

CURRICULUM VITAE: SUMMARY

Prof. Xavier Obradors i Berenguer (xavier.obradors@icmab.es)
Institut Materials Science Barcelona (ICMAB), National High Research Council (CSIC), Spain
Born in Manresa, Spain on 28th January 1956 (64 years old)
Research I.D.: A-8146-2012

Education

- Degree in Physics, Universitat de Barcelona, June 1978
- DEA in Physique des Solides, Université de Toulouse (France), June 1980
- Ph.D. in Physics, Universitat de Barcelona, October 1982
- Doctorat Materials Science, Université Scientifique et Médicale de Grenoble (France), January 1983

Research and teaching positions

- Assistant Professor, Universitat de Barcelona, June 1978-79
- Doctoral fellow, INSA Toulouse and Grenoble, 1979-80
- Doctoral fellow, CNRS Grenoble, 1980-82
- Postdoctoral fellow and Assistant Professor, Universitat de Barcelona, 1982-85
- Associate Professor (Prof. Titular), Universitat de Barcelona, 1985-89
- Research scientist, National High Research Council (CSIC), 1989-1992
- Research Professor, National High Research Council (CSIC), 1992-onwards
- Head of the Dpt. of Magnetic and Superconducting Materials, ICMAB-CSIC, 1991-2008
- Deputy-Director Materials Science Institute of Barcelona, ICMAB-CSIC, 2002-2008
- Director Materials Science Institute of Barcelona, ICMAB-CSIC, 2008-onwards

Research projects

- Research coordinator of 12 Spanish national projects on:
 - Functional oxides: metal – insulator transitions, magnetic properties
 - Materials Science and properties of high temperature superconductors
 - Nanoscience and technology: nanostructures by chemical solutions
- Coordinator of 4 European cooperation research projects
 - Novel sol gel technology for long length superconducting tapes (SOLSULET) (9 partners), 2001-2004
 - High performance nanostructured coated conductors by chemical processing (HIPERCHEM) (6 partners), 2005-2008
 - European development of Superconducting Tapes: integrating novel materials and architectures into cost effective processes for power applications and magnets (EUROTAPES) (20 partners), 2012-2015
 - DOCTORAL training programme in Functional Advanced Materials (DOCFAM) (5 partners), 2017-2021
- Principal scientist of 26 European projects
- Principal scientist of 15 projects with industrial companies, among them:
 - Endesa, Zenergy, Pirelli, Lafarga, Mavilor, Red Eléctrica de España
- Coordinator of the CONSOLIDER-INGENIO project “Advanced materials and NANOTECHNOLOGIES for innovative electrical, ELECTRONIC and magnetoelectronic devices (NANOSELECT)” (2007-2012); 9 research groups (ICMAB, IMB, ICMM, UAB), ~120 researchers and 6 M€ budget
- Coordinator of the SEVERO OCHOA Excellence Award of ICMAB “Smart Functional Materials for social grand challenges” (FUNMAT), (2016-2019); MINECO, 4 M€

Professional activities

Organization of international conferences and courses

- Director of 6 Courses, Conferences and Workshops on: Superconductivity, Neutron diffusion, Solid State Physics and Applications of Superconductivity.

- Chairman of the European Conference on Applied Superconductivity, Sitges (Spain) 1999
- Co-Chairman of International Symposium of Superconductivity, Japan 2004
- Co-Chairman of Workshop of Coated Conductors for Applications, Japan 2004; Santa Fe (USA) 2005; Stuttgart (Germany) 2006; Jeju Island (Korea) 2007; Houston (USA) 2008; Barcelona 2009
- Co-Chairman of "Recent Advances in Superconductivity", Materials Research Society, USA 2006
- Co-Chairman of "Solution Synthesis of Inorganic Films and Nanostructured Materials", Materials Research Society, USA 2012 and 2014
- Member of the International Scientific Committees or Program Committees on more than 35 International Conferences on Superconductivity and Ceramic Materials.
- Member of the Board of International Cryogenic Materials Conference, 2001-2006
- Member of the Board of Applied Superconductivity Conference USA, 2006-2011

Scientific evaluation committees and management of professional societies

- Expert on evaluation panels of:
 - Spanish Research Ministry; Catalan Research Plan; European Union (Energy, NMP); European Research Council; Department of Energy, USA; Agence d'évaluation de la recherche et de l'enseignement supérieur (AERES), France; Universities: Antwerp, Leuven, Cambridge, Liège, Geneva; Research Foundation Flanders, Belgium; Humboldt Foundation, Germany; FONCYT-Argentina; Agència per a la Qualitat del Sistema Universitari de Catalunya; Fundação para a Ciência e a Tecnologia, Portugal, ACPUA-Aragon, Spain
- Member of the National Scientific Advisory Committee of CSIC, 2004-2009
- Member of the "National Materials Science and Technology" Committee of CSIC, 1993-96; 2004-08
- Member of the Scientific Committee "Magnetic Structures", Institut Laue Langevin, 1987-89, Grenoble (France)
- Member of the Scientific Committee, Institut Laue Langevin, Grenoble (France), 1989-91
- Coordinator of the Committee "Science and Technology of Materials", National Agency of Evaluation and Prospective (ANEP), (Spain), 1987-90
- Member of the International Scientific Committees of:
 - "Laboratoire d'Electrodynamique des Matériaux Avancés" (LEMA), Université de Tours – CNRS (France), 2003
 - "Laboratoire de Cristallographie de Grenoble", CNRS, Grenoble (France) 2006
 - "Centre d'elaboration de matériaux et d'études structurales – CEMES", CNRS, Toulouse (France) 2009
 - "Unité mixte de Physique Thales – CNRS", Paris (France), 2010
 - "Institute of Solid State and Materials Research", Dresden – Leibniz Society (Germany), 2007-2016
 - "HERCULES Science Commission", Research Foundation, Flanders (Belgium), 2016
 - "Luxembourg Institute of Science and Technology" - Department Materials Research and Technology, Luxembourg, 2018
- Founder (1998), President (2006-2011) and Board member (2011-onwards) of the European Society of Applied Superconductivity (ESAS)
- Member of the managing Committee (2000-03) and President (2003-2007) of the National Group on Solid State Physics (GEFES), Spanish Royal Society of Physics
- Member of the Governing or scientific Boards of:
 - Research Park Universitat Autònoma de Barcelona (PRUAB), Bellaterra (Spain), 2009-onwards
 - Technological center of water (CETAQUA), Barcelona (Spain), 2009-onwards
 - Lafarga – Lacambra, Masies de Voltregà (Spain), 2009-2012

Editorial activities

- Member of the Editorial Executive Board of "Superconducting Science and Technology", Inst. of Physics (U.K.)
- Member of the Advisory Board of "Superconducting Science and Technology", Inst. of Physics (U.K.)
- Editor of Physica C: Superconductivity and its Applications, Elsevier (Holland), 2008-onwards
- Editorial Board of European Superconductivity News Forum (www.ewh.ieee.org/tc/csc/europe/newsforum)

Honours and awards

- Member of the Royal Academy of Science and Arts of Barcelona, Spain 1998-
- Doctor Honoris Causa University of Pitesti, Rumania 1999
- Medal to the scientific achievements "Narcis de Monturiol", Catalan Government, Spain 1999
- Fellow of the Institute of Physics, UK 1999-onwards
- Award of Excellence "Processing and Applications of Superconducting ReBCO Large Grain Materials", Morioka, Japón 1999
- Duran i Farell Prize to the Technological Research, "Superconducting Fault Current Limiter: Towards the future electrical technology", Gas Natural, Spain 2002
- National Prize "Blas Cabrera" of Physical Sciences, Materials and Earth studies, Science and Education Ministry, Spain 2003
- Chevalier dans l'Ordre des Palmes Academiques, Ministère d'Education Nationale, France 2005
- Prize Gold Epsilon, Ceramic and Glass Spanish Society, Spain 2005
- ENDESA-NOVARE Prize to Energy Efficiency, "Superconducting cable for efficient and sustainable electrical energy distribution and transport", SUPERCABLE, Spain 2007
- Leibniz Medal of the Institut of Solid State and Materials Research, Dresden 2016
- City of Barcelona Prize to Experimental Science and Technology, Teresa Puig and Xavier Obradors, Barcelona 2016
- Newspaper Regio 7, Ambassador Award, Manresa 2017

Publications

- More than 550 research articles in international journals
- 80 publications in books and 10 review articles in books
- More than 11.700 citations in international journals, 1 article with more than 700 citations, 2 articles with > 400 citations, 18 articles with more than 100 citations.

Distribution of publications among journals with different Impact Index

Journal	Impact Index	No. art.	Journal	Impact Index	No. art.
Nature Materials	36,503	2	J. Alloys and Compounds	2,999	3
Chem Soc Rev	33,383	3	J. Eur. Ceram. Soc.	2,947	2
Nature Physics	20,147	1	Phys Rev Materials	2,926	3
Adv. Materials	17,493	4	Supercond.Sci. Technol.	2,88	69
Nano Letters	13,592	2	Ceram. International	2,758	1
J. Amer. Chem. Soc.	13,860	2	J. Mater. Sci.	2,371	1
Nature Communications	12,120	2	Appl. Phys. Express	2,365	1
Angew. Chemie	11,990	1	J. Phys. Cond. Mat.	2,346	9
Adv. Funct. Mat.	11,805	5	Mater. Res. Bull.	2,288	2
Adv. Science	9,030	2	Mater. Chem. Phys.	2,259	1
Chem. Mater.	9,478	9	EPL-Europhys. Lett.	2,229	3
Small	8,64	2	J. Nanopart. Res.	2,184	3
Phys.Rev.Lett.	8,46	6	Thermochim. Acta	2,184	4
ACS Applied Mat. and Interfaces	8,097	1	J.Appl. Phys.	2,183	31
Nanoscale	7,37	2	J.Solid State Chem.	2,133	6
Chem. Comm.	6,32	1	J. Magn. Magn.Mater.	1,970	20
J. Mater. Chem C	6,64	2	Surface Science	1,925	1
Crystal Growth Design	4,891	2	Solid State Comm.	1,897	6
Solar Energy Materials and Solar Cells	4,78	1	J. Phys. Chem. Solids	1,853	6
Acta Materialia	4,465	1	Philos. Mag.	1,825	3
Appl. Phys. Lett. Materials	4,323	1	Thin Solid Films	1,759	7
J Phys. Chem. C	4,309	1	J. Cryst. Growth	1,698	1
Adv. Mat. Interfaces	4,28	1	Phys. Lett. A	1,683	1
Scientific Reports	4,26	4	J. Mater.Res.	1,647	10
Adv. Electronic Mat.	4,19	3	J. Nanosc. Nanotec.	1,556	1
Phys Chem Chem Phys	4,12	2	J. Sol-Gel Sci. Technol.	1,532	4
CrysEngComm	4,034	3	IEEE Trans. on Magn.	1,386	11
Phys.Rev. B	3,84	57	Eur. Phys. J. B	1,345	1
Journal of Analytical And Applied Pyrolysis	3,47	3	IEEE Trans. Appl. Superc.	1,235	36
Nanotechnology	3,44	3	Physica C	0,942	82
RSC Advances	3,289	3	ACS Appl. Nano Mat		1
Appl. Phys. Lett.	3,302	27			
New J. of Chemistry	3,277	1			

Distribution of published articles among the Web of Science categories

Web of Science categories	No. articles	% total
Applied Physics	397	66
Condensed Matter Physics	338	56
Materials Science, Multidisciplinary	176	29
Engineering Electrical and Electronic	54	9
Chemistry Physical	47	8

Chemistry, Multidisciplinar	44	7
Nanoscience and Nanotechnology	33	5
Physics, Multidisciplinar	27	5

Selected ten publications (citations March 2020)

- B. Martínez, X. Obradors, Ll. Balcells, A. Rouanet, C. Monty
Low temperature surface spin glass transition in γ -Fe₂O₃ nanoparticles
Phys. Rev. Lett. 80, 181 (1998) (700 citations)
- J. Fontcuberta, B. Martínez, A. Seffar, J. L. García-Muñoz, S. Piñol, X. Obradors
The colossal magnetoresistance of ferromagnetic manganites: structural tuning and mechanisms
Phys. Rev. Lett 76, 1122 (1996) (483 citations)
- J. Gutiérrez, A. Llordés, J. Gázquez, M. Gibert, N. Romà, S. Ricart, A. Pomar, F. Sandiumenge, N. Mestres, T. Puig, X. Obradors
Strong isotropic flux pinning in YBa₂Cu₃O_{7-x} – BaZrO₃ nanocomposite superconductor films derived from chemical solutions
Nature Materials 6, 367 (2007) (429 citations)
- A. Llordés, A. Palau, J. Gázquez, M. Coll, R. Vlad, A. Pomar, J. Arbiol, R. Guzmán, S. Ye, V. Rouco, F. Sandiumenge, S. Ricart, T. Puig, M. Varela, D. Chateigner, J. Vanacken, J. Gutiérrez, V. Moshchalkov, G. Deutscher, C. Magen, X. Obradors; Nanoscale strain-induced pair suppression as a vortex-pinning mechanism in high-temperature superconductors; Nature Materials 11, 329 (2012) (197 cit)
- X. Obradors, T. Puig, A. Pomar, F. Sandiumenge, N. Mestres, M. Coll, A. Cavallaro, N. Romà, J. Gázquez, J.C. González, O. Castaño, J. Gutierrez, A. Palau, K. Zalamova, S. Morlens, A. Hassini, M. Gibert, S. Ricart, J.M. Moretó, S. Piñol
Progress towards all chemical superconducting YBa₂Cu₃O₇ coated conductors.
Supercond. Sci. and Technol. 19, S13 (2006) (197 citations)
- J. Figueras, T. Puig, X. Obradors, W.K. Kwok, L. Paulius, G.W. Crabtree, G. Deutscher
The loss of vortex line tension sets an upper limit to the irreversibility line in YBa₂Cu₃O₇
Nature Physics, 2, 402 (2006) (37 citations)
- X Obradors, T Puig, S Ricart, M Coll, J Gázquez, A Palau, X Granados
Growth, nanostructure and vortex pinning in superconducting YBa₂Cu₃O₇ thin films based on trifluoroacetate solutions
Supercond. Sci. Technol. 25, 123001 (2012) (108 citations).
- X. Obradors, T. Puig, M. Gibert, A. Queralto, J. Zabaleta, N. Mestres
Chemical solution route to self-assembled epitaxial oxide nanostructures
Chemical Society Reviews, 43, 2200 (2014) (52 citations)
- C. Moreno, C. Munuera; S. Valencia, F. Kronast, X. Obradors, C. Ocal
Reversible Resistive Switching and Multilevel Recording in La_{0.7}Sr_{0.3}MnO₃ Thin Films for Low Cost Nonvolatile Memories
Nano Letters, 10, 3828 (2010) (98 citations)
- X. Obradors, T. Puig
Coated conductors for power applications: materials challenges
Superconductor Science & Technology 27, 44003 (2014) (181 citations)

Researchers training

- Director or co-director of 28 Ph D in Physics, Materials Science and Nanoscience
- Director or co-director of 2 Ph D (underway)
- Supervisor of 10 Master Science degrees

Patents and technology transfer activities

- 17 Spanish patents, some with the international extension in the topics:
 - Magnetic devices and sensors
 - Processing and joining of bulk textured ceramics
 - Superconducting tape processing methodologies
 - Superconducting devices

- Low temperature thin film preparation processes on plastic substrates
- Creation and participation of three technologically-based companies:
 - ATIPIC, Valles Technological Park, 2000. Start-up. Magnetic devices.
 - OXOLUTIA, PRUAB - Bellaterra, 2011. Spin-off. Development of superconducting tapes by low cost chemical methods
 - ECCOSTORE, Martorell, 2019. Start-up. Renewable energy systems.
- 4 patents licenced to the spin-off company OXOLUTIA

Invited and plenary conferences

- 183 conferences given in national and international Universities and research centers
- 101 invited or plenary conferences (5 France, 19 Japan, 7 Brasil, 8 Italy, 2 China, 8 Germany, 1 Holland, 15 USA, 20 Spain, 4 Austria, 1 Russia, 3 Belgium, 3 Korea, 2 Switzerland, 1 Greece)

Selected presentations

- “Progress in nanostructured coated conductor research and development”. Int Conference on Materials and Mechanisms of Superconductivity. Beijing, August 2018, Invited Conference
- Progress in the development of nanostructured coated conductors in Europe
International Superconductivity Symposium. Tokyo (Japan), Dec 2016, Plenary Conference
- Progress in R&D of nanostructured superconductors for high current applications
20th International Conference on Solid Compounds of Transition Elements (SCTE-2016). Zaragoza, April 2016, Plenary Conference
- Progress in nanostructured coated conductor research and development
International Conference on Applied Superconductivity and Electromagnetic Devices. Shanghai, November 2015, Plenary Conference
- Progress in nanostructured coated conductor research and development
International Conference on Materials and Mechanisms of Superconductivity. Geneva, August 2015, Invited Conference
- High temperature nanostructured superconductors: a tool towards a new era of high field magnetism.
International Conference on Magnetism. Barcelona, July 2015, Semi-plenary conference
- Bottom-up approach to epitaxial functional oxide nanostructures and nanocomposite thin films with outstanding superconducting, electronic and magnetic properties.
Materials and Challenges in Alternative & Renewable Energy. Jeju Island (Korea), February 2015. Plenary Conference.
- Bottom-up approach to epitaxial complex oxide nanostructures and nanocomposite thin films with outstanding magnetic, superconducting and electronic properties
38th International Conference on Advanced Ceramics and Composites, Invited Conference
Daytona Beach (USA), January 2014
- Advances in solution derived $YBa_2Cu_3O_7$ coated conductors
Superconductivity 4 Energy, Plenary Conferences
Paestum (Italy), May 2014
- Coated Conductors Lay-out Overview: Pros and Cons
1st Workshop on Accelerator Magnets in HTS, Plenary Conference
Hamburgh (Germany), May 2014
- Advances in coated conductor research in Europe.
International Superconductivity Symposium. Tokyo (Japan), Nov 2014; Nov 2013; Oct 2011; Invited Conferences.
- Strong pinning nanostructured superconducting materials for energy applications
10th Materials & Mechanisms of Superconductivity Conference, Washington (USA), Aug. 2012. Invited Conference.
- High current superconductors: overcoming the materials challenges to achieve power applications
European Conference of Applied Superconductivity 2013, Plenary conference
Genova, Italia, Septembre 2013
- Chemical solution approaches to self-assembled and nanocomposite superconducting and ferromagnetic films
Imagine Nano, TNT Energy, Bilbao (Spain), April 2011
- Tuning critical currents of YBCO and nanocomposite chemical solution-derived films by strain control: nano versus mesostrain
International Symposium on Superconductivity

- Tsukuba (Japan), November 2010
- Chemical solution approaches to self-assembled and nanocomposite functional oxide nanostructures
Electronic Materials and Applications Workshop, American Ceramic Society
Orlando (USA), January 2010
 - Tuning critical currents of YBCO and nanocomposite TFA-MOD films by strain control: Nanostrain versus mesostrain
Workshop on Nanoscale superconductivity, fluxonics and plasmonics
Crete (Greece), September 2010
 - Materials science and vortex physics challenges in coated conductors
European Conference of Applied Superconductivity, EUCAS 2009, Plenary conference
Dresden (Germany), September 2009
 - Nanostructured superconductors: why do we need them and how can we prepare them?
EU – Japan Workshop on new superconductors
Brussels (Belgium), November 2009
 - Progress in chemical solution approaches to nanocomposite superconducting films
International Symposium on Superconductivity
Tsukuba (Japan), November 2009
 - Vortex pinning in chemical solution nanostructured YBCO films
Materials Research Society (MRS) Spring Meeting 2008
San Francisco (USA), March 2008
 - Chemical solution approaches to self-assembled and nanocomposite nanostructured superconducting films
Swiss workshop on materials with novel electronic properties
Les Diablerets (Switzerland), September 2007
 - Engineered interfaces in chemically grown YBCO superconducting multilayers: influence on critical currents
International Workshop on Coated Conductors for applications 2007
Jeju Island (Korea), November 2007
 - Progress towards all chemical superconducting $\text{YBa}_2\text{Cu}_3\text{O}_7$ coated conductors
European Conference on Applied Superconductivity, EUCAS2005, Plenary conference
Vienna (Austria), September 2005
 - Solution chemistry: a path towards low cost coated conductors
European Conference on Applied Superconductivity, EUCAS 2003
Sorrento (Italy), September 2003
 - Bulk superconductors with tuned properties for Fault Current Limiters
International Superconductivity Symposium, Plenary conference
Kobe (Japan), September 2001
 - Melt textured YBCO superconductors: tailoring properties for current limitation
Cryogenic Engineering Conference – International Cryogenic Materials Conference, Plenary conference
Madison, Wisconsin (USA) July 2001
 - Anisotropic vortex plasticity in the vortex liquid state of YBCO
APS March Meeting
Seattle (USA), March 2001
 - Superconductivity in $\text{ReBa}_2\text{Cu}_3\text{O}_7$: Tuning role of rare Earth ions
4th International Conference on f-elements, Plenary conference
Madrid (Spain), September 2000
 - Superconducting fault Current limiter: A novel device for improved power quality
Meeting German Physical Society
Regensburg (Germany), March 2000
 - Directional solidification of $\text{ReBa}_2\text{Cu}_3\text{O}_7$ (Re=Y, Nd): microstructure and superconducting properties
European Conference on Applied Superconductivity, EUCAS '97
Enschede (The Netherlands), June 1997

Research interests and strategy

The vision of my career during 35 years has been to reach enough understanding to achieve outstanding physical properties of materials with technological attractiveness. This approach has been stimulated by the interest in exploring new approaches in Materials Science and Engineering as a route towards technological innovation. I have therefore continuously promoted the use of novel materials preparation techniques and I have used them in obtaining advanced functional oxide materials and devices derived from them.

I have focused my interest in functional nanomaterials with shapes adapted to their use in specific practical applications: nanoparticles, self-assembled nanoobjects (nanodots, nanowires), ultrathin and multilayered films, coated conductors and nanocomposites are the main types of materials we have developed. A common underlying issue is that their physical properties, morphologies or nanostructure are controlled to a great extent by the surfaces and the interfaces, a very fertile source of new functionalities and enhanced materials performance. The topics where I have been active are:

Complex ferrimagnetic oxides: crystal structure vs magnetic properties; Metal-insulator transitions and magnetoresistive oxides; Magnetic frustration and spin glass properties of insulators; Preparation, microstructure and superconducting properties of melt textured ceramics; Growth and superconducting/magnetic properties of functional nanostructured oxide films, multilayers and coated conductors by chemical solution deposition (CSD); Growth and nanoscale properties of oxide nanoparticles, self-assembled and templated epitaxial nanostructures (nanodots, nanowires) by CSD; Nanoscale tuning and characterization of oxide functional properties by SPM and its applications for non-volatile memories; Physics of vortex matter in superconductors, vortex pinning by artificial nanostructures and nanocomposites; Development of power applications based on superconducting materials (fault current limiters, motors, generators and cables).

The topic where I have made my most recent scientific and technological achievements is high temperature superconductors (HTS) where we have become an international reference in the Physics and Materials Science of these functional nanomaterials. Our most recent hallmark has been the discovery of HTS nanocomposite films with worldwide record performances in terms of critical currents. This discovery was patented and we created a spin-off company (Oxolutia) to bring into the market our outstanding high current conductors. During my career I have been PI of 41 scientific projects from public and industrial funding: 12 Spanish public projects, 19 European projects (coordinator in 3 of them) and 10 with industries. As recent large projects I have coordinated I should mention: “Advanced materials and NANOTEchnologies for innovative electrical, ELECTronic and magnetoelectronic devices” (NANOSELECT), Consolider (2007-2014), 6 M€ “European development of Superconducting Tapes: integrating novel materials and architectures into cost effective processes for power applications and magnets” (EUROTAPES), (2012-2017), 12 M€ SEVERO OCHOA Excellence Award of ICMAB “Smart Functional Materials for social grand challenges” (FUNMAT), (2016-2019); MINECO, 4 M€

Updated, March 2020

CURRICULUM VITAE: FULL

Xavier Obradors i Berenguer

OUTLINE

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- 16.- **PARTICIPATION IN PhD JURIES, HABILITATION AND DIRECTION COMMITTEES ABROAD**

1 _____ **PERSONAL DATA**

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Nombre: Francesc Xavier
Nacido en: Manresa, el 28-1-1956
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Domicilio: C/ Viladordis 80
08240 Manresa, Barcelona
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Organismo: Consejo Superior de Investigaciones Científicas
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Tel.: 34-93-580-18-53
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E. Mail: Xavier.Obradors@icmab.es
Departamento: Materiales Superconductores y nanoestructuración a gran escala
Categoría: Profesor de Investigación, desde los 35 años
Director del Departamento (1991 –2002)
Vicedirector del ICMAB (2002 - 2008)
Director del ICMAB (2008 -)
Código Unesco: 2211.17, 2211.27, 2211.05
Código Nabs: 0700
Research ID <http://www.researcherid.com/rid/A-8146-2012>

2 _____ **ACADEMIC DEGREES**

- Licenciatura de Física, Universitat de Barcelona,
Junio 1978
- Licenciatura con Grado, Universitat de Barcelona,
Noviembre 1979
- Diplôme d'Etudes Approfondies "Physique et Structure des solides"
Université Paul Sabatier de Toulouse,
Julio 1980

3 _____ **DOCTORAL THESIS**

- Doctorado de Física, Universitat de Barcelona,
Octubre de 1982
Director : Javier Tejada Palacios
- Doctorat Troisième Cycle "Science des Matériaux",
Université Scientifique et Médicale de Grenoble,
Enero de 1983
Director : Jean Claude Joubert

MASTER DEGREES

- Estudio del comportamiento vidrio de spin en óxidos aislantes
Raúl Rodríguez Solá.
Tesis de Licenciatura de Física. Enero 1986.
- Caracterización estructural y magnética de partículas finas tipo hexaferrita para la grabación magnética
Rosa Ardiaca Capell.
Tesis de Licenciatura de Física. Octubre 1986.
- Simulación por elementos finitos de la fuerza de levitación en materiales superconductores
Diego Camacho (Codirección Javier Mora)
Proyecto fin de Carrera, Julio 1996
Ingeniería de Telecomunicaciones
- Caracterización de superconductores de alta temperatura crítica para aplicaciones de levitación magnética
Eduard Portabella (Codirección Javier Mora)
Proyecto Fin de Carrera, Julio 1997
Ingeniería de Telecomunicaciones
- Efectes microestructurals sobre l'ancoratge del fluxe magnetic en mostres texturades de YBCO.
Jordi Figueras Puig
Tesis de Licenciatura de Física, Septiembre 2000
- Obtenció i caracterització de mostres massiques texturades de YBCO per l'aplicació de limitació de corrent
Ernest Mendoza Gómez
Tesis de Licenciatura de Física, Septiembre 2000
- Procesado y estudio estructural de superconductores texturados de YBCO con adiciones de óxidos de zirconio
Ana Esther Carrillo Fernández
Tesis de Licenciatura de 1999-2003
- Estudio de los procesos de soldadura superconductor entre piezas superconductoras monodominio
Simona Iliescu
Tesis de Licenciatura de 2000-2003

Ph D THESIS

- 1.- Propiedades magnéticas de ferritas hexagonales tipo magnetoplumbita y óxidos de Niquel tipo K_2NiF_4
Xavier Batlle Gelabert
(Profesor Asociado, Universitat de Barcelona)
Doctorado en Física, Julio 1990
- 2.- Magnetismo y superconductividad en óxidos de cobre y niquel: estudio experimental mediante difusión de neutrones
José Luis García Muñoz (codirección Dr. J. Rodríguez Carvajal)
(Becario Institut Laue Langevin de Grenoble),
Doctorado en Física, Julio 1992
- 3.- Granularidad en óxidos superconductores cerámicos y Débil ferromagnetismo en óxidos tipo R_2CuO_4
(R=Tierra Rara)

- Francesc Perez
(Becario Programa Midas-CICYT y REDESA)
Doctorado en Física, Diciembre 1992
- 4.- Flujo magnético en cerámicos texturados de YBaCuO: Propiedades de equilibrio y metaestables
Vicenç Gomis
(Becario DGICYT-MEC)
Doctorado en Física, Septiembre 1994
 - 5.- Preparación y procesado de cerámicas superconductoras texturadas con altas corrientes críticas
Iolanda Catalán (codirección Dra. A.Fuertes)
(Becaria DGICYT-MEC)
Doctorado en Física, Junio 1994
 - 6.- Magnetismo y absorción de microondas en óxidos de cobre tipo T', aislantes o superconductores
Alberto Rouco
(Becario DGICYT-MEC)
Doctorado en Física, Septiembre 1994
 - 7.- Fuerzas de levitación magnética en superconductores de alta temperatura
Javier Mora
(Becario Ingeniero CSIC)
Doctorado en Ingeniería, Enero 1998
 - 8.- Síntesis de materiales avanzados base Sr
Albert Calleja (Codirección Dr. Salvador Piñol)
(Becario MEC-Intercambio empresas)
Doctor Química, Enero 1999
 - 9.- Anisotropía de propiedades magnéticas y de transporte en superconductores texturados
Jordi Figueras (Codirección Dra. Teresa Puig)
(Becario Generalitat de Catalunya)
Doctor Física, 1999- 2003
 - 10.- Superconductores texturados para limitadores de corriente
Ernest Mendoza (Codirección Dra. Teresa Puig)
(Becario generalitat de Catalunya-Intercambio empresas)
Doctor Física, Diciembre (2002)
 - 11.- Microestructura y corrientes críticas en superconductores deformados plásticamente
Jerome Plain (Codirección Dr. Jacques Rabier)
Doctor cotutela Física (UAB- U. Poitiers), Noviembre (2001)
 - 12.- Superconducting joints of melt-textured YBa₂Cu₃O₇ monoliths: preparation, microstructure and critical currents
Simona Iliescu (Codirección Teresa Puig)
(Becaria proyecto TMR-UE)
Doctor Física, 2001 – 2004
 - 13.- Optimization of Chemical Solution Deposited buffer layers for YBa₂Cu₃O₇ coated conductor development
Andrea Cavallaro (Codirección Felip Sandiumenge)
Becario CSIC
Doctor Química, 2001 – 2005
 - 14.- Preparación de cintas superconductores mediante técnicas de química combinatoria
Mariona Coll (codirección Teresa Puig)

- Becaria CSIC
Doctor Química, 2002 – 2007
- 15.- Preparación y caracterización microestructural y magnética de soldaduras artificiales de cerámicas texturadas de YBCO
Bernat Bozzo (codirección Xavier Granados)
Doctor en Física, 2004 – 2016
- 16.- Fast growth of YBCO superconducting films: microstructure and properties
Katerina Zalamova (codirección Alberto Pomar)
Becaria Generalitat de Catalunya
Doctor en Física, 2005 – 2009
- 17.- Nanoestructuración de superconductores mediante autoensamblaje: influencia en el anclaje de vórtices
Marta Gibert (codirección Teresa Puig)
Becaria CSIC
Doctor en Física, 2005 – 2009
- 18.- Preparación de láminas superconductoras nanocomposite mediante deposición de soluciones químicas
Anna Llordés (codirección Susagna Ricart)
Becaria CSIC
Doctor en Química, 2005 – 2010
- 19.- Preparación de nanopartículas y láminas superconductoras nanocomposite mediante soluciones químicas
Fernando Martínez (codirección Susagna Ricart)
Becario MEC
Doctor en Química, 2006 – 2011
- 20.- Preparación y caracterización de las propiedades magnéticas y de transporte de láminas delgadas ferromagnéticas preparadas mediante deposición de soluciones químicas
César Moreno (codirección Carmen Ocal)
Becario CSIC
Doctor en Física, 2006 – 2010
- 21.- Preparación de cintas superconductoras mediante deposición de disoluciones químicas
Roxana Vlad (codirección Alberto Pomar)
Becaria CSIC
Doctor en Química, 2007 – 2011
- 22.- Síntesis y propiedades magnéticas y de transporte de Rutenatos con elevada frustración magnética
Susset Muñoz
Becaria Alban
Doctor en Física, 2006 – 2009
- 23.- Mecanismos de crecimiento de láminas superconductoras e influencia en sus corrientes críticas
Cesar Fidel Sánchez (codirección Teresa Puig)
Becario JAE
Doctor en Física, 2010-2013
- 24.- Mecanismos de crecimiento y desarrollo microestructural de cerámicas superconductoras texturadas
Ana Esther Carrillo Fernández (codirección Teresa Puig)
Doctor en Materiales, 2016
- 25.- Multifunctional nanostructured superconductors by chemical means: towards high current conductors
Pablo Cayado (cosupervised Mariona Coll)

Contract EUROTAPES
Doctor en Física 2012-2016

- 26.- Liquid-assisted ultrafast growth of superconducting films derived from chemical solutions
Laia Soler (cosupervised Susagna Ricart)
Becaria Projecte
Doctor en Ciencia de Materiales, 2013-2019
- 27.- Synthesis of defect free $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ films over $1 \mu\text{m}$ by CSD using Inkjet Printing
Bohores Villarejo Reina (cosupervised Teresa Puig)
Contrato EUROTAPES
Doctor en Ciencia de Materiales, 2013-2018
- 28.- High critical current nanocomposite superconducting thin films
Ziliang Li (cosupervised Mariona Coll)
Becario China Scholarship Council
Doctor en Ciencia de Materiales, 2014-2018
- 29.- Novel concepts of Superconducting Fault Current Limiters
Pedro Barusco (cosupervised Javier Granados)
Contrato FASTGRID
Doctor en Física
- 30.- High performance superconducting films grown through transient liquid assisted growth
Lavinia Saltarelli (cosupervised Teresa Puig)
Contrato ULTRASUPERTAPES
Doctor en Ciencia de Materiales (en curso)

5 _____ **ACADEMIC AND RESEARCH POSITIONS**

- Profesor Ayudante
Universitat de Barcelona.
Septiembre 1978-1979.
- Investigador (becario doctoral)
Laboratoire de Physique des Solides, CNRS-Univ. de Toulouse.
Octubre 1979 a Julio 1980.
- Investigador (becario doctoral)
Laboratoire de Cristallographie, CNRS de Grenoble.
Octubre 1980 a Octubre de 1982.
- Investigador (becario postdoctoral)
Universitat de Barcelona.
Octubre 1982 a Marzo 1984.
- Profesor Encargado de Curso nivel C.
Universitat de Barcelona.
Marzo 1984 a Enero 1985.
- Profesor Titular de Universidad, "Física de la Materia Condensada"
Universitat de Barcelona.
Enero 1985 a Febrero 1989 (excedencia voluntaria).
- Maître Assistant Associé
Université Scientifique et Médicale de Grenoble. Laboratoire de Cristallographie CNRS.
Julio 1986 a Septiembre 1986.
- Professeur Associé étranger
Université Joseph Fourier de Grenoble, Laboratoire de Cristallographie CNRS
Julio 1988 y Julio 1989.
- Investigador Científico del C.S.I.C., Area Ciencia y Tecnología de Materiales
Marzo 1989 - Abril 1991
- Profesor de Investigación del CSIC, Area Ciencia y Tecnología de Materiales
Mayo 1991 - Actualidad
- Directeur de Recherche Associé
C.N.R.S., Institut Matériaux et Procédés, Odeillo
Octubre 1992 a Diciembre 1992
- Profesor Asociado "Materiales funcionales"
Universitat Politècnica de Catalunya, Ingeniería de Materiales, Barcelona
Octubre 1997 - Septiembre 1998-99
- Director Departamento
Materiales magnéticos y superconductores, ICMAB-CSIC
Marzo 1989 - Noviembre 2002
- Vicedirector Instituto
Institut Ciència de Materials de Barcelona, CSIC
Noviembre 2002 – 2008

- Director Instituto
Institut Ciència de Materials de Barcelona, CSIC
Enero 2008 - actualidad

6 _____ **TEACHING ACTIVITIES**

- Profesor de prácticas Mecánica y Termología.
Curso 1978-79. Universitat de Barcelona.
- Profesor de prácticas Cristallographie
Curso 1981-82. Institut National Polytechnique de Grenoble.
- Profesor de Física. Primer Curso de la Licenciatura de Química.
Cursos 1983-84, 1987-88 y 1988-89. Universitat de Barcelona.
- Profesor de Física del Estado Sólido. Cuarto Curso de la Licenciatura de Física.
Cursos 1985-86 a 1988-1989. Universitat de Barcelona.
- Profesor Programas de Tercer Ciclo Física de Materiales (1986-1988), Física Fonamental (1987-1989) y Física y Tecnología de Materiales (1988-91)
Universitat de Barcelona:
 - * Magnetismo experimental.
 - * Materiales magnéticos.
 - * Radiación sincrotrón y difusión de neutrones.
 - * Materiales superconductores.
 - * Corrientes críticas en superconductores de tipo II
- Profesor del Curso Master Ciencia de Materiales.
1987-88, 1988-89, 1989-90, 1990-91, 1991-92. Universidad de Barcelona
- Coordinador Programas de Tercer Ciclo "Física de Materiales", "Física Fonamental" y "Física y Tecnología de Materiales"
Cursos 1986-87 a 1988-89
- Profesor I Curso Técnicas experimentales con haces de neutrones
Jaca, Octubre 1986
- Profesor I Escuela Magnetismo
Jaca, Septiembre 1989
- Profesor Programa de Tercer Ciclo " Ciencia de Materiales"
1993-94 a 1995-96. Universitat Autònoma de Barcelona
Corrientes críticas en superconductores de alta temperatura
- Profesor de Materiales funcionales. Ingeniería de Materiales
1997-98. Universitat Politècnica de Catalunya
- Profesor de "Materiales Magnéticos y superconductores"
Junio 1999. Universidad de Pitesti, Rumania
Curso Ingeniería de Materiales

7 _____ RESEARCH PROJECTS

7.1- PARTICIPANT RESEARCHER

- 1.- Proyecto CAICYT (1979-82)
Caracterización micro y macroscópica de espinelas, perovskitas y granates
Responsables: J.Tejada y M.Font-Altava
- 2.- Ayuda a la investigación Ayuntamiento de Barcelona (1980)
Obtención y caracterización de óxidos dobles
Responsable: J. Tejada
- 3.- Ayuda a la investigación Universitat de Barcelona (1982-85)
Obtención y caracterización micro y macroscópica de materiales magnéticos y bioinorgánicos
Responsable: J. Tejada
- 4.- Acción Integrada Hispano- Francesa (1984-86)
Elaboración y caracterización magnética de óxidos ferrimagnéticos fuertemente anisótropos
Responsable: J. Tejada
- 5.- Proyecto IDAMSA (1985)
Caracterización de láminas delgadas
Responsable: J. Tejada
- 6.- Acción Integrada Hispano-Británica (1986)
Estudio de fases vidrio de espín
Responsable: J. Tejada
- 7.- Ayuda a la investigación Conselleria d'Indústria. Generalitat de Catalunya (1986)
Obtención y caracterización de materiales magnéticos utilizables en la grabación magnética
Responsable: J.Tejada
- 8.- Proyecto Instrumatic Española (1986)
Caracterización de materiales magnéticos utilizables en la grabación magnética
Responsable: J. Tejada
- 9.- Participación en Proyecto CAICYT (1986-88)
Obtención y caracterización micro y macroscópica de materiales magnéticos y bioinorgánicos
Responsable: J. Tejada.
- 10.- Programa Stimulation, CEE-SCIENCE (1989-1991)
Flux pinning in high temperature superconductors
* Universidad de Amsterdam
* Universidad de Leiden
* Universidad de Cambridge
* Centro de Estudios Nucleares de Karlsruhe
* Universidad de Oxford
* Departamento Química Inorgánica,
Universidad Complutense de Madrid
* Instituto Ciencia de Materiales de Aragón
C.S.I.C., Zaragoza
* ICMAB, C.S.I.C. y Dpt.Física Fonamental,
Universitat de Barcelona, Barcelona
Responsable equipo Barcelona: J.Fontcuberta
- 11.- Programa Nacional de Materiales, CICYT (1991-93)

- Síntesis y procesamiento de superconductores de alta temperatura crítica: propiedades magnéticas y corrientes críticas
 ICMAB, CSIC
 Responsable: J. Fontcuberta
- 12.- CSIC - CNR (1993-94)
 Propiedades magnéticas de materiales superconductores: monocristales, cerámicas texturadas y láminas delgadas
 ICMAB Barcelona, ITSE Montelibreti, Roma
 Responsables: Dr. Benjamín Martínez - Dr. Dino Fiorani
- 13.- CSIC - CNRS (1993-94)
 Microestructura y dinámica de flujo en cerámicas texturadas de superconductores de alta temperatura
 ICMAB Barcelona, INSA Toulouse
 Responsables: Dr. Josep Fontcuberta - Dr. André Fert
- 14.- Programa Nacional de Materiales, CICYT (1994-96)
 Anclaje de flujo y corrientes críticas en superconductores anisótropos. Magnetoresistencia en materiales magnéticos nanoestructurados
 Responsable: Dr. Josep Fontcuberta
- 15.- Contrato de investigación Jumberca S.A. (1996-97)
 Análisis de actuadores magnéticos en máquinas rotativas
 Responsable: Dr. Josep Fontcuberta
- 16.- Proyecto PETRI (1997-98)
 Desarrollo de potenciómetros sin contactos basados en materiales magnetoresistivos
 CEIT San Sebastián, U. País Vasco, ICMAB, NACESA-PIHER (Navarra)
 Responsable: Dr. Josep Fontcuberta
- 17.- Programa Nacional de Materiales, CICYT (1997-99)
 Magnetoresistencia en óxidos: mecanismos básicos y desarrollo de dispositivos
 Responsable: Dr. Benjamín Martínez
- 18.- Acción Integrada Hispano-Británica (1998)
 Efectos del ancho de banda en la magnetoresistencia de fronteras de grano artificiales en manganitas
 ICMAB - Univ. Of Cambridge (Prof. J. Evetts)
 Responsable: Dr. Josep Fontcuberta
- 19.- Proyecto de investigación PREMO S.A. (1997)
 Análisis y diseño de transformadores planares
 Responsable: Dr. J. Fontcuberta
- 20.- Proyecto PETRI (1998-99)
 Fabricación de superconductores de Hg a presiones normales
 Diopma S.L., ICMAB
 Responsable: Dr. S. Piñol
- 21.- Proyecto FEDER (2000-2001)
 Fabricación de cintas superconductoras de YBCO de altas corrientes críticas
 Lafarga Lacambra, ICMAB, Univ. Barcelona
 Responsable: Dr. S. Piñol
- 22.- Proyecto MCyT - Plan Nacional de Materiales (2001-2002)
 Transporte eléctrico en cintas superconductoras de YBCO preparadas por sol-gel (SUPERGEL)
 Investigador Principal: Dra. T. Puig

- 23.- Proyecto MCyT - Programa nacional de Materiales (2002-2005)
Cintas superconductores epitaxiales de YBCO: crecimiento mediante técnicas sol-gel, nanoestructura y transporte eléctrico. (SUPERNANO GEL)
Investigador Principal: Dra. T. Puig
- 24.- Proyecto MCyT - Programa nacional de Materiales (2003-2006)
Nuevas estrategias de nanoestructuración de defectos en superconductores de alta temperatura para aplicaciones de corrientes críticas elevadas (NANOSUPERMAT)
Investigador Principal: Dr. F. Sandiumenge
- 25.- Red de Excelencia Nanotechnology and nanosciences, knowledge-based multifunctional materials, new production processes and devices – UE (2004-2008)
Functional Advanced Materials and their Engineering (FAME)
Investigador principal: Dr.C. Miravittles
- 26.- Proyecto CICyT - Programa nacional de Materiales
Nanoestructuración artificial de superconductores mediante procesos químicos (NANOARTIS) (2006-2008)
Investigador Principal: Dra. T. Puig
- 27.- Marie Curie Research Training Networks: MRTN-CT-2006-035619 (2006-2010)
NanoEngineered Superconductors for Power Applications, NESPA
Investigador Principal: Dra.T. Puig
- 28.- Proyecto EU- support action: Science and Society, (SAS6-CT 2003-509058)
Superconductivity for life (SUPERLIFE)
Investigador principal: Dr. X. Granados
- 29.- Proyecto STREP, Unión Europea (2008-2011)
Efficient Environmental-Friendly Electro-Ceramics Coating Technology and Synthesis (EFFECTS)
Investigador Principal: Dr. X. Granados
- 30.- Proyecto CICyT - Programa nacional de Materiales
All solution based nanostructured superconductors for energy applications (NANOSUPENERGY) (2008-2011)
Investigador Principal: Dra. T. Puig
- 31.- Proyecto STREP, Unión Europea (2010-2013)
Development and field testing of an efficient YBCO Coated Conductor based Fault Current Limiter for Operation in Electricity Networks (ECCOFLOW)
Investigador Principal: Dr. X. Granados
- 32.- Proyecto CENIT, MICINN (2010-2013)
ENERGÍA EÓLICA OFFSHORE 2020 (AZIMUT)
Subcontratación de GAMESA
Investigador Principal: Dr. X. Granados
- 33.- Grupo consolidado de La Generalitat de Catalunya (2009-2013)
Materials Superconductors i Nanoestructuració a Gran Escala
Investigador Principal: Dra. T. Puig
- 34.- Xarxa temàtica “Materials per a l’Energia” (XeRMAE) (2005-2012)
Materials Superconductors i Nanoestructuració a Gran Escala
Investigador Principal: Dra. T. Puig
- 35.- ERC-2014-AdG (2015-2020)
ULTRAFast growth of ultrahigh performance SUPERconducting TAPES (ULTRASUPERTAPE)
Investigador Principal: Dra. T. Puig

- 36.- MINECO. Retos colaboración (2014-2017)
 Diseño de una nueva generación de generadores y equipos auxiliares para energía eólica basados en superconductores (SUMAN)
 Empresa: Gamesa
 Investigador Principal: Dr. J. Granados
- 37.- MINECO. Retos Colaboración (2015-2017)
 Desarrollo de tintas de curado UV y pastas serigráficas enfocadas a cintas superconductoras (SuperinKs)
 Empresa: OXOLUTIA
 Investigador Principal: Dra. T. Puig
- 38.- MINECO. Plan Nacional (2015-2017)
 Cintas superconductoras y heteroestructuras de óxidos de bajo coste para el reto energético (CoachSupenergy)
 Investigador Principal: Dra. T. Puig
- 39.- Grupo consolidado de La Generalitat de Catalunya (2014-2016)
 Materials Superconductors i Nanoestructuració a Gran Escala
 Investigador Principal: Dra. T. Puig

7.2- PRINCIPAL RESEARCHER

- 1.- Estudio de materiales tipo ferrita utilizables para la grabación magnética: elaboración y caracterización de partículas finas y capas delgadas
 Universitat de Barcelona - C.N.R.S. Grenoble
 Responsable: X. Obradors
- 2.- Proyecto Twinning (CEE-SCIENCE) (1988-90)
 Realización y puesta a punto de instrumentación para la difracción de rayos X en los centros de radiación sincrotrón de Frascati y Lure
 Participantes:
 3 Laboratorios franceses
 3 Laboratorios italianos
 2 Laboratorios españoles
 Responsable equipo Barcelona: X. Obradors
- 3.- Programa Internacional de Cooperación Científica (PICS). Financiación: CNRS-CSIC (1988-90)
 Elaboración y caracterización de óxidos mixtos y aleaciones magnéticas. Aplicaciones: Grabación magnética, imanes permanentes, superconductores de alta temperatura
 Laboratorios participantes:
 Laboratoire de Cristallographie, CNRS, Grenoble
 Instituto de Ciencia de Materiales de Aragón.
 Dpto. Química Inorgánica, Univ. Complutense de Madrid.
 Dpto. Física Fundamental, Univ. de Barcelona-Instituto Ciencia de Materiales de Barcelona
 Responsable equipo Barcelona: X. Obradors
- 4.- Acción Integrada Hispano-Francesa (1988)
 Estudio de materiales ferritas utilizables para la grabación magnética: elaboración y caracterización de partículas finas y de láminas delgadas
 Responsable: X. Obradors
- 5.- Proyecto Twinning (CEE-SCIENCE) (1988-90)
 Investigación básica de monocristales de óxidos superconductores de alta temperatura crítica
 Participantes:
 * Laboratoire Louis Néel

Laboratoire Cristallographie et Centre de Recherche des Très Basses Temperatures
C.N.R.S. Grenoble

- * Laboratorio MASPEC, C.N.R., Parma
- * I.T.S.E., C.N.R., Roma
- * I.T.M., C.N.R., Milano
- * C.N.R., Bologna
- * Max Planck Institut (3 Laboratorios) Stuttgart
- * Physics Department, University of Warwick
- * Departamento de Física, Universidade de Oporto
- * Departamento de Química Inorgánica,
Universidad Complutense de Madrid
- * Instituto de Ciencia de Materiales de Aragón,
C.S.I.C., Zaragoza
- * Instituto Ciencia de Materiales de Barcelona - CSIC
Departamento Física Fundamental Universitat de Barcelona
Responsable equipo Barcelona: X. Obradors.

- 6.- Infraestructura Científica, Plan Nacional Nuevos Materiales, CICYT (1988)
Equipo superconductor de campo magnético intenso para diversas medidas físicas
Responsable: X. Obradors
- 7.- Proyecto Programa MIDAS, CICYT - REDESA - UNESA, (1989-1992)
Preparación y procesado de cerámicas superconductoras texturadas con altas corrientes críticas
Instituto de Ciencia de Materiales de Barcelona, C.S.I.C.
ERCROS S.A.
Investigador Responsable: X. Obradors
- 8.- Ayuda Complementaria de proyecto CEE-CODEST, DGICYT, M.E.C.
Realización y puesta a punto de instrumentación para la difracción de rayos X en los centros de radiación sincrotrón de Frascati y LURE
Investigador Responsable: X. Obradors
- 9.- Acción Integrada Hispano - Británica (1989)
Antiferromagnetism and high temperature superconductivity in copper oxides
I.C.M.B., C.S.I.C. - University of Reading
Responsable: X. Obradors
- 10.- Programa General de Conocimiento, Ministerio de Educación y Ciencia (1990-92)
Oxidos Superconductores y no superconductores: estudio comparativo de las propiedades magnéticas y de transporte
I.C.M.A.B., C.S.I.C.
Responsable: X. Obradors
- 11.- Programa SCIENCE, CEE (1992-94)
Non copper based and non standard superconducting materials
 - * Lab.L.Néel, CNRS Grenoble
 - * Lab.Cristallographie, CNRS Grenoble
 - * LEPES, CNRS Grenoble
 - * ICMAB, CSIC Barcelona
 - * Univ.Warwick, Warwick, G.B.
 - * Univ.Oxford, Oxford, G.B.
 - * Max Planck Inst., StuttgartResponsable equipo Barcelona: X. Obradors
- 12.- Cooperación Científica Internacional. CEE, DG-XII, (1993-95)
Magnetism and superconductivity in electron superconductors: Influence of oxygen stoichiometry and microstructure

- * Centro Atómico Bariloche, Argentina
 - * ICMAB, CSIC, Barcelona
 - * Univ. Complutense de Madrid, Madrid
- Responsable equipo Barcelona: X. Obradors
- 13.- Infraestructura Científica, Plan Nacional de Materiales, CICYT, (1992)
Equipos generales de taller mecánico y electrónico
Responsable: X. Obradors
- 14.- Infraestructura Científica, DGICYT+CSIC+FEDER+CICYT (1993-94)
Licuefactor Helio
Responsable: X. Obradors
- 15.- NATO Collaborative Research Grant (1992-93). NATO
Anisotropic pinning mechanism in high temperature superconductors
* Argonne National Laboratory, USA
* ICMAB, Barcelona
Responsable: X. Obradors
- 16.- Contrato de investigación MARKPLI S.L. (1993)
Análisis del acondicionador de agua magnetohidrodinámico MHD
Responsable: X. Obradors
- 17.- Scientific and Technical Cooperation Network (1993-95)
Human Capital and Mobility Program, CEE
Flux pinning in high temperature superconductors
7 Laboratorios Alemania
4 Laboratorios Holanda
2 Laboratorios Gran Bretaña
1 Laboratorio Bélgica
1 Laboratorio Austria
1 Laboratorio Francia
1 Laboratorio Italia
1 Laboratorio Suiza
3 Laboratorios España
Responsable Barcelona: X. Obradors
- 18.- Promoción General de Conocimiento, DGICYT (1993-95)
Magnetismo, transición metal-aislante y superconductividad en óxidos de transferencia de carga
Responsable: X. Obradors
- 19.- Programa MIDAS: CICYT-REE-UNESA (1993-96)
Desarrollo de sistemas de electricidad de potencia basados en cerámicas texturadas superconductoras de $\text{YBa}_2\text{Cu}_3\text{O}_7$
Responsable: X. Obradors
- 20.- CEE, Brite-Euram (1994-96)
Melt texture processing of bulk YBaCuO material for magnetic levitation and energy conversion
* Univ.Gottingen, Lab.Jena, Univ.Braunschweig, Alemania
* CNRS Caen, Francia
* ICMAB -CSIC, España
Responsable: Dr. X. Obradors
Coordinador: Dr. H. Freyhardt
- 21.- CICYT. Acción Especial (1994)
Complementos para licuefactor de Helio
Responsable: Dr. X. Obradors

- 22.- Contrato de investigación Minas de Almadén y Arrayanes - Erkimia (1995-96)
Fabricación de imanes permanentes y superconductores con base Sr
Responsable: Dr. X. Obradors
- 23.- Grupos de investigación de calidad, Generalitat de Catalunya (1994)
Laboratori Propietats Elèctriques i Magnètiques, ICMAB
Responsable: Dr. X. Obradors
- 24.- Xarxa temàtica (1995), Generalitat de Catalunya, Pla de Recerca
Aplicacions dels materials superconductors o magnètics
9 Laboratoris
Responsable: Dr. X. Obradors
- 25.- Network HCM -UE (1996-99)
Oxide spin electronics (OXSEN)
1 Laboratori irlandés
2 Laboratoris britànics
2 Laboratoris franceses
1 Laboratori alemany
1 Laboratori espanyol
Responsable Barcelona: Dr. X. Obradors
- 26.- Acció especial, CICYT, Plan de Materiales (1996)
Ampliació laboratori de magnetometria del ICMAB
Responsable: Dr. X. Obradors
- 27.- Programa Nacional de Materiales, CICYT (1996-98)
Procesado de superconductores con altas corrientes críticas: desarrollo de prototipos de sistemas
electrotécnicos
Proyecto coordinado: 4 subproyectos
Responsable - coordinador: Dr. X. Obradors
- 28.- Xarxa temàtica (1997), Generalitat de Catalunya, Pla de Recerca
Aplicacions dels materials superconductors o magnètics
9 Laboratoris
Responsable: Dr. X. Obradors
- 29.- Grupos de investigación de calidad, Generalitat de Catalunya (1996)
Laboratori Propietats Elèctriques i Magnètiques, ICMAB
Responsable: Dr. X. Obradors
- 30.- Comunidad de Trabajo de los Pirineos, Generalitat de Catalunya (1997-99)
Nanosistemas magnéticos y aplicaciones
4 comunidades: Barcelona (ICMAB, UPC, UAB), Toulouse (CNRS - UPS), Font Romeu (CNRS),
CEIT - San Sebastián
Responsable - coordinador: Dr. X. Obradors
- 31.- Superconducting European Excellence Network (SCENET) (1996-98)
Programa ESPRIT - UE
Coordinador: Dr. M. Marezio, Steering Committee: Dr. X. Obradors
- 32.- Contrato de investigación con Red Eléctrica de España (1997-98)
Desarrollo y fabricación de sistemas de interés en electricidad de potencia basados en materiales
superconductores cerámicos
Responsable: Dr. X. Obradors

- 33.- Contrato de investigación con Markpli S.L. (1997)
Optimización mediante CAD de sistemas magnetohidrodinámicos acondicionadores de aguas
Responsable: Dr. X. Obradors
- 34.- Network HCM - UE (1998-2000)
High Critical Current Superconductors for Technical Applications (SUPERCURRENTS)
2 laboratorios austríacos
2 laboratorios británicos
1 laboratorio holandés
1 laboratorio alemán
1 laboratorio español
Responsable: Dr. X. Obradors
- 35.- Proyecto EURAM - industrial - UE (1998-2001)
Bulk YBCO and High Voltage Fault Current Limiter (BYFAULT)
1 laboratorio francés
1 laboratorio alemán
2 laboratorios españoles
1 industria francesa
1 industria alemana
3 industrias españolas
Responsable: Dr.X. Obradors
- 36.- Proyecto Thematic Network, EURAM (1999-2000)
European Network for power applications of superconductivity (SCENET-POWER)
Coordinador: Dr. M. Marezio, Responsable Barcelona: Dr. X. Obradors
- 37.- Proyecto colaboración internacional CSIC - Univ.Tel Aviv (Israel) (1998-2000)
ICMAB - School of Physics (Prof.G. Deutscher)
Anisotropía y línea de irreversibilidad en superconductores de alta temperatura basados en Hg
sustituidos con Re
- 38.- Acción Especial, Complemento proyecto EURAM, CICYT (1999)
Bulk YBCO and High Voltage Fault Current Limiter (BYFAULT)
Responsable: Dr. X. Obradors
- 39.- Red Temática, Comunidad de Trabajo de los Pirineos (1998-1999)
Barcelona, Toulouse, Zaragoza
Manganitas: Materialers máxicos y láminas delgadas. Estudio de las propiedades magnéticas bajo
campos magnéticos pulsantes
Responsable Barcelona: Dr. X. Obradors
- 40.- Proyecto PETRI-CICYT (2000-2001)
Mavilor S.A., U.P. Catalunya, CIMNE, ICMAB-CSIC
Motor con cojinete magnético pasivo para sistemas de alta fiabilidad
Responsable: Dr. X. Obradors
- 41.- Proyecto colaboración Internacional CSIC-CNR (2000-2001)
Preparación y caracterización de los nuevos superconductores de alta temperatura del sistema Hg-Ba-
Ca-Cu-O
Barcelona, Faenza
Responsable: Dr. X. Obradors
- 42.- Generalitat de Catalunya, Ayuda grupo consolidado (1998-99)
Instituto de Ciencia de Materiales de Barcelona – CSIC
Grupo Materiale magnéticos y superconductores
Responsable: Prof. X. Obradors

- 43.- Generalitat de Catalunya, Ayuda grupo consolidado (2000-2001)
 Instituto de Ciencia de Materiales de Barcelona – CSIC
 Grupo Materiales superconductores
 Responsable: Prof. X. Obradors
- 44.- European network finaced by the Engineering and Physical Sciences Research Council (EPSRC-GB)
 European Forum for Processors of Bulk (RE)BCO (EFFORT)
 14 laboratorios europeos
 Responsable: Dr. X. Obradors
- 45.- Network HCM - UE (2000-2003)
 Advanced rotating electrical machines exploiting high temperature superconducting components (SUPERMACHINES)
 1 laboratorio belga
 2 laboratorios británicos
 1 laboratorio portugués
 1 laboratorio alemán
 1 laboratorio español
 Responsable: Dr. X. Obradors
- 46.- Proyecto PHARE –UE (2000)
 Development of PTCR thermistors based on BaTiO₃ for heating source with low energy consumption
 Institut for Non-ferrous and Rare metals, Bucarest, Rumania, ICMAB-CSIC
 Responsable: Dr. X. Obradors
- 47.- Contrato de investigación con Expert (2000)
 Desarrollo de sistema de calefacción para desorción de filtro de carbón activo
 UPC, ICMAB-CSIC
 Responsables: Dr. X. Obradors y Dr. X. Granados
- 48.- Proyecto Hispano- americano de cooperación científica y tecnológica (2000)
 Soldadura de monodominios monolíticos de REBCO para dispositivos superconductores
 Argonne National Laboratory, ICMAB-CSIC
 Responsables: Dr. X. Obradors, Dr. George Crabtree
- 49.- Proyecto CICYT, Plan Nacional de Materiales (1999-2001)
 Superconductores con altas corrientes críticas para aplicaciones de potencia
 ICMAB-CSIC, UPC, UB
 Responsable: Dr. X. Obradors
- 50.- Proyecto programa Sustainable Growth – UE (2001-2004)
 Novel sol gel technology for long length superconducting tapes (SOLSULET)
 1 industria alemana
 1 industria española
 1 industria británica
 1 industria italiana
 1 laboratorio alemán
 2 laboratorios franceses
 2 laboratorios españoles
 Coordinador general: Dr. X. Obradors
- 51.- Proyecto STREP Sustainable Energy Systems – UE (2004-2007)
 Superconducting Coated conductor cable (Super3C)
 2 industrias alemanas
 2 industrias francesas
 1 laboratorio finlandés
 1 laboratorio eslovaco

- 2 laboratorios españoles
Responsable ICMA B: Dr. X. Obradors
- 52.- Proyecto Science and Society, Specific Support Action - UE (2004-2005)
Superconductivity for everyday life (Superlife)
1 laboratorio húngaro
1 laboratorio francés
1 laboratorio alemán
1 laboratorio británico
1 laboratorio español
1 industria húngara
1 industria sueca
Responsable ICMA B: Dr. Xavier Obradors
- 53.- Centre de Referència de Materials Avançats per l'Energia (CeRMAE)
Pla de recerca de la Generalitat de Catalunya (2003-2005)
7 laboratoris de Catalunya
Responsable ICMA B: Dr. Xavier Obradors
- 54.- Proyecto Unión Europea (STREP 516858) (2005-2008)
High performance nanostructured coated conductors by chemical processing: HIPERCHEM
1 laboratorio español
1 laboratorio británico
1 laboratorio austríaco
1 laboratorio belga
1 laboratorio alemán
1 industria alemana
Coordinador General: Dr. Xavier Obradors
- 55.- Proyecto ICMA B-CSIC Nexans Superconductors (2005)
Optimization and scaling up of the artificial welding of YBCO/Ag/YBCO structures and Preparation and characterization of welded elements with variable misorientation angles
Coordinador: Dr. Xavier Obradors
- 56.- Generalitat de Catalunya, Ayuda grupo consolidado (2005-2008)
Instituto de Ciencia de Materiales de Barcelona – CSIC
Grupo Materiales superconductores y nanoestructuración a gran escala
Responsable: Prof. X. Obradors
- 57.- Proyecto Acción Estratégica nanotecnología, CICYT (2005-2008)
Nanocomposites multifuncionales por vía química: superconductividad, magnetismo y óptica (NANOFUNCIONA)
Proyecto coordinado, ICMA B-CSIC, Univ. Santiago Compostela, Universidad de Vigo
Coordinador General: Dr. Xavier Obradors
- 58.- Proyecto Acciones Intramurales CSIC (2005-2007)
Crecimiento asistido por nanoplantillas de nanoestructuras multifuncionales a partir de soluciones químicas (CANNAMUS)
Proyecto coordinado, ICMA B-CSIC, CNM-CSIC, ICMM-CSIC
Coordinador General: Dr. Xavier Obradors
- 59.- Acción complementaria MEC (2006-2008)
Red “Nanoestructuración de materiales funcionales a gran escala”
Proyecto con 12 participantes
Coordinador general: Dr. Xavier Obradors
- 60.- Proyecto European Space agency
Super conductive materials for electric propulsion system (ARTES) (2006-2007)
Proyecto coordinado por INASMET

Coordinadores ICMAB-CSIC: Dr. X. Granados, Dr. X. Obradors

- 61.- Proyecto CONSOLIDER MEC (2007-2012)
Materiales avanzados y Nanotecnologías para dispositivos y sistemas eléctricos, electrónicos y magnetoelectrónicos innovadores
Proyecto coordinado con 9 grupos de investigación
Coordinador General: Dr. Xavier Obradors
- 62.- Proyecto NOVARE-ENDESA (2008-2010)
Cable superconductor para distribución y transporte eficiente y sostenible de la energía eléctrica, SUPERCABLE
Proyecto coordinado con 2 grupos de investigación y 1 empresa
Coordinador general: Dr. Xavier Obradors
- 63.- Proyecto Empresa Zenergy Power (2008-2010)
Ink-jet printing of superconducting layers (INES)
Coordinador general: Dr. Xavier Obradors
- 64.- Proyecto empresa Pirelli (2009-2011)
Development of low-cost coating on polymeric substrates
Coordinador general: Dr. Xavier Obradors
- 65.- Proyecto empresa Lafarga Lacambra (2011-2012)
Desarrollo de láminas piezoeléctricas sobre sustratos de cobre
Coordinador general: Dr. Xavier Obradors
- 66.- Proyecto colaborativo (Large), UE (2011- 2015)
European development of Superconducting Tapes: integrating novel materials and architectures into cost effective processes for power applications and magnets (EUROTAPES)
19 participantes
Coordinador general: Dr. Xavier Obradors
- 67.- Ministerio de Ciencia e Innovación-Programa INNPACTO (2011-2013)
Desarrollo de cintas superconductoras en modo continuo
Coordinador general: Dr. Xavier Obradors
- 68.- MINECO. Red de excelencia (2015-2017)
Materiales avanzados y nanotecnologías para dispositivos y sistemas eléctricos, electrónicos y magnetoelectrónicos innovadores (NANOSELECT)
Proyecto coordinado con 9 grupos de investigación
Coordinador general: Dr. Xavier Obradors
- 69.- H2020-INFRAIA-2014-2015 (2015-2019)
Nanoscience Foundries and Fine Analysis - Europe (NFFA-EUROPE)
Coordinador general: Dr. Xavier Obradors
- 70.- MINECO. Proyectos Plan Nacional (2015-2017)
Cintas superconductoras y heteroestructuras de óxidos de bajo coste para el reto energético (CoachSupenergy)
Responsables: Teresa Puig y Xavier Obradors
- 71.- MINECO. Apoyo a Centros de Excelencia Severo Ochoa (2016-2019)
Smart FUNctional MATerials for Social Grand Challenges (FUNMAT)
Coordinador general: Dr. Xavier Obradors
72. H2020-NMBP-18-2016-IA (2017-2020)
Cost effective SCFCL using advanced superconducting tapes for future HVDC grids (FASTGRID)
1 industria española
1 industria francesa

1 industria italiana
1 industria alemana
1 laboratorio alemán
1 laboratorio francés (coordinador)
2 laboratorios eslovacos
1 laboratorio suizo
1 laboratorio canadiense
1 laboratorio israelí
Responsable ICMAB: Dr. Xavier Obradors

73.- MINECO. Proyectos Plan Nacional (2019-2021)
Materiales superconductores de $\text{REBa}_2\text{Cu}_3\text{O}_{7-x}$ y funcionalidades para dispositivos tecnológicos (SuMaTe)
Responsables: Teresa Puig y Xavier Obradors

74.- H2020-MSCA-COFUND-2016 (EU-754397) (2017-2021)
DOCTORAL training programme in Functional Advanced Materials (DOCFAM)
5 partners (ICMAB, ICN2, IREC, IMB, ALBA)
Responsable: Xavier Obradors

8 _____ PUBLICATIONS

Citation number: >11.500

h index: 50

Number of articles distributed among journals with different impact index

Journal	Impact Index	No. art.	Journal	Impact Index	No. art.
Nature Materials	36,503	2	J. Alloys and Compounds	2,999	3
Chem Soc Rev	33,383	3	J. Eur. Ceram. Soc.	2,947	2
Nature Physics	20,147	1	Phys Rev Materials	2,926	3
Adv. Materials	17,493	4	Supercond.Sci. Technol.	2,88	69
Nano Letters	13,592	2	Ceram. International	2,758	1
J. Amer. Chem. Soc.	13,860	2	J. Mater. Sci.	2,371	1
Nature Communications	12,120	2	Appl. Phys. Express	2,365	1
Angew. Chemie	11,990	1	J. Phys. Cond. Mat.	2,346	9
Adv. Funct. Mat.	11,805	5	Mater. Res. Bull.	2,288	2
Adv. Science	9,030	2	Mater. Chem. Phys.	2,259	1
Small	8,64	1	EPL-Europhys. Lett.	2,229	3
Chem. Mater.	9,47	9	J. Nanopart. Res.	2,184	3
Phys.Rev.Lett.	8,46	6	Thermochim. Acta	2,184	4
ACS Applied Mat. and Interfaces	8,097	1	J.Appl. Phys.	2,183	31
Nanoscale	7,37	2	J.Solid State Chem.	2,133	6
Chem. Comm.	6,32	1	J. Magn. Magn.Mater.	1,970	20
J. Mater. Chem C	5,976	2	Surface Science	1,925	1
Crystal Growth Design	4,891	2	Solid State Comm.	1,897	6
Solar Energy Materials and Solar Cells	4,78	1	J. Phys. Chem. Solids	1,853	6
Acta Materialia	4,465	1	Philos. Mag.	1,825	3
Appl. Phys. Lett. Materials	4,323	1	Thin Solid Films	1,759	7
Adv. Mat. Interfaces	4,28	1	J. Cryst. Growth	1,698	1
Scientific Reports	4,26	4	Phys. Lett. A	1,683	1
Adv. Electronic Mat.	4,19	3	J. Mater.Res.	1,647	10
Phys Chem Chem Phys	4,12	2	J. Nanosc. Nanotec.	1,556	1
CrysEngComm	4,034	3	J. Sol-Gel Sci. Technol.	1,532	4
Journal of Analytical And Applied Pyrolysis	3,47	3	IEEE Trans. on Magn.	1,386	11
Nanotechnology	3,44	3	Eur. Phys. J. B	1,345	1
Phys.Rev. B	3,84	57	IEEE Trans. Appl. Superc.	1,235	36
RSC Advances	3,289	3	Physica C	0,942	82
Appl. Phys. Lett.	3,302	27	ACS Appl. Nano Mat		1
New J. of Chemistry	3,277	1			

Distribution of published articles among the Web of Science cathegories

Web of Science categories	No. articles	% total
Applied Physics	397	66
Condensed Matter Physics	338	56
Materials Science, Multidisciplinar	176	29
Engineering Electrical and Electronic	54	9
Chemistry Physical	47	8

Chemistry, Multidisciplinary	44	7
Nanoscience and Nanotechnology	33	5
Physics, Multidisciplinary	27	5

LIST OF PUBLICATIONS

1. E. Bartolomé, B. Mundet, R. Guzmán, J. Gázquez, S. M. Valvidares, J. Herrero-Martín, E. Pellegrin, T. Puig, X. Obradors
Embedded Magnetism in $\text{YBa}_2\text{Cu}_3\text{O}_7$ Associated to Cu-O Vacancies within Intergrowths: Implications for Superconducting Current Performance
2020, *ACS Appl. Nano Mat* (in press)
2. N. Pompeo, A Alimenti, K Torokhtii, E Bartolomé, A. Palau, T Puig, A Augieri, V Galluzzi, A Mancini, G. Celentano, X Obradors, E Silva
Intrinsic anisotropy and pinning anisotropy in nanostructured $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ from microwave measurements
2020, *Supercond. Sci. Technol.* <https://doi.org/10.1088/1361-6668/ab773b>
3. Bernat Mundet, Steven T. Hartman, Roger Guzmán, Juan C. Idrobo, Xavier Obradors, Teresa Puig, Rohan Mishra, Jaume Gázquez
Local strain-driven migration of oxygen vacancies to apical sites in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$
2020, *Nanoscale*, 12, 5922
4. Soler, L.; Jareno, J.; Banchewski, J.; Rasi, S.; Chamorro, N.; Guzman, R.; Yanez, R.; Mocuta, C.; Ricart, S.; Farjas, J.; Roura-Grabulosa, P.; Obradors, X.; Puig, T.
Ultrafast transient liquid assisted growth of high current density superconducting films
2020, *NATURE COMMUNICATIONS*, 11, 334
5. Hartman, Steven; Mundet, Bernat; Idrobo, Juan-Carlos; Obradors, Xavier; Puig, Teresa; Gázquez, Jaume; Mishra, Rohan
Direct observation of apical oxygen vacancies in the high-temperature superconductor $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$
2019, *PHYSICAL REVIEW MATERIALS*, 3, 14806
6. Rasi, Silvia; Ricart, Susagna; Obradors, Xavier; Puig, Teresa; Roura-Grabulosa, Pere; Farjas, Jordi
Effect of triethanolamine on the pyrolysis of metal-propionate-based solutions
2019, *JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS*, 143, 104685
7. Carlos Gonzalez-Rosillo, Juan; Ortega-Hernandez, Rafael; Arndt, Benedikt; Coll, Mariona; Dittmann, Regina; Obradors, Xavier; Palau, Anna; Sune, Jordi; Puig, Teresa
Engineering Oxygen Migration for Homogeneous Volume Resistive Switching in 3-Terminal Devices
2019, *ADVANCED ELECTRONIC MATERIALS*, 5, 1800629
8. Bartolome, E.; Valles, F.; Palau, A.; Rouco, V; Pompeo, N.; Balakirev, F. F.; Maiorov, B.; Civalle, L.; Puig, T.; Obradors, X.; Silva, E.
Intrinsic anisotropy versus effective pinning anisotropy in $\text{YBa}_2\text{Cu}_3\text{O}_7$ thin films and nanocomposites
2019, *PHYSICAL REVIEW B*, 100, 54502

9. Rasi, Silvia; Ricart, Susagna; Obradors, Xavier; Puig, Teresa; Roura-Grabulosa, Pere; Farjas, Jordi
Radical and oxidative pathways in the pyrolysis of a barium propionate-acetate salt
 2019, *JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS*, 141, 104640
10. Tixador, Pascal; Bauer, Markus; Bruzek, Christian-Eric; Calleja, Albert; Deutscher, Guy; Dutoit, Bertrand; Gomory, Fedor; Martini, Luciano; Noe, Mathias; Obradors, Xavier; Pekarcikova, Marcela; Sirois, Frederic
Status of the European Union Project FASTGRID
 2019, *IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY*, 29, 5603305
11. Martinez-Esain, Jordi; Puig, Teresa; Obradors, Xavier; Ros, Josep; Farjas, Jordi; Roura-Grabulosa, Pere; Faraudo, Jordi; Yanez, Ramon; Ricart, Susagna
Using evolved gas analysis - mass spectrometry to characterize adsorption on a nanoparticle surface
 2019, *NANOSCALE ADVANCES*, 1, 2740
12. V. Rouco, C. Navau, N. Del-Valle, D. Massarotti, G. P. Papari, D. Stornaiuolo, X. Obradors, T. Puig, F. Tafuri, A. Sanchez, A. Palau
Depairing Current at High Magnetic Fields in Vortex-Free High-Temperature Superconducting Nanowires
 2019, *Nano Letters* 19, 4174
13. S. Rasi, F. Silveri, S. Ricart, X. Obradors, T. Puig, P. Roura-Grabulosa, J. Farjas
Thermal decomposition of CuProp(2): In-situ analysis of film and powder pyrolysis
 2019, *Journal of Analytical and Applied Pyrolysis*, 140, 312
14. Z. Li, M. Coll, B. Mundet, A. Palau, T. Puig, X. Obradors
Accelerated growth by flash heating of high critical current Trifluoroacetate solution derived epitaxial superconducting YBa₂Cu₃O₇ films
 2019, *J. Mater. Chem C*, 7, 4789
15. Z. Li, M. Coll, B. Mundet, N. Chamorro, F. Vallès, A. Palau, J. Gazquez, S. Ricart, T. Puig, X. Obradors
Control of nanostructure and pinning properties in solution deposited YBa₂Cu₃O₇ nanocomposite with preformed perovskite nanoparticles
 2019, *Scientific Reports*, 9, 5828
16. Machado, Pamela; Scigaj, Mateusz; Gazquez, Jaume; Rueda, Estel; Sanchez-Diaz, Antonio; Fina, Ignasi; Gibert-Roca, Marti; Puig, Teresa; Obradors, Xavier; Campoy-Quiles, Mariano; Coll, Mariona
Band Gap Tuning of Solution-Processed Ferroelectric Perovskite BiFe_{1-x}CoxO₃ Thin Films
 2019, *Chemistry of Materials*, 31 (3), pp. 947 - 954
17. del Moral, A.; Gonzalez-Rosillo, J. C.; Gomez, A.; Puig, T.; Obradors, X.
Thermoelectric stack sample cooling modification of a commercial atomic force microscopy
 2019, *Ultramicroscopy*, 196, pp. 186 - 191

18. Pop, C.; Villarejo, B.; Pino, F.; Mundet, B.; Ricart, S.; de Palau, M.; Puig, T.; Obradors, X.
Growth of all-chemical high critical current YBa₂Cu₃O_{7-δ} thick films and coated conductors
2019, *Superconductor Science & Technology*, 32 (1), 15004
19. Martinez-Esain, Jordi; Faraudo, Jordi; Puig, Teresa; Obradors, Xavier; Ros, Josep; Ricart, Susagna; Yanez, Ramon
Tunable Self-Assembly of YF₃ Nanoparticles by Citrate -Mediated Ionic Bridges
2018, *Journal of the American Chemical Society*, 140 (6), pp. 2127 - 2134
20. Obradors, X.; Puig, T.; Li, Z.; Pop, C.; Mundet, B.; Chamorro, N.; Valles, F.; Coll, M.; Ricart, S.; Vallejo, B.; Pino, F.; Palau, A.; Gazquez, J.; Ros, J.; Usoskin, A.
Epitaxial YBa₂Cu₃O_{7-x} nanocomposite films and coated conductors from BaMO₃ (M = Zr, Hf) colloidal solutions
2018, *Superconductor Science & Technology*, 31 (4), 44001
21. Palau, A.; Valles, F.; Rouco, V.; Coll, M.; Li, Z.; Pop, C.; Mundet, B.; Gazquez, J.; Guzman, R.; Gutierrez, J.; Obradors, X.; Puig, T.
Disentangling vortex pinning landscape in chemical solution deposited superconducting YBa₂Cu₃O_{7-x} films and nanocomposites
2018, *Superconductor Science & Technology*, 31 (3), 34004
22. Gomez, A.; Puig, T.; Obradors, X.
Diminish electrostatic in piezoresponse force microscopy through longer or ultra-stiff tips
2018, *Applied Surface Science*, 439, pp. 577 - 582
23. Valles, F.; Palau, A.; Rouco, V.; Mundet, B.; Obradors, X.; Puig, T.
Angular flux creep contributions in YBa₂Cu₃O_{7-δ} nanocomposites from electrical transport measurements
2018, *Scientific Reports*, 8, 5924
24. Palau, Anna; Fernandez-Rodriguez, Alejandro; Gonzalez-Rosillo, Juan Carlos; Granados, Xavier; Coll, Mariona; Bozzo, Bernat; Ortega-Hernandez, Rafael; Sune, Jordi; Mestres, Narcis; Obradors, Xavier; Puig, Teresa
Electrochemical Tuning of Metal Insulator Transition and Nonvolatile Resistive Switching in Superconducting Films
2018, *Acs Applied Materials & Interfaces*, 10 (36), pp. 30522 - 30531
25. Roxana Vlad, Valentina; Bartolome, Elena; Vilardell, Marta; Calleja, Albert; Meledin, Alexander; Obradors, Xavier; Puig, Teresa; Ricart, Susagna; Van Tendeloo, Gustaaf; Usoskin, Alexander; Lee, Sergey; Petrykin, Valery; Molodyk, Alexander
Inkjet Printing Multideposited YBCO on CGO/LMO/MgO/Y₂O₃/Al₂O₃/Hastelloy Tape for 2G-Coated Conductors
2018, *Ieee Transactions on Applied Superconductivity*, 28 (4), 6601805
26. Rouco, Victor; Massarotti, Davide; Stornaiuolo, Daniela; Papari, Gian Paolo; Obradors, Xavier; Puig, Teresa; Tafuri, Francesco; Palau, Anna
Vortex Lattice Instabilities in YBa₂Cu₃O_{7-x} Nanowires
2018, *Materials*, 11 (2), 211

27. Martinez-Esain, Jordi; Puig, Teresa; Obradors, Xavier; Ros, Josep; Yanez, Ramon; Faraudo, Jordi; Ricart, Susagna
Faceted-Charge Patchy LnF(3) Nanocrystals with a Selective Solvent Interaction
2018, *Angewandte Chemie-International Edition*, 57 (45), pp. 14747 - 14751
28. Obradors, Xavier
High critical current nanocomposite REBa₂Cu₃O₇ (RE = rare earth) tapes: towards a new era of ultra-high field magnetism
2018, *Superconductor Science & Technology*, 31 (11), 110501
29. Rasi, Silvia; Ricart, Susagna; Obradors, Xavier; Puig, Teresa; Roura, Pere; Farjas, Jordi
Thermal decomposition of yttrium propionate: film and powder
2018, *Journal of Analytical and Applied Pyrolysis*, 133, pp. 225 - 233
30. Mundet, B.; Jareno, J.; Gazquez, J.; Varela, M.; Obradors, X.; Puig, T.
Defect landscape and electrical properties in solution-derived LaNiO₃ and NdNiO₃ epitaxial thin films
2018, *Physical Review Materials*, 2 (6), 63607
31. Valles, F.; Palau, A.; Rouco, V.; Mundet, B.; Obradors, X.; Puig, T.
Angular flux creep contributions in YBa₂Cu₃O₇-delta nanocomposites from electrical transport measurements (2018)
2018, *Scientific Reports*, 8, 7064
32. Guzman, Roger; Gazquez, Jaume; Mundet, Bernat; Coll, Mariona; Obradors, Xavier; Puig, Teresa
Probing localized strain in solution-derived YBa₂Cu₃O₇-delta nanocomposite thin films
2017, *Physical Review Materials*, 1 (2), 24801
33. Queralto, Albert; de la Mata, Maria; Arbiol, Jordi; Huehne, Ruben; Obradors, Xavier; Puig, Teresa
Unveiling the Nucleation and Coarsening Mechanisms of Solution-Derived Self-Assembled Epitaxial Ce_{0.9}Gd_{0.1}O_{2-y} Nanostructures
2017, *Crystal Growth & Design*, 17 (2), pp. 504 - 516
34. Gomez, A.; Gich, M.; Carretero-Genevri, A.; Puig, T.; Obradors, X.
Piezo-generated charge mapping revealed through direct piezoelectric force microscopy
2017, *Nature Communications*, 8, 1113
35. Bartolome, Elena; Cayado, Pablo; Solano, Eduardo; Mocuta, Cristian; Ricart, Susagna; Mundet, Bernat; Coll, Marionna; Gazquez, Jaume; Meledin, Alexander; van Tendeloo, Gustaaf; Valvidares, S. Manuel; Herrero-Martin, Javier; Gargiani, Pierluigi; Pellegrin,
Hybrid YBa₂Cu₃O₇ Superconducting-Ferromagnetic Nanocomposite Thin Films Prepared from Colloidal Chemical Solutions
2017, *Advanced Electronic Materials*, 3 (7), 1700037

36. Cayado, Pablo; Mundet, Bernat; Eloussifi, Hichem; Valles, Ferren; Coll, Mariona; Ricart, Susagna; Gazquez, Jaume; Palau, Anna; Roura, Pere; Farjas, Jordi; Puig, Teresa; Obradors, Xavier
Epitaxial superconducting GdBa₂Cu₃O_{7-δ}/Gd₂O₃ nanocomposite thin films from advanced low-fluorine solutions
 2017, *Superconductor Science & Technology*, 30 (12), 125010
37. Lu, Changyong; Sandoval, Stefania; Puig, Teresa; Obradors, Xavier; Tobias, Gerard; Ros, Josep; Ricart, Susagna
Novel Fe₃O₄@GNF@SiO₂ nanocapsules fabricated through the combination of an in situ formation method and SiO₂ coating process for magnetic resonance imaging
 2017, *Rsc Advances*, 7 (40), pp. 24690 - 24697
38. Carlos Gonzalez-Rosillo, Juan; Ortega-Hernandez, Rafael; Jareno-Cerulla, Julia; Miranda, Enrique; Sune, Jordi; Granados, Xavier; Obradors, Xavier; Palau, Anna; Puig, Teresa
Volume Resistive Switching in metallic perovskite oxides driven by the Metal-Insulator Transition
 2017, *Journal of Electroceramics*, 39 (1-4), pp. 185 - 196
39. Rouco, V.; Cordoba, R.; De Teresa, J. M.; Rodriguez, L. A.; Navau, C.; Del-Valle, N.; Via, G.; Sanchez, A.; Monton, C.; Kronast, F.; Obradors, X.; Puig, T.; Palau, A.
Competition between Superconductor - Ferromagnetic stray magnetic fields in YBa₂Cu₃O_{7-x} films pierced with Co nano-rods
 2017, *Scientific Reports*, 7, 5663
40. Cayado, P.; Sanchez-Valdes, C. F.; Stangl, A.; Coll, M.; Roura, P.; Palau, A.; Puig, T.; Obradors, X.
Untangling surface oxygen exchange effects in YBa₂Cu₃O_{6+x} thin films by electrical conductivity relaxation
 2017, *Physical Chemistry Chemical Physics*, 19 (21), pp. 14129 - 14140
41. Tair, Fadila; Carreras, Laura; Camps, Jaume; Farjas, Jordi; Roura, Pere; Calleja, Albert; Puig, Teresa; Obradors, Xavier
Melting temperature of YBa₂Cu₃O_{7-x} and GdBa₂Cu₃O_{7-x} at subatmospheric partial pressure
 2017, *Journal of Alloys and Compounds*, 692, pp. 787 - 792
42. Solano, Eduardo; Geenen, Filip; Puig, Teresa; Obradors, Xavier; Mocuta, Cristian; Detavernier, Christophe
Axiotaxy in oxide heterostructures: Preferential orientation of BaCeO₃ nanoparticles embedded in superconducting YBa₂Cu₃O_{7-δ} thin films
 2017, *Thin Solid Films*, 638, pp. 105 - 113
43. Garces, P.; Coll, M.; Castro, H.; Puig, T.; Obradors, X.
Preparation of YBCO-BYTO and YBCO-BZO nanostructured superconducting films by chemical method
 2017, *II Colombian Congress of Electrochemistry (Cceq) and 2Nd Symposium on Nanoscience and Nanotechnology (Snn)*, 786, UNSP 012017

44. Vilardell, Marta; Fornell, Jordina; Sort, Jordi; Vlad, Roxana; Carlos Fernandez, Juan; Puig, Joaquim; Usoskin, Alexander; Palau, Anna; Puig, Teresa; Obradors, Xavier; Calleja, Albert
Inkjet-Printed Chemical Solution Y₂O₃ Layers for Planarization of Technical Substrates
2017, *Coatings*, 7 (12), 227
45. De Keukeleere, Katrien; Cayado, Pablo; Meledin, Alexander; Valles, Ferran; De Roo, Jonathan; Rijckaert, Hannes; Pollefeyt, Glenn; Bruneel, Els; Palau, Anna; Coll, Mariona; Ricart, Susagna; Van Tendeloo, Gustaaf; Puig, Teresa; Obradors, Xavier; Van Driessc
Superconducting YBa₂Cu₃O₇- Nanocomposites Using Preformed ZrO₂ Nanocrystals: Growth Mechanisms and Vortex Pinning Properties
2016, *Advanced Electronic Materials*, 2 (10), 1600161
46. Gazquez, Jaume; Guzman, Roger.; Mishra, Rohan; Bartolome, Elena; Salafranca, Juan; Magen, Cesar; Varela, Maria; Coll, Mariona; Palau, Anna; Valvidares, S. Manuel; Gargiani, Pierluigi; Pellegrin, Eric; Herrero-Martin, Javier.; Pennycook, Stephen J.; Pantel
Emerging Diluted Ferromagnetism in High-T_c Superconductors Driven by Point Defect Clusters
2016, *Advanced Science*, 3 (6), 1500295
47. Palmer, X.; Pop, C.; Eloussifi, H.; Villarejo, B.; Roura, P.; Farjas, J.; Calleja, A.; Palau, A.; Obradors, X.; Puig, T.; Ricart, S.
Solution design for low-fluorine trifluoroacetate route to YBa₂Cu₃O₇ films
2016, *Superconductor Science & Technology*, 29 (2), 24002
48. Queralto, Albert; de la Mata, Maria; Arbiol, Jordi; Obradors, Xavier; Puig, Teresa
Disentangling Epitaxial Growth Mechanisms of Solution Derived Functional Oxide Thin Films
2016, *Advanced Materials Interfaces*, 3 (18), 1600392
49. Queralto, Albert; del Pino, Angel Perez; de la Mata, Maria; Tristany, Mar; Obradors, Xavier; Puig, Teresa; Troler-McKinstry, Susan
Ultraviolet pulsed laser crystallization of Ba_{0.8}Sr_{0.2}TiO₃ films on LaNiO₃-coated silicon substrates
2016, *Ceramics International*, 42 (3), pp. 4039 - 4047
50. Meledin, A.; Turner, S.; Cayado, P.; Mundet, B.; Solano, E.; Ricart, S.; Ros, J.; Puig, T.; Obradors, X.; Van Tendeloo, G.
Unique nanostructural features in Fe, Mn-doped YBCO thin films
2016, *Superconductor Science & Technology*, 29 (12), 125009
51. Queralto, Albert; Perez del Pino, Angel; de la Mata, Maria; Arbiol, Jordi; Tristany, Mar; Obradors, Xavier; Puig, Teresa
Ultrafast Epitaxial Growth Kinetics in Functional Oxide Thin Films Grown by Pulsed Laser Annealing of Chemical Solutions
2016, *Chemistry of Materials*, 28 (17), pp. 6136 - 6145
52. Bartolome, Elena; Cayado, Pablo; Solana, Eduardo; Ricart, Susagna; Gazquez, Jaume; Mundet, Bernat; Coll, Mariona; Puig, Teresa; Obradors, Xavier; Valvidares, Manuel; Herrero-Martin, Javier; Gargiani, Pierlugi; Pellegrin, Eric
Magnetic stability against calcining of microwave-synthesized CoFe₂O₄ nanoparticles
2016, *New Journal of Chemistry*, 40 (8), pp. 6890 - 6898

53. Queralto, A.; de la Mata, M.; Martinez, L.; Magen, C.; Gibert, M.; Arbiol, J.; Huehne, R.; Obradors, X.; Puig, T.
Orientation symmetry breaking in self-assembled Ce_{1-x}GdxO_{2-y} nanowires derived from chemical solutions
 2016, *Rsc Advances*, 6 (99), pp. 97226 - 97236
54. Lu, C. Y.; Puig, T.; Obradors, X.; Ricart, S.; Ros, J.
Ultra-fast microwave-assisted reverse microemulsion synthesis of Fe₃O₄@SiO₂ core-shell nanoparticles as a highly recyclable silver nanoparticle catalytic platform in the reduction of 4-nitroaniline
 2016, *Rsc Advances*, 6 (91), pp. 88762 - 88769
55. Palau, Anna; Valencia, Sergio; Del-Valle, Nuria; Navau, Carles; Cialone, Matteo; Arora, Ashima; Kronast, Florian; Tennant, D. Alan; Obradors, Xavier; Sanchez, Alvaro; Puig, Teresa
Encoding Magnetic States in Monopole-Like Configurations Using Superconducting Dots
 2016, *Advanced Science*, 3 (11), 1600207
56. Hopkins, Simon C.; Mitchell-Williams, Tom B.; Vanden Bussche, Dries R.; Calleja, Albert; Vlad, Valentina Roxana; Vilardell, Marta; Granados, Xavier; Puig, Teresa; Obradors, Xavier; Usoskin, Alexander; Soloviov, Mykola; Vojenciak, Michal; Goemoery, Fedor;
Low AC Loss Inkjet-Printed Multifilamentary YBCO Coated Conductors
 2016, *Ieee Transactions on Applied Superconductivity*, 26 (3), 6602905
57. Dias, Fabio Teixeira; Vieira, Valdemar das Neves; Nunes, Sabrina Esperanca; Pureur, Paulo; Schaf, Jacob; Farinela da Silva, Grazielle Fernanda; Gouvea, Cristol de Paiva; Wolff-Fabris, Frederik; Kampert, Erik; Obradors, Xavier; Puig, Teresa; Roa Rovira, Joa
Magnetic irreversibility: An important amendment in the zero-field-cooling and field-cooling method
 2016, *Japanese Journal of Applied Physics*, 55 (2), 23101
58. Calleja, Albert; Sort, Jordi; Ricart, Susagna; Granados, Xavier; Palmer, Xavier; Roxana Vlad, Valentina; Puig, Teresa; Obradors, Xavier
Composite films combining electrospun fiber network and epitaxial oxide by chemical solution deposition
 2016, *Journal of Sol-Gel Science and Technology*, 80 (2), pp. 277 - 284
59. Dias, F. T.; Vieira, V. N.; Garcia, E. L.; Wolff-Fabris, F.; Kampert, E.; Gouvea, C. P.; Schaf, J.; Obradors, X.; Puig, T.; Roa, J. J.
Functional behavior of the anomalous magnetic relaxation observed in melt-textured YBa₂Cu₃O_{7-δ} samples showing the paramagnetic Meissner effect
 2016, *Physica C-Superconductivity and Its Applications*, 529, pp. 44 - 49
60. Dias, F. T.; Vieira, V. N.; Wolff-Fabris, F.; Kampert, E.; Gouvea, C. P.; Campos, A. P. C.; Archanjo, B. S.; Schaf, J.; Obradors, X.; Puig, T.; Roa, J. J.; Sahoo, B. K.
High-field paramagnetic Meissner effect up to 14 T in melt-textured YBa₂Cu₃O_{7-δ}
 2016, *Physica C-Superconductivity and Its Applications*, 525, pp. 105 - 110

61. Cayado, P.; De Keukeleere, K.; Garzon, A.; Perez-Mirabet, L.; Meledin, A.; De Roo, J.; Valles, F.; Mundet, B.; Rijckaert, H.; Pollefeyt, G.; Coll, M.; Ricart, S.; Palau, A.; Gazquez, J.; Ros, J.; Van Tendeloo, G.; Van Driessche, I.; Puig, T.; Obradors, X.
Epitaxial YBa₂Cu₃O_{7-x} nanocomposite thin films from colloidal solutions
 2015, *Superconductor Science & Technology*, 28 (12), 124007
62. Mele, Paolo; Guzman, Roger; Gazquez, Jaume; Puig, Teresa; Obradors, Xavier; Saini, Shrikant; Yoshida, Yutaka; Mukaida, Masashi; Ichinose, Ataru; Matsumoto, Kaname; Adam, Malik Idries
High pinning performance of YBa₂Cu₃O_{7-x} films added with Y₂O₃ nanoparticulate defects
 2015, *Superconductor Science & Technology*, 28 (2), 24002
63. Roura, P.; Farjas, J.; Eloussifi, H.; Carreras, L.; Ricart, S.; Puig, T.; Obradors, X.
Thermal analysis of metal organic precursors for functional oxide preparation: Thin films versus powders
 2015, *Thermochimica Acta*, 601, pp. 1 - 8
64. Queralto, A.; del Pino, A. Perez; de la Mata, M.; Arbiol, J.; Tristany, M.; Gomez, A.; Obradors, X.; Puig, T.
Growth of ferroelectric Ba_{0.8}Sr_{0.2}TiO₃ epitaxial films by ultraviolet pulsed laser irradiation of chemical solution derived precursor layers
 2015, *Applied Physics Letters*, 106 (26), 262903
65. Ortega-Hernandez, R.; Coll, M.; Gonzalez-Rosillo, J.; Palau, A.; Obradors, X.; Miranda, E.; Puig, T.; Sune, J.
Resistive switching in CeO₂/La_{0.8}Sr_{0.2}MnO₃ bilayer for non-volatile memory applications
 2015, *Microelectronic Engineering*, 147, pp. 37 - 40
66. Coll, Mariona; Gazquez, Jaume; Fina, Ignasi; Khayat, Zakariya; Quindeau, andy; Alexe, Marin; Varela, Maria; Trolier-McKinstry, Susan; Obradors, Xavier; Puig, Teresa
Nanocrystalline Ferroelectric BiFeO₃ Thin Films by Low-Temperature Atomic Layer Deposition
 2015, *Chemistry of Materials*, 27 (18), pp. 6322 - 6328
67. Sanchez-Valdes, C. F.; Puig, T.; Obradors, X.
in situ study through electrical resistance of growth rate of trifluoroacetate-based solution-derived YBa₂Cu₃O₇ films
 2015, *Superconductor Science & Technology*, 28 (2), 24006
68. Queralto, Albert; Perez del Pino, Angel; de la Mata, Maria; Arbiol, Jordi; Obradors, Xavier; Puig, Teresa
Ultrafast Crystallization of Ce_{0.9}Zr_{0.1}O_{2-y} Epitaxial Films on Flexible Technical Substrates by Pulsed Laser Irradiation of Chemical Solution Derived Precursor Layers
 2015, *Crystal Growth & Design*, 15 (4), pp. 1957 - 1967
69. Cobas, Raiden; Munoz-Perez, Susset; Cadogan, Sean; Ridgway, Mark C.; Obradors, Xavier
Surface Charge Reversal Method for High-Resolution Inkjet Printing of Functional Water-Based Inks
 2015, *Advanced Functional Materials*, 25 (5), pp. 768 - 775

70. Garzon-Manjon, Alba; Solano, Eduardo; de la Mata, Maria; Guzman, Roger; Arbiol, Jordi; Puig, Teresa; Obradors, Xavier; Yanez, Ramon; Ricart, Susagna; Ros, Josep
Induced shape controllability by tailored precursor design in thermal and microwave-assisted synthesis of Fe₃O₄ nanoparticles
 2015, *Journal of Nanoparticle Research*, 17 (7), 291
71. Konstantopoulou, K.; Sarazin, M.; Granados, X.; Pastor, J. Y.; Obradors, X.
Effect of the axial stress and the magnetic field on the critical current and the electric resistance of the joints between HTS coated conductors
 2015, *Superconductor Science & Technology*, 28 (6), 64001
72. Rouco, V.; Palau, A.; Monton, C.; Del-Valle, N.; Navau, C.; Sanchez, A.; Obradors, X.; Puig, T.
Geometrically controlled ratchet effect with collective vortex motion
 2015, *New Journal of Physics*, 17, 73022
73. Perez, S. Munoz; Cobas, R.; Cadogan, J. M.; Albino Aguiar, J.; Streltsov, S. V.; Obradors, X.
Ruthenium- europium configuration in the Eu₂Ru₂O₇ pyrochlore
 2015, *Journal of Applied Physics*, 117 (17), 17C702
74. Carretero-Genevri, A.; Frontera, C.; Hassini, A.; Oro-Sole, J.; Moreno, C.; Obradors, X.; Puig, T.; Mestres, N.
Chemical solution growth of La_{0.7}Sr_{0.3}MnO₃ nanotubes in confined geometries
 2015, *Journal of Sol-Gel Science and Technology*, 73 (3), pp. 620 - 627,
75. Obradors, Xavier; Puig, Teresa
Coated conductors for power applications: materials challenges
 2014, *Superconductor Science & Technology*, 27 (4), 44003
76. Obradors, X.; Puig, T.; Gibert, M.; Queralto, A.; Zabaleta, J.; Mestres, N.
Chemical solution route to self-assembled epitaxial oxide nanostructures
 2014, *Chemical Society Reviews*, 43 (7), pp. 2200 - 2225
77. Aklalouch, Mohamed; Calleja, Albert; Granados, Xavier; Ricart, Susagna; Boffa, Vincenzo; Ricci, Fabrizio; Puig, Teresa; Obradors, Xavier
Hybrid sol-gel layers containing CeO₂ nanoparticles as UV-protection of plastic lenses for concentrated photovoltaics
 2014, *Solar Energy Materials and Solar Cells*, 120, pp. 175 - 182
78. Coll, Mariona; Moreno, Josep M. Montero; Gazquez, Jaume; Nielsch, Kornelius; Obradors, Xavier; Puig, Teresa
Low Temperature Stabilization of Nanoscale Epitaxial Spinel Ferrite Thin Films by Atomic Layer Deposition
 2014, *Advanced Functional Materials*, 24 (34), pp. 5368 - 5374
79. Coll, M.; Guzman, R.; Garcés, P.; Gazquez, J.; Rouco, V.; Palau, A.; Ye, S.; Magen, C.; Suo, H.; Castro, H.; Puig, T.; Obradors, X.
Size-controlled spontaneously segregated Ba₂YTaO₆ nanoparticles in YBa₂Cu₃O₇ nanocomposites obtained by chemical solution deposition
 2014, *Superconductor Science & Technology*, 27 (4), 44008

80. Rouco, V.; Palau, A.; Guzman, R.; Gazquez, J.; Coll, M.; Obradors, X.; Puig, T.
Role of twin boundaries on vortex pinning of CSD YBCO nanocomposites
 2014, *Superconductor Science & Technology*, 27 (12), 125009
81. Solano, Eduardo; Frontera, Carlos; Puig, Teresa; Obradors, Xavier; Ricart, Susagna; Ros, Josep
Neutron and X-ray diffraction study of ferrite nanocrystals obtained by microwave-assisted growth. A structural comparison with the thermal synthetic route
 2014, *Journal of Applied Crystallography*, 47, pp. 414 - 420
82. Coll, M.; Palau, A.; Gonzalez-Rosillo, J. C.; Gazquez, J.; Obradors, X.; Puig, T.
Integration of atomic layer deposition CeO₂ thin films with functional complex oxides and 3D patterns
 2014, *Thin Solid Films*, 553, pp. 7 - 12
83. Carretero-Genevri, A.; Puig, T.; Obradors, X.; Mestres, N.
Ferromagnetic 1D oxide nanostructures grown from chemical solutions in confined geometries
 2014, *Chemical Society Reviews*, 43 (7), pp. 2042 - 2054
84. Rouco, V.; Bartolome, E.; Maiorov, B.; Palau, A.; Civale, L.; Obradors, X.; Puig, T.
Vortex creep in TFA-YBCO nanocomposite films
 2014, *Superconductor Science & Technology*, 27 (11), 115008
85. Carretero-Genevri, Adrian; Oro-Sole, Judith; Gazquez, Jaume; Magen, Cesar; Miranda, Laura; Puig, Teresa; Obradors, Xavier; Ferain, Etienne; Sanchez, Clement; Rodriguez-Carvajal, Juan; Mestres, Narcis
Direct Monolithic Integration of Vertical Single Crystalline Octahedral Molecular Sieve Nanowires on Silicon
 2014, *Chemistry of Materials*, 26 (2), pp. 1019 - 1028
86. Hopkins, S. C.; Joseph, D.; Mitchell-Williams, T. B.; Calleja, A.; Vlad, V. R.; Vilardell, M.; Ricart, S.; Granados, X.; Puig, T.; Obradors, X.; Usoskin, A.; Falter, M.; Baecker, M.; Glowacki, B. A.
Inkjet printing of multifilamentary YBCO for low AC loss coated conductors
 2014, *11Th European Conference on Applied Superconductivity (Eucas2013), Pts 1-4*, 507, 22010
87. Zabaleta, J.; Jaafar, M.; Asenjo, A.; Agramunt-Puig, S.; Del-Valle, N.; Navau, C.; Sanchez, A.; Puig, T.; Obradors, X.; Mestres, N.
Magnetic vortex evolution in self-assembled La_{0.7}Sr_{0.3}MnO₃ nanoislands under in-plane magnetic field
 2014, *Apl Materials*, 2 (7), 76111
88. Palau, A.; Rouco, V.; Luccas, R. F.; Obradors, X.; Puig, T.
Nanowall pinning for enhanced pinning force in YBCO films with nanofabricated structures
 2014, *Physica C-Superconductivity and Its Applications*, 506, pp. 178 - 183
89. Calleja, A.; Ricart, S.; Aklalouch, M.; Mestres, N.; Puig, T.; Obradors, X.
Thickness-concentration-viscosity relationships in spin-coated metalorganic ceria films containing polyvinylpyrrolidone
 2014, *Journal of Sol-Gel Science and Technology*, 72 (1), pp. 21 - 29

90. Dias, F. T.; Vieira, V. N.; Silva, D. L.; Aguiar, J. Albino; Valadao, D. R. B.; Obradors, X.; Puig, T.; Wolff-Fabris, F.; Kampert, E.
Paramagnetic moments in YBa₂Cu₃O₇-delta nanocomposite films
 2014, *Physica C-Superconductivity and Its Applications*, 503, pp. 175 - 177
91. Amabilino, David B.; Obradors, Xavier
Nucleation & crystallisation
 2014, *Chemical Society Reviews*, 43 (7), pp. 2009 - 2012
92. Solano, Eduardo; Frontera, Carlos; Puente Orench, Ines; Puig, Teresa; Obradors, Xavier; Ricart, Susagna; Ros, Josep
Neutron and X-ray diffraction study of ferrite nanocrystals obtained by microwave-assisted growth. A structural comparison with the thermal synthetic route. (vol 47, pg 414, 2014)
 2014, *Journal of Applied Crystallography*, 47, pp. 1478 - 1478
93. Luccas, R. F.; Granados, X.; Obradors, X.; Puig, T.
Vortex energy landscape from real space imaging analysis of YBa₂Cu₃O₇ with different defect structures
 2014, *Physica C-Superconductivity and Its Applications*, 505, pp. 47 - 54
94. Garces, P.; Coll, M.; Castro, H.; Puig, T.; Obradors, X.
Development of YBa₂Cu₃O₇-Ba₂YTaO₆ nanocomposites by chemical solution deposition
 2014, *27Th International Conference on Low Temperature Physics (Lt27), Pts 1-5*, 568, 22015
95. Coll, M.; Ye, S.; Rouco, V.; Palau, A.; Guzman, R.; Gazquez, J.; Arbiol, J.; Suo, H.; Puig, T.; Obradors, X.
Solution-derived YBa₂Cu₃O₇ nanocomposite films with a Ba₂YTaO₆ secondary phase for improved superconducting properties
 2013, *Superconductor Science & Technology*, 26 (1), 15001
96. Guzman, R.; Gazquez, J.; Rouco, V.; Palau, A.; Magen, C.; Varela, M.; Arbiol, J.; Obradors, X.; Puig, T.
Strain-driven broken twin boundary coherence in YBa₂Cu₃O₇-delta nanocomposite thin films
 2013, *Applied Physics Letters*, 102 (8), 81906
97. Sanchez-Rodriguez, Daniel; Farjas, Jordi; Roura, Pere; Ricart, Susagna; Mestres, Narcis; Obradors, Xavier; Puig, Teresa
Thermal Analysis for Low Temperature Synthesis of Oxide Thin Films from Chemical Solutions
 2013, *Journal of Physical Chemistry C*, 117 (39), pp. 20133 - 20138
98. Perez-Mirabet, Leonardo; Solano, Eduardo; Martinez-Julian, Fernando; Guzman, Roger; Arbiol, Jordi; Puig, Teresa; Obradors, Xavier; Pomar, Alberto; Yanez, Ramon; Ros, Josep; Ricart, Susagna
One-pot synthesis of stable colloidal solutions of MFe₂O₄ nanoparticles using oleylamine as solvent and stabilizer
 2013, *Materials Research Bulletin*, 48 (3), pp. 966 - 972
99. Vilardell, M.; Granados, X.; Ricart, S.; Van Driessche, I.; Palau, A.; Puig, T.; Obradors, X.
Flexible manufacturing of functional ceramic coatings by inkjet printing
 2013, *Thin Solid Films*, 548, pp. 489 - 497

100. Bartolome, E.; Vlad, V. R.; Calleja, A.; Aklalouch, M.; Guzman, R.; Arbiol, J.; Granados, X.; Palau, A.; Obradors, X.; Puig, T.; Usoskin, A.
Magnetic and structural characterization of inkjet-printed (YBa₂Cu₃O_{7-x})-Y-TFA/(MOD)CZO/(ABAD)YSZ/SS coated conductors
2013, *Superconductor Science & Technology*, 26 (12), UNSP 125004
101. Pena-Rodriguez, O.; Sanchez-Valdes, C. F.; Garriga, M.; Alonso, M. I.; Obradors, X.; Puig, T.
Optical properties of ceria-zirconia epitaxial films grown from chemical solutions
2013, *Materials Chemistry and Physics*, 138 (2-3), pp. 462 - 467
102. Eloussifi, H.; Farjas, J.; Roura, P.; Ricart, S.; Puig, T.; Obradors, X.; Dammak, M.
Thermoanalytical study of the decomposition of yttrium trifluoroacetate thin films
2013, *Thin Solid Films*, 545, pp. 200 - 204
103. Eloussifi, H.; Farjas, J.; Roura, P.; Ricart, S.; Puig, T.; Obradors, X.; Dammak, M.
Thermal decomposition of barium trifluoroacetate thin films
2013, *Thermochimica Acta*, 556, pp. 58 - 62
104. Menegotto Costa, R.; Dias, F. T.; Pureur, P.; Obradors, X.
Multiple superconducting transition and phase separation in melt-textured YBa₂Cu₃O_{7-d}
2013, *Physica C-Superconductivity and Its Applications*, 495, pp. 202 - 207
105. Queralto, Albert; Perez del Pino, Angel; Ricart, Susagna; Obradors, Xavier; Puig, Teresa
Laser-induced metal organic decomposition for Ce_{0.9}Zr_{0.1}O_{2-y} epitaxial thin film growth
2013, *Journal of Alloys and Compounds*, 574, pp. 246 - 254
106. Zabaleta, Jone; Valencia, Sergio; Kronast, Florian; Moreno, Cesar; Abellan, Patricia; Gazquez, Jaume; Sepehri-Amin, H.; Sandiumenge, Felip; Puig, Teresa; Mestresa, Narcis; Obradors, Xavier
Photoemission electron microscopy study of sub-200 nm self-assembled La_{0.7}Sr_{0.3}MnO₃ epitaxial islands
2013, *Nanoscale*, 5 (7), pp. 2990 - 2998
107. Malowney, J.; Mestres, N.; Borrise, X.; Calleja, A.; Guzman, R.; Llobet, J.; Arbiol, J.; Puig, T.; Obradors, X.; Bausells, J.
Functional oxide nanostructures written by EBL on insulating single crystal substrates
2013, *Microelectronic Engineering*, 110, pp. 94 - 99
108. Perez, S. Munoz; Cobas, R.; Cadogan, J. M.; Albino Aguiar, J.; Frontera, C.; Puig, T.; Long, G.; DeMarco, M.; Coffey, D.; Obradors, X.
Anomalous electronic and magnetic properties of the Eu₂Ru₂O₇ pyrochlore
2013, *Journal of Applied Physics*, 113 (17), 1,7e+103
109. Lazic, Z.; Chamritski, V.; Pooke, D.; Valvidares, S. M.; Pellegrin, E.; Ferrer, S.; Granados, X.; Obradors, X.
Integrating UHV (Ultra High Vacuum) and HTS (High Temperature Superconducting) magnets for x-ray synchrotron based experiments
2013, *11Th International Conference on Synchrotron Radiation Instrumentation (Sri 2012)*, 425

110. Vilardell, M.; Granados, X.; Ricart, S.; Calleja, A.; Palau, A.; Puig, T.; Obradors, X.
Patterning of Functional Ceramic Oxides on Metallic Substrates by Inkjet Printing
2013, *Nip29: 29Th International Conference on Digital Printing Technologies / Digital Fabrication 2013*, 0, pp. 503 - 507
111. Llordes, A.; Palau, A.; Gazquez, J.; Coll, M.; Vlad, R.; Pomar, A.; Arbiol, J.; Guzman, R.; Ye, S.; Rouco, V.; Sandiumenge, F.; Ricart, S.; Puig, T.; Varela, M.; Chateigner, D.; Vanacken, J.; Gutierrez, J.; Moshchalkov, V.; Deutscher, G.; Magen, C.; Obrad
Nanoscale strain-induced pair suppression as a vortex-pinning mechanism in high-temperature superconductors
2012, *Nature Materials*, 11 (4), pp. 329 - 336
112. Obradors, X.; Puig, T.; Ricart, S.; Coll, M.; Gazquez, J.; Palau, A.; Granados, X.
Growth, nanostructure and vortex pinning in superconducting YBa₂Cu₃O₇ thin films based on trifluoroacetate solutions
2012, *Superconductor Science & Technology*, 25 (12), 123001
113. Solano, Eduardo; Perez-Mirabet, Leonardo; Martinez-Julian, Fernando; Guzman, Roger; Arbiol, Jordi; Puig, Teresa; Obradors, Xavier; Yanez, Ramon; Pomar, Alberto; Ricart, Susagna; Ros, Josep
Facile and efficient one-pot solvothermal and microwave-assisted synthesis of stable colloidal solutions of MFe₂O₄ spinel magnetic nanoparticles
2012, *Journal of Nanoparticle Research*, 14 (8), 1034
114. Coll, Mariona; Gazquez, Jaume; Palau, Anna; Varela, Maria; Obradors, Xavier; Puig, Teresa
Low Temperature Epitaxial Oxide Ultrathin Films and Nanostructures by Atomic Layer Deposition
2012, *Chemistry of Materials*, 24 (19), pp. 3732 - 3737
115. Obradors, X.; Martinez-Julian, F.; Zalamova, K.; Vlad, V. R.; Pomar, A.; Palau, A.; Llordes, A.; Chen, H.; Coll, M.; Ricart, S.; Mestres, N.; Granados, X.; Puig, T.; Rikel, M.
Nucleation and mesostrain influence on percolating critical currents of solution derived YBa₂Cu₃O₇ superconducting thin films
2012, *Physica C-Superconductivity and Its Applications*, 482, pp. 58 - 67
116. Eloussifi, Hichem; Farjas, Jordi; Roura, Pere; Camps, Jaume; Dammak, Mohamed; Ricart, Susagna; Puig, Teresa; Obradors, Xavier
Evolution of yttrium trifluoroacetate during thermal decomposition
2012, *Journal of Thermal Analysis and Calorimetry*, 108 (2), pp. 589 - 596
117. Palau, A.; Monton, C.; Rouco, V.; Obradors, X.; Puig, T.
Guided vortex motion in YBa₂Cu₃O₇ thin films with collective ratchet pinning potentials
2012, *Physical Review B*, 85 (1), 12502
118. Farjas, J.; Camps, J.; Roura, P.; Ricart, S.; Puig, T.; Obradors, X.
The thermal decomposition of barium trifluoroacetate
2012, *Thermochimica Acta*, 544, pp. 77 - 83

119. Zabaleta, J.; Jaafar, M.; Abellan, P.; Monton, C.; Iglesias-Freire, O.; Sandiumenge, F.; Ramos, C. A.; Zysler, R. D.; Puig, T.; Asenjo, A.; Mestres, N.; Obradors, X.
Nanoscale magnetic structure and properties of solution-derived self-assembled La_{0.7}Sr_{0.3}MnO₃ islands
 2012, *Journal of Applied Physics*, 111 (2), 24307
120. Roura, P.; Farjas, J.; Ricart, S.; Aklalouch, M.; Guzman, R.; Arbiol, J.; Puig, T.; Calleja, A.; Pena-Rodriguez, O.; Garriga, M.; Obradors, X.
Synthesis of nanocrystalline ceria thin films by low-temperature thermal decomposition of Ce-propionate
 2012, *Thin Solid Films*, 520 (6), pp. 1949 - 1953
121. Gazquez, J.; Coll, M.; Roma, N.; Sandiumenge, F.; Puig, T.; Obradors, X.
Structural defects in trifluoroacetate derived YBa₂Cu₃O₇ thin films
 2012, *Superconductor Science & Technology*, 25 (6), 65009
122. Carretero-Genevri, Adrian; Gazquez, Jaume; Magen, Cesar; Varela, Maria; Ferain, Etienne; Puig, Teresa; Mestres, Narcis; Obradors, Xavier
Chemical synthesis of oriented ferromagnetic LaSr-2 x 4 manganese oxide molecular sieve nanowires
 2012, *Chemical Communications*, 48 (50), pp. 6223 - 6225
123. Moreno, Cesar; Munuera, Carmen; Obradors, Xavier; Ocal, Carmen
The memory effect of nanoscale memristors investigated by conducting scanning probe microscopy methods
 2012, *Beilstein Journal of Nanotechnology*, 3, pp. 722 - 730
124. Moreno, C.; Abellan, P.; Sandiumenge, F.; Casanove, M. -J.; Obradors, X.
Nanocomposite lanthanum strontium manganite thin films formed by using a chemical solution deposition
 2012, *Applied Physics Letters*, 100 (2), 23103
125. Rouco, V.; Bartolome, E.; Palau, A.; Coll, M.; Obradors, X.; Puig, T.
Nanostrain induced pinning in YBa₂Cu₃O_{7-x} nanocomposites even close to the irreversibility line
 2012, *Superconductor Science & Technology*, 25 (12), 122001
126. Calleja, Albert; Ricart, Susagna; Granados, Xavier; Palmer, Xavier; Solano, Eduardo; Antonio Tornero, Jose; Cano, Francesc; Puig, Teresa; Obradors, Xavier
Epitaxial BaZrO₃ tracks by electrospinning of metalorganic fibers on single crystals
 2012, *Crystengcomm*, 14 (14), pp. 4686 - 4691
127. Abellan, P.; Zabaleta, J.; Santiso, J.; Casanove, M. -J.; Dix, N.; Aguiar, J.; Browning, N. D.; Mestres, N.; Puig, T.; Obradors, X.; Sandiumenge, F.
Interface structure governed by plastic and structural dissimilarity in perovskite La_{0.7}Sr_{0.3}MnO₃ nanodots on rock-salt MgO substrates
 2012, *Applied Physics Letters*, 100 (8), 83104

128. Gombos, M.; Gomis, V.; Ciancio, R.; Zola, D.; Carrillo, A. E.; Carapella, G.; Vecchione, A.; Polichetti, M.; Pace, S.; Obradors, X.
Reduced twinning efficiency and tri-dimensional crack structure in melt-textured NdBa₂Cu₃O₇-delta bulk samples fragmentation process
 2012, *Superconductor Science & Technology*, 25 (12), 125017
129. Munoz-Perez, S.; Cobas, R.; Cadogan, J. M.; Albino Aguiar, J.; Bonville, P.; Puig, T.; Obradors, X.
Metallic state induced in Eu₂Ru₂O₇ by hole creation and orbital overlap in the t(2g) bands
 2012, *Journal of Applied Physics*, 111 (7), 7e+150
130. Carrera, M.; Granados, X.; Amoros, J.; Puig, T.; Obradors, X.
Current distribution in wide YBCO tapes
 2012, *Superconductivity Centennial Conference 2011*, 36, pp. 1625 - 1630,
131. Palau, A.; Bartolome, E.; Llordes, A.; Puig, T.; Obradors, X.
Isotropic and anisotropic pinning in TFA-grown YBa₂Cu₃O_{7-x} films with BaZrO₃ nanoparticles
 2011, *Superconductor Science & Technology*, 24 (12), 125010
132. Abellan, Patricia; Sandiumenge, Felip; Casanove, Marie-Jose; Gibert, Marta; Palau, Anna; Puig, Teresa; Obradors, Xavier
Interaction between solution derived BaZrO₃ nanodot interfacial templates and YBa₂Cu₃O₇ films leading to enhanced critical currents
 2011, *Acta Materialia*, 59 (5), pp. 2075 - 2082
133. Gibert, Marta; Abellan, Patricia; Martinez, Lidia; Roman, Elisa; Crespi, Anna; Sandiumenge, Felip; Puig, Teresa; Obradors, Xavier
Orientation and shape selection of self-assembled epitaxial Ce_{1-x}Gd_xO_{2-y} nanostructures grown by chemical solution deposition
 2011, *Crystengcomm*, 13 (22), pp. 6719 - 6727
134. Roa, J. J.; Jimenez-Pique, E.; Puig, T.; Obradors, X.; Segarra, M.
Nanoindentation of multilayered epitaxial YBa₂Cu₃O₇-delta thin films and coated conductors
 2011, *Thin Solid Films*, 519 (8), pp. 2470 - 2476
135. Roura, P.; Farjas, J.; Camps, J.; Ricart, S.; Arbiol, J.; Puig, T.; Obradors, X.
Decomposition processes and structural transformations of cerium propionate into nanocrystalline ceria at different oxygen partial pressures
 2011, *Journal of Nanoparticle Research*, 13 (9), pp. 4085 - 4096
136. Farjas, J.; Camps, J.; Roura, P.; Ricart, S.; Puig, T.; Obradors, X.
Thermoanalytical study of the formation mechanism of yttria from yttrium acetate
 2011, *Thermochimica Acta*, 521 (1-2), pp. 84 - 89
137. Cobas, R.; Munoz-Perez, S.; Cadogan, J. M.; Puig, T.; Obradors, X.
Magnetoresistance in epitaxial thin films of La_{0.85}Ag_{0.15}MnO₃ produced by polymer assisted deposition
 2011, *Applied Physics Letters*, 99 (8), 83113

138. Carretero-Genevri, Adrian; Gazquez, Jaume; Idrobo, Juan Carlos; Oro, Judith; Arbiol, Jordi; Varela, Maria; Ferain, Etienne; Rodriguez-Carvajal, Juan; Puig, Teresa; Mestres, Narcis; Obradors, Xavier
Single Crystalline La_{0.7}Sr_{0.3}MnO₃ Molecular Sieve Nanowires with High Temperature Ferromagnetism
 2011, *Journal of the American Chemical Society*, 133 (11), pp. 4053 - 4061
139. Abellan, P.; Moreno, C.; Sandiumenge, F.; Obradors, X.; Casanove, M.-J.
Misfit relaxation of La_{0.7}Sr_{0.3}MnO₃ thin films by a nanodot segregation mechanism
 2011, *Applied Physics Letters*, 98 (4), 41903
140. Obradors, X.; Puig, T.; Palau, A.; Pomar, A.; Sandiumenge, F.; Mele, P.; Matsumoto, K.
Nanostructured Superconductors with Efficient Vortex Pinning
 2011, *Comprehensive Nanoscience and Technology, Vol 3: Nanostructured Surfaces*, 0, pp. 303 - 349
141. Carrera, M.; Amoros, J.; Granados, X.; Maynou, R.; Puig, T.; Obradors, X.
Computation of Current Distribution in YBCO Tapes With Defects Obtained From Hall Magnetic Mapping by Inverse Problem Solution
 2011, *Ieee Transactions on Applied Superconductivity*, 21 (3), pp. 3408 - 3412
142. Calleja, Albert; Granados, Xavier; Ricart, Susagna; Oro, Judith; Arbiol, Jordi; Mestres, Narcis; Esther Carrillo, Ana; Palmer, Xavier; Cano, Francesc; Antonio Tornero, Jose; Puig, Teresa; Obradors, Xavier
High temperature transformation of electrospun BaZrO₃ nanotubes into nanoparticle chains
 2011, *Crystengcomm*, 13 (24), pp. 7224 - 7230
143. Vilardell, M.; Granados, X.; Ricart, S.; Cobas, R.; Arjona, M.; Puig, T.; Obradors, X.; Hopkins, S. C.; Glowacki, B. A.; Bennewitz, J.; Falter, M.; Baecker, M.
Ink Jet Printing for Functional Ceramic Coatings
 2011, *Journal of Imaging Science and Technology*, 55 (4), 40304
144. Palau, A.; Llordes, A.; Gibert, M.; Puig, T.; Pomar, A.; Obradors, X.
Pinning Landscape Analysis in YBCO Films With Epitaxial and/or Non-Coherent BZO Nanoparticles
 2011, *Ieee Transactions on Applied Superconductivity*, 21 (3), pp. 3243 - 3246
145. Mendonca-Ferreira, L.; Dias, F. T.; Pureur, P.; Borges, H. A.; Rodrigues, P., Jr.; Obradors, X.
Study of the in-plane and c-axis fluctuation conductivity of melt-textured YBa₂Cu₃O₇ under hydrostatic pressure
 2011, *European Physical Journal B*, 83 (4), pp. 423 - 428
146. Martinez-Julian, F.; Ricart, S.; Pomar, A.; Coll, M.; Abelian, P.; Sandiumenge, F.; Casanove, M. -J.; Obradors, X.; Puig, T.; Pastoriza-Santos, I.; Liz-Marzan, L. M.
Chemical Solution Approaches to YBa₂Cu₃O₇-delta-Au Nanocomposite Superconducting Thin Films
 2011, *Journal of Nanoscience and Nanotechnology*, 11 (4), pp. 3245 - 3255

147. Bartolome, E.; Palau, A.; Llordes, A.; Gibert, M.; Puig, T.; Obradors, X.
Vortex Dynamics in Nanostructured TFA-Grown YBCO Films Studied by Ac Susceptibility
 2011, *Ieee Transactions on Applied Superconductivity*, 21 (3), pp. 3189 - 3191
148. Moreno, Cesar; Munuera, Carmen; Valencia, Sergio; Kronast, Florian; Obradors, Xavier; Ocal, Carmen
Reversible Resistive Switching and Multilevel Recording in La_{0.7}Sr_{0.3}MnO₃ Thin Films for Low Cost Nonvolatile Memories
 2010, *Nano Letters*, 10 (10), pp. 3828 - 3835
149. Llordes, A.; Zalamova, K.; Ricart, S.; Palau, A.; Pomar, A.; Puig, T.; Hardy, A.; Van Bael, M. K.; Obradors, X.
Evolution of Metal-Trifluoroacetate Precursors in the Thermal Decomposition toward High-Performance YBa₂Cu₃O₇ Superconducting Films
 2010, *Chemistry of Materials*, 22 (5), pp. 1686 - 1694
150. Zalamova, K.; Pomar, A.; Palau, A.; Puig, T.; Obradors, X.
Intermediate phase evolution in YBCO thin films grown by the TFA process
 2010, *Superconductor Science & Technology*, 23 (1), 14012
151. Gibert, Marta; Abellan, Patricia; Benedetti, Alessandro; Puig, Teresa; Sandiumenge, Felip; Garcia, Alberto; Obradors, Xavier
Self-Organized Ce_{1-x}Gd_xO_{2-y} Nanowire Networks with Very Fast Coarsening Driven by Attractive Elastic Interactions
 2010, *Small*, 6 (23), pp. 2716 - 2724
152. Chen, H.; Zalamova, K.; Pomar, A.; Granados, X.; Puig, T.; Obradors, X.
Growth rate control and solid-gas modeling of TFA-YBa₂Cu₃O₇ thin film processing
 2010, *Superconductor Science & Technology*, 23 (3), 34005
153. Bartolome, E.; Palau, A.; Llordes, A.; Puig, T.; Obradors, X.
Vortex dynamics at high ac amplitudes of trifluoroacetate route grown YBa₂Cu₃O_{7-x}-BaZrO₃ nanocomposites
 2010, *Physical Review B*, 81 (18), 184530
154. Carretero-Genevri, Adrian; Gazquez, Jaume; Puig, Teresa; Mestres, Narcis; Sandiumenge, Felip; Obradors, Xavier; Ferain, Etienne
Vertical (La,Sr)MnO₃ Nanorods from Track-Etched Polymers Directly Buffering Substrates
 2010, *Advanced Functional Materials*, 20 (6), pp. 892 - 897
155. Zabaleta, Jone; Mestres, Narcis; Abellan, Patricia; Gibert, Marta; Sandiumenge, Felip; Puig, Teresa; Obradors, Xavier
Orientalional ordering of solution derived epitaxial Gd-doped ceria nanowires induced by nanoscratching
 2010, *Nanotechnology*, 21 (2), 25302
156. Chen, H.; Zalamova, K.; Pomar, A.; Granados, X.; Puig, T.; Obradors, X.
Nucleation and growth rate influence on microstructure and critical currents of TFA-YBa₂Cu₃O₇ under low-pressure conditions
 2010, *Journal of Materials Research*, 25 (12), pp. 2371 - 2379

157. Gibert, Marta; Garcia, Alberto; Puig, Teresa; Obradors, Xavier
Thermodynamic stability analysis of isometric and elongated epitaxial Ce_{1-x}Gd_xO_{2-y} nanostructures on perovskite substrates
 2010, *Physical Review B*, 82 (16), 165415
158. Solovyov, Vyacheslav F.; Gibert, Marta; Puig, Teresa; Obradors, Xavier
Size-dependent strain in epitaxial (001) gadolinium-doped ceria nanoislands
 2010, *Applied Physics Letters*, 97 (23), 231904
159. Dias, F. T.; Vieira, V. N.; de Almeida, M. L.; Falck, A. L.; Pureur, P.; Pimentel, J. L., Jr.; Obradors, X.
Paramagnetic Meissner effect at high fields in YCaBaCuO single crystal and melt-textured YBaCuO
 2010, *Physica C-Superconductivity and Its Applications*, 470, pp. S111 - S112
160. Carrera, M.; Granados, X.; Amoros, J.; Maynou, R.; Puig, T.; Obradors, X.
Current distribution in HTSC tapes obtained by inverse problem calculation
 2010, *9Th European Conference on Applied Superconductivity (Eucas 09)*, 234, 12009
161. Bartolome, E.; Palau, A.; Llordes, A.; Puig, T.; Obradors, X.
Vortex oscillations in TFA-grown YBCO thin-films with BZO nanoparticles
 2010, *Physica C-Superconductivity and Its Applications*, 470 (22), pp. 2033 - 2039
162. Calleja, A.; Ricart, S.; Palmer, X.; Luccas, R. F.; Puig, T.; Obradors, X.
Water determination of precursor solutions with oxidant cations by the Karl Fischer method: the YBCO-TFA case
 2010, *Journal of Sol-Gel Science and Technology*, 53 (2), pp. 347 - 352
163. Dias, F. T.; Vieira, V. N.; Pureur, P.; Rodrigues, P., Jr.; Obradors, X.; Wolff-Fabris, F.
Fluctuation conductivity in melt-textured YBaCuO samples under low magnetic fields
 2010, *International Conference on Magnetism (Icm 2009)*, 200, 12027
164. Romedenne, O.; Granados, X.; Casals, P.; Cascante, S.; Puig, T.; Obradors, X.
Two Examples of Efficient Superconducting Cable Applications
 2010, *9Th European Conference on Applied Superconductivity (Eucas 09)*, 234, 32049
165. Coll, M.; Gazquez, J.; Huehne, R.; Holzapfel, B.; Morilla, Y.; Garcia-Lopez, J.; Pomar, A.; Sandiumenge, F.; Puig, T.; Obradors, X.
All chemical YBa₂Cu₃O₇ superconducting multilayers: Critical role of CeO₂ cap layer flatness
 2009, *Journal of Materials Research*, 24 (4), pp. 1446 - 1455
166. Moreno, Cesar; Abellan, Patricia; Hassini, Awatef; Ruyter, Antoine; Perez del Pino, Angel; Sandiumenge, Felip; Casanove, Marie-Jose; Santiso, Jose; Puig, Teresa; Obradors, Xavier
Spontaneous Outcropping of Self-Assembled Insulating Nanodots in Solution-Derived Metallic Ferromagnetic La(0.7)Sr(0.3)MnO(3) Films
 2009, *Advanced Functional Materials*, 19 (13), pp. 2139 - 2146

167. Gutierrez, J.; Puig, T.; Gibert, M.; Moreno, C.; Roma, N.; Pomar, A.; Obradors, X.
Anisotropic c-axis pinning in interfacial self-assembled nanostructured trifluoroacetate-YBa₂Cu₃O_{7-x} films
2009, *Applied Physics Letters*, 94 (17), 172513
168. Gutierrez, J.; Maiorov, B.; Puig, T.; Gazquez, J.; Roma, N.; Wang, H.; Sandiumenge, F.; Obradors, X.
The role of stacking faults in the critical current density of MOD films through a thickness dependence study
2009, *Superconductor Science & Technology*, 22 (1), 15022
169. Pomar, Alberto; Roxana Vlad, Valentina; Llordes, Anna; Palau, Anna; Gutierrez, Joffre; Ricart, Susagna; Puig, Teresa; Obradors, Xavier; Usoskin, Alexander
Enhanced Vortex Pinning in YBCO Coated Conductors With BZO Nanoparticles From Chemical Solution Deposition
2009, *Ieee Transactions on Applied Superconductivity*, 19 (3), pp. 3258 - 3261
170. Roxana Vlad, Valentina; Zalamova, Katerina; Coll, Mariona; Pomar, Alberto; Palau, Anna; Gutierrez, Joffre; Puig, Teresa; Obradors, Xavier; Usoskin, Alexander
Growth of Chemical Solution Deposited (YBCO)-Y-TFA/(MOD)(Ce, Zr)O-2/(ABAD)YSZ/SS Coated Conductors
2009, *Ieee Transactions on Applied Superconductivity*, 19 (3), pp. 3212 - 3215
171. Gutierrez, J.; Palau, A.; Durrell, J. H.; Roma, N.; Puig, T.; Obradors, X.; Blamire, M. G.
Vortex dynamics in thin films of YBa₂Cu₃O_{7-x} with three-dimensional nanoscale patterns
2009, *Physical Review B*, 79 (6), 64526
172. Moreno, C.; Munuera, C.; Perez del Pino, A.; Gutierrez, J.; Puig, T.; Ocal, C.; Obradors, X.; Ruyter, A.
Absence of self-heated bistable resistivity in La_{0.7}Sr_{0.3}MnO₃ films up to high current densities
2009, *Physical Review B*, 80 (9), 94412
173. Dias, Fabio Teixeira; Vieira, Valdemar das Neves; Pureur, Paulo; Rodrigues, Pedro, Jr.; Obradors, Xavier
Fluctuation conductivity along the c-axis and parallel to the ab-planes in melt-textured YBa₂Cu₃O_{7-delta} samples doped with Y₂O₃ phase
2009, *Physica B-Condensed Matter*, 404 (19), pp. 3106 - 3108
174. Carrera, M.; Granados, X.; Amoros, J.; Maynou, R.; Puig, T.; Obradors, X.
Detection of Current Distribution in Bulk Samples With Artificial Defects From Inversion of Hall Magnetic Maps
2009, *Ieee Transactions on Applied Superconductivity*, 19 (3), pp. 3553 - 3556
175. Maroni, Victor A.; Obradors, Xavier
Special Issue Perspectives on Flux Pinning in the MBCO Coated Conductor Preface
2009, *Physica C-Superconductivity and Its Applications*, 469 (23-24), pp. 2015 - 2015,
176. Abellan, P.; Sandiumenge, F.; Moreno, C.; Casanove, M. J.; Puig, T.; Obradors, X.
Strain Relaxation of Self-Nanostructured Solution Derived La_{0.7}Sr_{0.3}MnO₃ Films
2009, *Functional Metal-Oxide Nanostructures*, 1174, pp. 27 - +

177. Puig, T.; Gutierrez, J.; Pomar, A.; Llordes, A.; Gazquez, J.; Ricart, S.; Sandiumenge, F.; Obradors, X.
Vortex pinning in chemical solution nanostructured YBCO films
 2008, *Superconductor Science & Technology*, 21 (3), 34008
178. Foerster, C. E.; Lima, E.; Rodrigues, P., Jr.; Serbena, F. C.; Lepienski, C. M.; Cantao, M. P.; Jurelo, A. R.; Obradors, X.
Mechanical properties of Ag-doped top-seeded melt-grown YBCO pellets
 2008, *Brazilian Journal of Physics*, 38 (3A), pp. 341 - 345
179. Coll, M.; Gazquez, J.; Sandiumenge, F.; Puig, T.; Obradors, X.; Espinos, J. P.; Huehne, R.
Nanostructural control in solution-derived epitaxial Ce_{1-x}Gd_xO_{2-y} films
 2008, *Nanotechnology*, 19 (39), 395601
180. Carretero-Genevri, Adrian; Mestres, Narcis; Puig, Teresa; Hassini, Awatef; Oro, Judith; Pomar, Alberto; Sandiumenge, Felip; Obradors, Xavier; Ferain, Etienne
Single-Crystalline La_{0.7}Sr_{0.3}MnO₃ Nanowires by Polymer-Template-Directed Chemical Solution Synthesis
 2008, *Advanced Materials*, 20 (19), pp. 3672 - +
181. Coll, Mariona; Pomar, Alberto; Puig, Teresa; Obradors, Xavier
Atomically Flat Surface: The Key Issue for Solution-Derived Epitaxial Multilayers
 2008, *Applied Physics Express*, 1 (12), 121701
182. Granados, X.; Lopez, J.; Bosch, R.; Bartolome, E.; Lloberas, J.; Maynou, R.; Puig, T.; Obradors, X.
Low-power superconducting motors
 2008, *Superconductor Science & Technology*, 21 (3), 34010
183. Dias, F. T.; Vieira, V. N.; Rodrigues, P., Jr.; Obradors, X.; Pureur, P.; Schaf, J.
Correlation between the magnetic irreversibility limit and the zero resistance point in different granular YBa₂Cu₃O_{7-δ} superconductors
 2008, *Physical Review B*, 77 (13), 134503
184. Diko, P.; Kanuchova, M.; Chaud, X.; Odier, P.; Granados, X.; Obradors, X.; Kulik, P.; Bozzo, B.
Oxygenation mechanism of TSMG YBCO Bulk Superconductor
 2008, *8Th European Conference on Applied Superconductivity (Eucas'07)*, 97, UNSP 012160
185. Bartolome, E.; Bozzo, B.; Granados, X.; Sandiumenge, F.; Puig, T.; Obradors, X.
Vortex pinning regimes in YBa₂Cu₃O_{7-x} bulk boundaries investigated by quantitative magnetic Hall microscopy
 2008, *Superconductor Science & Technology*, 21 (12), 125002
186. Figueras, J.; Puig, T.; Obradors, X.; Olsson, R. J.; Kwok, W. K.; Crabtree, G. W.
Multidirectional in-plane linear correlated disorder pinning of vortices in YBa(2)Cu(3)O(7)
 2008, *Superconductor Science & Technology*, 21 (2), 25002

187. Sefcikova, M.; Diko, P.; Bozzo, B.; Granados, X.; Obradors, X.
Influence of crystal plane on the welding quality of YBCO bulk superconductor
 2008, *Materials Science and Engineering B-Advanced Functional Solid-State Materials*, 151 (1), pp. 107 - 110,
188. Carrera, M.; Granados, X.; Amoros, J.; Maynou, R.; Puig, T.; Obradors, X.
Computation of critical current in artificially structured bulk samples from Hall measurements
 2008, *8Th European Conference on Applied Superconductivity (Eucas'07)*, 97, UNSP 012107
189. Dias, F. T.; Vieira, V. N.; Rodrigues, P., Jr.; Obradors, X.; Pimentel, J. L., Jr.; Pureur, P.; Schaf, J.
Magnetic irreversibility and zero resistance in melt-textured YBaCuO
 2008, *Journal of Magnetism and Magnetic Materials*, 320 (14), pp. E481 - E483
190. Bartolome, E.; Granados, X.; Bozzo, B.; Navau, C.; Puig, T.; Obradors, X.
Simulation of dc magnetic effects due to geometrically defined grain boundaries in type-II superconductors
 2008, *Physica C-Superconductivity and Its Applications*, 468 (6), pp. 492 - 497
191. Lloberas, J.; Granados, X.; Lopez, J.; Obradors, X.
Design of a Multidisk Axially Excited low power class Superconducting Motor for industrial application
 2008, *8Th European Conference on Applied Superconductivity (Eucas'07)*, 97, 12125
192. Gutierrez, J.; Lordes, A.; Gazquez, J.; Gibert, M.; Roma, N.; Ricart, S.; Pomar, A.; Sandiumenge, F.; Mestres, N.; Puig, T.; Obradors, X.
Strong isotropic flux pinning in solution-derived YBa₂Cu₃O_{7-x} nanocomposite superconductor films
 2007, *Nature Materials*, 6 (5), pp. 367 - 373
193. Gibert, Marta; Puig, Teresa; Obradors, Xavier; Benedetti, Alessandro; Sandiumenge, Felip; Huhne, Ruben
Self-organization of heteroepitaxial CeO₂ nanodots grown from chemical solutions
 2007, *Advanced Materials*, 19 (22), pp. 3937 - +
194. Gutierrez, J.; Puig, T.; Obradors, X.
Anisotropy and strength of vortex pinning centers in YBa₂Cu₃O_{7-x} coated conductors
 2007, *Applied Physics Letters*, 90 (16), 162514
195. Palau, A.; Puig, T.; Obradors, X.; Jooss, Ch.
Simultaneous determination of grain and grain-boundary critical currents in YBa₂Cu₃O₇-coated conductors by magnetic measurements
 2007, *Physical Review B*, 75 (5), 54517
196. Hassini, A.; Pomar, A.; Gutierrez, J.; Coll, M.; Roma, N.; Moreno, C.; Ruyter, A.; Puig, T.; Obradors, X.
Atomically flat MOD La_{0.7}Sr_{0.3}MnO₃ buffer layers for high critical current YBa₂Cu₃O₇ TFA films
 2007, *Superconductor Science & Technology*, 20 (9), pp. S230 - S238

197. Gibert, M.; Puig, T.; Obradors, X.
Growth of strain-induced self-assembled BaZrO₃ nanodots from chemical solutions
 2007, *Surface Science*, 601 (13), pp. 2680 - 2683
198. Morlens, S.; Roma, N.; Ricart, S.; Pomar, A.; Puig, T.; Obradors, X.
Thickness control of solution deposited YBCO superconducting films by use of organic polymeric additives
 2007, *Journal of Materials Research*, 22 (8), pp. 2330 - 2338
199. Hassini, A.; Pomar, A.; Moreno, C.; Ruyter, A.; Roma, N.; Puig, T.; Obradors, X.
Conducting La_{0.7}Sr_{0.3}MnO₃-superconducting YBa₂Cu₃O₇ epitaxial bilayers grown by chemical solution deposition
 2007, *Physica C-Superconductivity and Its Applications*, 460, pp. 1357 - 1358
200. Palau, A.; Puig, T.; Obradors, X.
Grain and grain boundary vortex dynamics in YBa₂Cu₃O₇-delta coated conductor by ac susceptibility
 2007, *Journal of Applied Physics*, 102 (7), 73911
201. Granados, X.; Torner, M.; Puig, T.; Obradors, X.
Magnetization of Ferromagnetic-SC heterostructures for trapped field low power motors
 2007, *Ieee Transactions on Applied Superconductivity*, 17 (2), pp. 1629 - 1632
202. Bartolome, E.; Goemory, F.; Granados, X.; Puig, T.; Obradors, X.
Universal correlation between critical current density and normal-state resistivity in porous YBa₂Cu₃O_{7-x} thin films
 2007, *Superconductor Science & Technology*, 20 (10), pp. 895 - 899
203. Bartolome, E.; Palau, A.; Gutierrez, J.; Granados, X.; Pomar, A.; Puig, T.; Obradors, X.; Cambel, V.; Soltys, J.; Gregusova, D.; Chen, D. X.; Sanchez, A.
Artificial magnetic granularity effects on patterned epitaxial YBa₂Cu₃O_{7-x} thin films
 2007, *Physical Review B*, 76 (9), 94508
204. Pomar, A.; Llordes, A.; Gibert, M.; Ricart, S.; Puig, T.; Obradors, X.
Tuning the superconducting properties of YBa₂Cu₃O₇ tapes grown by chemical methods
 2007, *Physica C-Superconductivity and Its Applications*, 460, pp. 1401 - 1404,
205. Lopez, J.; Lloberas, J.; Maynou, R.; Granados, X.; Bosch, R.; Obradors, X.; Torres, R.
AC three-phase axial flux motor with magnetized superconductors
 2007, *Ieee Transactions on Applied Superconductivity*, 17 (2), pp. 1633 - 1636
206. Chen, D-X.; Pardo, E.; Sanchez, A.; Bartolome, E.; Puig, T.; Obradors, X.
Magnetic properties of a melt-textured YBa₂Cu₃O_x ring with a perpendicular crack
 2007, *Applied Physics Letters*, 90 (7) 72501
207. Navau, C.; Bartolome, E.; del Valle, N.; Chen, D.-X.; Pardo, E.; Sanchez, A.; Puig, T.; Obradors, X.
Ac susceptibility of bicrystal-like type-II superconducting films
 2007, *Physica C-Superconductivity and Its Applications*, 460, pp. 787 - 788

208. Bartolome, E.; Navau, C.; Sanchez, A.; Chen, D.-X.; Puig, T.; Obradors, X.; Cambel, V.
Imaging current percolation and ac losses in artificially granular YBCO thin films
 2007, *Ieee Transactions on Applied Superconductivity*, 17 (2), pp. 3223 - 3226
209. Chen, D.-X.; Bartolome, E.; Pardo, E.; Sanchez, A.; Bozzo, B.; Granados, X.; Puig, T.; Obradors, X.; Claus, H.
AC susceptibility of half-half jointed melt-textured YBCO rings
 2007, *Physica C-Superconductivity and Its Applications*, 460, pp. 770 - 771
210. Cobas, R.; Perez, S. Munoz; Obradors, X.; Aguiar, J. Albino
Analysis of the possible influence of crystallographic shear planes on magnetic and superconducting behavior in RuSr₂EuCu₂O₈
 2007, *Ieee Transactions on Applied Superconductivity*, 17 (2), pp. 2973 - 2975
211. Obradors, X; Puig, T; Pomar, A; Sandiumenge, F; Mestres, N; Coll, M; Cavallaro, A; Roma, N; Gazquez, J; Gonzalez, JC; Castano, O; Gutierrez, J; Palau, A; Zalamova, K; Morlens, S; Hassini, A; Gibert, M; Ricart, S; Moreto, JM; Pinol, S; Isfort, D; Bock, J
Progress towards all-chemical superconducting YBa₂Cu₃O₇-coated conductors
 2006, *Superconductor Science & Technology*, 19 (3), pp. S13 - S26
212. Roma, N.; Morlens, S.; Ricart, S.; Zalamova, K.; Moreto, J. M.; Pomar, A.; Puig, T.; Obradors, X.
Acid anhydrides: a simple route to highly pure organometallic solutions for superconducting films
 2006, *Superconductor Science & Technology*, 19 (6), pp. 521 - 527
213. Zalamova, Katerina; Roma, Neus; Pomar, Alberto; Morlens, Stephanie; Puig, Teresa; Gazquez, Jaume; Carrillo, Anna E.; Sandiumenge, Felip; Ricart, Susana; Mestres, Narcis; Obradors, Xavier
Smooth stress relief of trifluoroacetate metal-organic solutions for YBa₂Cu₃O₇ film growth
 2006, *Chemistry of Materials*, 18 (25), pp. 5897 - 5906
214. Gazquez, J.; Sandiumenge, F.; Coll, M.; Pomar, A.; Mestres, N.; Puig, T.; Obradors, X.; Kihn, Y.; Casanove, M. J.; Ballesteros, C.
Precursor evolution and nucleation mechanism of YBa₂Cu₃O_x films by TFA metal-organic decomposition
 2006, *Chemistry of Materials*, 18 (26), pp. 6211 - 6219
215. Cavallaro, andrea; Sandiumenge, Felip; Gazquez, Jaume; Puig, Teresa; Obradors, Xavier; Arbiol, Jordi; Freyhardt, Herbert C.
Growth mechanism, microstructure, and surface modification of nanostructured CeO₂ films by chemical solution deposition
 2006, *Advanced Functional Materials*, 16 (10), pp. 1363 - 1372
216. Figueras, J.; Puig, T.; Obradors, X.; Kwok, W. K.; Paulius, L.; Crabtree, G. W.; Deutscher, G.
The loss of vortex line tension sets an upper limit to the irreversibility line in YBa₂Cu₃O₇
 2006, *Nature Physics*, 2 (6), pp. 402 - 407

217. Palau, A.; Durrell, J. H.; MacManus-Driscoll, J. L.; Harrington, S.; Puig, T.; Sandiumenge, F.; Obradors, X.; Blamire, M. G.
Crossover between channeling and pinning at twin boundaries in YBa₂Cu₃O₇ thin films
 2006, *Physical Review Letters*, 97 (25), 257002
218. Coll, M; Gazquez, J; Pomar, A; Puig, T; Sandiumenge, F; Obradors, X
Stress-induced spontaneous dewetting of heteroepitaxial YBa₂Cu₃O₇ thin films
 2006, *Physical Review B*, 73 (7), 75420
219. Palau, A; Puig, T; Gutierrez, J; Obradors, X; de la Cruz, F
Pinning regimes of grain boundary vortices in YBa₂Cu₃O_{7-x} coated conductors
 2006, *Physical Review B*, 73 (13), 132508
220. Pomar, A; Coll, M; Cavallaro, A; Gazquez, J; Gonzalez, JC; Mestres, N; Sandiumenge, F; Puig, T; Obradors, X
All-chemical high-J(c) YBa₂Cu₃O₇ multilayers with SrTiO₃ as cap layer
 2006, *Journal of Materials Research*, 21 (5), pp. 1106 - 1116
221. Pomar, Alberto; Coll, Mariona; Cavallaro, andrea; Gazquez, Jaume; Mestres, Narcis; Sandiumenge, Felip; Puig, Teresa; Obradors, Xavier
Interface control in all metalorganic deposited coated conductors: Influence on critical currents
 2006, *Journal of Materials Research*, 21 (9), pp. 2176 - 2184
222. Palau, A; Puig, T; Obradors, X; Feenstra, R; Gapud, AA
Correlation between grain and grain-boundary critical current densities in ex situ coated conductors with variable YBa₂Cu₃O₇-delta layer thickness
 2006, *Applied Physics Letters*, 88 (12), 122502
223. Pomar, A; Cavallaro, A; Coll, M; Gazquez, J; Palau, A; Sandiumenge, F; Puig, T; Obradors, X; Freyhardt, HC
All-chemical YBa₂Cu₃O₇ coated conductors on IBAD-YSZ stainless steel substrates
 2006, *Superconductor Science & Technology*, 19 (1), pp. L1 - L4,
224. Pomar, A; Gutierrez, J; Palau, A; Puig, T; Obradors, X
Porosity induced magnetic granularity in epitaxial YBa₂Cu₃O₇ thin films
 2006, *Physical Review B*, 73 (21), 214522
225. Granados, X.; Bartolome, E.; Obradors, X.; Tornos, M.; Rodrigues, L.; Gawalek, W.; McCulloch, M.; Hughes, D. Dew; Campbell, A.; Coombs, T.; Ausloos, M.; Cloots, R.
Iron-YBCO heterostructures and their application for trapped field superconducting motor
 2006, *7th European Conference on Applied Superconductivity (Eucas'05)*, 43, pp. 788 - 791
226. Rousseau, B.; Canizares, A.; Veron, E.; Ramy-Ratiarison, R.; Blin, A.; Meneses, D. De Sousa; Simon, P.; Berberich, F.; Graafsma, H.; Pomar, A.; Mestres, N.; Puig, T.; Obradors, X.
Characterisation of YBa₂Cu₃O_{6+x} films grown by the trifluoro-acetate metal organic decomposition route by infrared spectroscopy
 2006, *Thin Solid Films*, 515 (4), pp. 1607 - 1611

227. Iliescu, S.; Granados, X.; Puig, T.; Obradors, X.
Growth mechanism of Ag-foil-based artificially superconducting joints of YBa₂Cu₃O₇ monoliths
 2006, *Journal of Materials Research*, 21 (10), pp. 2534 - 2541
228. Palau, A; Puig, T; Obradors, X; Feenstra, R; Gapud, AA; Specht, ED; Feldmann, DM; Holesinger, TG
Grain and grain-boundary critical currents in coated conductors with noncorrelating YBa₂Cu₃O₇ and substrate grain-boundary networks
 2006, *Applied Physics Letters*, 88 (13), 132508
229. Roma, N.; Ricart, S.; Moreto, J. M.; Morlens, S.; Castano, O.; Pomar, A.; Puig, T.; Obradors, X.
Preparation of anhydrous TFA solution for deposition of YBa₂Cu₃O_{7-x} thin films
 2006, *7Th European Conference on Applied Superconductivity (Eucas'05)*, 43, pp. 178 - 181
230. Morlens, S.; Roma, N.; Ricart, S.; Moreto, J. M.; Puig, T.; Pomar, A.; Obradors, X.
Use of polymeric compounds to produce thick YBCO films by TFA-MOD process
 2006, *7Th European Conference on Applied Superconductivity (Eucas'05)*, 43, pp. 182 - 186
231. Kwok, WK; Karapetrov, G; Welp, U; Rydh, A; Crabtree, GW; Paulius, L; Figueras, J; Puig, T; Obradors, X
New transition in the vortex liquid state of YBa₂Cu₃O_{7-delta}
 2006, *Physica C-Superconductivity and Its Applications*, 0, pp. 176 - 179
232. Zalamova, K.; Roma, N.; Pomar, A.; Ricart, S.; Gazquez, J.; Puig, T.; Sandiumenge, F.; Obradors, X.
Fast calcination of purified Trifluoroacetate metal-organic precursors for high critical current YBa₂Cu₃O₇ thin films
 2006, *7Th European Conference on Applied Superconductivity (Eucas'05)*, 43, pp. 150 - 153
233. Bozzo, B.; Bartolome, E.; Granados, X.; Puig, T.; Obradors, X.
Obtention and characterization of YBCO/Ag/YBCO welds at different misorientation angles
 2006, *7Th European Conference on Applied Superconductivity (Eucas'05)*, 43, pp. 401 - 404
234. Bartolome, E; Granados, X; Bozzo, B; Iliescu, S; Puig, T; Obradors, X
In-field magnetic Hall probe microscopy studies of YBa₂Cu₃O₇ based superconductors
 2006, *Journal of Physics and Chemistry of Solids*, 67 (1-3), pp. 403 - 406
235. De Los Santos, VL; Bustamante, DA; Gonzalez, GJ; Flores, SJ; Obradors, X
Superconductivity in the system CaLaBaCu₃-X(PO₄)(X)O_{7-delta} with X=0.1, 0.3, 0.5
 2006, *Journal of Physics and Chemistry of Solids*, 67 (1-3), pp. 605 - 609
236. Gazquez, J.; Gonzalez, J. C.; Coll, M.; Castano, O.; Roma, N.; Pomar, A.; Sandiumenge, F.; Mestres, N.; Puig, T.; Obradors, X.
NUCLEATION MECHANISM OF YBa₂Cu₃O₇ BY CSD USING TFA PRECURSORS
 2006, *7Th European Conference on Applied Superconductivity (Eucas'05)*, 43, pp. 321 - 324,

237. Amoros, J.; Carrera, M.; Granados, X.; Iliescu, S.; Moreno, E.; Bozzo, B.; Obradors, X.
Computation limits of Current Distribution in thick Superconducting Bulks from Magnetic Field Measurements
 2006, *7Th European Conference on Applied Superconductivity (Eucas'05)*, 43, pp. 518 - 521
238. Coll, M.; Gazquez, J.; Sandiumenge, F.; Pomar, A.; Puig, T.; Obradors, X.; Espinos, J. P.; Gonzalez-Eliphe, A. R.
Faceting of (001) CeO₂ Films: The Road to High Quality TFA-YBa₂Cu₃O₇ Multilayers
 2006, *7Th European Conference on Applied Superconductivity (Eucas'05)*, 43, pp. 138 - 141
239. Carrillo, A. E.; Puig, T.; Palau, A.; Obradors, X.; Zheng, H.; Chen, L.; Paulikas, A. P.; Veal, B. W.; Claus, H.
NEW MICROCRACK NETWORK GENERATION IN TSMTG YBCO
 2006, *7Th European Conference on Applied Superconductivity (Eucas'05)*, 43, pp. 397 - 400
240. Bustamante, A; De Los Santos, LV; Willems, BL; Barinotto, VHC; Gonzalez, JCG; Obradors, X
Superconductivity in the system[Y_{0.8}Ca_{0.2}](SrBa)Cu_{3-x}(BO₃)O_{7-delta} with 0.1 <= x <= 0.5
 2006, *Journal of Physics and Chemistry of Solids*, 67 (1-3), pp. 594 - 596
241. Puig, T; Gonzalez, JC; Pomar, A; Mestres, N; Castano, O; Coll, M; Gazquez, J; Sandiumenge, F; Pinol, S; Obradors, X
The influence of growth conditions on the microstructure and critical currents of TFA-MOD YBa₂Cu₃O₇ films
 2005, *Superconductor Science & Technology*, 18 (8), pp. 1141 - 1150
242. Sandiumenge, F; Cavallaro, A; Gazquez, J; Puig, T; Obradors, X; Arbiol, J; Freyhardt, HC
Mechanisms of nanostructural and morphological evolution of CeO₂ functional films by chemical solution deposition
 2005, *Nanotechnology*, 16 (9), pp. 1809 - 1813
243. Navau, C; Sanchez, A; Pardo, E; Chen, DX; Bartolome, E; Granados, X; Puig, T; Obradors, X
Critical state in finite type-II superconducting rings
 2005, *Physical Review B*, 71 (21), 214507
244. Chen, DX; Pardo, E; Sanchez, A; Wang, SS; Han, ZH; Bartolome, E; Puig, T; Obradors, X
Anomalous ac magnetic susceptibility of high-temperature YBa₂Cu₃O_{7-delta} superconductors
 2005, *Physical Review B*, 72 (5), 52504
245. Huhne, R; Holzapfel, B; Kursumovic, A; Evetts, JE; Cavallaro, A; Sandiumenge, F; Pomar, A; Puig, T; Obradors, X
Preparation of MZrO₃ (M = Ba, Sr) buffer layers on surface oxidized Ni/NiO templates by PLD and MOD
 2005, *Ieee Transactions on Applied Superconductivity*, 15 (2), pp. 3024 - 3027

246. Bartolome, E; Granados, X; Puig, T; Obrados, X; Reddy, ES; Kracunovska, S
Critical state of YBCO superconductors with artificially patterned holes
 2005, *Ieee Transactions on Applied Superconductivity*, 15 (2), pp. 2775 - 2778
247. Granados, X; Bozzo, B; Iliescu, S; Bartolome, E; Puig, T; Obradors, X; Amoros, J; Carrera, M
Critical current determination of artificially welded HTS samples by in-field hall mapping technique
 2005, *Ieee Transactions on Applied Superconductivity*, 15 (2), pp. 3632 - 3635
248. Carrillo, AE; Puig, T; Obradors, X
Pushing and trapping phenomena in YBa₂Cu₃O₇ melt-textured composites with BaZrO₃ and Ag additions
 2005, *Superconductor Science & Technology*, 18 (2), pp. S77 - S81
249. Bartolome, E; Granados, X; Palau, A; Puig, T; Obradors, X; Navau, C; Pardo, E; Sanchez, A; Claus, H
Magnetization and critical current of finite superconducting YBa₂Cu₃O₇ rings
 2005, *Physical Review B*, 72 (2), 24523
250. Bozzo, B; Iliescu, S; Bartolome, E; Palau, A; Granados, X; Puig, T; Obradors, X; Amoros, J; Carrera, M
Determination of the inter- and intra-granular critical currents in superconducting YBa₂Cu₃O₇ welds
 2005, *Superconductor Science & Technology*, 18 (9), pp. 1227 - 1232
251. Bartolome, E; Gomory, F; Granados, X; Puig, T; Obradors, X
Transport versus magnetization technique for determination of critical current densities in superconducting tapes with macroscopic defects
 2005, *Superconductor Science & Technology*, 18 (4), pp. 388 - 394
252. Palau, A; Puig, I; Obradors, X; Feenstra, R; Freyhardt, HC
Effect of strain on grain and grain-boundary critical currents of YBCO coated conductors
 2005, *Ieee Transactions on Applied Superconductivity*, 15 (2), pp. 2790 - 2793
253. Gombos, M; Gomis, V; Vecchione, A; Ciancio, R; Fittipaldi, R; Carrillo, AE; Pace, S; Obradors, X
Mechanical fragility and tri-dimensional crack structure in NdBaCuO top seeded and multi-seeded melt-textured samples
 2005, *Ieee Transactions on Applied Superconductivity*, 15 (2), pp. 3137 - 3140
254. Iliescu, S; Carrillo, AE; Bartolome, E; Granados, X; Bozzo, B; Puig, T; Obradors, X; Garcia, I; Walter, H
Melting of Ag-YBa₂Cu₃O₇ interfaces: the path to large area high critical current welds
 2005, *Superconductor Science & Technology*, 18 (2), pp. S168 - S172
255. Berberich, F; Graafsma, H; Rousseau, B; Canizares, A; Ratiarison, RR; Raimboux, N; Simon, P; Odier, P; Mestres, N; Puig, T; Obradors, X
Combined synchrotron x-ray diffraction and micro-Raman for following in situ the growth of solution-deposited YBa₂Cu₃O₇ thin films
 2005, *Journal of Materials Research*, 20 (12), pp. 3270 - 3273

256. Zmorayova, K; Diko, P; Carrillo, AE; Sandiumenge, F; Obradors, X
Quantitative analysis of YBaCuO₅ particle distribution in a melt-grown YBa₂Cu₃O₇/YBaCuO₅ bulk superconductor
 2005, *Superconductor Science & Technology*, 18 (7), pp. 948 - 952
257. Pomar, A; Coll, M; Cavallaro, A; Gazquez, J; Gonzalez, JC; Mestres, N; Sandiumenge, F; Puig, T; Obradors, X
High J(C) YBCO thin films and multilayers grown by chemical solution deposition
 2005, *Ieee Transactions on Applied Superconductivity*, 15 (2), pp. 2747 - 2750
258. Plain, J; Sandiumenge, F; Rabier, J; Prout, A; Stretton, I; Puig, T; Obradors, X
Vortex pinning by a novel stress induced stacking fault microstructure in melt-textured YBa₂Cu₃O₇
 2005, *Superconductor Science & Technology*, 18 (2), pp. S184 - S187
259. Obradors, X; Puig, T; Pomar, A; Sandiumenge, F; Pinol, S; Mestres, N; Castano, O; Coll, M; Cavallaro, A; Palau, A; Gazquez, J; Gonzalez, JC; Gutierrez, J; Roma, N; Ricart, S; Moreto, JM; Rossell, MD; van Tendeloo, G
Chemical solution deposition: a path towards low cost coated conductors
 2004, *Superconductor Science & Technology*, 17 (8), pp. 1055 - 1064, PII S0953-2048(04)73446-6
260. Palau, A; Puig, T; Obradors, X; Pardo, E; Navau, C; Sanchez, A; Usoskin, A; Freyhardt, HC; Fernandez, L; Holzapfel, B; Feenstra, R
Simultaneous inductive determination of grain and intergrain critical current densities of YBa₂Cu₃O_{7-x} coated conductors
 2004, *Applied Physics Letters*, 84 (2), pp. 230 - 232
261. Iliescu, S; Granados, X; Bartolome, E; Sena, S; Carrillo, AE; Puig, T; Obradors, X; Evetts, JE
High critical current YBa₂Cu₃O₇ artificial joints using Ag foils as welding agent
 2004, *Superconductor Science & Technology*, 17 (1), pp. 182 - 185, PII S0953-2048(04)63203-9
262. Chen, DX; Pardo, E; Sanchez, A; Palau, A; Puig, T; Obradors, X
Comparison of ac susceptibility of YBa₂Cu₃O₇ coated conductors and single crystals
 2004, *Applied Physics Letters*, 85 (23), pp. 5646 - 5648
263. Bartolome, E; Granados, X; Puig, T; Obradors, X; Reddy, ES; Schmitz, GJ
Critical state in superconducting single-crystalline YBa₂Cu₃O₇ foams: Local versus long-range currents
 2004, *Physical Review B*, 70 (14), 144514
264. Gonzalez, JC; Mestres, N; Puig, T; Gazquez, J; Sandiumenge, F; Obradors, X; Usoskin, A; Jooss, C; Freyhardt, HC; Feenstra, R
Biaxial texture analysis of YBa₂Cu₃O₇-coated conductors by micro-Raman spectroscopy
 2004, *Physical Review B*, 70 (9), 94525
265. Dias, FT; Pureur, P; Rodrigues, P; Obradors, X
Paramagnetic effect at low and high magnetic fields in melt-textured YBa₂Cu₃O_{7-delta}
 2004, *Physical Review B*, 70 (22), 224519

266. Cavallaro, A; Castano, O; Palau, A; Gonzalez, JC; Rossell, MD; Puig, T; Sandiumenge, F; Mestres, N; Pinol, S; Obradors, X
Chemical solution techniques for epitaxial growth of oxide buffer and YBa₂Cu₃O₇ films
 2004, *Journal of the European Ceramic Society*, 24 (6), pp. 1831 - 1835
267. Puig, T; Palau, A; Obradors, X; Pardo, E; Navau, C; Sanchez, A; Jooss, C; Guth, K; Freyhardt, HC
The identification of grain boundary networks of distinct critical current density in YBa₂Cu₃O_{7-x} coated conductors
 2004, *Superconductor Science & Technology*, 17 (11), pp. 1283 - 1288, PII S0953-2048(04)79305-7
268. Palau, A; Puig, T; Obradors, X; Usokin, A; Freyhardt, H; Fernandez, L; Holzapfel, B; Feenstra, R; Sanchez, A; Pardo, E
Magnetic granularity analysis of YBCO coated conductors
 2004, *Physica C-Superconductivity and Its Applications*, 408, pp. 866 - 868
269. Obradors, X; Puig, T; Pomar, A; Mestres, N; Sandiumenge, F; Pinol, S; Castano, O; Cavallaro, A; Palau, A; Gonzalez, JC; Coll, M; Gazquez, J
Chemical solution growth of superconductors: a new path towards high critical current coated conductors
 2004, *Physica C-Superconductivity and Its Applications*, 408, pp. 913 - 914
270. Zmorayova, K; Diko, P; Sefcikova, M; Granados, X; Sandiumenge, F; Obradors, X
Oscillation of Y₂BaCuO₅ particle concentration in the melt-grown YBaCuO bulk superconductors
 2004, *Journal of Crystal Growth*, 270 (3-4), pp. 685 - 690
271. Dias, FT; Pureur, P; Rodrigues, P; Obradors, X
High-field paramagnetic Meissner effect in melt-textured YBCO
 2004, *Physica C-Superconductivity and Its Applications*, 408, pp. 653 - 654
272. Bastidas, DM; Pinol, S; Plain, J; Puig, T; Obradors, X
Influence of the mercury source on the synthesis of Hg_{0.8}Re_{0.2}Ba_{2-y}Sr_yCa₂Cu₃O_{8+delta} at normal pressures
 2004, *Physica C-Superconductivity and Its Applications*, 403 (3), pp. 132 - 138
273. Castano, O; Cavallaro, A; Palau, A; Gonzalez, JC; Rossell, M; Puig, T; Sandiumenge, F; Mestres, N; Pinol, S; Pomar, A; Obradors, X
High quality YBa₂Cu₃O₇ thin films grown by trifluoroacetates metalorganic deposition
 2003, *Superconductor Science & Technology*, 16 (1), pp. 45 - 53, PII S0953-2048(03)37883-2
274. Castano, O; Cavallaro, A; Palau, A; Gonzalez, JC; Rosell, M; Puig, T; Pinol, S; Mestres, N; Sandiumenge, F; Pomar, A; Obradors, X
Influence of porosity on the critical currents of trifluoroacetate-MOD YBa₂Cu₃O₇ films
 2003, *IEEE Transactions on Applied Superconductivity*, 13 (2), pp. 2504 - 2507

275. Carrera, M; Amoros, J; Obradors, X; Fontcuberta, J
A new method of computation of current distribution maps in bulk high-temperature superconductors: analysis and validation
 2003, *Superconductor Science & Technology*, 16 (10), pp. 1187 - 1194, PII S0953-2048(03)64104-7
276. Iliescu, S; Sena, S; Granados, X; Bartolome, E; Puig, T; Obradors, X; Carrera, M; Amoros, J; Krakunovska, S; Habisreuther, T
In-field Hall probe mapping system for characterization of YBCO welds
 2003, *Ieee Transactions on Applied Superconductivity*, 13 (2), pp. 3136 - 3139
277. Diko, P; Zmorayova, K; Granados, X; Sandiumenge, F; Obradors, X
Growth related Y2BaCuO5 particle concentration micro-inhomogeneity in the growth sectors of TSMG YBa2Cu3O7/Y2BaCuO5 bulk superconductor
 2003, *Physica C-Superconductivity and Its Applications*, 384 (1-2), pp. 125 - 129, PII S0921-4534(02)01795-1
278. Granados, X; Sena, S; Bartolome, E; Palau, A; Puig, T; Obradors, X; Carrera, M; Amoros, J; Claus, H
Characterization of superconducting rings using an in-field Hall probe magnetic mapping system
 2003, *Ieee Transactions on Applied Superconductivity*, 13 (2), pp. 3667 - 3670
279. Carrera, M; Amoros, J; Carrillo, AE; Obradors, X; Fontcuberta, J
Current distribution maps in large YBCO melt-textured blocks
 2003, *Physica C-Superconductivity and Its Applications*, 385 (4), pp. 539 - 543, PII S0921-4534(02)02289-X
280. Figueras, J; Puig, T; Obradors, X
Influence of twin boundaries and randomly oriented correlated disorder on the liquid vortex plasticity of YBa2Cu3O7
 2003, *Physical Review B*, 67 (1), 14503
281. Jurelo, AR; Rodrigues, P; Carrillo, AE; Puig, T; Obradors, X; Barbosa, J
Fluctuation conductivity in melt-textured REBa2Cu3O7-delta superconductors
 2003, *Physica C-Superconductivity and Its Applications*, 399 (1-2), pp. 87 - 92
282. Gombos, M; Gomis, V; Carrillo, AE; Vecchione, A; Tedesco, P; Pace, S; Obradors, X
Reactivity between Nd1+xBa2-xCu3O7-delta+x/2 and Nd4-2zBa2+2zCu2-zO10-2z phases in superconducting NdBaCuO powders and melt textured bulk samples
 2003, *Superconductor Science & Technology*, 16 (8), pp. 865 - 870, PII S0953-2048(03)61071-7
283. Mendoza, E; Puig, T; Granados, X; Obradors, X; Porcar, L; Bourgault, D; Tixador, P
Extremely high current-limitation capability of underdoped YBa2Cu3O7-x superconductor
 2003, *Applied Physics Letters*, 83 (23), pp. 4809 - 4811

284. Palau, A; Puig, T; Obradors, X; Usoskin, A; Freyhardt, HC; Fernandez, L; Holzapfel, B
Inductive analysis of magnetic granularity effects in YBCOIBAD and RABiTS coated conductors
 2003, *Ieee Transactions on Applied Superconductivity*, 13 (2), pp. 2599 - 2602
285. Perez, B; Alvarez, A; Suarez, P; Caceres, D; Ceballos, JM; Obradors, X; Granados, X; Bosch, R
AC losses in a toroidal superconducting transformer
 2003, *Ieee Transactions on Applied Superconductivity*, 13 (2), pp. 2341 - 2343
286. Gombos, M; Gomis, V; Carrillo, AE; Vecchione, A; Pace, S; Obradors, X
Correlation between the formation of growth bands and Nd210 addition in Nd1Ba2Cu3O7-delta bulk samples
 2003, *Ieee Transactions on Applied Superconductivity*, 13 (2), pp. 3169 - 3172
287. Gombos, M; Gomis, V; Carrillo, AE; Vecchione, A; Pace, S; Obradors, X
Identification of Nd163 phase in melt-textured NdBa2Cu3O7-delta bulk samples
 2003, *Journal of Materials Research*, 18 (9), pp. 2050 - 2054
288. Castano, O; Cavallaro, A; Palau, A; Gonzalez, JC; Rossell, M; Puig, T; Sandiumenge, F; Mestres, N; Pinol, S; Obradors, X
Towards an all chemical solution coated conductor
 2003, *Processing of High-Temperature Superconductors*, 140, pp. 67 - 76
289. Sandiumenge, F; Obradors, X; Puig, T; Rabier, J; Plain, J
Tailoring dislocation substructures for high critical current melt textured YBa2Cu3O7
 2003, *Processing of High-Temperature Superconductors*, 140, pp. 285 - 298
290. Plain, J; Puig, T; Sandiumenge, F; Obradors, X; Rabier, J
Microstructural influence on critical currents and irreversibility line in melt-textured YBa2Cu3O7-x reannealed at high oxygen pressure
 2002, *Physical Review B*, 65 (10), 104526
291. Alvarez, A; Suarez, P; Caceres, D; Granados, X; Obradors, X; Bosch, R; Cordero, E; Perez, B; Caballero, A; Blanco, JA
Superconducting,armature for induction motor of axial flux based on YBCO bulks
 2002, *Physica C-Superconductivity and Its Applications*, 372, pp. 1517 - 1519, PII S0921-4534(02)01070-5
292. Serradilla, IG; Calleja, A; Capdevila, XG; Segarra, M; Mendoza, E; Teva, J; Granados, X; Obradors, X; Espiell, F
Synthesizing the Y-123/Y-211 composite by the PVA method
 2002, *Superconductor Science & Technology*, 15 (4), pp. 566 - 571, PII S0953-2048(02)28809-0
293. Castano, O; Palau, A; Gonzalez, JC; Pinol, S; Puig, T; Mestres, N; Sandiumenge, F; Obradors, X
Epitaxial nucleation and growth of buffer layers and Y123 coated conductors deposited by metal-organic decomposition
 2002, *Physica C-Superconductivity and Its Applications*, 372, pp. 806 - 809, PII S0921-4534(02)00912-7

294. Granados, X; Puig, T; Obradors, X; Mendoza, E; Teva, J; Calleja, A; Serradilla, IG; Segarra, M; Calero, J; Garcia -Tabares, L; Oyarbide, E; Iturbe, R; Peral, L
Design, building up and testing of a 400 kV A hybrid FCL
 2002, *Physica C-Superconductivity and Its Applications*, 372, pp. 1680 - 1683, PII S0921-4534(02)01100-0
295. Obradors, X; Puig, T; Granados, X; Sandiumenge, F
Melt textured YBa₂Cu₃O₇: fundamental properties and current limitation applications
 2002, *Physica C-Superconductivity and Its Applications*, 378, pp. 1 - 10, PII S0921-4534(02)01373-4
296. Rodrigues, P; Puig, T; Carrillo, AE; Palau, A; Obradors, X
Melt growth and microstructure development of high critical current REBa₂Cu₃O₇ superconductors with a natural mixture of rare earths
 2002, *Superconductor Science & Technology*, 15 (1), pp. 60 - 66
297. Carrillo, AE; Rodriguez, P; Puig, T; Palau, A; Obradors, X; Zheng, H; Welp, U; Chen, L; Veal, BW; Claus, H; Crabtree, GW
Growth and microstructure of MTG REBa₂Cu₃O₇/RE₂ ' BaCuO₅ with heavy rare earth elements
 2002, *Physica C-Superconductivity and Its Applications*, 372, pp. 1119 - 1122, PII S0921-4534(02)00863-8
298. Granados, X; Pallares, J; Sena, S; Blanco, JA; Lopez, J; Bosch, R; Obradors, X
Ironless armature for high speed HTS disk shaped rotor in self levitating configuration
 2002, *Physica C-Superconductivity and Its Applications*, 372, pp. 1520 - 1523, PII S0921-4534(02)01071-7
299. Plain, J; Sandiumenge, F; Rabier, J; Denanot, MF; Obradors, X
Dislocation substructures and phase stability of melt-textured YBa₂Cu₃O₇-Y₂BaCuO₅ composites at high oxygen pressures
 2002, *Philosophical Magazine A-Physics of Condensed Matter Structure Defects and Mechanical Properties*, 82 (2), pp. 337 - 348
300. Diko, P; Zmorayova, K; Mendoza, E; Sandiumenge, F; Obradors, X
Growth related microstructure of Bridgman grown YBa₂Cu₃O₇/Y₂BaCuO₅ single-grain bars
 2002, *Superconductor Science & Technology*, 15 (10), pp. 1385 - 1391, PII S0953-2048(02)30837-6
301. Pinol, S; Najib, M; Puig, T; Obradors, X; Xuriguera, H; Segarra, M
Directional solidification of YBaCuO thick films deposited by screen printing on Ag and Ag-Pd tapes
 2002, *Physica C-Superconductivity and Its Applications*, 372, pp. 738 - 741, PII S0921-4534(02)00895-X
302. Rabier, J; Sandiumenge, F; Plain, J; Prout, A; Tall, PD; Obradors, X
Dislocations engineering in melt textured oxide superconductors
 2002, *Radiation Effects and Defects in Solids*, 157 (6-12), pp. 871 - 880

303. Sandiumenge, F; Vilalta, N; Rabier, J; Obradors, X
Subboundary mesostructures and variable dislocation networks in single domain melt textured YBa₂Cu₃O₇-implications on critical currents
 2002, *Physica C-Superconductivity and Its Applications*, 372, pp. 1204 - 1207, PII S0921-4534(02)00973-5
304. Mendoza, E; Teva, J; Puig, T; Granados, X; Obradors, X
Growth and characterization of YBa₂(Cu_{(1-x)A(x)})_{(3)O₇-delta} (A = Mg, Zn, Ni) bars as switching elements for fault current limiters
 2002, *Physica C-Superconductivity and Its Applications*, 372, pp. 1622 - 1625, PII S0921-4534(02)01091-2
305. Figueras, J; Puig, T; Obradors, X; Erb, A; Walker, E
Anisotropy of the low-field critical point of the melting line of twinned YBa₂Cu₃O₇-delta single crystals
 2002, *Physical Review B*, 65 (9), 92505
306. Bastidas, DM; Pinol, S; Plain, J; Puig, T; Obradors, X; Celotti, G; Sprio, S; Tampieri, A
Synthesis and densification of Hg(Re)-1223 superconductors
 2002, *Physica C-Superconductivity and Its Applications*, 372, pp. 1171 - 1173, PII S0921-4534(02)00885-7
307. Figueras, J; Puig, T; Obradors, X; Erb, A; Walter, E
Anisotropic behaviour of the melting line and the low critical field in YBCO
 2002, *Physica C-Superconductivity and Its Applications*, 369 (1-4), pp. 209 - 212, PII S0921-4534(01)01243-6
308. Obradors, X; Puig, T; Granados, X; Mendoza, E; Teva, J; Calleja, A; Serradilla, IG; Segarra, M; Oyarbide, E
Melt textured superconductors: Tailoring properties for current limitation
 2002, *Advances in Cryogenic Engineering, Vols 48A and B*, 614, pp. 331 - 351
309. Puig, T; Rodriguez, P; Carrillo, AE; Obradors, X; Zheng, H; Welp, U; Chen, L; Claus, H; Veal, BW; Crabtree, GW
Self-seeded YBCO welding induced by Ag additives
 2001, *Physica C*, 363 (2), pp. 75 - 79
310. Dias, FT; Pureur, P; Rodrigues, P; Obradors, X
Paramagnetic Meissner effect at high fields in melt-textured YBa₂Cu₃O₇-delta
 2001, *Physica C*, 354 (1-4), pp. 219 - 222
311. Sandiumenge, F; Vilalta, N; Rabier, J; Obradors, X
Subgrain boundary structure in melt-textured RBa₂Cu₃O₇ (R = Y,Nd): Limitation of critical currents versus flux pinning
 2001, *Physical Review B*, 64 (18), 184515
312. Granados, X; Puig, T; Teva, J; Mendoza, E; Obradors, X
Quench behavior of the switching elements of a hybrid HTS current limiter
 2001, *Ieee Transactions on Applied Superconductivity*, 11 (1), pp. 2406 - 2409

313. Bastidas, DM; Pinol, S; Obradors, X; Calleja, A; Segarra, M
Influence of the Sr content on the synthesis of $\text{Hg}_{0.8}\text{Re}_{0.2}\text{Ba}_{2-x}\text{Sr}_x\text{Ca}_2\text{Cu}_3\text{O}_{8+\delta}$ at normal pressures
 2001, *Superconductor Science & Technology*, 14 (11), pp. 981 - 986
314. Mendoza, E; Puig, T; Varesi, E; Carrillo, AE; Plain, J; Obradors, X
Critical current enhancement in YBCO-Ag melt-textured composites: influence of microcrack density
 2000, *Physica C*, 334 (1-2), pp. 7 - 14
315. Puig, T; Obradors, X
Anisotropic vortex plasticity in the liquid state of $\text{YBa}_2\text{Cu}_3\text{O}_7$: Evidence for quenched c-axis vortex correlation length
 2000, *Physical Review Letters*, 84 (7), pp. 1571 - 1574
316. Sandiumenge, F; Puig, T; Rabier, J; Plain, J; Obradors, X
Optimization of flux pinning in bulk melt textured 1-2-3 superconductors: Bringing dislocations under control
 2000, *Advanced Materials*, 12 (5), pp. 375 - +
317. Tixador, P; Obradors, X; Tournier, R; Puig, T; Bourgault, D; Granados, X; Duval, JM; Mendoza, E; Chaud, X; Varesi, E; Beaugnon, E; Isfort, D
Quench in bulk HTS materials - application to the fault current limiter
 2000, *Superconductor Science & Technology*, 13 (5), pp. 493 - 497
318. Figueras, J; Puig, T; Carrillo, AE; Obradors, X
In-plane Mg doping in $\text{YBa}_2\text{Cu}_3\text{O}_7$: influence on the superconducting anisotropy
 2000, *Superconductor Science & Technology*, 13 (7), pp. 1067 - 1073
319. Obradors, X; Puig, T; Mendoza, E; Plain, J; Figueras, J; Granados, X; Carrillo, AE; Varesi, E; Sandiumenge, F; Tixador, P
Tuning the critical currents in bulk MTG YBCO for current limiting devices
 2000, *Superconductor Science & Technology*, 13 (6), pp. 879 - 885
320. Yun, SH; Pedarnig, JD; Rossler, R; Bauerle, D; Obradors, X
In-plane and out-of-plane resistivities of vicinal Hg-1212 thin films
 2000, *Applied Physics Letters*, 77 (9), pp. 1369 - 1371
321. Carrillo, AE; Puig, T; Plain, J; Figueras, J; Obradors, X
 Y_2BaCuO_5 -free melt textured $\text{YBa}_2\text{Cu}_3\text{O}_7$: a search for the reference sample
 2000, *Physica C*, 336 (3-4), pp. 213 - 226
322. Orlando, MTD; Cunha, AG; de Mello, EVL; Belich, H; Baggio-Saitovitch, E; Sin, A; Obradors, X; Burghardt, T; Eichler, A
Effect of hydrostatic pressure on $\text{HgBa}_2\text{Ca}_2\text{Cu}_3\text{O}_{8+\delta}$ superconductor doped with Re
 2000, *Physical Review B*, 61 (22), pp. 15454 - 15461
323. Alejandro, G; Causa, MT; Tovar, M; Fontcuberta, J; Obradors, X
Magnetic frustration in Y-doped manganites: Electron spin resonance and magnetization
 2000, *Journal of Applied Physics*, 87 (9), pp. 5603 - 5605

324. Orlando, MTD; Cunha, AG; Bud'ko, SL; Sin, A; Martinez, LG; Vanoni, W; Belich, H; Obradors, X; Emmerich, FG; Baggio-Saitovitch, E
Hg_{0.95}Re_{0.05}Ba₂Ca₂Cu₃O_{8+delta} superconductor: sample preparation and transport properties under hydrostatic pressure
 2000, *Superconductor Science & Technology*, 13 (2), pp. 140 - 147
325. Dias, FT; Pureur, P; Rodrigues, P; Obradors, X
Paramagnetic Meissner effect in melt-textured YBa₂Cu₃O_{7-delta}
 2000, *Physica C*, 341, pp. 1377 - 1378
326. Jezowski, A; Rogacki, K; Puig, T; Obradors, X
Anisotropy of the thermal conductivity of melt-textured Y123/Y211 composites
 2000, *Physica B*, 284, pp. 1015 - 1016
327. Puig, T; Figueras, J; Obradors, X
Competition effects between random quenched and linearly correlated disorders in MTG-YBCO
 2000, *Physica C*, 341, pp. 2301 - 2304
328. Cunha, AG; Sin, A; Granados, X; Calleja, A; Orlando, MTD; Pinol, S; Obradors, X; Emmerich, FG; Baggio-Saitovitch, E
A novel thermobaric analyser: in situ measurement of gas pressure during synthesis in sealed quartz tube at high temperatures
 2000, *Superconductor Science & Technology*, 13 (11), pp. 1549 - 1552
329. Connolly, E; Sandiumenge, F; Zandbergen, HW; Puig, T; Obradors, X
Analytical and structural transmission electron microscopy study of normal - superconductor interfaces in melt-textured Nd_{1+x}Ba_{2-x}Cu₃O_y
 2000, *Physica C*, 341, pp. 1973 - 1976
330. Plain, J; Puig, T; Sandiumenge, F; Obradors, X; Alonso, JA; Rabier, J
Engineering stacking fault configurations for high critical current melt textured YBa₂Cu₃O₇
 2000, *Physica C*, 341, pp. 1983 - 1984
331. Murakami, M; Cardwell, D; Dew-Hughes, D; Obradors, X; Salama, K
Special issue: Papers presented at the 2nd International Workshop on the Processing and Applications of Superconducting (RE)CBO Large Grain Materials, Morioka, 19-22 October 1999 - Foreword
 2000, *Superconductor Science & Technology*, 13 (6), pp. U3 - U4
332. Obradors, X
Papers presented at the 4th European Conference on Applied Superconductivity, Sitges, Spain, 14-17 September 1999 - Foreword
 2000, *Superconductor Science & Technology*, 13 (5), pp. U3 - U3
333. Sin, A; Cunha, AG; Calleja, A; Orlando, MTD; Emmerich, FG; Baggio-Saitovitch, E; Segarra, M; Pinol, S; Obradors, X
Influence of precursor oxygen stoichiometry on the formation of Hg, Re-1223 superconductors
 1999, *Superconductor Science & Technology*, 12 (3), pp. 120 - 127

334. Martinez, B; Senis, R; Fontcuberta, J; Obradors, X; Cheikh-Rouhou, W; Strobel, P; Bougerol-Chaillout, C; Pernet, M
Carrier density dependence of magnetoresistance in $Tl_2Mn_{2-x}Ru_xO_7$ pyrochlores
 1999, *Physical Review Letters*, 83 (10), pp. 2022 - 2025
335. Puig, T; Galante, F; Gonzalez, EM; Vicent, JL; Obradors, X
Vortex liquid entanglement in twinned $YBa_2Cu_3O_7/Y_2BaCuO_5$ composite superconductors
 1999, *Physical Review B*, 60 (18), pp. 13099 - 13106
336. Puig, T; Plain, J; Sandiumenge, F; Obradors, X; Rabier, J; Alonso, JA
High oxygen pressure generation of flux-pinning centers in melt-textured $YBa_2Cu_3O_7$
 1999, *Applied Physics Letters*, 75 (13), pp. 1952 - 1954
337. Sin, A; Fabrega, L; Orlando, MTD; Cunha, AG; Pinol, S; Bagio-Saitovich, E; Obradors, X
Improvement of superconducting (Hg,Re)-1223 ceramics synthesised by the sealed quartz tube technique
 1999, *Physica C*, 328 (1-2), pp. 80 - 88
338. Fontcuberta, J; Laukhin, V; Obradors, X
Bandwidth dependence of the charge-order and Curie temperatures in manganese perovskites
 1999, *Physical Review B*, 60 (9), pp. 6266 - 6269
339. Orlando, MTD; Sin, A; Alsina, F; Cunha, AG; Mestres, N; Calleja, A; Pinol, S; Emmerich, FG; Martinez, LG; Segarra, M; Obradors, X; Baggio-Saitovich, E
Effects of re-doping on superconducting properties and formation of Hg-1223 superconductors
 1999, *Physica C-Superconductivity and Its Applications*, 328 (3-4), pp. 257 - 269
340. Martinez, B; Sandiumenge, F; Puig, T; Obradors, X; Richard, L; Rabier, J
Enhanced critical currents in melt textured $YBa_2Cu_3O_7$ by cold isostatic pressing
 1999, *Applied Physics Letters*, 74 (1), pp. 73 - 75
341. Granados, X; Obradors, X; Puig, T; Mendoza, E; Gomis, V; Pinol, S; Garcia-Tabares, L; Calero, J
Hybrid superconducting fault current limiter based on bulk melt textured $YBa_2Cu_3O_7$ ceramic composites
 1999, *Ieee Transactions on Applied Superconductivity*, 9 (2), pp. 1308 - 1311
342. Marquez, I; Granados, X; Obradors, X; Pallares, J; Bosch, R
Radial and axial flux superconducting motors in a levitating rotor configuration
 1999, *Ieee Transactions on Applied Superconductivity*, 9 (2), pp. 1249 - 1252
343. Calleja, A; Tijero, E; Martinez, B; Pinol, S; Sandiumenge, F; Obradors, X
Hexaferrite particles by coprecipitation and lyophilization
 1999, *Journal of Magnetism and Magnetic Materials*, 196, pp. 293 - 294
344. Fabrega, L; Calleja, A; Sin, A; Pinol, S; Obradors, X; Fontcuberta, J; King, PJC
Muon spin relaxation in Re-substituted $HgA(2)Ca(n-1)Cu(n)O(2n+2+x)$ ($A = Sr, Ba$; $n=2,3$) superconductors
 1999, *Physical Review B*, 60 (10), pp. 7579 - 7584

345. Cheikh-Rouhou, W; Strobel, P; Chaillout, C; Loureiro, SM; Senis, R; Martinez, B; Obradors, X; Pierre, J
Synthesis and transport properties of substituted $Tl_2Mn_2O_7$ pyrochlore
 1999, *Journal of Materials Chemistry*, 9 (3), pp. 743 - 748
346. Pinol, S; Puig, T; Martinez, B; Obradors, X; Chimenos, JM
Melt growth and superconducting properties of textured $Ag-YBa_2Cu_3O_7$ conductors
 1999, *Ieee Transactions on Applied Superconductivity*, 9 (2), pp. 1483 - 1486
347. Fontcuberta, J; Balcells, LL; Martinez, B; Obradors, X
Magneto-resistance at interfaces in submicrometric manganese perovskites ceramics
 1999, *Nano-Crystalline and Thin Film Magnetic Oxides*, 72, pp. 105 - 118
348. Sin, A; Odier, P; Cunha, AG; Orlando, MTD; Pinol, S; Baggio-Saitovitch, E; Obradors, X
Processing and superconducting properties of $Hg_{1-x}RexBa_2Ca_2Cu_3O_{8+\delta}$
 1999, *Superconductor Science & Technology*, 12 (12), pp. 1175 - 1178
349. Figueras, J; Carrillo, AE; Puig, T; Obradors, X
Solubility limit and anisotropy analysis of Mg doping in melt textured $YBa_2(Cu_{1-x}Mgx)_3O_{7-\delta}$
 1999, *Journal of Low Temperature Physics*, 117 (3-4), pp. 873 - 877
350. Respaud, M; Martinez, B; Balcells, L; Fontcuberta, J; Obradors, X; Broto, JM; Rakota, H; Goiran, M
Magnetic surface anisotropy and magneto-resistance in polycrystalline manganese perovskites
 1999, *Journal of Magnetism and Magnetic Materials*, 203, pp. 100 - 101
351. Senis, R; Martinez, B; Fontcuberta, J; Obradors, X; Cheikh-Rouhou, W; Strobel, P; Bougerol-Chaillot, C; Pernet, M
Transport and magnetic properties of $Tl_2Mn_2-xRuxO_7$ diluted system
 1999, *Journal of Applied Physics*, 85 (8), pp. 5405 - 5407
352. Suryanarayanan, R; Berthon, J; Zelenay, I; Martinez, B; Obradors, X
Semiconductor-metal transition, thermoelectric power and giant magneto resistance of the double Mn perovskite- $La_{1.5}Ca_{1.5}Mn_2O_7$
 1999, *Physica B-Condensed Matter*, 0, pp. 837 - 838
353. Puig, T; Obradors, X; Martinez, B; Sandiumenge, F; Gomis, V; Alonso, JA
High pressure oxygenation in melt textured $NdBa_2Cu_3O_7$: Identification of pinning mechanisms
 1999, *Ieee Transactions on Applied Superconductivity*, 9 (2), pp. 2054 - 2057
354. Garcia-Munoz, JL; Llobet, A; Frontera, C; Fontcuberta, J; Obradors, X; Ritter, C
Charge localization and magnetic dynamics in manganites
 1999, *Journal of Magnetism and Magnetic Materials*, 196, pp. 477 - 478
355. Llobet, A; Ritter, C; Frontera, C; Obradors, X; Garcia-Munoz, JL; Alonso, JA
Structural instability vs. bandwidth-controlled charge ordering in $x=1/2$ manganites
 1999, *Journal of Magnetism and Magnetic Materials*, 196, pp. 549 - 551

356. Cheikh-Rouhou, W; Senis, R; Chaillout, C; Strobel, P; Martinez, B; Obradors, X
New substituted pyrochlore-type manganates with magnetoresistive properties
 1999, *Solid-State Chemistry of Inorganic Materials II*, 547, pp. 27 - 32
357. Puig, T; Obradors, X; Martinez, B; Sandiumenge, F; O'Callaghan, J; Rabier, J
Direct identification of extended defects as vortex pinning centers in melt textured YBa₂Cu₃O₇-Y₂BaCuO₅ composites
 1999, *Ieee Transactions on Applied Superconductivity*, 9 (2), pp. 2663 - 2666
358. Martinez, B; Balcells, L; Respaud, M; Sandiumenge, F; Fontcuberta, J; Obradors, X
Surface and interfacial effects in ceramic manganites
 1999, *Journal of Magnetism and Magnetic Materials*, 196, pp. 479 - 480
359. Martinez, B; Obradors, X; Balcells, L; Rouanet, A; Monty, C
Low temperature surface spin-glass transition in gamma-Fe₂O₃ nanoparticles
 1998, *Physical Review Letters*, 80 (1), pp. 181 - 184
360. Balcells, L; Fontcuberta, J; Martinez, B; Obradors, X
High-field magnetoresistance at interfaces in manganese perovskites
 1998, *Physical Review B*, 58 (22), pp. 14697 - 14700
361. Causa, MT; Tovar, M; Caneiro, A; Prado, F; Ibanez, G; Ramos, CA; Butera, A; Alascio, B; Obradors, X; Pinol, S; Rivadulla, F; Vazquez-Vazquez, C; Lopez-Quintela, MA; Rivas, J; Tokura, Y; Oseroff, SB
High-temperature spin dynamics in CMR manganites: ESR and magnetization
 1998, *Physical Review B*, 58 (6), pp. 3233 - 3239
362. Balcells, LL; Fontcuberta, J; Martinez, B; Obradors, X
Magnetic surface effects and low-temperature magnetoresistance in manganese perovskites
 1998, *Journal of Physics-Condensed Matter*, 10 (8), pp. 1883 - 1890
363. Fontcuberta, J; Laukhin, V; Obradors, X
Local disorder effects on the pressure dependence of the metal-insulator transition in manganese perovskites
 1998, *Applied Physics Letters*, 72 (20), pp. 2607 - 2609
364. Sin, A; Cunha, AG; Calleja, A; Orlando, MTD; Emmerich, FG; Baggio-Saitovich, E; Pinol, S; Chimenos, JM; Obradors, X
Formation and stability of HgCaO₂, a competing phase in the synthesis of Hg_{1-x}RexBa₂Ca₂Cu₃O_{8+delta} superconductor
 1998, *Physica C*, 306 (1-2), pp. 34 - 46
365. Senis, R; Laukhin, V; Martinez, B; Fontcuberta, J; Obradors, X; Arsenov, AA; Mukovskii, YM
Pressure and magnetic-field effects on charge ordering in La_{0.9}Sr_{0.1}MnO₃
 1998, *Physical Review B*, 57 (23), pp. 14680 - 14683
366. Sin, A; Cunha, AG; Calleja, A; Orlando, MTD; Emmerich, FG; Baggio-Satiovitch, E; Segarra, M; Pinol, S; Obradors, X
Pressure-controlled synthesis of the Hg_{0.82}Re_{0.18}Ba₂Ca₂Cu₃O_{8+delta} superconductor
 1998, *Advanced Materials*, 10 (14), pp. 1126 - +

367. Fontcuberta, J; Martinez, B; Laukhin, V; Balcells, L; Obradors, X; Cohenca, CH; Jardim, RF
Bandwidth control of the spin diffusion through interfaces and the electron-phonon coupling in magnetoresistive manganites
 1998, *Philosophical Transactions of the Royal Society A-Mathematical Physical and Engineering Sciences*, 356 (1742), pp. 1577 - 1590
368. Tovar, M; Causa, MT; Ibanez, G; Ramos, CA; Butera, A; Rivadulla, F; Alascio, B; Oseroff, SB; Cheong, SW; Obradors, X; Pinol, S
Electron spin resonance and magnetization in perovskite and pyrochlore manganites
 1998, *Journal of Applied Physics*, 83 (11), pp. 7201 - 7203
369. Martinez, B; Balcells, L; Fontcuberta, J; Obradors, X; Cohenca, CH; Jardim, RF
Magnetic anisotropy and spin diffusion through spin disordered interfaces in magnetoresistive manganites
 1998, *Journal of Applied Physics*, 83 (11), pp. 7058 - 7060
370. Hu, A; Obradors, X; Gomis, V; Puig, T; Carrillo, A; Cardellach, E; Mendoza, E; Zhao, ZX; Xiong, JW
Fabrication of melt-textured Nd₁₂₃ superconductors with Nd₂BaO₄ addition
 1998, *Applied Superconductivity*, 6 (2-5), pp. 129 - 137
371. Fabrega, L; Martinez, B; Fontcuberta, J; Sin, A; Pinol, S; Obradors, X
Magnetic irreversibility and surface barriers in grain-aligned Re-doped Hg-1223
 1998, *Physica C*, 296 (1-2), pp. 29 - 36
372. Martinez, B; Puig, T; Gou, A; Gomis, V; Pinol, S; Fontcuberta, J; Obradors, X; Chouteau, G
In-plane flux pinning in melt-textured YBa₂Cu₃O₇-Y₂BaCuO₅ composites
 1998, *Physical Review B*, 58 (22), pp. 15198 - 15207
373. Sandiumenge, F; Vilalta, N; Rabier, J; Obradors, X
Three dimensional dislocation substructure in NdBa₂Cu₃O_y
 1998, *Applied Physics Letters*, 73 (18), pp. 2660 - 2662
374. Suryanarayanan, R; Berthon, J; Zelenay, I; Martinez, B; Obradors, X; Uma, S; Gmelin, E
Thermoelectric power, specific heat, and giant magnetoresistance of La_{0.85}MnO₃
 1998, *Journal of Applied Physics*, 83 (10), pp. 5264 - 5269
375. Durand, L; Balcells, L; Calleja, A; Fontcuberta, J; Obradors, X
Screen printed La_{2/3}Sr_{1/3}MnO₃ thick films on alumina substrates
 1998, *Journal of Materials Research*, 13 (9), pp. 2623 - 2631
376. Ramos, CA; Causa, MT; Tovar, M; Obradors, X; Pinol, S
Magnetization and FMR in La_{0.7}Pb_{0.3}MnO₃ single crystals
 1998, *Journal of Magnetism and Magnetic Materials*, 177, pp. 867 - 868

377. Ullrich, M; Leenders, A; Krelaus, J; Kautschor, LO; Freyhardt, HC; Schmidt, L; Sandiumenge, F; Obradors, X
High temperature deformation of Bridgman melt-textured YBCO
 1998, *Materials Science and Engineering B-Solid State Materials For Advanced Technology*, 53 (1-2), pp. 143 - 148
378. Richard, L; Denanot, MF; Rabier, J; Sandiumenge, F; Rodriguez, E; Martinez, B; Obradors, X
Microstructure and flux dynamics in YBa₂Cu₃O₇ plastically deformed at room temperature
 1998, *Physica C*, 301 (3-4), pp. 129 - 140
379. Rodriguez, E; Gou, A; Martinez, B; Pinol, S; Obradors, X
Influence of disorder on the vortex-lattice melting in twinned oxygen-deficient ortho-II YBa₂Cu₃O_y (y approximate to 6.6)
 1998, *Physical Review B*, 57 (14), pp. 8687 - 8695
380. Pinol, S; Sin, A; Calleja, A; Fontcuberta, J; Obradors, X
Synthesis of Hg_{1-x}RexBa₂Ca₂Cu₃O_{8+x} pure phase at normal pressures
 1998, *Journal of Superconductivity*, 11 (1), pp. 125 - 126
381. Sandiumenge, F; Martinez, B; Vilalta, N; Yu, R; Obradors, X
Microstructure and pinning in high-T-c-high-J(c) Nd_{1+x}Ba_{2-x}Cu₃O_y directionally solidified in air
 1998, *Superconductor Science & Technology*, 11 (1), pp. 165 - 168
382. Calleja, A; Sin, A; Fabrega, L; Garcia-Munoz, JL; Pinol, S; Fontcuberta, J; Obradors, X
Successful synthesis of Hg_{0.80}Re_{0.20}Sr₂Can-1Cu_nO_{2n+2+delta} (n = 1, 2) by the sealed quartz tube technique
 1998, *Journal of Materials Science*, 33 (22), pp. 5359 - 5363
383. Fabrega, L; Martinez, B; Fontcuberta, J; Sin, A; Pinol, S; Obradors, X
The Re-doped high T-c superconductor HgBa₂Ca₂Cu₃O_x: Magnetic irreversibility versus anisotropy
 1998, *Journal of Applied Physics*, 83 (11), pp. 7309 - 7311
384. Puig, T; Obradors, X; Martinez, B; Alonso, JA
Enhanced interface pinning and aging by high pressure oxygenation of melt textured Nd_{1+x}Ba_{2-x}Cu₃O_{7-delta}
 1998, *Physica C*, 308 (1-2), pp. 115 - 122
385. Galante, F; Rodriguez, E; Fontcuberta, J; Obradors, X
Vortex liquid in YBa₂Cu₃O₇ : Y₂BaCuO₅
 1998, *Physica C*, 296 (1-2), pp. 96 - 102
386. Martinez, B; Obradors, X; Balcells, L; Rouanet, A; Monty, C
Low temperature magnetic behaviour of gamma-Fe₂O₃ nanoparticles
 1998, *Mechanically Alloyed, Metastable and Nanocrystalline Materials, Part 2*, 0, pp. 883 - 888
387. Puig, T; Martinez, B; Yu, R; Hu, A; Gomis, V; Sandiumenge, F; Obradors, X
Critical currents in air processed NdBa₂Cu₃O₇ melt-textured superconductors
 1998, *Applied Superconductivity*, 6 (2-5), pp. 119 - 127

388. Calleja, A; Obradors, X; Roig, A; Martinez, B; Pinol, S; Sandiumenge, F
Hexaferrite-magnetite nanocomposite permanent magnets produced by mechanical alloying
 1998, *Mechanically Alloyed, Metastable and Nanocrystalline Materials, Part 2, 0*, pp. 943 - 948
389. Balcells, L; Martinez, B; Fontcuberta, J; Obradors, X; Cohenca, CH; Jardim, RF
Magnetic surface anisotropy and low-temperature magnetoresistance in manganese perovskites
 1998, *Mechanically Alloyed, Metastable and Nanocrystalline Materials, Part 2, 0*, pp. 889 - 894
390. Vilalta, N; Richard, L; Sandiumenge, F; Rabier, J; Denanot, MF; Prikhna, T; Gawalek, W; Obradors, X
Deformation of melt textured YBa₂Cu₃O₇ superconductors
 1998, *Electron Microscopy 1998, Vol 2: Materials Science 1, 0*, pp. 685 - 686
391. Vilalta, N; Sandiumenge, F; Rabier, J; Obradors, X
New dislocation substructure in NdBa₂Cu₃O₇
 1998, *Electron Microscopy 1998, Vol 2: Materials Science 1, 0*, pp. 823 - 824
392. Laukhin, V; Fontcuberta, J; GarciaMunoz, JL; Obradors, X
Pressure effects on the metal-insulator transition in magnetoresistive manganese perovskites
 1997, *Physical Review B*, 56 (16), pp. 10009 - 10012
393. Vilalta, N; Sandiumenge, F; Pinol, S; Obradors, X
Precipitate size refinement by CeO₂ and Y₂BaCuO₅ additions in directionally solidified YBa₂Cu₃O₇
 1997, *Journal of Materials Research*, 12 (1), pp. 38 - 46
394. GarciaMunoz, JL; Fontcuberta, J; Martinez, B; Seffar, A; Pinol, S; Obradors, X
Magnetic frustration in mixed valence manganites
 1997, *Physical Review B*, 55 (2), pp. R668 - R671
395. Sandiumenge, F; Martinez, B; Obradors, X
Tailoring of microstructure and critical currents in directionally solidified YBa₂Cu₃O_{7-x}
 1997, *Superconductor Science & Technology*, 10 (7A), pp. A93 - A119
396. Obradors, X; Yu, R; Sandiumenge, F; Martinez, B; Vilalta, N; Gomis, V; Puig, T; Pinol, S
Directional solidification of ReBa₂Cu₃O₇ (Re = Y, Nd): microstructure and superconducting properties
 1997, *Superconductor Science & Technology*, 10 (12), pp. 884 - 890
397. Yu, R; Sandiumenge, F; Martinez, B; Vilalta, N; Obradors, X
Interface pinning in high T_c-high J(c) Nd_{1+x}Ba_{2-x}Cu₃O_y directionally solidified in air
 1997, *Applied Physics Letters*, 71 (3), pp. 413 - 415
398. Camacho, D; Mora, J; Fontcuberta, J; Obradors, X
Calculation of levitation forces in permanent magnet-superconductor systems using finite element analysis
 1997, *Journal of Applied Physics*, 82 (3), pp. 1461 - 1468

399. Vilalta, N; Sandiumenge, F; Rodriguez, E; Martinez, B; Pinol, S; Obradors, X; Rabier, J
Microstructure, irreversibility line and flux dynamics in plastically deformed directionally solidified YBa₂Cu₃O₇
 1997, *Philosophical Magazine B-Physics of Condensed Matter Statistical Mechanics Electronic Optical and Magnetic Properties*, 75 (3), pp. 431 - 441
400. Yu, R; Mora, J; Vilalta, N; Sandiumenge, F; Gomis, V; Pinol, S; Obradors, X
Effect of melt-processing temperature on the microstructure and the levitation force of YBCO melt-textured superconductors
 1997, *Superconductor Science & Technology*, 10 (8), pp. 583 - 589
401. Fontcuberta, J; GarciaMunoz, JL; Suaaidi, M; Martinez, B; Pinol, S; Obradors, X
Competing magnetic interactions in manganese perovskites
 1997, *Journal of Applied Physics*, 81 (8), pp. 5481 - 5483
402. Sandiumenge, F; Vilalta, N; Maniette, Y; Obradors, X
Stability and evolution of stacking faults in melt textured YBa₂Cu₃O_{7-x}
 1997, *Applied Physics Letters*, 70 (16), pp. 2192 - 2194
403. Balcells, LL; Enrich, R; Calleja, A; Fontcuberta, J; Obradors, X
Designing and testing of a sensor based on a magnetoresistive manganese perovskite thick film
 1997, *Journal of Applied Physics*, 81 (8), pp. 4298 - 4300
404. Yu, R; Mora, J; Pinol, S; Sandiumenge, F; Vilalta, N; Gomis, V; Martinez, B; Rodriguez, E; Amoros, J; Carrera, M; Granados, X; Camacho, D; Fontcuberta, J; Obradors, X
Processing and levitation force in top-seeded YBCO
 1997, *Ieee Transactions on Applied Superconductivity*, 7 (2), pp. 1809 - 1812
405. Vilalta, N; Sandiumenge, F; Rabier, J; Denanot, MF; Obradors, X
Evolution of the microstructure during high-temperature creep and oxygenation in directionally solidified YBa₂Cu₃O_{7-x}
 1997, *Philosophical Magazine A-Physics of Condensed Matter Structure Defects and Mechanical Properties*, 76 (4), pp. 837 - 855
406. Yu, R; Gomis, V; Vilalta, N; Sandiumenge, F; Martinez, B; Pinol, S; Obradors, X
Growth rate dependence of the critical currents in directionally solidified YBa₂Cu₃O₇-Y₂BaCuO₅ superconductive bars
 1997, *Physica C*, 290 (1-2), pp. 161 - 169
407. Granados, X; Yu, R; Martinez, B; Pinol, S; Sandiumenge, F; Vilalta, N; Carrera, M; Gomis, V; Obradors, X
Fabrication and microstructural control of high current ReBa₂Cu₃O₇ current leads (Re=Y, Nd, Sm)
 1997, *Ieee Transactions on Applied Superconductivity*, 7 (2), pp. 1743 - 1746

408. Yu, R; Gomis, V; Pinol, S; Sandiumenge, F; Mora, J; Carrera, M; Fontcuberta, J; Obradors, X
Preparation of top seeded YBa₂Cu₃O₇ large single-domain tiles
 1997, *Applied Superconductivity 1997, Vols 1 and 2: Vol 1: Small Scale and Electronic Applications; Vol 2: Large Scale and Power Applications*, 0 (158), pp. 845 - 848
409. Vilalta, N; Sandiumenge, F; Yu, R; Obradors, X
Dislocation configurations in directionally solidified NdBa₂Cu₃O₇
 1997, *Applied Superconductivity 1997, Vols 1 and 2: Vol 1: Small Scale and Electronic Applications; Vol 2: Large Scale and Power Applications*, 0 (158), pp. 853 - 856
410. Martinez, B; Sandiumenge, F; Yu, R; Vilalta, N; Puig, T; Gomis, V; Obradors, X
Directional solidification in air of NdBa₂Cu₃O₇ superconductors with high T_c and J(c)
 1997, *Applied Superconductivity 1997, Vols 1 and 2: Vol 1: Small Scale and Electronic Applications; Vol 2: Large Scale and Power Applications*, 0 (158), pp. 857 - 860
411. Pinol, S; Sin, A; Calleja, A; Fabrega, L; Fontcuberta, J; Obradors, X; Segarra, M
Synthesis of Hg_{1-y}Re_yBa₂Ca₂Cu₃O_{8+x} pure phase at normal pressures
 1997, *Applied Superconductivity 1997, Vols 1 and 2: Vol 1: Small Scale and Electronic Applications; Vol 2: Large Scale and Power Applications*, 0 (158), pp. 897 - 900
412. Fabrega, L; Martinez, B; Sin, A; Pinol, S; Fontcuberta, J; Obradors, X
Rising of the irreversibility line in re-substituted Hg-1223 high T_c superconductors
 1997, *Applied Superconductivity 1997, Vols 1 and 2: Vol 1: Small Scale and Electronic Applications; Vol 2: Large Scale and Power Applications*, 0 (158), pp. 1045 - 1048
413. Granados, X; Marquez, I; Mora, J; Fontcuberta, J; Obradors, X; Pallares, J; Bosch, R
Hysteresis motor with self sustained rotor for high speed applications
 1997, *Applied Superconductivity 1997, Vols 1 and 2: Vol 1: Small Scale and Electronic Applications; Vol 2: Large Scale and Power Applications*, 0 (158), pp. 1527 - 1530
414. Amoros, J; Carrera, M; Granados, X; Fontcuberta, J; Obradors, X
Computation of critical current through magnetic flux profile measurements
 1997, *Applied Superconductivity 1997, Vols 1 and 2: Vol 1: Small Scale and Electronic Applications; Vol 2: Large Scale and Power Applications*, 0 (158), pp. 1639 - 1642
415. Portabella, E; Mora, J; Martinez, B; Fontcuberta, J; Obradors, X
Modelling of YBa₂Cu₃O₇ superconductors for magnetic levitation applications
 1997, *Applied Superconductivity 1997, Vols 1 and 2: Vol 1: Small Scale and Electronic Applications; Vol 2: Large Scale and Power Applications*, 0 (158), pp. 1647 - 1650
416. Martinez, B; Obradors, X; Sandiumenge, F; Labarta, A
Magnetic properties of geometrically frustrated systems
 1997, *Complex Behaviour of Glassy Systems*, 492, pp. 414 - 425
417. Pinol, S; Gomis, V; Sandiumenge, F; Vilalta, N; Martinez, B; Obradors, X; Salinas, AJ; ValletRegi, M; SanRoman, J; GonzalezCalvet, JM
Shaping of YBa₂Cu₃O₇-Y₂BaCuO₅ bulk superconducting composites
 1997, *Journal of the European Ceramic Society*, 17 (2-3), pp. 393 - 396

418. Martinez, B; Balcells, L; Molins, ARE; Obradors, X; Rouanet, A; Monty, C
Magnetic behaviour of gamma-Fe₂O₃ nanoparticles
 1997, *Magnetic Hysteresis in Novel Magnetic Materials*, 338, pp. 351 - 355
419. Martinez, B; Sandiumenge, F; Gomis, V; Gou, A; Vilalta, N; Yu, R; PinOL, S;
 Fontcuberta, J; Obradors, X
Nanostructuration of pinning centers in directionally solidified YBa₂Cu₃O₇-Y₂BaCuO₅ composites
 1997, *Synthesis and Properties of Mechanically Alloyed and Nanocrystalline Materials, Pts 1 and 2 - Ismanam-96*, 0, pp. 973 - 978
420. Fontcuberta, J; Martinez, B; Seffar, A; Pinol, S; GarciaMunoz, JL; Obradors, X
Colossal magnetoresistance of ferromagnetic manganites: Structural tuning and mechanisms
 1996, *Physical Review Letters*, 76 (7), pp. 1122 - 1125
421. Martinez, B; Roig, A; Obradors, X; Molins, E; Rouanet, A; Monty, C
Magnetic properties of gamma-Fe₂O₃ nanoparticles obtained by vaporization condensation in a solar furnace
 1996, *Journal of Applied Physics*, 79 (5), pp. 2580 - 2586
422. Martinez, B; Obradors, X; Gou, A; Gomis, V; Pinol, S; Fontcuberta, J; VanTol, H
Critical currents and pinning mechanisms in directionally solidified YBa₂Cu₃O₇-Y₂BaCuO₅ composites
 1996, *Physical Review B*, 53 (5), pp. 2797 - 2810
423. GarciaMunoz, JL; Fontcuberta, J; Suaaidi, M; Obradors, X
Bandwidth narrowing in bulk L_{2/3}A_{1/3}MnO₃ magnetoresistive oxides
 1996, *Journal of Physics-Condensed Matter*, 8 (50), pp. L787 - L793
424. Balcells, L; Enrich, R; Mora, J; Calleja, A; Fontcuberta, J; Obradors, X
Manganese perovskites: Thick-film based position sensors fabrication
 1996, *Applied Physics Letters*, 69 (10), pp. 1486 - 1488
425. Fontcuberta, J; Seffar, A; Granados, X; GarciaMunoz, JL; Obradors, X; Pinol, S
Extraordinary thermopower in magnetoresistive (La_{1-x}Y_x)(O_{0.67})Ca_{0.33}MnO₃ oxides
 1996, *Applied Physics Letters*, 68 (16), pp. 2288 - 2290
426. Martinez, B; Fontcuberta, J; Seffar, A; GarciaMunoz, JL; Pinol, S; Obradors, X
Spin-disorder scattering and localization in magnetoresistive (La_{1-x}Y_x)(_{2/3})Ca_{1/3}MnO₃ perovskites
 1996, *Physical Review B*, 54 (14), pp. 10001 - 10007
427. Sandiumenge, F; Vilalta, N; Obradors, X; Pinol, S; Bassas, J; Maniette, Y
Polygonization of directionally solidified high critical current YBa₂Cu₃O_{6+x}
 1996, *Journal of Applied Physics*, 79 (11), pp. 8847 - 8849
428. Fontcuberta, J; Martinez, B; Seffar, A; Pinol, S; GarciaMunoz, JL; Obradors, X
Chemical tuning of the colossal magnetoresistance of ferromagnetic perovskites
 1996, *Europhysics Letters*, 34 (5), pp. 379 - 384

429. Fontcuberta, J; Martinez, B; Seffar, A; Pinol, S; Roig, A; Molins, E; Obradors, X; Alonso, J; GonzalezCalbet, JM
Magnetic properties of colossal magnetoresistive manganese oxides
 1996, *Journal of Applied Physics*, 79 (8), pp. 5182 - 5184
430. Perez, F; Obradors, X; Fontcuberta, J; Bozec, X; Fert, A
Magnetic flux penetration and creep in a ceramic (Y,Sm)Ba₂Cu₃O₇ superconductor
 1996, *Superconductor Science & Technology*, 9 (3), pp. 161 - 175
431. Fontcuberta, J; Martinez, B; GarciaMunoz, JL; Seffar, A; Pinol, S; Roig, A; Molins, E; Obradors, X
High magnetic polarizability of magnetoresistive manganese oxides
 1996, *Solid State Communications*, 97 (12), pp. 1033 - 1038
432. GarciaMunoz, JL; Suaaidi, M; Fontcuberta, J; Pinol, S; Obradors, X
Lattice compression and charge transfer in electron-doped L(2-x)Ce(x)CuO(4) superconductors
 1996, *Physica C*, 268 (1-2), pp. 173 - 179
433. Seffar, A; Fontcuberta, J; Pinol, S; Obradors, X; Peraudeau, G; Berjoan, R
Copper deficiency and superconductivity in Nd_{2-x}Ce_xCuO₄ oxides
 1996, *Physica C*, 259 (1-2), pp. 75 - 82
434. Martinez, B; Sandiumenge, F; Vilalta, N; Pinol, S; Obradors, X; Rabier, J
Plastic deformation in high critical current melt-textured YBa₂Cu₃O₇
 1996, *Journal of Applied Physics*, 80 (9), pp. 5515 - 5517
435. Mora, J; Carrera, M; Granados, X; Fontcuberta, J; Pinol, S; Obradors, X
Flux trapping and levitation forces in directionally solidified superconducting YBa₂Cu₃O₇ ingots
 1996, *Journal of Applied Physics*, 79 (8), pp. 6596 - 6598
436. Idrissi, HRA; Peraudeau, G; Berjoan, R; Pinol, S; Fontcuberta, J; Obradors, X
Oxygen stoichiometry variations, control of copper oxide content and superconducting behaviour of Nd_{2-x}Ce_xCu_{1+y}O_{4-delta} ceramics
 1996, *Superconductor Science & Technology*, 9 (9), pp. 805 - 813
437. Seffar, A; Fontcuberta, J; Martinez, B; GarciaMunoz, J; Pinol, S; Obradors, X
Giant magnetoresistance in ceramic perovskites La-L-Ca-MnO (L=Y,Gd)
 1996, *Journal of Magnetism and Magnetic Materials*, 157, pp. 260 - 261
438. Rodriguez, E; Galante, F; Obradors, X; Fontcuberta, J; Pinol, S; delaCruz, F
Vortex liquid in melt textured YBa₂Cu₃O₇/Y₂BaCuO₅
 1996, *Czechoslovak Journal of Physics*, 46, pp. 1579 - 1580
439. Gou, A; Martinez, B; Gomis, V; Pinol, S; Obradors, X
Pinning mechanisms in ortho-II YBa₂Cu₃O_{6.6} melt-textured samples
 1996, *Czechoslovak Journal of Physics*, 46, pp. 1675 - 1676
440. Martinez, B; Sandiumenge, F; Pinol, S; Vilalta, N; Fontcuberta, J; Obradors, X
Aging of Critical Currents and Irreversibility Line in Melt-Textured YBa₂Cu₃O₇
 1995, *Applied Physics Letters*, 66 (6), pp. 772 - 774

441. Sandiumenge, F; Vilalta, N; Pinol, S; Martinez, B; Obradors, X
Aging of the Microstructure of Melt-Textured Yba2cu3o7/Y2bacuo5 Composites and Implications on their Superconducting Properties
 1995, *Physical Review B*, 51 (10), pp. 6645 - 6654
442. Acero, J; Garciatabares, L; Bajko, M; Calero, J; Granados, X; Obradors, X; Pinol, S
Current Limiter Based on Melt-Processed Ybco Bulk Superconductors
 1995, *Ieee Transactions on Applied Superconductivity*, 5 (2), pp. 1071 - 1074
443. Pinol, S; Sandiumenge, F; Martinez, B; Vilalta, N; Granados, X; Gomis, V; Galante, F; Fontcuberta, J; Obradors, X
Modified Growth-Mechanism in Directionally Solidified Yba2cu3o7
 1995, *Ieee Transactions on Applied Superconductivity*, 5 (2), pp. 1549 - 1552
444. Garciamunoz, JI; Obradors, X; Rodriguezcarvajal, J
Magnetic-Behavior of R(2)Cu(2)O(5) Cuprates Studied by Neutron-Diffraction
 1995, *Physical Review B*, 51 (10), pp. 6594 - 6601
445. Martinez, B; Pinol, S; Gomis, V; Sandiumenge, F; Vilalta, N; Fontcuberta, J; Obradors, X
Influence of the Oxygenation Process in the Critical Currents of Bulk Melt-Textured Yba2cu3o7
 1995, *Ieee Transactions on Applied Superconductivity*, 5 (2), pp. 1611 - 1614
446. Granados, X; Gomis, V; Pinol, S; Carrera, M; Martinez, B; Sandiumenge, F; Vilalta, N; Fontcuberta, J; Obradors, X; Iglesias, J; Portillo, S
Transport critical currents in (Y,Gd)Ba2Cu3O7 long bars for current lead applications
 1995, *Applied Superconductivity 1995, Vols. 1 and 2: Vol 1: Plenary Talks and High Current Applications; Vol 2: Small Scale Applications*, 148, pp. 207 - 210
447. Mora, J; Granados, X; Gomis, V; Carrera, M; Sandiumenge, F; Pinol, S; Fontcuberta, J; Obradors, X
Directional solidification of YBCO cylinders for magnetic levitation applications
 1995, *Applied Superconductivity 1995, Vols. 1 and 2: Vol 1: Plenary Talks and High Current Applications; Vol 2: Small Scale Applications*, 148, pp. 679 - 682
448. Rouco, A; Obradors, X; Tovar, M
The Metamagnetic and the Weak Ferromagnetic Transitions of the Cu Lattice of Ho2cuo4
 1995, *Journal of Applied Physics*, 78 (7), pp. 4608 - 4614
449. Martinez, B; Obradors, X; Gou, A; Gomis, V; Pinol, S; Fontcuberta, J; VanTol, H
Pinning mechanisms in melt textured YBa2Cu3O7-Y2BaCuO5 ceramics
 1995, *Applied Superconductivity 1995, Vols. 1 and 2: Vol 1: Plenary Talks and High Current Applications; Vol 2: Small Scale Applications*, 148, pp. 271 - 274
450. Pinol, S; Sandiumenge, F; Martinez, B; Gomis, V; Fontcuberta, J; Obradors, X; Snoeck, E; Roucau, C
Enhanced Critical Currents by Ceo2 Additions in Directionally Solidified Yba2cu3o7
 1994, *Applied Physics Letters*, 65 (11), pp. 1448 - 1450

451. Sandiumenge, F; Pinol, S; Obradors, X; Snoeck, E; Roucau, C
Microstructure of Directionally Solidified High-Critical-Current Yba2cu3o7-Y2bacuo5 Composites
 1994, *Physical Review B*, 50 (10), pp. 7032 - 7045
452. Martinez, B; Labarta, A; Rodriguezsola, R; Obradors, X
Magnetic Transition in Highly Frustrated SrCr8Ga4O19 - The Archetypal Kagome System
 1994, *Physical Review B*, 50 (21), pp. 15779 - 15786
453. Rouco, A; Obradors, X; Tovar, M; Perez, F; Chateigner, D; Bordet, P
Magnetic Phase-Diagram of Y2CuO4 - Weak Ferromagnetism and Metamagnetic Transition
 1994, *Physical Review B*, 50 (14), pp. 9924 - 9936
454. Granados, X; Pinol, S; Martinez, B; Galante, F; Sandiumenge, F; Fontcuberta, J; Obradors, X
Directional Solidification of Ybco Rods For Current Lead Applications
 1994, *Cryogenics*, 34, pp. 833 - 836
455. Perez, F.; Obradors, X.; Fontcuberta, J.; Bozec, X.; Fert, A.
Intergranular Flux Penetration and Creep in Strongly Connected Yba2cu3o7 Ceramics
 1994, *Physica C-Superconductivity and Its Applications*, 0, pp. 2941 - 2942
456. Martinez, B.; Gomis, V.; Pinol, S.; Fontcuberta, J.; Obradors, X.
Pinning mechanisms in directionally solidified YBa2Cu3O7: Influence of Y2BaCuO5 concentration
 1994, *Physica C-Superconductivity and Its Applications*, 0, pp. 3007 - 3008
457. Medarde, M; Rodriguezcarvajal, J; Martinez, B; Batlle, X; Obradors, X
Magnetic-Ordering and Spin Reorientations in Nd1.8sr0.2nio3.72
 1994, *Physical Review B*, 49 (13), pp. 9138 - 9149
458. Seffar, A; Fontcuberta, J; Pinol, S; Garciamunoz, JI; Obradors, X; Peraudeau, G; Berjoan, R
Stoichiometry and Superconductivity in the Ln(2-X)Ce(X)CuO(4-Delta) System
 1994, *Physica C*, 235, pp. 791 - 792
459. Suaaidi, M; Garciamunoz, JI; Pinol, S; Vigoureux, P; Fontcuberta, J; Obradors, X
Chemical Pressure Effects on the Optimization of T-C in T' Electron-Doped Superconducting Cuprates
 1994, *Physica C*, 235, pp. 789 - 790
460. Rouco, A; Garciamunoz, JI; Perez, F; Navarro, Jm; Fuertes, A; Pinol, S; Obradors, X; Tovar, M
Weak Ferromagnetism in Gd2CuO4 and Gd(2-X)R(X)CuO(4+/-Delta) (R=Ce, Sr)
 1994, *Physica C*, 235, pp. 1569 - 1570
461. Gomis, V; Catalan, I; Martinez, B; Gou, A; Obradors, X; Fontcuberta, J
Vortex Fluctuation Effects in the 2d System Yba2cu3o6.6
 1994, *Physica C-Superconductivity and Its Applications*, 235, pp. 2623 - 2624

462. Garciamunoz, JI; Cywinski, R; Kilcoyne, Sh; Obradors, X
Magnetic Order and Disorder in $\text{Yb}_2(\text{Cu}_{1-x}\text{Fex})_3\text{O}_{6+y}$
 1994, *Physica C-Superconductivity and Its Applications*, 233 (1-2), pp. 85 - 96
463. Rouco, A; Obradors, X; Briatico, J; Tovar, M; Pinol, S; Fontcuberta, J; Causa, Mt
2-Dimensional Superconductivity in $\text{Sm}_2\text{-Xcexcuo}_4\text{-Delta}$ - Evidence From Microwave-Absorption
 1994, *Physica C*, 235, pp. 2027 - 2028
464. Garciamunoz, JI; Obradors, X; Rodriguezcarvajal, J
Competition Between Copper and Rare-Earth Magnetic Sublattices in $\text{Ho}_2\text{Cu}_2\text{O}_5$ and $\text{Yb}_2\text{Cu}_2\text{O}_5$
 1994, *Physica B*, 194, pp. 277 - 278
465. Fontcuberta, J; Fabrega, L; Crusellas, Ma; Rouco, A; Suaiddi, M; Seffar, A;
 Garciamunoz, JI; Martinez, B; Pinol, S; Obradors, X
The Electron-Doped Cuprates - Superconducting Properties and Pressure Effects
 1994, *Physica C*, 235, pp. 142 - 145
466. Rouco, A; Fontcuberta, J; Obradors, X; Pinol, S; Fabrega, L; Tovar, M; Briatico, J;
 Causa, Mt
Magnetic-Field Dependent Microwave-Absorption in A $\text{Sm}_2\text{-Xcexcuo}_4$ Single-Crystal
 1994, *Physica B*, 194, pp. 1585 - 1586
467. Fabrega, L; Crusellas, Ma; Fontcuberta, J; Obradors, X; Pinol, S; Welp, U;
 Crabtree, Gw
Magnetic-Field-Induced Superconducting Fluctuations in $\text{L}_2\text{-Xcexcuo}_4\text{-Y}$ Single-Crystals
 1994, *Physica B*, 194, pp. 2253 - 2254
468. Fontcuberta, J; Fabrega, L; Obradors, X
Josephson Decoupling in $\text{Nd}_{1.85}\text{Ce}_{0.15}\text{CuO}_4$ Revisited
 1994, *Physical Review Letters*, 73 (24), pp. 3327 - 3327
469. Pinol, S.; Gomis, V.; Gou, A.; Martinez, B.; Fontcuberta, J.; Obradors, X.
Oxygenation and aging processes in melt textured $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$
 1994, *Physica C-Superconductivity and Its Applications*, 0, pp. 3045 - 3046
470. Crusellas, Ma; Fabrega, L; Fontcuberta, J; Martinez, B; Obradors, X; Pinol, S
Elastic Flux-Creep in the Mixed-State of Superconducting $\text{L}_2\text{-Xcexcuo}_4$ Single-Crystals
 1994, *Physica B*, 194, pp. 1831 - 1832
471. Sandiumenge, F; Pinol, S; Obradors, X; Snoeck, E; Roucau, C
Microstructure of melt processed $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}\text{-Y}_2\text{BaCuO}_5$ high critical current composites
 1994, *Electron Microscopy 1994, Vols 2A and 2B: Applications in Materials Sciences*, 0, pp. 947 - 948
472. Obradors, X; Paulius, Lm; Maple, Mb; Torrance, Jb; Nazzal, Ai; Fontcuberta, J;
 Granados, X
Pressure-Dependence of the Metal-Insulator-Transition in the Charge-Transfer Oxides RnO_3 ($\text{R} = \text{Pr}, \text{Nd}, \text{Nd}_{0.7}\text{La}_{0.3}$)
 1993, *Physical Review B*, 47 (18), pp. 12353 - 12356

473. Granados, X; Fontcuberta, J; Obradors, X; Manosa, L; Torrance, JB
Metallic State and the Metal-Insulator-Transition of NdNiO₃
 1993, *Physical Review B*, 48 (16), pp. 11666 - 11672
474. Batlle, X; Obradors, X; Medarde, M; Rodriguezcarvajal, J; Pernet, M; Valletregi, M
Surface Spin Canting in BaFe₁₂O₁₉ Fine Particles
 1993, *Journal of Magnetism and Magnetic Materials*, 124 (1-2), pp. 228 - 238
475. Pinol, S; Gomis, V; Martinez, B; Labarta, A; Fontcuberta, J; Obradors, X
Bridgman Growth and Enhanced Critical Currents in Textured YBa₂Cu₃O₇ - Y₂BaCuO₅ Composites
 1993, *Journal of Alloys and Compounds*, 195 (1-2), pp. 11 - 14
476. Martinez, B; Gomis, V; Pinol, S; Catalan, I; Fontcuberta, J; Obradors, X
Field-Induced Decoupling of Superconducting Bands in Oxygen-Deficient Melt-Textured YBa₂Cu₃O_{7-x}
 1993, *Applied Physics Letters*, 63 (22), pp. 3081 - 3083
477. Fabrega, L; Fontcuberta, J; Obradors, X; Pinol, S; Welp, U; Crabtree, Gw
Field-Induced Diamagnetic Fluctuations At Low-Temperature in Pr_{1.85}Ce_{0.15}CuO_{4-y} Superconductor
 1993, *Europhysics Letters*, 24 (7), pp. 595 - 600
478. Fernandezdiaz, Mt; Martinez, JI; Rodriguezcarvajal, J; Beille, J; Martinez, B; Obradors, X; Odier, P
Metamagnetism in Single-Crystal Pr₂NiO₄
 1993, *Physical Review B*, 47 (10), pp. 5834 - 5840
479. Obradors, X; Visani, P; Delatorre, Ma; Maple, Mb; Tovar, M; Perez, F; Bordet, P; Chenavas, J; Chateigner, D
Rare-Earth Magnetic-Ordering in the R₂CuO₄ Cuprates (R = Tb, Dy, Ho, Er and Tm)
 1993, *Physica C*, 213 (1-2), pp. 81 - 87
480. Steren, Lb; Fainstein, A; Tovar, M; Rouco, A; Perez, F; Obradors, X; Mira, J; Rivas, J; Oseroff, Sb; Fisk, Z
Weak Ferromagnetism Induced by the External-Field Above T_n in Gd₂CuO₄
 1993, *Journal of Applied Physics*, 73 (10), pp. 5710 - 5712
481. Martinez, B; Sandiumenge, F; Golosovski, I; Gali, S; Labarta, A; Obradors, X
Magnetic-Behavior of the BaFe₄-2xSn₂+XCoO₁₁ System - From Cluster Glass To Kagome Phase
 1993, *Physical Review B*, 48 (22), pp. 16440 - 16448
482. Barbeta, Vb; Westphal, Ch; Jardim, Rf; Maple, Mb; Obradors, X
Transport and Magnetic-Properties of Polycrystalline Nd_{1.85}Ce_{0.15}CuO_{4-y} Under Applied Magnetic-Fields
 1993, *Journal of Applied Physics*, 73 (10), pp. 6639 - 6641
483. Sanchez, Rd; Causa, Mt; Sayagues, Mj; Gonzalezcalbet, Jm; Valletregi, M; Obradors, X
Electron-Spin-Resonance of La_{2-x}Sr_xNiO_{4+Δ}
 1993, *Physica B-Condensed Matter*, 190 (2-3), pp. 177 - 182

484. Gomis, V; Catalan, I; Perez, F; Martinez, B; Fontcuberta, J; Fuertes, A; Obradors, X
Anisotropic Magnetization and Weak Links in Melt Textured Yba2cu3o7
 1993, *Cryogenics*, 33 (1), pp. 39 - 45
485. Gomis, V.; Castello, D.; Catalan, I.; Martinez, B.; Fontcuberta, J.; Fuertes, A.; Obradors, X.
Persistent Magnetic Flux and Mapping of Intergranular Junctions in Melt Textured Yba2cu3o7
 1993, *Ieee Transactions on Applied Superconductivity*, 3 (1), pp. 1632 - 1635
486. Gomis, V; Castello, D; Catalan, I; Martinez, B; Fontcuberta, J; Fuertes, A; Obradors, X
Persistent Magnetic-Flux and Mapping of Intergranular Junctions in Melt-Textured Yba2cu3o7
 1993, *Ieee Transactions on Applied Superconductivity, Vol 3, No 1, March 1993 Pts 2-4, 0* , pp. 1632 - 1635
487. Martinez, B; Sandiumenge, F; Rouco, A; Labarta, A; Rodriguezcarvajal, J; Tovar, M; Causa, Mt; Gali, S; Obradors, X
Magnetic Dilution in the Strongly Frustrated Kagome Antiferromagnet Sr_g12-Xcrx_o19
 1992, *Physical Review B*, 46 (17), pp. 10786 - 10792
488. Granados, X; Fontcuberta, J; Obradors, X; Torrance, Jb
Metastable Metallic State and Hysteresis Below the Metal-Insulator-Transition in Prnio3
 1992, *Physical Review B*, 46 (24), pp. 15683 - 15688
489. Tovar, M; Obradors, X; Perez, F; Oseroff, Sb; Duro, Rj; Rivas, J; Chateigner, D; Bordet, P; Chenavas, J
Weak Ferromagnetism and Spin-Glass-Like Behavior in the Rare-Earth Cuprates R₂cuo₄ (R = Tb, Dy, Ho, Er, Tm, and Y)
 1992, *Physical Review B*, 45 (9), pp. 4729 - 4737
490. Sandiumenge, F; Martinez, B; Batlle, X; Gali, S; Obradors, X
Cation Distribution and Magnetization of Bafe₁₂-2xcosnxo₁₉ (X=0.9,1.28) Single-Crystals
 1992, *Journal of Applied Physics*, 72 (10), pp. 4608 - 4614
491. Labarta, A; Batlle, X; Martinez, B; Obradors, X
Magnetic Study of Spin Freezing in the Spin-Glass Baco₆ti₆o₁₉ - Static and Dynamic Analysis
 1992, *Physical Review B*, 46 (14), Pp. 8994 - 9001
492. Batlle, X; Obradors, X; Martinez, B
Magnetic-Interactions, Weak Ferromagnetism, and Field-Induced Transitions in Nd₂nio₄
 1992, *Physical Review B*, 45 (6), pp. 2830 - 2843
493. Fabrega, L; Martinez, B; Fontcuberta, J; Obradors, X; Pinol, S
Critical Fields and Fundamental Lengths in A Superconducting Electron-Doped Pr_{1.85}ce_{0.15}cuo₄-Y Single-Crystal
 1992, *Physical Review B*, 46 (9), pp. 5581 - 5587
494. Rouco, A; Obradors, X; Tovar, M; Bordet, P; Chateigner, D; Chenavas, J
Magnetic-Field Induced Weak Ferromagnetic Order in Y₂cuo₄
 1992, *Europysics Letters*, 20 (7), pp. 651 - 656

495. Ansaldo, Ej; Niedermayer, C; Gluckler, H; Stronach, Ce; Riseman, Tm; Noakes, Dr; Obradors, X; Fuertes, A; Navarro, Jm; Gomez, P; Casan, N; Martinez, B; Perez, F; Rodriguezcarvajal, J; Cary, Rs; Chow, K
Observation of Magnetic Order in the Double-Layer System $\text{La}_2\text{mCu}_2\text{O}_6+\Delta$ (M=Ca,Sr)
 1992, *Physical Review B*, 46 (5), pp. 3084 - 3088
496. Batlle, X; Obradors, X; Sayagues, Mj; Vallet, M; Gonzalezcalbet, J
Weak Ferromagnetism and Magnetic-Interactions in La_2NiO_4
 1992, *Journal of Physics-Condensed Matter*, 4 (2), pp. 487 - 496
497. Martinez, B; Sandiumenge, F; Gali, S; Obradors, X; Rodriguez-Clemente, R
Crystal-Structure and Spin-Glass Behavior in R-Type $\text{BaFe}_4-2x\text{Sn}_2+x\text{Co}_2$ (X=1.1) Hexagonal Ferrite
 1992, *Solid State Communications*, 83 (8), pp. 649 - 654
498. Fontcuberta, J; Jurado, J; Obradors, X; Cabanas, Mv; Vallet, M; Gonzalezcalbet, JM
Topological Excitations Vs Intergranular Phase - Coherence in A Htsc $\text{Y}_0.5\text{Sm}_0.5\text{Ba}_2\text{Cu}_3\text{O}_7$ Ceramics
 1992, *Zeitschrift Fur Physik B-Condensed Matter*, 87 (1), pp. 21 - 28
499. Martinez, B; Obradors, X; Ansaldo, Ej; Niedermayer, C; Noakes, Dr; Sayagues, Mj; Vallet, M; Gonzalezcalbet, J
Mu+Sr Study of Magnetic Order in $\text{La}_2\text{NiO}_4+\Delta$
 1992, *Journal of Magnetism and Magnetic Materials*, 104, pp. 941 - 943
500. Medarde, M; Rodriguezcarvajal, J; Obradors, X; Valletregi, M; Gonzalezcalbet, Jm; Sayagues, Mj
Oxygen Vacancy Ordering in $\text{La}_2-\text{Xsr}_x\text{NiO}_4-\Delta$
 1992, *Physica B*, 180, pp. 399 - 401
501. Medarde, M; Rodriguezcarvajal, J; Obradors, X; Valletregi, M; Gonzalezcalbet, Jm; Alonso, J
Spin Reorientations in $\text{Nd}_{1.8}\text{Sr}_{0.2}\text{NiO}_{3.8}$
 1992, *Physica B*, 180, pp. 402 - 404
502. Tovar, M; Obradors, X; Perez, F; Oseroff, Sb; Chateigner, D; Bordet, P; Chenavas, J; Canfield, Pc; Fisk, Z
Ac Susceptibility in Weak Ferromagnetic R_2CuO_4 Cuprates
 1992, *Journal of Magnetism and Magnetic Materials*, 104, pp. 549 - 550
503. Rouco, A; Sandiumenge, F; Martinez, B; Gali, S; Tovar, M; Obradors, X
Dilution Effects in the Strongly Frustrated System $\text{SrGa}_{12-x}\text{Cr}_x\text{O}_{19}$
 1992, *Journal of Magnetism and Magnetic Materials*, 104, pp. 1645 - 1646
504. Fabrega, L; Crusellas, Ma; Pinol, S; Fontcuberta, J; Martinez, B; Obradors, X
Irreversibility Line and Critical Currents in a $\text{Pr}_2-\text{xCe}_x\text{CuO}_4$ Single-Crystal
 1992, *Superconductor Science & Technology*, 5, pp. S264 - S267
505. Garciamunoz, JI; Rodriguezcarvajal, J; Obradors, X
Magnetism in the Rare-Earth Cuprates $\text{R}_2\text{Cu}_2\text{O}_5$ (R=Y, Ho, Er, Yb, Tm)
 1992, *Journal of Magnetism and Magnetic Materials*, 104, pp. 617 - 618

506. Batlle, X; Martinez, B; Obradors, X; Pernet, M; Vallet, M; Gonzalezcalvet, J; Alonso, J
Study of the Magnetic-Properties of Nd₂NiO₄
 1992, *Journal of Magnetism and Magnetic Materials*, 104, pp. 918 - 920
507. Causa, Mt; Tovar, M; Obradors, X; Labarta, A; Tejada, J
Electron-Spin-Resonance in the Spin-Glass-Like System Fe_{1-x}GaxSbO₄
 1992, *Journal of Magnetism and Magnetic Materials*, 104, pp. 1649 - 1651
508. Fabrega, L; Crusellas, Ma; Pinol, S; Fontcuberta, J; Martinez, B; Obradors, X
Irreversibility Line and Critical Currents in A Pr_{2-x}CexCuO₄ Single-Crystal
 1992, *Critical Current*, 0, pp. S264 - S267
509. Nguyen, E; Castello, D; Fontcuberta, J; Obradors, X
High-Frequency Intergranular Ac Losses in EuBa₂Cu₃O₇ Ceramics
 1992, *Critical Current*, 0, pp. S268 - S271
510. Nguyen, E; Castello, D; Fontcuberta, J; Obradors, X
High-Frequency Intergranular Ac Losses in EuBa₂Cu₃O₇ Ceramics
 1992, *Superconductor Science & Technology*, 5, pp. S268 - S271
511. Batlle, X; Obradors, X; Rodriguezcarvajal, J; Pernet, M; Cabanas, Mv; Vallet, M
Cation Distribution and Intrinsic Magnetic-Properties of Co-Ti-Doped M-Type Barium Ferrite
 1991, *Journal of Applied Physics*, 70 (3), pp. 1614 - 1623
512. Garciamunoz, JI; Rodriguezcarvajal, J; Obradors, X; Valletregi, M; Gonzalezcalbet, J; Parras, M
Complex Magnetic-Structures of the Rare-Earth Cuprates R₂Cu₂O₅ (R=Y, Ho, Er, Yb, Tm)
 1991, *Physical Review B*, 44 (9), pp. 4716 - 4719
513. Batlle, X; Labarta, A; Martinez, B; Obradors, X; Cabanas, V; Valletregi, M
Spin-Glass Transition in BaCo₆Ti₆O₁₉
 1991, *Journal of Applied Physics*, 70 (10), pp. 6172 - 6174
514. Causa, Mt; Tovar, M; Obradors, X; Labarta, A; Tejada, J
Electron-Spin-Resonance in the Spin-Glass-Like System Fe_{1-x}GaxSbO₄
 1991, *Physical Review B*, 44 (9), pp. 4455 - 4460
515. Fabrega, L; Crusellas, Ma; Fontcuberta, J; Obradors, X; Pinol, S; Vanderbeek, Cj; Kes, Ph; Grenet, T; Beille, J
Upper Critical-Field Anisotropy and Dissipative Flux Motion in Nd-Ce-Cu-O Single-Crystals
 1991, *Physica C*, 185, pp. 1913 - 1914
516. Tovar, M; Obradors, X; Perez, F; Oseroff, Sb; Duro, Rj; Rivas, J; Chateigner, D; Bordet, P; Chenavas, J
Weak Ferromagnetism and Spin-Glass-Like Behavior in Tb₂CuO₄
 1991, *Journal of Applied Physics*, 70 (10), pp. 6095 - 6097
517. Labarta, A; Rodriguez, R; Balcells, L; Tejada, J; Obradors, X; Berry, Fj
Noncritical Behavior and Remanent Magnetization in Magnetically Frustrated Fesbo₄
 1991, *Physical Review B*, 44 (2), pp. 691 - 698

518. Grey, Ie; Collomb, A; Obradors, X
The Crystal-Structure of A New Quaternary Ferrite - Ba₁₂Fe₂₈Ti₁₅O₈₄
 1991, *Journal of Solid State Chemistry*, 91 (1), pp. 131 - 139
519. Obradors, X; Batlle, X; Rodriguezcarvajal, J; Martinez, JI; Vallet, M;
 Gonzalezcalbet, J; Alonso, J
Magnetic Transitions in Nd₂NiO₄
 1991, *Physical Review B*, 43 (13), pp. 10451 - 10454
520. Caldes, Mt; Navarro, Jm; Perez, F; Carrera, M; Fontcuberta, J; Casanpastor, N;
 Miravittles, C; Obradors, X; Rodriguezcarvajal, J; Gonzalezcalbet, Jm; Valletregi, M;
 Garcia, A; Fuertes, A
Electron-Microscopy, Neutron-Diffraction, and Physical-Properties of Bi₄Sr₈Cu₅O₁₉+Y
 1991, *Chemistry of Materials*, 3 (5), pp. 844 - 852
521. Garciamunoz, JI; Obradors, X; Kilcoyne, Sh; Cywinski, R
A mu-SR Search For Localized Moments in YBa₂(Cu_{1-x}Zn_x)₃O₇
 1991, *Physica C*, 185, pp. 1085 - 1086
522. Obradors, X; Martinez, B; Batlle, X; Rodriguezcarvajal, J; Fernandezdiaz, Mt;
 Martinez, JI; Odier, P
Magnetic Transitions in Pr₂NiO₄ Single-Crystal
 1991, *Journal of Applied Physics*, 70 (10), pp. 6329 - 6332
523. Perez, F; Obradors, X; Fontcuberta, J; Vallet, M; Gonzalezcalbet, J
Magnetic Irreversibility in Granular Superconductors - Ac Susceptibility Study
 1991, *Physica C*, 185, pp. 1843 - 1844
524. Garciamunoz, JI; Rodriguezcarvajal, J; Schaerpf, O; Obradors, X; Kilcoyne, Sh;
 Cywinski, R
The Nature of Magnetic Order in YBa₂(Cu_{0.9}Fe_{0.1})₃O_{7.2} - A Neutron Polarization Analysis Study
 1991, *Physica C*, 185, pp. 1173 - 1174
525. Sandiumenge, F; Gali, S; Rodriguez-Clemente, R; Batlle, X; Obradors, X
Ba₂Fe₁₀Sn₂CoO₂₂ - Growth, Crystal-Structure (120-K), and Magnetic-Properties
 1991, *Journal of Solid State Chemistry*, 92 (1), pp. 213 - 218
526. Fontcuberta, J; Reiff, W; Obradors, X
Low-Temperature Dynamics of Bipyramidal Ions in SrFe₁₂O₁₉
 1991, *Journal of Physics-Condensed Matter*, 3 (13), pp. 2131 - 2136
527. Nguyen, E; Castello, D; Fontcuberta, J; Obradors, X
High-Frequency Diamagnetic Screening in EuBa₂Cu₃O₇ Ceramics
 1991, *Physica C*, 184 (1-3), pp. 34 - 40
528. Ansaldo, Ej; Niedermayer, C; Gluckler, H; Stronach, Ce; Riseman, Tm; Cary, Rs;
 Noakes, Dr; Obradors, X; Fuertes, A; Navarro, Jm; Gomez, P; Casan, N; Martinez, B;
 Perez, F; Rodriguezcarvajal, J; Chow, K
Superconductivity and Magnetic Order in Superoxygenated La₂MCu₂O₆+Delta (M=Ca,Sr)
 1991, *Physica C*, 185, pp. 1213 - 1214

529. Caldes, Mt; Fuertes, A; Bruna, L; Obradors, X; Fontcuberta, J; Martinez, B; Perez, F
Spin-Glass-Like Behavior in Fe-Doped Bi₄Sr₈Cu₅O_{19+X} Insulating Perovskite
 1991, *Journal of Applied Physics*, 70 (10), pp. 6184 - 6186
530. Caldes, Mt; Carrera, M; Perez, F; Fuertes, A; Fontcuberta, J; Obradors, X; Casan, N
Metal-Insulator-Transition in Bi₂Sr_{1.6-z}La_{0.4}CuO_{6+Delta} Induced by Cation Vacancies
 1991, *Physica C*, 185, pp. 1307 - 1308
531. Fuertes, A; Obradors, X; Navarro, Jm; Gomezromero, P; Casanpastor, N; Perez, F; Fontcuberta, J; Miravittles, C; Rodriguezcarvajal, J; Martinez, B
Oxygen Excess and Superconductivity At 45 K in La₂CaCu₂O_{6+Y}
 1990, *Physica C*, 170 (1-2), pp. 153 - 160
532. Garciamunoz, JI; Rodriguezcarvajal, J; Obradors, X; Valletregi, M; Calbet, Jg; Garcia, E
Ferromagnetic Layers in Y₂Cu₂O₅ - A Neutron-Diffraction Study
 1990, *Physics Letters A*, 149 (5-6), pp. 319 - 327
533. Batlle, X; Obradors, X; Pernet, M; Vallet, M; Cabanas, M; Rodriguez, J; Fontcuberta, J
Cationic Distribution, Magnetization and Magnetic-Anisotropy of Co²⁺ Doped M-Type Barium Ferrite
 1990, *Journal of Magnetism and Magnetic Materials*, 83 (1-3), pp. 465 - 467
534. Obradors, X; Bassas, J; Rodriguez, J; Pannetier, J; Labarta, A; Tejada, J; Berry, Fj
Short-Range Antiferromagnetic Correlations in Spin-Glass-Like Iron Antimonate of Composition FeSbO₄
 1990, *Journal of Physics-Condensed Matter*, 2 (32), pp. 6801 - 6806
535. Obradors, X; Tejada, J; Rodriguez, J; Perez, F; Vallet, M; Gonzalezcalbet, J; Medarde, M
Low-Temperature Magnetization of Antiferromagnetic YBa₂Cu₃O₆
 1990, *Journal of Magnetism and Magnetic Materials*, 83 (1-3), pp. 517 - 518
536. Saintpaul, M; Tholence, JI; Pinol, S; Obradors, X; Melville, Rj; Palmer, Sb
Ultrasound Study on Nd_{1.85}Ce_{0.15}CuO₄-Y Single-Crystals
 1990, *Solid State Communications*, 76 (11), pp. 1257 - 1259
537. Fontcuberta, J; Pinol, S; Obradors, X; Lera, F; Rillo, C
Critical Currents and Relaxation Effects in Nd_{2-x}CexCuO₄-Y Single-Crystals
 1990, *Cryogenics*, 30 (7), pp. 656 - 659,
538. Batlle, X; Pernet, M; Obradors, X; Valletregi, M
High-Field Magnetization Study of Doped Barium Ferrite
 1990, *Advances in Ferrites, Vols 1 and 2*, 0, pp. 423 - 427
539. Granados, X; Batlle, X; Medarde, M; Obradors, X; Fontcuberta, J; Rodriguez, J; Vallet, M; Gonzalez, J; Alonso, J; Sayagues, Mj
Transport and Magnetic-Properties Versus Hole Doping in (La,Nd)₂NiO₄+Delta
 1990, *Journal of the Less-Common Metals*, 164, pp. 853 - 861

540. Caldes, Mt; Casanpastor, N; Navarro, Jm; Perez, F; Fuertes, A; Gomezromero, P; Obradors, X; Miravittles, C
Influence of Strontium Vacancies on the Superconductivity of Bi₂Sr₂-Z-XLaxCuO₆+Y
 1990, *Journal of the Less-Common Metals*, 164, pp. 604 - 611
541. Fontcuberta, J; Jurado, J; Obradors, X; Cabanas, Mv; Vallet, M; Gonzalezcalbet, Jm
Evidence For A Kosterlitz-Thouless Transition in High-Quality YBaCuO Ceramics
 1990, *Journal of the Less-Common Metals*, 164, pp. 160 - 165
542. Berry, Fj; Sarson, Mi; Tejada, J; Labarta, A; Rodriguez, R; Obradors, X
Spin Glass-Type Behavior in Iron Antimonate - The Identification of Unusual Phenomena At Low-Temperatures in Low Magnetic-Fields
 1990, *Journal of Solid State Chemistry*, 87 (1), pp. 237 - 240
543. Caldes, Mt; Navarro, Jm; Fuertes, A; Obradors, X; Miravittles, C; Rodriguezcarvajal, J; Vallet, M; Gonzalezcalbet, J
High-Resolution Neutron Powder Diffraction Study of the Tubular Phase Bi₄Sr₈Cu₅O₁₉+X
 1990, *High-Temperature Superconductors : Fundamental Properties and Novel Materials Processing*, 169, pp. 133 - 136
544. Medarde, M; Batlle, X; Granados, X; Obradors, X; Rodriguez, J; Fontcuberta, J; Vallet, M; Gonzalez, J; Alonso, J; Sayagues, Mj; Martinez, JI; Fontaine, A
Hole Doping in Re₂NiO₄+Delta
 1990, *Electronic Properties of High-Tc Superconductors and Related Compounds*, 99, pp. 166 - 171
545. Fontcuberta, J; Jurado, J; Obradors, X; Cabanas, Mv; Vallet, M; Gonzalezcalbet, Jm
Kosterlitz-Thouless Transition in YBaCuO Ceramics
 1990, *Proceedings of the ICTPS 90 International Conference on Transport Properties of Superconductors*, 25, pp. 273 - 276
546. Obradors, X; Perez, F; Jurado, J; Crusellas, Ma; Fontcuberta, J; Vallet, M; Gonzalezcalbet, J; Garcia, E
Low Field Superconducting Glass Phase-Diagram in Fe Doped YBa₂Cu₃O₇
 1990, *Proceedings of the ICTPS 90 International Conference on Transport Properties of Superconductors*, 25, pp. 277 - 282
547. Fuertes, A; Miravittles, C; Gonzalezcalbet, J; Valletregi, M; Obradors, X; Rodriguezcarvajal, J
The Tubular Crystal-Structure of the New Phase Bi₄Sr₈Cu₅O₁₉+X Related To the Superconducting Perovskites
 1989, *Physica C*, 157 (3), pp. 525 - 530
548. Batlle, X; Garciamunoz, JI; Medarde, M; Rodriguezcarvajal, J; Obradors, X; Martinez, JI; Vallet, M; Gonzalezcalbet, J; Sayagues, Mj; Fontcuberta, J
Antiferromagnetism in La_{2-x}Sr_xNiO₄-Y
 1989, *Physica C-Superconductivity and Its Applications*, 162, pp. 1273 - 1274

549. Lera, F; Rillo, C; Navarro, R; Bartolome, J; Obradors, X; Fontcuberta, J; Granados, X; Carrera, M; Vallet, M; Gonzalezcalbet, J; Rodriguez, J; Medarde, M
Diamagnetism and Critical Currents of Bi-Ca-Sr-Cu-O Samples
 1989, *Cryogenics*, 29 (3A), pp. 379 - 383
550. Granados, X; Carrera, M; Obradors, X; Ferrer, N; Fontcuberta, J; Lera, F; Rillo, C; Bartolome, J; Navarro, R; Vallet, M; Cabanas, Mv; Gonzalezcalbet, Jm
Y-Sm Twinned and Untwinned High-Temperature Superconductors - A Comparative-Study
 1989, *Cryogenics*, 29 (3A), pp. 350 - 354
551. Bartolome, J; Lera, F; Navarro, R; Rillo, C; Gonzalezcalbet, Jm; Ramirez, J; Vallet, M; Carrera, M; Fontcuberta, J; Granados, X; Obradors, X; Perez, F
Influence of Sb and Pb Substitution on the Physical-Properties of the Bi-Sr-Ca-Cu-O Compounds
 1989, *Physica C*, 162, pp. 863 - 864
552. Medarde, M; Rodriguez, J; Vallet, M; Pernet, M; Obradors, X; Pannetier, J
Synthesis of BaFe₁₂O₁₉ Small Particles - A Neutron Thermodiffractometry Study
 1989, *Physica B*, 156, pp. 36 - 39
553. Carrera, M; Granados, X; Crusellas, Ma; Fontcuberta, J; Obradors, X; Garciamunoz, JI; Rodriguez, J; Vallet, M; Gonzalezcalbet, J; Rillo, C; Lera, F
On Inhomogeneous Superconductivity in Fe-Substituted YBa₂Cu₃O₇-Delta
 1989, *Physica C*, 162, pp. 41 - 42
554. Caldes, Mt; Fuertes, A; Gonzalezcalbet, Jm; Valletregi, M; Garcia, A; Obradors, X; Fontcuberta, J; Rodriguez, J; Miravittles, C; Perez, F
Electron-Microscopy, Electrical-Resistivity and Magnetic-Properties of the New Tubular Phase Bi₄Sr₈Cu₅O₁₉+X
 1989, *Physica C*, 162, pp. 865 - 866
555. Carrera, M; Granados, X; Fontcuberta, J; Obradors, X; Vallet, M; Gonzalez Calbet, Jm
Fluctuations and Critical Fields in (Y-Sm) Htsc
 1989, *Physica C*, 162, pp. 723 - 724
556. Obradors, X; Labarta, A; Isalgue, A; Tejada, J; Rodriguez, J; Pernet, M
Magnetic Frustration and Lattice Dimensionality in SrCr₈Ga₄O₁₉
 1988, *Solid State Communications*, 65 (3), pp. 189 - 192
557. Obradors, X; Solans, X; Collomb, A; Samaras, D; Rodriguez, J; Pernet, M; Fontalaba, M
Crystal-Structure of Strontium Hexaferrite SrFe₁₂O₁₉
 1988, *Journal of Solid State Chemistry*, 72 (2), pp. 218 - 224
558. Pernet, M; Obradors, X; Vallet, M; Hernandez, T; Germi, P
Synthesis and Characterization of New Substituted Barium-Ferrite Particles For Magnetic Recording
 1988, *Ieee Transactions on Magnetics*, 24 (2), pp. 1898 - 1900

559. Fontcuberta, J; Obradors, X
Dynamics of the Bipyramidal Ions in SrFe₁₂O₁₉ Studied by Mossbauer-Spectroscopy
 1988, *Journal of Physics C-Solid State Physics*, 21 (12), pp. 2335 - 2345
560. Rodriguez, J; Bassas, J; Obradors, X; Vallet, M; Calbet, J; Anne, M; Pannetier, J
The Chemistry of YBa₂Cu₃O₇ - A Neutron Powder Thermodiffraction Study
 1988, *Physica C*, 153, pp. 1671 - 1672
561. Vallet, M; Obradors, X; Pernet, M; Rodriguez, J; Medarde, M
Low-Temperature Synthesis and Characterization of Gamma-Fe₂O₃ Particles
 1988, *IEEE Transactions on Magnetics*, 24 (2), pp. 1829 - 1831
562. Batlle, X; Rodriguez, J; Obradors, X; Pernet, M; Vallet, M; Fontcuberta, J
Cationic Distribution in BaFe_{12-2x}CoxSn_xO₁₉ Hexagonal Ferrites Suitable For Magnetic Recording
 1988, *Journal de Physique*, 49 (C-8), pp. 939 - 940
563. Martinez, B; Moreu, Ma; Labarta, A; Obradors, X; Tejada, J
Magnetic-Properties of Amorphous Fe-Si Compositionally Modulated Thin-Films
 1988, *Journal of Applied Physics*, 63 (8), pp. 3206 - 3208
564. Obradors, X; Labarta, A; Tejada, J; Vallet, M; Gonzalezcalbet, Jm
Meissner Effect and Critical Fields in An Inhomogeneous Ba₂HoCu₃O_{7-x} High-Tc Superconductor
 1988, *Physical Review B*, 38 (4), pp. 2455 - 2459
565. Rillo, C; Lera, F; Garcia, J; Bartolome, J; Navarro, R; Gonzalez, D; Alariofranco, Ma; Beltran, D; Blank, Dha; Gonzalezcalbet, J; Flokstra, J; Ibanez, R; Moran, E; Munoz, Js; Obradors, X; Sanchez, A; Vallet, M
Magnetic Energy-Absorption in Sintered YBa₂Cu₃O₇-Delta Samples
 1988, *Physica C-Superconductivity and Its Applications*, 153, pp. 1533 - 1534
566. Obradors, X; Labarta, A; Tejada, J; Pernet, M; Tholence, JI; Saintpaul, M; Barbara, B
Quenching of Ferrimagnetic-Like Ordering in SrCr₈Fe₄O₁₉ Hexagonal Ferrite
 1988, *Journal of Applied Physics*, 63 (8), pp. 4091 - 4093
567. Berry, Fj; Labarta, A; Obradors, X; Rodriguez, R; Sarson, Mi; Tejada, J
An Investigation of the Spin-Glass Behavior in Iron Antimonate by Fe-57 and Sb-121 Mossbauer-Spectroscopy
 1988, *Hyperfine Interactions*, 41 (1-4), pp. 463 - 466
568. Fontcuberta, J; Isalgue, A; Obradors, X
The Dynamics of Bipyramidal Ions in Magnetoplumbite-Like Hexagonal Ferrite Systems Revisited
 1988, *Zeitschrift Fur Physik B-Condensed Matter*, 70 (3), pp. 379 - 386
569. Obradors, X; Vallet, M; Rodriguez, J; Fontcuberta, J; Labarta, A; Gonzalezcalbet, Jm
Structural, Electrical and Magnetic-Properties of Ba_{2y}Cu_{3-x}FexO₇-Delta, Ba₂HoCu_{3-x}FexO₇-Delta High-Tc Superconductors
 1988, *Physica C*, 153, pp. 888 - 889

570. Labarta, A; Obradors, X; Tejada, J; Berry, Fj; Sarson, M
Spin-Glass Behavior in Mixed Metal-Oxides With A Rutile-Type Structure
 1988, *Journal of Applied Physics*, 63 (8), pp. 4337 - 4339
571. Fontcuberta, J; Obradors, X; Vallet, M; Gonzalezcalbet, Jm
Mossbauer Emission Study of Co-57 - YBa₂Cu₃O_{7- γ} Htsc
 1988, *Zeitschrift Fur Physik B-Condensed Matter*, 73 (2), pp. 143 - 148
572. Rodriguez, R; Obradors, X; Labarta, A; Tejada, J; Pernet, M; Saintpaul, M; Tholence, JI
Magnetic Phase-Diagram in the Ferrimagnetic Spin-Glass System SrCr₈Fe_{4-x}GaxO₁₉
 1988, *Journal de Physique*, 49 (C-8), pp. 1119 - 1120
573. Ardiaca, R; Medarde, M; Obradors, X; Vallet, M; Pernet, M; Rodriguez, J; Fontcuberta, J
BaFe₁₂O₁₉ Small Particles - Formation - Particle-Size and Magnetic-Properties
 1988, *Journal de Physique*, 49 (C-8), pp. 1849 - 1850
574. Obradors, X; Rillo, C; Vallet, M; Labarta, A; Fontcuberta, J; Gonzalezcalbet, J; Lera, F
Diamagnetism and Electrical Connectivity in An Inhomogeneous Ba₂YCu₃O_{7-x} Superconductor
 1988, *Physica C*, 153, pp. 389 - 390
575. Martinez, B; Moreu, Ma; Ruiz, A; Labarta, A; Obradors, X; Briones, F; Tejada, J
Mossbauer and Magnetization Studies of Amorphous NdFeB Compositionally Modulated Thin-Films
 1988, *Ieee Transactions on Magnetics*, 24 (2), pp. 1694 - 1696
576. Obradors, X; Labarta, A; Vallet, M; Gonzalezcalbet, J
Critical Fields in Ba₂SmCu₃O_{7-x} High-Tc Superconductor From Magnetization Measurements
 1988, *Physica C*, 153, pp. 1503 - 1504
577. Ardiaca, R; Ramos, R; Isalgue, A; Rodriguez, J; Obradors, X; Pernet, M; Vallet, M
Hexagonal Ferrite Particles For Perpendicular Recording Prepared by the Precursor Method
 1987, *Ieee Transactions on Magnetics*, 23 (1), pp. 22 - 24
578. Collomb, A; Obradors, X; Isalgue, A; Fruchart, D
Neutron-Diffraction Study of the Crystallographic and Magnetic-Structures of the BaFe_{12-x}MnxO₁₉ M-Type Hexagonal Ferrites
 1987, *Journal of Magnetism and Magnetic Materials*, 69 (3), pp. 317 - 324
579. Berry, Fj; Sarson, Mi; Labarta, A; Obradors, X; Rodriguez, R; Tejada, J
Spin-Glass Transition in Iron Antimonate - The Inducement by Cationic Ordering of Localized Magnetic Order in A Mixed Metal-Oxide With A Superlattice
 1987, *Journal of Solid State Chemistry*, 71 (2), pp. 582 - 586
580. Fontcuberta, J; Obradors, X; Goodenough, Jb
Influence of Internal Electric-Field on the Transport-Properties of the Magnetoplumbite System BaFe_{12-x}MnxO₁₉
 1987, *Journal of Physics C-Solid State Physics*, 20 (3), pp. 441 - 449

581. Obradors, X; Labarta, A; Tejada, J; Garciaalvarado, F; Moran, E; Vallet, M; Gonzalezcalvet, Jm; Alario, Ma
Magnetic-Properties of $Ba_2SmCu_3O_{9-x}$ High-Tc Superconductor
 1987, *Solid State Communications*, 64 (5), pp. 707 - 710
582. Cusido, Ja; Obradors, X; Fontcuberta, J; Isalgue, A; Canal, F; Cortadellas, J; Langlet, M; Joubert, Jc
Cems and Faraday-Rotation Study of Gamma- Fe_2O_3 - Fe_3O_4 Films Obtained by A New Pyrolysis Technique
 1987, *Ieee Transactions on Magnetics*, 23 (1), pp. 74 - 76
583. Labarta, A; Sarson, M; Obradors, X; Berry, F; Rodriguez, R; Tejada, J
Spin-Glass Behavior of $Fesbo_4$ Studied by Mossbauer and Magnetometry
 1987, *Ieee Transactions on Magnetics*, 23 (5), pp. 2311 - 2313
584. Obradors, X; Isalgue, A; Rodriguez, J; Tejada, J
Mossbauer Study of the Dynamic Properties of $Fe-3+$ Ions in A Bypiramidal Site
 1987, *Crystal Lattice Defects and Amorphous Materials*, 16 (1-4), pp. 31 - 35
585. Martinez, B; Labarta, A; Obradors, X; Tejada, J
Particle Orientation Distribution in Gamma- Fe_2O_3 Magnetic Tapes by Mossbauer and Hysteresis Loop Measurements
 1987, *Ieee Transactions on Magnetics*, 23 (5), pp. 2812 - 2814
586. Martinez, B; Ruiz, A; Labarta, A; Obradors, X; Briones, F; Tejada, J
Mossbauer Studies of Amorphous $FeSi$ Compositionally Modulated Thin-Films
 1987, *Ieee Transactions on Magnetics*, 23 (5), pp. 3581 - 3583
587. Collomb, A; Wolfers, P; Obradors, X
Neutron-Diffraction Studies of Some Hexagonal Ferrites - $BaFe_{12}O_{19}$, $BaMg_2-W$ and $BaCo_2-W$
 1986, *Journal of Magnetism and Magnetic Materials*, 62 (1), pp. 57 - 67
588. Isalgue, A; Labarta, A; Tejada, J; Obradors, X
Exchange Interactions in $BaFe_{12}O_{19}$
 1986, *Applied Physics A-Materials Science & Processing*, 39 (3), pp. 221 - 225
589. Obradors, X; Isalgue, A; Collomb, A; Labarta, A; Pernet, M; Pereda, Ja; Tejada, J; Joubert, Jc
Cation Distribution and Random Spin Canting in $LaZnFe_{11}O_{19}$
 1986, *Journal of Physics C-Solid State Physics*, 19 (33), pp. 6605 - 6621
590. Pereda, Ja; Isalgue, A; Tejada, J; Litterst, Fj; Obradors, X
Mossbauer Study of the Mixed Ferrimagnetic-Spin Glass Phase in $SrFe_{12-x}Cr_xO_{19}$ Hexagonal Ferrites
 1986, *Hyperfine Interactions*, 28 (1-4), pp. 569 - 572
591. Roset, J; Fernandez, A; Obradors, X; Tejada, J
Mossbauer Emission Studies of $Co-57$ Doped ZnO , Cu_2O , and $TiCoO_3$
 1986, *Physica Status Solidi B-Basic Research*, 134 (1), pp. 297 - 302

592. Tejada, J; Fontcuberta, J; Obradors, X; Roset, J; Fernandez, A; Molins, E
Co-57 Doped Oxides As Fe-57 Mossbauer Single Line Sources
 1986, *Hyperfine Interactions*, 29 (1-4), pp. 1221 - 1224
593. Mignot, Jp; Isalgue, A; Obradors, X; Joubert, Jc; Tejada, J
Hyperfine Fields and Exchange Interactions in BaLiFe₁₇O₂₇ W-Type Hexagonal Ferrite
 1986, *Hyperfine Interactions*, 28 (1-4), pp. 565 - 568
594. Obradors, X; Collomb, A; Pernet, M; Samaras, D; Joubert, Jc
X-Ray-Analysis of the Structural and Dynamic Properties of BaFe₁₂O₁₉ Hexagonal Ferrite At Room-Temperature
 1985, *Journal of Solid State Chemistry*, 56 (2), pp. 171 - 181
595. Rodriguez, R; Fernandez, A; Isalgue, A; Rodriguez, J; Labarta, A; Tejada, J; Obradors, X
Spin-Glass Behavior in An Antiferromagnetic Non-Frustrated Lattice Sr₂FeNbO₆ Perovskite
 1985, *Journal of Physics C-Solid State Physics*, 18 (14), pp. L401 - L405
596. Vallet, M; Rodriguez, P; Obradors, X; Isalgue, A; Rodriguez, J; Pernet, M
Particle-Size and Magnetic-Properties of BaFe₁₂O₁₉ Prepared by the Organometallic Precursor Method
 1985, *Journal de Physique*, 46 (C-6), pp. 335 - 338
597. Isalgue, A; Obradors, X; Tejada, J
Dipolar Magnetic-Anisotropy in Some Uniaxial Hexagonal Ferrites
 1985, *Journal de Physique*, 46 (C-6), pp. 345 - 348
598. Obradors, X; Isalgue, A; Collomb, A; Pernet, M; Tejada, J; Joubert, Jc
Magnetic-Properties of BaFe₄Mn₂O₁₁ R-Type Hexagonal Ferrite
 1985, *Journal de Physique*, 46 (C-6), pp. 339 - 343
599. Fontcuberta, J; Obradors, X; Rodriguez, J; Tejada, J
Mossbauer Emission-Spectroscopy of Doped Co⁵⁷_{1-x}O .2. Donor Impurities - Co⁵⁷_{1-x}O-Fe, Ti, In
 1985, *Journal of Physics and Chemistry of Solids*, 46 (3), pp. 305 - 308
600. Fontcuberta, J; Obradors, X; Rodriguez, J; Tejada, J
Mossbauer Emission-Spectroscopy of Doped Co⁵⁷_{1-x}O .1. Acceptor Impurities - Co⁵⁷_{1-x}O-Li
 1985, *Journal of Physics and Chemistry of Solids*, 46 (3), pp. 301 - 304
601. Obradors, X; Pernet, M; Vallet, M; Isalgue, A; Rodriguez, J; Labarta, A
High-Field Magnetization Study of Sodium-Zinc Spinel Ferrites
 1985, *Journal De Physique*, 46 (C-6), pp. 445 - 448
602. Martinez, B; Labarta, A; Obradors, X; Cusido, Ja; Tejada, J
Texture Function in Gamma-Fe₂O₃ Magnetic Tapes
 1985, *Journal de Physique*, 46 (C-6), pp. 379 - 382
603. Obradors, X; Collomb, A; Pernet, M; Joubert, Jc; Isalgue, A
Structural and Magnetic-Properties of BaFe₁₂-XMnxO₁₉ Hexagonal Ferrites
 1984, *Journal of Magnetism and Magnetic Materials*, 44 (1-2), pp. 118 - 128

604. Harami, T; Loock, J; Huenges, E; Fontcuberta, J; Obradors, X; Tejada, J; Parak, F
The Influence of the Semiconductor Properties on the Mossbauer Emission-Spectra of Co-57 Cobalt Oxide
 1984, *Journal of Physics and Chemistry of Solids*, 45 (2), pp. 181 - 190
605. Obradors, X; Isalgue, A; Collomb, A; Pernet, M; Pannetier, J; Rodriguez, J; Tejada, J; Joubert, Jc
Cation Distribution and High-Field Magnetization Studies on SrFe_{12-x}Cr_xO₁₉
 1984, *Ieee Transactions on Magnetics*, 20 (5), pp. 1636 - 1638
606. Obradors, X; Tejada, J; Isalgue, A; Joubert, Jc
Mossbauer Study of Bipyramidal Site Occupancy in BaFe_{12-x}Mn_xO₁₉
 1984, *Solid State Communications*, 50 (9), pp. 821 - 824
607. Pernet, M; Obradors, X; Fontcuberta, J; Joubert, Jc; Tejada, J
Magnetic-Structure and Supermagnetic Properties of Delta-FeOOH
 1984, *Ieee Transactions on Magnetics*, 20 (5), pp. 1524 - 1526
608. Vallet, M; Parras, M; Obradors, X; Pernet, M; Rodriguez, J; Joubert, Jc
Synthesis of Sodium-Zinc Spinel Ferrites
 1984, *Ieee Transactions on Magnetics*, 20 (5), pp. 1515 - 1517
609. Obradors, X; Collomb, A; Pannetier, J; Isalgue, A; Tejada, J; Joubert, Jc
Crystal-Structure and Cationic Distribution of BaFe₄Ti₂O₁₁ R-Type Hexagonal Ferrite
 1983, *Materials Research Bulletin*, 18 (12), pp. 1543 - 1553
610. Fontcuberta, J; Isalgue, A; Obradors, X; Tejada, J; Joubert, Jc
Mossbauer Emission Studies of LiNbO₃-Co-57
 1983, *Radiation Effects and Defects in Solids*, 73 (1-4), pp. 173 - 177
611. J. Tejada, X. Obradors, J. Fontcuberta, J. Rodriguez, R. Rodriguez, M. Oliva
Anomalous charge states in complex oxides
 J. de Physique 41, C1-461 (1980)
612. X. Obradors, R. Farré, J. Rodriguez, A. Labarta, J. Vinaixa, J. Tejada
Mössbauer spectroscopy of non-stoichiometric perovskites
 Ann. de Física A77, 162 (1981)
613. J. Aragonés, M. Caballeria, R. Farré, J. Fontcuberta, A. Isalgué, A. Labarta, E. Molins, X. Obradors, M. Oliva, R. Olivella, J. Rodriguez, R. Rodriguez, J. Tejada, J. Vinaixa
Atoms calents en òxids no-estequiomètrics
 Libro Homenaje a la memoria del Prof. R. Marqués Fernández. Ed. de Universidad de Barcelona, p.9 (1982)

9 _____ OUTREACH PUBLICATIONS

- Regió 7, 4-6-1983.
L'atom a l'abast de tot-hom.
X. Obradors.
- La Vanguardia, 11-1-1987.
Biomagnetisme, una nueva disciplina de estudio
J. Tejada, X. Obradors, A. Labarta.
- La Vanguardia, 1-3-1987.
La Tecnología magnética de la información
X. Obradors, J. Tejada, A. Labarta.
- Regió 7, 25-6-1987.
Un nou estil, una nova intel·ligència
X. Obradors.
- Avui, 15-5-1987.
La Superconductividad, anunci d'una nova revolució tecnològica
J. Tejada, X. Obradors, A. Labarta.
- La Vanguardia, 1-11-1987.
Los neutrones sondan la materia: incorporación española al Instituto Laue-Langevin
X. Obradors, J. Rodriguez.
- Regió 7, 9-1-1988
Els materials superconductors: l'inici d'una nova revolució tecnològica
X. Obradors.
- Revista Mèdica
El biomagnetisme
X. Obradors, J. Tejada
- La Vanguardia (Suplemento Ciencia y Tecnología), 30-6-1990
Superconductividad: de la ciencia a las aplicaciones tecnológicas
X. Obradors
- Revista Española de Física, 4, 83 (1990)
Magnetismo y Superconductividad de alta temperatura
X. Obradors
- Regió 7, 23-4-94
La recerca científica i tecnològica a Catalunya
X. Obradors
- Fronteras de la Ciencia y la Tecnología, Julio 1995
La superconductividad y el ahorro energético
X. Obradors
- Symposium in Homage to Manuel Cardona in his 60th birthday
Superconductivity at ICMAB: 1987-1994
Servei Publ. Univ. Aut. Barcelona (1994)
X. Obradors
- Reptes de La Ciència a les portes del Segle XXI
X. Bellés i Jaume Estruch eds., Rubes Ed. (1995), p.26

Els nous materials del futur"

X.Obradors

- Investigación y Ciencia, Agosto 1996, p.78
Materiales magnetoresistivos
X. Obradors, J.Fontcuberta
- ELECTRA, nº 77, Junio 1996
Aplicaciones electrotécnicas de los superconductores de alta temperatura
X. Obradors, X. Granados, R. Bosch
- Regió 7, Supl. Idees, Febrer 1996
Cent anys convivint amb els raigs X
X. Obradors
- Regió 7, 8 Marzo 1997
La Ciència alça la veu
X. Obradors
- Investigación y Ciencia, Febrero 1997
La creación de materiales nanofásicos, Richard W.Siegel
Traducción para Investigación y Ciencia
- Regió 7, Suplement Idees, Gener 1997
Quan la vida sí que és una tómbola
Xavier Obradors
- INPUT, Nº18, Abril 1999, p.38
Superconductors d'alta temperatura i aplicacions de levitació magnètica
E. Portabella, J. Mora, J. Fontcuberta, X. Obradors
- Investigación y Ciencia, Agosto 1999, p.31
Magnetismo a partir de los vapores de hierro
X. Obradors, B. Martínez, C. Monty
- Ibérica, Actualidad Tecnológica, Junio 1999, p.313
Materiales superconductores y energía eléctrica
X. Obradors, T. Puig
- El temps ambiental, Marzo 2000
Volar amb Superconductors
X. Obradors
- Revista Española de Física, 16, Nº1, p.19 (2002)
Superconductividad: I-Retos Científicos
X. Obradors
- Revista Española de Física, 16, Nº2 p.17 (2002)
Superconductividad: II-Retos Tecnológicos
X. Obradors
- Revista de Física, 2n semestre p.4 (2002)
Superconductivitat. Reptes científics
X. Obradors, T. Puig
- Revista de Física, 1er semestre p.4 (2003)
Superconductivitat. Reptes tecnològics

X. Obradors, T. Puig, X. Granados, F. Sandiumenge, S. Piñol

- La Vanguardia, 17 Noviembre 2003
La superconductividad
X. Obradors, T. Puig
- Revista de Física, 1r Semestre 2004
Superconductivitat i superfluidesa. Un premi per a la comprensió d'efectes quàntics ben visibles
Josep Fontcuberta, Xavier Obradors
- Energética, Enero/Febrero, p. 150 (2008)
Un cable superconductor en España
X. Granados, T. Puig, X. Obradors
- Cicle Nous reptes per a l'energia, Residència d'Investigadors (en prensa)
Energia nanotecnològica
X. Obradors
- Revista Sociedad de Bioquímica y Biología Molecular 162, Diciembre, p.16-19, (2009)
Ciencia para una buena crisis
X. Obradors
- Nanoscience and nanotechnology in Spain, Phantom Foundations, pp. 44-57, (2011)
Nanomaterials for energy
X. Obradors
- La Red eléctrica del futuro: el Nuevo paradigma superconductor
Energía sin CO₂: realidad o utopía, Publicaciones del CSIC, pp. (2011)
X. Obradors, X. Granados, T. Puig
- Revista Española de Física, 26-3 (2012)
Cien años de superconductividad: acariciando un sueño
X. Obradors, T. Puig
- Investigación y Ciencia, Foro Científico (2013)
Nanotecnología: la ineludible necesidad del siglo XXI
X. Obradors
- Revista de Física, Abril - Junio (2017)
Sobre el ICMAB
Mariano Campoy-Quiles, Josep Fontcuberta, Marta Mas-Torrent, Anna May-Masnou, Xavier Obradors,
Rosa Palacín, Teresa Puig, Imma Ratera y Riccardo Rurali
- Memòries Reial Acadèmia de Ciències i Arts de Barcelona, No. 1051, vol LXVII, No 4, p. 267 (2018)
Els nanomaterials de la transició energètica
X. Obradors

10 PATENTS

- 1.- Procedimiento de obtención de cerámicas superconductoras texturadas de $\text{TrBa}_2\text{Cu}_3\text{O}_7$ donde Tr significa Tierra Rara o Ytrio, mediante solidificación direccional
S. Piñol, X. Obradors, B. Martínez, J. Fontcuberta, F. Sandiumenge
N° 9400854
- 2.- Procedimiento de obtención de polvos y piezas superconductoras de $\text{Hg}_{1-x}\text{M}_x\text{Ba}_{2-y}\text{Sr}_y\text{Ca}_2\text{Cu}_3\text{O}_8$ a presiones normales, donde M significa un catión de valencia igual o más alta que el mercurio
S. Piñol, X. Obradors, J. Fontcuberta
N° 9700631
- 3.- Dispositivos magnéticos para la detección de presencia y posición de piezas metálicas
J. Fontcuberta, Ll. Balcells, A. Calleja, X. Obradors
N° 9701153
- 4.- Dispositivo magnetoresistivo para la detección de posiciones angulares basados en capas gruesas de óxidos de Manganeso
J. Fontcuberta, Ll. Balcells, X. Obradors, B. Martínez
N° 9702200
- 5.- Analizador termobarométrico
A. Sin, X. Obradors, A. Cunha
N° 9802355
- 6.- Limitador de corriente con secundario híbrido de metal normal y superconductor de alta temperatura como interruptor controlado por corriente
X. Granados, X. Obradors, T. Puig, L. Garcia-Tabares, R. Bosch
N° 200001697
- 7.- Procedimiento de unión de cerámicas superconductoras texturadas tipo $\text{TRBa}_2\text{Cu}_3\text{O}_7$, donde TR significa Tierra Rara o Ytrio, mediante fundentes monocristalinos tipo $\text{TRBa}_2\text{Cu}_3\text{O}_7/\text{Ag}$
T. Puig, P. Rodríguez Jr., A. E. Carrillo, X. Obradors
N° 200002102
- 8.- Joined product of $\text{REBa}_2\text{Cu}_3\text{O}_7$ superconducting textured ceramics, where RE means rare Earth or Yttrium, and joining process using Ag foils as welding agent
X. Obradors, T. Puig, X. Granados, S. Iliescu, E. Bartolomé, A. E. Carrillo
N° 200300081
Extended to all the world (01-2004) and licenced to Nexans Superconductors (Germany)
- 9.- Cintas superconductoras multicapa preparadas mediante deposición de disoluciones químicas
X. Obradors, T. Puig, F. Sandiumenge, S. Piñol, N. Mestres, A. Pomar, O. Castaño, A. Cavallaro, M. Coll, J. Gázquez, J.C. González, J. Gutiérrez, A. Palau, A. Hassini
N° 200500702
- 10.- Preparación de precursores metalorgánicos anhidros y uso para la deposición y crecimiento de capas y cintas superconductoras
X. Obradors, T. Puig, S. Ricart, N. Romà, J.M. Moretó, A. Pomar, K. Zalamova, J. Gázquez, F. Sandiumenge
N° 200500749
- 11.- Material superconductor nanoestructurado tipo $\text{REBa}_2\text{Cu}_3\text{O}_7$ (RE=Tierra Rara o Ytrio) con una elevada densidad de centros de anclaje de vórtices y su método de preparación
X. Obradors, T. Puig, S. Ricart, A. Pomar, F. Sandiumenge, N. Mestres, A. Llordés, M. Gibert, J. Gutiérrez, J. Gázquez, N. Romà
N° 20063172

- 12.- Cintas superconductoras formadas a partir de soluciones metalorganicas con bajo contenido en fluor.
S. Ricart, X. Palmer, A. Pomar, T. Puig, X. Obradors, A. Palau
P200931114, PCT/ES2010/070798
- 13.- Cintas superconductoras formadas a partir de soluciones metalorgánicas que contienen dos metales de transición
X. Obradors, T. Puig, S. Ricart, A. Pomar, A. Palau, F. Martínez-Julián
P200930679; PCT/ES2010/070577
- 14.- Obtención de capas basadas en óxido de Cerio por descomposición térmica de sales metalorgánicas a baja temperatura
X. Obradors, T. Puig, A. Calleja, S. Ricart, M. Aklalouch, P. Roura, J. Farjas
2011
- 15.- Método de fabricación de láminas delgadas de óxidos epitaxiales mediante impresión de chorro de tinta
S. Ricart, J. Granados, A. Calleja, M. Vilardell, V. R. Vlad, X. Obradors, T. Puig
PCT/ES14/070534
Licenced OXOLUTIA 2015
- 16.- Cintas, capas o láminas superconductoras y su método de fabricación a partir de disoluciones precursoras sin flúor con elevadas velocidades de crecimiento
X. Obradors, T. Puig, S. Ricart, L. Soler, A. Calleja
PCT/ES2014/070788
Licenced OXOLUTIA 2015
- 17.- Superconductor material and process for producing the same
A. Calleja, R. Vlad, X. Obradors, T. Puig, X. Granados, P. Barusco, F. Sirois, C. Lacroix
EP18382760.9 (2018)

11 _____ INVITED AND PLENARY TALKS AND SEMINARS

TOTAL: 196 in research centers and Universities + 107 in conferences and workshops

INVITED TALKS IN UNIVERSITIES, COURSES, RESEARCH CENTERS

TOTAL: 196 (2 United Kingdom, 3 Germany, 3 USA, 1 Roumania, 1 China, 1 Argentine, 11 France, 3 Brasil, 2 Japan, 1 Switzerland, 5 Italy, 1 Andorre, 2 Hungary, 156 Spain, 1 Belgium, 2 Israel, 1 Canada)

- 1.- Propiedades estructurales y magnéticas de las ferritas hexagonales
Universidad de Zaragoza, Zaragoza 1982
- 2.- La Espectroscopía Mössbauer y su aplicación a la Metalurgia Física.
Escuela Universitaria Politècnica de Manresa, 1983.
- 3.- Los estadios de la Materia y su estudio mediante las espectroscopías.
Instituto de Bachillerato Blanxart de Terrassa, 1983.
- 4.- La historia del átomo.
Instituto de Bachillerato Vives Vich de Igualada, 1984.
- 5.- Spin glass behaviour in insulating oxides.
Physics Department, University of Liverpool, 1985.
- 6.- ¿Qué es la Ciencia de Materiales?
Instituto de Formación Profesional de Manresa 1986.
- 7.- La investigación en Física de Materiales en la Universitat de Barcelona
I Reunión Hispano-Francesa de materiales inorgánicos.
Universidad Complutense de Madrid, Madrid 1986.
- 8.- Cristalografía con neutrones.
I Curso sobre utilización de técnicas de neutrones.
Universidad de Zaragoza, Jaca 1986.
- 9.- Introducción a la difracción de neutrones.
Facultad Química, Universidad Complutense de Madrid, Madrid 1986.
- 10.- Los estudios universitarios científicos en España.
Instituto de Formación Profesional de Navars, Navars 1986.
- 11.- ¿Qué es el Instituto Max von Laue - Paul Langevin?
Escuela nacional de Biofísica, Universidad Autónoma de Barcelona, Bellaterra 1987
- 12.- Presentación del Instituto Laue - Langevin
II Curso Difusión de Neutrones, Blanes, 1988
- 13.- Difracción de Neutrones: Cristalografía y Magnetismo
Ciclo de Conferencias sobre Espectroscopía Neutrónica
Universidad de Cadiz, Cádiz Febrero 1989
- 14.- Ferrimagnetismo y Materiales ferrimagnéticos
Escuela Ibérica de Magnetismo
Jaca, Septiembre 1989
- 15.- Magnetismo y Superconductividad de alta temperatura

ICMAB- C.S.I.C., Barcelona, Marzo 1989

- 16.- Ciencia de Materials: de la pedra als superconductors
XVé Pla d'Acció Cultural, Falca Cultural
Casa de Cultura "La Caixa", Manresa Marzo 1990
- 17.- Superconducting Oxides: Crystal Chemistry and fundamental properties
International School "Crystal growth and industrial Materials"
Sitges, Mayo 1990.
- 18.- Superconducting Oxides: Ceramic processing for high critical current applications
International School "Crystal growth and industrial Materials",
Sitges, Mayo 1990.
- 19.- Magnetismo y Superconductividad de alta temperatura.
Universidad Internacional Menendez Pelayo "Superconductividad: de la Ciencia a las aplicaciones"
Barcelona, Junio 1990.
- 20.- High Temperature Superconductivity research in Barcelona
Argonne National Laboratory, Chicago-Illinois USA Julio 1990.
- 21.- Los nuevos materiales
Simposi "Noves Tecnologies i dasafiament socio-económic".
Institut Catalá d'Estudios Mediterranis, Barcelona Noviembre 1990.
- 22.- Weak ferromagnetism and spin-glass behavior in the R_2CuO_4 cuprates
Department of Physics, University of California at San Diego
San Diego USA, Julio 1991
- 23.- Magnetismo y superconductividad de alta temperatura
Instituto de Ciencia de Materiales de Aragón, Zaragoza Nov. 1991
- 24.- Superconductores con altas corrientes críticas: Texturación de óxidos mediante fusión
Instituto de Ciencia de Materiales de Aragón, Zaragoza Nov. 1991
- 25.- Els nous materials
Jornadas Formación Profesorado Enseñanza Secundaria
Depart.Ensenyament, Generalitat de Catalunya, Barcelona Nov. 1991
- 26.- Magnetismo en superconductores de alta temperatura
Facultad de Ciencias, Universidad de Cantabria, Santander Mayo 1992
- 27.- Magnetismo versus superconductividad de alta temperatura
Escuela de verano "Superconductividad de alta temperatura"
Universidad Complutense de Madrid, El Escorial Julio 1992
- 28.- Texturación de $YBa_2Cu_3O_7$: Desarrollo de superconductores con corrientes críticas elevadas
Escuela de verano "Superconductividad de alta temperatura"
Universidad Complutense de Madrid, El Escorial Julio 1992
- 29.- Growth and enhancement of critical currents in monolithic melt textured $YBa_2Cu_3O_7$
EEC Workshop Flux pinning in high temperature superconductors
Zaragoza, Spain, Septiembre 1992
- 30.- Magnetic and superconducting properties of R_2CuO_4 -like cuprates
EEC Workshop Non-copper based and non-standard superconducting materials
Grenoble, Francia, Junio 1992

- 31.- Els nous materials ceràmics
Cicle Conferències Societat Catalana de Física
Facultat de Física, Universitat de Barcelona, Barcelona, Octubre 1993
- 32.- Superconductivitat d'alta temperatura: de la Ciència a les aplicacions
Cicle Forum Telecomunicacions
Escola Enginyers de Telecomunicacions, Universitat Politècnica de Catalunya, Novembre 1993
- 33.- Microestructura, corrientes críticas y aplicaciones de cerámicas texturadas de $\text{YBa}_2\text{Cu}_3\text{O}_7$
Centro Atómico de Bariloche, Bariloche, Argentina, Diciembre 1993
- 34.- Aplicaciones de potencia de los superconductores cerámicos texturados
UNESA, Madrid, Junio 1993
- 35.- Els nous materials: de la vida quotidiana a l'alta tecnologia
Centre cultural de La Caixa, Palma de Mallorca, Gener 1994
- 36.- Els Materials a l'any 2.020
Jornades de debat "Reptes de la Ciència a les portes del segle XXI"
Universitat de Barcelona, Barcelona Abril 1994
- 37.- Magnetismo versus superconductividad de alta temperatura
Escuela de verano "Superconductividad de alta temperatura"
Universidad Complutense de Madrid, El Escorial, Julio 1992
- 38.- Texturación de $\text{YBa}_2\text{Cu}_3\text{O}_7$: Desarrollo de superconductores con corrientes críticas elevadas
Escuela de verano "Superconductividad de alta temperatura"
Universidad Complutense de Madrid, El Escorial, Julio 1992
- 39.- Magnetic and superconducting properties of R_2CuO_4 -like cuprates
EEC Workshop Non-copper based and non-standard superconducting materials
Grenoble, Francia, Junio 1992
- 40.- Els nous materials ceràmics
Cicle Conferències Societat Catalana de Física
Facultat de Física, Universitat de Barcelona, Octubre 1993
- 41.- Superconductivitat d'alta temperatura: de la Ciència a les aplicacions
Cicle Forum Telecomunicacions
Escola Enginyers de Telecomunicacions, Universitat Politècnica de Catalunya, Novembre 1993
- 42.- Aplicaciones de potencia de los superconductores cerámicos texturados
UNESA, Madrid, Junio 1993
- 43.- Els nous materials: de la vida quotidiana a l'alta tecnologia
Centre cultural de La Caixa, Palma de Mallorca, Gener 1994
- 44.- Els Materials a l'any 2.020
Jornades de debat "Reptes de la Ciència a les portes del segle XXI"
Universitat de Barcelona, Abril 1994
- 45.- Microstructure and critical currents in melt textured $\text{YBa}_2\text{Cu}_3\text{O}_7$ ceramics
International Superconducting Technology Center (ISTEC), Div.VII, Tokio, Junio 1994
- 46.- Superconductivitat a l'ICMAB: 1988 - 1994
Simposi Homenatge a Manel Cardona
ICMAB-UAB, Bellaterra, Septiembre 1994

- 47.- Els materials: de la vida quotidiana a les tecnologies avançades
Jornades Científico-Tecnològiques "Noves tecnologies i ocupació"
Fundació Lacetània, Manresa, Març 1995
- 48.- Premi Nobel de Física 1994: Els neutrons, una eina per estudiar els materials
Facultat de Física, Universitat de Barcelona, Març 1995
- 49.- Desenvolupament i perspectives d' aplicació dels superconductors d'alta temperatura
Associació d'Enginyers Industrials de Catalunya, Barcelona, Maig 1995
- 50.- Noves tendències en tecnologies magnètiques de grabació d'informació
Escola Universitària d' Informàtica, Universitat de Lleida, Lleida Mars 1995
- 51.- Oxidos de metales de transición y Tierras raras: un laboratorio de interacciones magnéticas
Curso de Verano de la Universidad Complutense "200 años de Tierras Raras"
El Escorial, Julio 1995
- 52.- Magnetismo de Tierras Rara en materiales superconductores
Curso de Verano de la Universidad Complutense "200 años de Tierras Raras"
El Escorial, Julio 1995
- 53.- Aplicaciones electrotécnicas de los superconductores de alta temperatura
Asociación Electrotécnica Española
Barcelona, Febrero 1996
- 54.- Superconductividad aplicada en el ICMAB
Comité Científico Internacional CSIC
Bellaterra, Mayo 1996
- 55.- Superconductores másicos: Aplicaciones y demostradores prácticos
Curso "Superconductividad y aplicaciones industriales"
CEIT, San Sebastián, Junio 1996
- 56.- Processing of directionally solidified YBCO superconductors
II Escola Brasileira de Superconductividade: "High critical current material for power applications"
Rio de Janeiro, Brasil, Noviembre 1996
- 57.- Microstructure and critical currents in directionally solidified YBCO superconductors
II Escola Brasileira de Superconductividade: "High critical current material for power applications"
Rio de Janeiro, Brasil, Noviembre 1996
- 58.- Development of practical applications based on bulk melt textured YBCO superconductors
II Escola Brasileira de Superconductividade: "High critical current material for power applications"
Rio de Janeiro, Brasil, Noviembre 1996
- 59.- Desarrollo de alimentadores de corriente basados en superconductores tipo YBCO
I Jornada de cooperación tecnológica en el sector de aceleradores
Centro de Desarrollo Tecnológico e Industrial
San Sebastián, Diciembre 1996
- 60.- Avances en dispositivos magnéticos y superconductores
Jornada Investigación - Empresa "Magnetismo, Materiales magnéticos y Aplicaciones"
Bilbao, 31 de Enero de 1997
- 61.- Dispositifs magnètiques basés aux matériaux avec magnétoresistance géante
Proyecto Comunidad de Trabajo de los Pirineos "Nanoestructuras magnéticas"
Toulouse, Francia, 7 Febrero de 1997
- 62.- Avances en dispositivos superconductores

Centro de Investigaciones Energéticas y Medioambientales
Madrid, Marzo 1997

- 63.- Nanosistemes magnètics i aplicacions
III Trobades de Recerca, Ciència i Tecnologia
Andorra la Vella, Andorra, Junio 1997
- 64.- Bulk superconductors: microstructure and superconducting properties
National Laboratory of Superconductivity
Beijing, China, Marzo 1997
- 65.- Nanosystèmes magnétiques et applications des matériaux magnétoresistifs
VI Colloque Franco - vénézuélien
Toulouse, Francia, Octubre 1997
- 66.- Els materials: de la vida quotidiana a les tecnologies avançades
Semana “Nuevas tecnologías”, Instituto E.S.O.
Sant Joan de Vilatorrada, Noviembre 1997
- 67.- Limitacions tecnològiques i nous materials: el cas de la superconductivitat
Jornada “Impacte de la tecnologia en la societat actual
Societat Catalana de Tecnologia, Institut d’Estudis Catalans
Barcelona, Octubre 1997
- 68.- Pressure dependence of the metal-insulator transition in CMR manganites
Oxide Spin Electronics Meeting
Sheffield, G.B., Noviembre 1997
- 69.- Tuning of colossal magnetoresistance in Manganese perovskites
Instituto de Física del estado Sólido, Max Planck Institute
Stuttgart, Alemania, Febrero 1998
- 70.- Processing of bulk high critical current superconductors
International Advanced School Leonardo da Vinci
Superconducting materials: advances in technology and applications
Bologna, Italia, Junio 1998
- 71.- Microstructural basis of enhanced flux pinning in bulk $\text{ReBa}_2\text{Cu}_3\text{O}_7$
International Advanced School Leonardo da Vinci
Superconducting materials: advances in technology and applications
Bologna, Italia, Junio 1998
- 72.- Noves Tecnologies per al demà
Aules d’Extensió Universitària per a la gent gran
Escola Universitària Politècnica de Manresa
Manresa, Mayo 1998
- 73.- Superconductivitat: La clau per una nova tecnologia
V Jornades Tecnològiques
I.E.S. Quercus, Sant Joan de Vilatorrada, Marzo 1998
- 74.- Noves Tecnologies pel demà
Cicle “Pensant en el futur”
I.E.S. Mig-Món, Suria, Febrero de 1998
- 75.- High Temperature Superconductors 10 Years Later: Materials Integration Strategy
Laboratoire Européen Associé Meeting
Cap d’Agde, Francia, Septiembre 1998

- 76.- Superconductores: Aplicaciones en ingeniería de potencia
Universidad Menéndez y Pelayo, Presente y Futuro de la Energía Eléctrica
La Coruña, Octubre 1998
- 77.- La supraconductivité: une réalité pour le siècle XXI
Respuesta al nombramiento de Doctor Honoris Causa por la Universidad de Pitesti, Rumania
Pitesti, Rumania, 11 de Junio de 1999
- 78.- Superconducting Fault Current Limiters in Europe
SCENET meeting, Working groups activities
Roma, Italia Mayo 1999
- 79.- Materiales superconductores: Aplicaciones industriales y perspectivas futuras
Curso Tecnologías avanzadas y su aplicación a la industria
Universidad de la Coruña, El Ferrol, 29 de Setiembre de 1999
- 80.- Vortex pinning competition in melt grown YBCO
Université de Genève, Suiza
Ginebra, Enero 2001
- 81.- Superconductivitat: Un repte científic i tecnològic
Discurso ingreso Academia de Ciencia y Artes de Barcelona
Barcelona, Mayo 2001
- 82.- Materials superconductors : reptes científics i tecnològics
Societat Catalana de Química
Bellaterra, Mayo 2001
- 83.- Melt textured YBCO bars: tailoring properties for current limitation
Workshop SCENET- Fault Current Limiters
Grenoble, Francia, Mayo 2001
- 84.- Y-211 and twin boundary contribution to flux pinning in the vortex liquid state of MTG-YBCO
International Workshop in Critical currents
Göttingen, Alemania, Junio 2001
- 85.- Superconductividad de alta temperatura: aplicaciones de potencia
Jornadas Técnicas Cluster de Energía “Redes y microrredes”
Parque Tecnológico de Miñao
Alava, País Vasco, Julio 2001
- 86.- Materials per a noves alternatives energètiques
Real Academia de Ciències i Arts de Barcelona
Barcelona, Enero 2002
- 87.- High critical current $\text{YBa}_2\text{Cu}_3\text{O}_7$ materials: bulk and coated conductors
Advanced studies on Superconducting Engineering
Budapest (Hungria), Agosto 2002
- 88.- Superconducting current limiters: materials alternatives
Advanced studies on Superconducting Engineering
Budapest (Hungria), Agosto 2002
- 89.- La recerca científica: Reptes del segle XXI
Premis Treballs de Recerca del Bages
Caixa d'Estalvis de Manresa
Manresa, Junio 2002

- 90.- High critical current $\text{YBa}_2\text{Cu}_3\text{O}_7$: bulk melt textured ceramics and chemical solution growth tapes
 Institut of Materials Sciences
 Dresden (Alemania), Marzo 2002
- 91.- La Recerca Científica: els reptes del segle XXI
 Institut d'Ensenyament de Secundària Lacetània
 Manresa, Noviembre 2002
- 92.- La Recerca Científica: els reptes del segle XXI
 Institut d'Ensenyament de Secundària Navas
 Navas, Febrero 2003
- 93.- La Recerca Científica: els reptes del segle XXI
 Institut d'Ensenyament de Secundària Cardona
 Cardona, Marzo 2003
- 94.- La Recerca Científica: els reptes del segle XXI
 Institut d'Ensenyament de Secundària Quercus
 Sant Joan Vilatorrada, Abril 2003
- 95.- Superconductivitat : reptes i realitats
 Facultat de Química, Universitat de Barcelona
 Barcelona, Abril 2003
- 96.- Textured $\text{YBa}_2\text{Cu}_3\text{O}_7$: processing, flux pinning, vortex dynamics and applications
 SCENET School on Superconductivity
 Cargèse, Córcega, Francia, Octubre 2003
- 97.- Chemical solution growth: towards an all-chemical coated conductor
 SCENET School on Superconductivity
 Cargèse, Córcega, Francia, Octubre 2003
- 98.- Ciència, tecnologia i formació continuada al Segle XXI
 25° Aniversario Escola Municipal Fonollosa
 Fonollosa (Barcelona), Octubre 2003
- 99.- Investigación en Magnetismo y Superconductividad: Premios Nacionales de investigación
 Residencia de Estudiantes
 Madrid, Noviembre 2003
- 100.-La Recerca Científica: els reptes del segle XXI
 Institut d'Ensenyament de Secundària Gerbert d'Aurillac
 Sant Fruitós de Bages, Diciembre 2003
- 101.-Premi Nobel Física 2003 : El magnetisme de la superconductivitat i la superfluidesa
 Institut de Ciència de Materials de Barcelona
 Bellaterra, Diciembre 2003
- 102.-Superconductividad: nuevos retos para el siglo XXI
 Facultad de Física, Universidad de Oviedo
 Oviedo, Diciembre 2003
- 103.-Premi Nobel Física 2003: Vórtices superconductores y superfluides
 Facultat de Física, Universitat de Barcelona
 Barcelona, Diciembre 2003

- 104.-La Recerca Científica: els reptes del segle XXI
 Institut d'Ensenyament de Secundària de Sant Vicenç de Castellet
 Sant Vicenç de Castellet, Enero 2004
- 105.-La Recerca Científica: els reptes del segle XXI
 Institut d'Ensenyament de Secundària d'Artés
 Artés, Febrero 2004
- 106.-Superconductivity new challenges for the XXI century
 Facultat de Física, Universitat de Barcelona,
 Barcelona, Mayo 2004
- 107.-Superconductividad nuevos retos para el siglo XXI
 Donostia Internacional Physics Center
 San Sebastián, Mayo 2004
- 108.-Nanociència contra el canvi climàtic
 Ajuntament de Cardona
 Cardona, Mayo 2004
- 109.-Nanociència: els materials del futur
 Fundació Universitària del Bages, XXV Aniversari Institut Pius Font i Quer
 Manresa, Mayo 2004
- 110.-Nanotechnology at ICMAB-CSIC
 Nanotechnology in European regions, ICMAB-CSIC
 Bellaterra, Mayo 2004
- 111.-Via química a superconductores nanoestructurados de alta corriente crítica
 Instituto de Ciencia de Materiales de Aragón-Universidad de Zaragoza
 Zaragoza, Mayo 2004
- 112.-Chemical solution growth: towards an all-chemical coated conductor
 Novel Sol Gel Technology for Long Length Superconducting Coated Tapes, SCENET School,
 Salamanca, Septiembre 2004.
- 113.-Melt textured YBa₂Cu₃O₇: microstructure, vortex properties, innovative processing and
 applications
 SCENET School, Salamanca, Septiembre 2004
- 114.-Superconductividad: Nuevos retos para el S.XXI
 Instituto Nacional del Carbón, Semana de la Ciencia
 Oviedo, Noviembre 2004
- 115.-Issues in the chemical approach to superconducting coated conductors
 Jornades CeRMAE “Nous materials per a l'energia del futur”, ICMAB-CSIC
 Bellaterra, Noviembre 2004
- 116.-Superconductivitat: Nanotecnologia per aturar el canvi climàtic
 Cicle Any de la Física, Universitat Autònoma de Barcelona
 Bellaterra, Enero 2005
- 117.-El Institut de Ciència de Materials de Barcelona
 Mesa Redonda “Ciencia de Materiales en España”
 Alicante, Febrero 2005
- 118.-Nanociència contra el canvi climàtic
 Institut Llobregat
 Sallent, Mars 2005

- 119.-Nanociència contra el canvi climàtic
 Institut Lluís de Peguera
 Manresa, Mars 2005
- 120.-Nanociència contra el canvi climàtic
 Institut Guillem de Catà
 Manresa, Abril 2005
- 121.-Nanociència contra el canvi climàtic
 Escola Mistral, Any de la Física
 Barcelona, Abril 2005
- 122.-Nanociència contra el canvi climàtic
 Escola Mistral, Any de la Física
 Barcelona, Maig 2005
- 123.-Nanotecnologia: el repte interdisciplinar de la Física del segle XXI"
 Institut Lluís de Peguera, Any de la Física
 Manresa, Maig 2005
- 124.-Superconductivitat: Nanotecnologia per aturar el canvi climàtic
 CosmoCaixa, Cicle "Les Energies del nou mil.leni"
 Barcelona, Maig 2005
- 125.-La recerca científica: una font de cultura, qualitat de vida i progrés econòmic
 Pregó Festa Major Manresa
 Manresa, Agost 2005
- 126.-Nanotecnología: el repte interdisciplinar del segle XXI
 Obertura Curs Escolar Institut d'Ouro de Santpedor (Barcelona)
 Santpedor, Octubre 2005
- 127.-Superconductivitat: Nanotecnologia per aturar el canvi climàtic
 Institut d'Estudis Catalans, Societat Catalana de Física, Inauguració de Curs
 Barcelona, Novembre 2005
- 128.-Superconductivitat: Estat de l'art i perspectives futures
 Reial Acadèmia de Ciències i Arts de Barcelona
 Inauguració Exposició "La màgia dels superconductors", Programa Superlife
 Barcelona, Novembre 2005
- 129.-La Superconductivitat: Una nanotecnologia per aturar el canvi climàtic
 Institut Municipal d'Acció Cultural
 Lleida, Febrer 2006
- 130.-Nanociència contra el canvi climàtic
 Institut Miquel Bosch i Jover d'Artés
 Artés, Febrer 2006
- 131.-Física sense fronteres
 Inauguración de la ampliación de la facultad de Química y de Física, Universitat de Barcelona
 Barcelona, 15 Març 2006
- 132.-Nanociència per aturar el canvi climàtic
 Semana de la Ciencia, Centre d'Estudis Avançats de Blanes, CSIC
 Blanes, 16 Noviembre 2006

- 133.-Coated conductors from chemical solution deposition: challenges and opportunities for power applications
SCENET School,
Camerino (Italia), Julio 2006
- 134.-Melt textured YBa₂Cu₃O₇ ceramics : processing, flux pinning and applications
SCENET School,
Camerino (Italia), Julio 2006
- 135.-Roadmap “High critical current superconducting materials for applications”
EU Comission
Bruselas (Bélgica), Octubre 2006
- 136.-Nanotechnology at ICMAB-CSIC
Réunion franco-espagnole sur les Nanosciences – Nanotechnologies
Montpellier (Francia), Junio 2006
- 137.-Superconductividad: del exotismo cuántico al megavatio
Institut d’Estudis Catalans, Univ. Politecnica de Catalunya
Barcelona, Febrero 2007
- 138.-El Magnetismo de la superconductividad
Reunión Club Magnético
Bellaterra, Enero 2007
- 139.-The magnetism of superconductivity
Escuela nacional de Magnetismo, Universidad de Zaragoza
Jaca, Julio 2007
- 140.-Nanotecnologia per aturar el canvi climàtic
Les nits de les estrelles, Observatori Fabra
Barcelona, Septiembre 2007
- 141.-Materials nanoestructurats per a l’Energia i les tecnologies de la informació
Nanociència i Nanotecnologia al Campus UAB : el BNC-b, Institut d’Estudis Catalans
Barcelona, Novembre 2007
- 142.-Energía nanotecnológica
Energías alternativas : alcance y limitaciones
Escuela de Energía y Cambio climático, Fundación Focus-Abengoa Y UIMP
Sevilla, Abril 2008
- 143.-Ciencia i societat del coneixement: nous reptes i oportunitats
Fundació Universitària del Bages
Manresa, Mayo 2008
- 144.-El reto energético: oportunidades para la Ciencia de Materiales
Instituto de Tecnologías de la Construcción Eduardo Torroja, CSIC
Madrid, Julio 2008
- 145.-Energía nanotecnològica, Ciclo “Energía: hoy y mañana”
Residencia Investigadores
Barcelona, Febrero 2009
- 146.-Nanotecnologia per aturar el canvi climàtic
Auditori Caixa Manresa
Manresa, Junio 2009
- 147.-Materials science and vortex physics challenges in coated conductors

Kyushu University (Japan)
Fukuoka (Japón), Noviembre 2009

- 148.-Nous materials: una porta a la sostenibilitat
CosmoCaixa, Cicle Del residu a la matèria primera: Les arrels dels productes de consum del demà
Barcelona, Octubre 2010
- 149.-Nanotecnología: reinventando la electricidad y la electrónica
Museo de la Ciencia y la tecnología, Ciclo Conferencias Consolider, MICINN
Madrid, Noviembre 2010
- 150.- Tecnología Superconductor para la Fusión
Jornada XaRMAE sobre Fusión
Barcelona, Noviembre 2010
- 151.- Nanomaterials per a l'energia: oportunitats per a combatre el canvi climàtic
Acadèmia de Ciències i Arts de Barcelona
Barcelona, Gener 2011
- 152.- Nanomaterials per a l'energia: oportunitats per a combatre el canvi climàtic
Empresa Lafarga Lacambra
Masies de Voltregà, Febrer 2011
- 153.- Superconductores con elevadas corrientes criticas: retos en el desarrollo de materiales
LA SUPERCONDUCTIVIDAD: CIEN AÑOS GANANDO ACTUALIDAD
Curso de Humanidades Contemporáneas, Universidad Autónoma de Madrid
Madrid, Noviembre 2011
- 154.- Aplicaciones de potencia
LA SUPERCONDUCTIVIDAD: CIEN AÑOS GANANDO ACTUALIDAD
Curso de Humanidades Contemporáneas, Universidad Autónoma de Madrid
Madrid, Noviembre 2011
- 155.- El segundo siglo de electricidad: el nuevo paradigma superconductor
Ciclo "Hacia un nuevo modelo productivo", "La innovación en la energía"
FUNDACIÓN ZARAGOZA CIUDAD DEL CONOCIMIENTO
Zaragoza, Diciembre 2011
- 156.- Future trends in Energy, Sustainability and environment
Round Table introduction
International Symposium on energy, sustainability and environment
MATGAS, Bellaterra, Junio 2011
- 157.- Cent anys de superconductivitat: acaronant un somni
Real Academia de Ciències i Arts de Barcelona (RACAB)
Barcelona, Enero 2012
- 158.Synchrotron radiation: An eye within the nanomaterials world
Sincrotró ALBA
Cerdanyola, Noviembre 2012
- 159.Technology transfer opportunities at ICMAB based on nanomaterials
Esade Creápolis
Sant Cugat del Vallés, Noviembre 2012
- 160.Nanotecnología: reinventant l'electricitat i l'electrònica
XXVII Jornades Científico-tecnològiques, "La crisi, una oportunitat per al canvi"
Fundació Lacetània
Manresa, Març 2013

161. Els nanomaterials de la 3^a revolució industrial”
 Jornada sobre Ciència i tecnologia de materials
 Barcelona Knowledge Campus
 Barcelona, Juny 2013
162. Els nanomaterials: cap a una nova revolució industrial?
 Cicle “Desafiaments del segle XXI: la veu dels descobriments, innovació o transferència de coneixement”
 Residència d’investigadors
 Barcelona, Novembre 2013
163. High current nanostructured superconductors: materials challenges for large scale applications
 Tel Aviv University
 Tel Aviv, Israel, October 2013
164. High current superconductors: materials challenges for large scale applications
 International Summer School on Superconductivity – Theory, Experiments, and Phenomena
 Cargèse, França, Agost 2013
165. Progress in power applications based on high temperature superconductors
 International Summer School on Superconductivity – Theory, Experiments, and Phenomena
 Cargèse, França, Agost 2013
166. El potencial tecnològic i industrial de Catalunya: “La veu dels investigadors”
 Jornada dels Economistes 2013
 Propostes per al creixement. Experiències comparades
 El potencial tecnològic i industrial de Catalunya
 Barcelona, Novembre 2013
167. Recerca en Materials, Nanociència i Nanotecnologia a Catalunya: oportunitats per a la cooperació industrial
 Doctorat industrial en materials, nanotecnologia i processos industrials
 Barcelona, Juny 2013
168. Presentació “Barcelona Nanotechnology Cluster – Bellaterra”
 Grau de Nanociència, Universitat Autònoma de Barcelona
 Bellaterra, Juny 2013
169. Presentació “Barcelona Nanotechnology Cluster – Bellaterra”
 Russel – Berrye Institute of Nanotechnology
 Technion University
 Haifa, Israel, October 2013
170. Advances in processing and nanostructure control in solution grown YBa₂Cu₃O₇ nanocomposite thin films and coated conductors
 Naval Research Laboratory
 Washington (USA), January 2014
171. Els nanomaterials de la 3^a revolució industrial
 Reial Acadèmia de Ciències i Arts de Barcelona
 250 Aniversari Reial Acadèmia de Ciències i Arts de Barcelona
 Barcelona, Mars 2014
172. Els nanomaterials de la 3^a revolució industrial
 Sopars amb les estrelles al Observatori
 Observatori Fabra
 Barcelona, Setembre 2014
173. Els nanomaterials de la 3^a revolució industrial

Cicle Ciència i Societat
Centre Cívic Sagrada Família
Barcelona, Octubre 2014

174. Els nanomaterials de la 3^a revolució industrial
Caixa Fòrum
Tarragona, Novembre 2014
175. Els nanomaterials de la 3^a revolució industrial
Fira Ecoviure
Palau Firal
Manresa, Octubre 2014
176. Nanotecnologia i reptes socials: com fer més, amb menys?
Què és la Nanociència i la Nanotecnologia?
Programa FUB+GRAN
Manresa, Mars 2017
177. Nanotecnologia i reptes socials: com fer més, amb menys?
Nanomaterials per a l'energia i el medi ambient
Programa FUB+GRAN
Manresa, Mars 2017
178. Nanotecnologia i reptes socials: com fer més, amb menys?
Nanoelectrònica, nanofotònica i les tecnologies de la informació i la comunicació
Programa FUB+GRAN
Manresa, Mars 2017
179. EUROTAPES: Superconductors per una Europa més eficaç a nivell energètic
Press reléase presentation
Barcelona European Parliament representation
Barcelona, Mars 2017
180. Com podem aturar el canvi climàtic?
Aula extensió Universitària de la gent gran
Universitat Politècnica de Catalunya
Manresa, Juny 2017
181. Round Table "From Lab to Fab"
ICN2 Severo Ochoa Workshop
Bellaterra, Juny 2017
182. Nanotecnologia i reptes socials: com fer més, amb menys?: Els nanomaterials de la 4^a revolució industrial
Bages Rotary Meeting: Young talents
Manresa, April 2018
183. Bottom-up approach to epitaxial functional oxide nanostructures and nanocomposite thin films
University of Toronto, Dpt. Materials Science, Distinguished Speaker Lecture
Toronto, Canada, April 2018
184. Nanotecnologia i reptes socials: com fer més, amb menys?
Què és la Nanociència i la Nanotecnologia?
Programa FUB+GRAN
Manresa, Mars 2018
185. Nanotecnologia i reptes socials: com fer més, amb menys?
Nanomaterials per a l'energia i el medi ambient
Programa FUB+GRAN

Manresa, Mars 2018

186. Nanotecnologia i reptes socials: com fer més, amb menys?
Nanoelectrònica, nanofotònica i les tecnologies de la informació i la comunicació
Programa FUB+GRAN
Manresa, Mars 2018
187. Què és la nanociència i la nanotecnologia?
Universitat Catalana d'Estiu
Manresa, June 2018
188. Nanomaterials per a l'energia
Universitat Catalana d'Estiu
Manresa, June 2018
189. Els nanomaterials de la transició energètica
Real Acadèmia de Ciències i Arts de Barcelona
Memòria sessió inaugural de curs 2018
Barcelona, Octubre 2018
190. Nanotecnologia i reptes socials: com fer més, amb menys?
Què és la Nanociència i la Nanotecnologia?
Programa FUB+GRAN
Manresa, Mars 2019
191. Nanotecnologia i reptes socials: com fer més, amb menys?
Nanomaterials per a l'energia i el medi ambient
Programa FUB+GRAN
Manresa, Mars 2019
192. Nanotecnologia i reptes socials: com fer més, amb menys?
Nanoelectrònica, nanofotònica i les tecnologies de la informació i la comunicació
Programa FUB+GRAN
Manresa, Mars 2019
193. Nanotecnologia: Reinventant l'electricitat i l'electrònica
50 Aniversari Institut Lacetània
Manresa, Abril 2019
194. Nanotecnologia i la transició energètica
Taula rodona Setmana de l'Energia
Centre Cívic Vil·la Urània
Barcelona, June 2019
195. ICMAB excellence: Smart FUNCTIONalMATERIALs for social grand challenges" (FUNMAT)
Jornada Planes Estratégicos de centros de excelencia
Agrupación estratégica de Materiales (AeMAT)
Facultad de Química, Universidad de Santiago de Compostela
Santiago de Compostela, June 2019
196. Nanomaterials: una eina per a combatre la crisi climàtica?
Auditori de La Plana de l'Om
Manresa, Febrer 2020

INVITED AND PLENARY TALKS IN NATIONAL AND INTERNATIONAL CONFERENCES

TOTAL: 107 (6 France, 19 Japan, 7 Brasil, 8 Italy, 5 China, 8 Germany, 1 Holland, 15 USA, 21 Spain, 4 Austria, 1 Russia, 3 Belgium, 3 Korea, 2 Switzerland, 1 Greece)

- 1.- Magnétisme et microstructure des Supraconducteurs à haut T_C
Colloque "Microstructure des supraconducteurs"
CNRS-PIRMAT, La Plagne, Marzo 1990
- 2.- Magnetisme et supraconductivité dans des cuprates type T'
Conferencia invitada, Colloque "Microstructure des supraconducteurs"
CNRS-PIRMAT, Les Embiez, Mayo 1991
- 3.- Texturation par fusion de $YBa_2Cu_3O_7$: microstructure et courants critiques
Conferencia invitada, Colloque "Microstructure des supraconducteurs"
CNRS-PIRMAT, Odeillo, Abril 1992
- 4.- Flux pinning mechanisms in directionally solidified $YBa_2Cu_3O_7$ - Y_2BaCuO_5 composite
Kyoto, Junio 1994
"1994 International Workshop on Superconductivity", ISTEC
- 5.- Nanostructuration of flux pinning centers in melt processed $YBa_2Cu_3O_7$ superconductors
Simposio Latino-Americano de Física do Estado Sólido
Gramado, Brasil, Noviembre 1995
- 6.- Directional solidification of $YBa_2Cu_3O_7$: defects and pinning mechanisms
European Ceramic Society Conference
Rimini, Italia, Octubre 1995
- 7.- Superconductores texturados: progresos en procesado y aplicaciones
V Reunión Nacional de Materiales
Cádiz, Octubre 1996
- 8.- Microstructural development and critical currents in melt textured $ReBaCuO$ ($Re=Y,Sm,Nd$)
International workshop on Critical currents in superconductors for practical applications
Xi'an, China, Marzo 1997
- 9.- Bulk superconducting materials and alternative High temperature superconductors
Workshop Superconducting European Network SCENET
Kassel, Alemania, Abril 1997
- 10.- Directional solidification of $ReBa_2Cu_3O_7$ ($Re=Y,Nd$): microstructure and superconducting properties
European Conference on Applied Superconductivity, EUCAS '97
Enschede, Holanda, Junio 1997
- 11.- Magnétisme des nanoparticules
NANOS 98
Odeillo, Francia, Enero 1998
- 12.- Opportunities for enhancing the critical currents in high temperature superconductors
Condensed Matter Physics Meeting, Brazilian Physical Society
Caxambu, Brasil, Junio 1998
- 13.- New opportunities to optimize high critical current superconductors
SCENET Workshop "Fundamental aspects of Superconductivity for Applications"
Ravello, Italia, Octubre 1998
- 14.- Identification of vortex pinning centers in melt-textured $ReBa_2Cu_3O_7$ ($Re=Y,Nd$)
International Symposium on Superconductivity
Fukuoka, Japón, Noviembre 1998

- 15.- Performance improvement through microstructural tailoring in MTG $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{Y}_2\text{BaCuO}_5$ composites: Test of current limiting elements
Workshop Bulk superconductors and its applications
Argonne National Laboratory, Chicago, USA, May 1999
- 16.- Tuning the critical currents in bulk MTG YBCO for current limiting devices
II International Workshop on the Processing and Applications of Superconducting ReBCO large grain Materials
Morioka, Japón, Octubre 1999
- 17.- Superconducting fault Current limiter : A novel device for improved power quality
Meeting German Physical Society
Regensburg, Alemania, Marzo 2000
- 18.- New controlled processes of $\text{Y}_{1-x}\text{RE}_x\text{Ba}_2\text{Cu}_3\text{O}_7$ Melt Textured Growth
International Cryogenic Materials Conference
Rio de Janeiro, Brasil, Junio 2000
- 19.- Superconductivity in $\text{REBa}_2\text{Cu}_3\text{O}_7$: Tuning role of rare Earth ions
4th International Conference on f-elements, Plenary conference
Madrid, Septiembre 2000
- 20.- Anisotropic vortex plasticity in the vortex liquid state of YBCO
APS March Meeting
Seattle, EEUU, Marzo 2001
- 21.- Superconductividad: Vórtices y corrientes bajo control microestructural
Reunión Nacional de Electrocerámica
Barcelona, Junio 2001
- 22.- Extended and point-like pinning centers in melt textured YBCO
International Workshop in Critical currents
Göttingen, Alemania, Junio 2001
- 23.- Artificial pinning centres in melt textured superconductors
SCENET Workshop “High critical current superconductors for practical applications”
Alpbach, Austria, Junio 2001
- 24.- Conclusions and prospectives in High critical current superconductors
SCENET Workshop “High critical current superconductors for practical applications”
Alpbach, Austria, Junio 2001
- 25.- Melt textured YBCO superconductors: tailoring properties for current limitation
Cryogenic Engineering Conference – International Cryogenic Materials Conference, Plenary conference
Madison, Wisconsin, EEUU, Julio 2001
- 26.- Bulk superconductors with tuned properties for Fault Current Limiters
International Superconductivity Symposium, Plenary conference
Kobe, Japón, Septiembre 2001
- 27.- High critical current $\text{REBa}_2\text{Cu}_3\text{O}_7$: bulk melt textured ceramics and chemical solution Growth tapes
Japan-Europe Workshop on Superconductivity, Invited Conference
Tsukuba, Japón, Diciembre 2001
- 28.- Matériaux supraconducteurs: le long chemin des applications
II Encuentro Franco-Español de Química y Física del Estado Sólido
Sant Feliu de Guíxols, Marzo 2002

- 29.- Oxydes supraconducteurs de haute temperature : le long chemin des applications
Applications of oxide Materials, Le Studium
Tours (Francia), Marzo 2003
- 30.- Solution chemistry: a path towards low cost coated conductors
European Conference on Applied Superconductivity
Sorrento (Italia), Septiembre 2003
- 31.- Chemical solution growth of buffer and $\text{YBa}_2\text{Cu}_3\text{O}_7$ layers for coated conductors
Coated Conductor for Applications Workshop
Orta (Italia), Septiembre 2003
- 32.- Chemical deposition of thin films for coated conductors
The First Topical SCENET-2 Workshop and Chem-HTSC-IX
Sant Feliu de Guíxols, Noviembre 2003
- 33.- All chemical coated conductors : status quo and perspectives
SCENET Workshop Chemical Processing of coated conductors
Montabaur (Alemania), Febrero 2004
- 34.- Chemical Approaches to high Critical Current Superconductors
High-Temperature Superconductors and novel inorganic materials engineering, MSU-HTSC VII
Moscow (Russia), Junio 2004
- 35.- Anisotropic irreversibility Line and loss of vortex correlation in the liquid state of $\text{YBa}_2\text{Cu}_3\text{O}_7$
Spectroscopies in Novel Superconductors 2004
Sitges, Barcelona, Julio 2004
- 36.- Preparation and microstructure of high critical current TFA-MOD $\text{YBa}_2\text{Cu}_3\text{O}_7$ films on MOD oxide
buffer layers
17th International Symposium on Superconductivity
Niigata (Japan), November 2004
- 37.- Growth and characterization of MOD CeO_2 buffer layers and TFA $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{CeO}_2$ multilayers
International Workshop on Coated Conductor for Applications
Kanagawa (Japan), November 2004
- 38.- Growth mechanisms and critical current control in $\text{YBa}_2\text{Cu}_3\text{O}_7$ films by the TFA route
SCENET WG Meeting, High Critical Current Superconductors for Applications
Rust (Austria), May 2005
- 39.- Chemical solution deposition of epitaxial superconducting $\text{YBa}_2\text{Cu}_3\text{O}_7$ layers and multilayers for
coated conductors
Reunión Nacional de Electrocerámica, Invited Conference
Teruel, Junio 2005
- 40.- Progress towards all chemical superconducting $\text{YBa}_2\text{Cu}_3\text{O}_7$ coated conductors
European Conference on Applied Superconductivity, EUCAS2005, Plenary conference
Vienna (Austria), Septiembre 2005
- 41.- Progress towards nanostructured all chemical superconducting YBCO coated conductors
International Symposium Superconductivity
Nagoya (Japón), Noviembre 2006
- 42.- Making Superconductors useful: Tailoring vortex pinning
DOE workshop "Basic research needs for Superconductivity"
Washington (USA), Mayo 2006

- 43.- Coated Conductors in Europe: review of the state-of-the-art
Coated Conductor for Applications
Ludwisburg (Germany), Julio 2006
- 44.- Chemical solution approaches to self-assembled and nanocomposite oxide nanostructured materials
European-China Workshop on Nanomaterials
Brussels (Belgium), Noviembre 2006
- 45.- High temperature superconductors: challenges to make them useful
Simposio internacional "Superconductores de alta temperatura y materiales relacionados: 20 años después"
Fundación Ramón Areces
Madrid, Mayo 2007
- 46.- Chemical solution approaches to nanostructured superconducting films and coated conductors
Internacional workshop on nanostructured materials
Dresden (Germany), Mayo 2007
- 47.- Chemical solution approaches to self-assembled and nanocomposite nanostructured superconducting films
Swiss workshop on materials with novel electronic properties
Les Diablerets (Switzerland), Septiembre 2007
- 48.- Engineered interfaces in chemically grown YBCO superconducting multilayers: influence on critical currents
International Workshop on Coated Conductors for applications 2007
Jeju Island (Korea), Noviembre 2007
- 49.- Vortex pinning in chemical solution nanostructured YBCO films
Materials Research Society (MRS) Spring Meeting 2008
San Francisco (USA), March 2008
- 50.- Materials prospects for superconducting power applications
Workshop Road to room temperature superconductors
Brussels (Bélgica), Mayo 2008
- 51.- Progress in Coated Conductors: European update
DOE Peer Review "Superconductivity for Electric Systems"
Washington (USA), Julio 2008
- 52.- Chemically grown YBCO superconducting multilayers
International Workshop on Coated Conductors for applications 2008
Houston (USA), Noviembre 2008
- 53.- Chemical solution approaches to self-assembled and nanocomposite superconducting films
VII Workshop on Frontiers of superconductivity and magnetism – Materials, mechanisms and applications
Muro Alto – Pernambuco (Brasil), Diciembre 2008
- 54.- Chemical solution approaches to self-assembled and nanocomposite oxide nanostructured materials
Spain – Japan Workshop on "Nanoscience and new materials"
Tokio (Japón), Abril 2009
- 55.- Materials science and vortex physics challenges in coated conductors
European Conference of Applied Superconductivity 2009, Plenary conference
Dresden (Alemania), Septiembre 2009
- 56.- Progress in chemical solution approaches to nanocomposite superconducting films
International Symposium on Superconductivity

Tsukuba (Japón), Noviembre 2009

- 57.- Nanostructured superconductors: why do we need them and how can we prepare them?
EU – Japan Workshop on new superconductors
Brussels, Noviembre 2009
- 58.- Chemical solution approaches to self-assembled and nanocomposite functional oxide nanostructures
Electronic Materials and Applications Workshop, American Ceramic Society
Orlando (USA), January 2010
- 59.- Tuning critical currents of YBCO and nanocomposite TFA-MOD films by strain control: Nanostrain versus mesostrain
Workshop On Nanoscale Superconductivity, Fluxonics And Plasmonics
Crete (Greece), September 2010
- 60.- Progress in chemical solution approaches to nanocomposite superconducting films
CIMTEC 2010 - 12th International Ceramics Congress & 5th Forum On New Materials
Montecatini (Italy), June 2010
- 61.- Progress in coated conductor development in Europe
“Recent Developments in High Temperature Superconductivity”, Materials Science and Technology Meeting (MS&2010)
Houston (USA), October 2010
- 62.- Progress in coated conductor development in Europe
International Workshop on Coated Conductors for applications 2010
Fukuoka (Japan), October 2010
- 63.- Advances in TFA $\text{YBa}_2\text{Cu}_3\text{O}_7$ thin film growth with controlled microstructure
International Symposium on Superconductivity
Tsukuba (Japan), November 2010
- 64.- Tuning critical currents of YBCO and nanocomposite chemical solution-derived films by strain control: nano versus mesostrain
International Symposium on Superconductivity
Tsukuba (Japón), November 2010
- 65.- Progress in coated conductor development in Europe
International Symposium on Superconductivity
Tsukuba (Japón), November 2010
- 66.- High current superconductors: from materials challenges to large scale applications
EULASUR Workshop “From materials to products”
Belo Horizonte (Brasil), April 2011
- 67.- Chemical solution approaches to self-assembled and nanocomposite superconducting and ferromagnetic films
Imagine Nano, TNT Energy
Bilbao, April 2011
- 68.- Nanostrain and vortex pinning in solution derived YBCO nanocomposites
7th International Workshop on magnetism and superconductivity at the nanoscale
Comarruga, July 2011
- 69.- Superconductores y aplicaciones en energía eléctrica: retos científicos y tecnológicos
“Desde el mercurio al grafeno: 100 años de superconductividad”, Curso Universidad Menendez y Pelayo
Santander, July 2011

- 70.- High current superconductors: from materials challenges to large scale power applications
New Materials for Energy (ENERMAT) Workshop
Santiago de Compostela, June 2011
- 71.- High current superconductors: from materials challenges to large scale power applications
Advanced School on anisotropic conductors and superconductors
Lorena (Brasil), August 2011
- 72.- Review of European Activities on coated conductors
International Superconductivity Symposium, 2011
Tokyo (Japan), October 2011
- 73.- Closing address on "Wires, Tapes and Characterization"
International Superconductivity Symposium, 2011
Tokyo (Japan), October 2011
- 74.- Strong pinning nanostructured superconducting materials for energy applications
10th Materials & Mechanisms of Superconductivity Conference
Superconductivity for Sustainable Energy session
Washington (USA), August 2012
75. Nanoscience and nanotechnology in Spain
TRAIN2 Nanoscience International Conference
Barcelona, November 2012
76. Bottom-up approach to epitaxial complex oxide nanostructures and thin films with outstanding magnetic, superconducting and electronic properties
II Workshop on the Physics of Complex Oxides
Alcudia, Mallorca, October 2012
77. Advances in processing and nanostructure control in TFA grown $\text{YBa}_2\text{Cu}_3\text{O}_7$ nanocomposite thin films and coated conductors
Dasan Conference on Superconductivity: New era of Energy technology
Jeju Island (Korea), November 2012
78. Progress and new initiatives in coated conductor research in Europe
X. Obradors
CCA 2012 International Conference on Coated Conductors for Applications
Heidelberg (Germany), November 2012
79. High current superconductors: materials challenges for large scale applications
X. Obradors
IREC Symposium on Wind Energy
Barcelona, December 2012
80. Bottom-up approach to epitaxial complex oxide nanostructures and thin films with outstanding magnetic, superconducting and electronic properties
X. Obradors
MRS Spring Meeting, Symposium "Solution synthesis of inorganic functional materials – Films, nanoparticles and nanocomposites"
San Francisco (USA), March 2013
81. Advances in processing and nanostructure control in TFA grown $\text{YBa}_2\text{Cu}_3\text{O}_7$ nanocomposite thin films and coated conductors
X. Obradors
MRS Spring Meeting, Symposium "Superconducting materials – From basic science to development"
San Francisco (USA), March 2013

82. Bottom-up approach to epitaxial complex oxide nanostructures and thin films with outstanding magnetic, superconducting and electronic properties
X. Obradors
Imagine Nano
Bilbao, May 2013
83. High current superconductors: materials challenges for large scale applications
X. Obradors
Academia – Industry Matching Event “Fostering collaborations in Superconductivity”
Ciemat
Madrid, May 2013
84. High current superconductors: overcoming the materials challenges to achieve power applications
European Conference of Applied Superconductivity 2009, Plenary conference
Genova, Italia, Septiembre 2013
85. Advances in coated conductor research in Europe
International Superconductivity Symposium, 2011
Tokyo (Japan), November 2013
86. Bottom-up approach to epitaxial complex oxide nanostructures and nanocomposite thin films with outstanding magnetic, superconducting and electronic properties
38th International Conference on Advanced Ceramics and Composites, Invited Conference
Daytona Beach (USA), January 2014
87. Advances in solution derived $\text{YBa}_2\text{Cu}_3\text{O}_7$ coated conductors
Superconductivity 4 Energy, Plenary Conference
Paestum (Italy), May 2014
88. Coated Conductors Lay-out Overview: Pros and Cons
1st Workshop on Accelerator Magnets in HTS, Invited Conference
Hamburgh (Germany), May 2014
89. Advances in nanocomposite $\text{YBa}_2\text{Cu}_3\text{O}_7$ superconductor thin films and coated conductors derived from chemical solutions
Coated Conductor for Applications, 2014
Jeju Island (Korea), December 2014
90. Progress in nanostructured coated conductor research and development in Europe
Advances in coated conductor research in Europe
International Superconductivity Symposium, 2011
Tokyo (Japan), November 2014
91. High current multilayered and nanocomposite $\text{YBa}_2\text{Cu}_3\text{O}_7$ superconductor thin films and coated conductors derived from chemical solutions
39th Int. Conf. on Advanced Ceramics and composites
Daytona Beach (USA), January 2015
92. Bottom-up approach to epitaxial functional oxide nanostructures and nanocomposite thin films with outstanding superconducting, electronic and magnetic properties
Materials Challenges in alternative & Renewable Energy 2015
Plenary Conference
Jeju Island (Korea), February 2015
93. High temperature nanostructured superconductors: a tool towards a new era of high field magnetism
International Conference of Magnetism 2015
Barcelona, July 2015
94. Progress in nanostructured coated conductor research and development

- International Conference on Materials and mechanisms of superconductivity
Geneva (Switzerland), August 2015
95. Progress in nanostructured coated conductor research and development
International Conference on Applied Superconductivity and Electromagnetic Devices
Plenary Conference
Shanghai (China), November 2015
 96. Progress in R&D of nanostructured superconductors for high current applications
20th International Conference on Solid Compounds of Transition Elements (SCTE-2016)
Plenary Conference
Zaragoza, April 2016
 97. Progress in the development of nanostructured coated conductors in Europe
International Superconductivity Symposium, Plenary Conference
Tokyo (Japan), December 2016
 98. Bottom-up approach to epitaxial functional oxide nanostructures and nanocomposite thin films
Technologically relevant Quantum Materials
Trieste (Italy), December 2016
 99. Progress in the development of coated conductors in Europe
Workshop in Acceleration Magnets in High Temperature Superconductors (WAMHTS)
Barcelona, February 2017
 100. Nanostructured high critical current superconducting wire research and development
13th Annual Conference on Materials Science, Metal and Manufacturing
Paris, November 2017
 101. Progress in high critical current nanocomposite $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ coated conductors from colloidal solutions
MRS Spring Meeting, Symposium “Superconducting materials – From basic science to development”
Phoenix (USA), April 2018
 102. Resistive Switching mechanism in metallic perovskite thin film oxides displaying the Metal-Insulator Transition
MRS Spring Meeting, Symposium “Materials, Devices and Systems for machine learning and neuromorphic computing”
Phoenix (USA), April 2018
 103. Advances in processing and applications of high critical current $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ coated conductors from chemical solutions
Shanghai High Temperature Superconductor Conference 2018
Shanghai (China), August 2018
 104. Advances in processing and applications of high critical current nanocomposite $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ coated conductors from chemical solutions
International Workshop on Superconducting Materials for Applications, Institute Electrical Engineering, Chinese Academy of Sciences
Beijing (China), August 2018
 105. Advances in high critical current nanocomposite $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ coated conductors from chemical solutions
Materials and Mechanisms of Superconductivity (M2S 2018)
Beijing (China), August 2018
 106. Transient liquid assisted growth: why is it a new opportunity for nanostructured coated conductors?

International Conference Materials Cryogenics – Cryogenic Engineering Conference (ICMC-CEC
2019)
Hartford (USA), July 2019

107. Progress in chemical approaches to epitaxial nanostructured functional oxides
BIT's 10th World Congress of Chemistry and Biology 2019
Barcelona, May 2019

12 _____ **FELLOWSHIPS**

- Beca Doctoral del Gobierno Francés
Université Paul Sabatier de Toulouse
Curso 1979-80.
- Beca Doctoral del Ministerio de Educación y Ciencia
Plan de Formación de Personal
Investigador en el extranjero, C.N.R.S.
Grenoble, cursos 1980-81 y 1981-82.
- Beca Posdoctoral del Ministerio de Educación y Ciencia
Plan de Formación de Personal
Investigador, modalidad reincorporación
Universidad de Barcelona, cursos 1982-83 y 1983-84.
- Ayuda a la Investigación Obra Social de la Caixa d'Estalvis de Barcelona, curso 1982--83.
- Ayuda a la investigación CIRIT-Generalitat de Catalunya, Curso 1982-83.
- Investigador invitado, financiación CNRS y Institut National Polytechnique de Grenoble
Julio y Noviembre 1983.
- Bolsa de viaje a Hamburg, Ministerio de Educación y Ciencia, marzo 1984.
- Investigador invitado del Gobierno Francés
CNRS. de Grenoble, Julio 1984.
- Ayuda a la Investigación Departament d'Ensenyament
Generalitat de Catalunya, curso 1984-85.
- Investigador invitado, financiación CNRS. Grenoble
Febrero 1985.
- Beca British Council
University of Liverpool, Julio 1985.
- Beca CIRIT-Generalitat de Catalunya
University of Liverpool, Julio 1985.
- Investigador invitado del Gobierno
Francés, CNRS. Grenoble, Junio 1985.
- Sabático en el extranjero, CICYT, MEC
Tres meses Argonne National Laboratory, USA (1990).
Tres meses University of California at San Diego, USA (1991).
- Directeur de Recherche associé
Institut de Matériaux et Procédés, C.N.R.S., Odeillo, Francia
Tres meses ,1992

13 _____ HONOURS AND AWARDS

- Miembro del Subcomité Científico "Estructuras Magnéticas" del Institut Laue-Langevin, Grenoble
Enero 1987 a Enero 1989.
- Miembro del Comité de Usuarios de Neutrones (CICYT)
Enero 1987-
- Coordinador Ponencia "Ciencia y Tecnología de Materiales"
Agencia Nacional de Evaluación y Prospectiva.
Septiembre 1987 a Febrero 1990.
- Coordinador Ponencia "Materiales Magnéticos". II Reunión Nacional de Ciencia de Materiales.
Zaragoza, Noviembre 1987.
- Ponente mesa redonda "La superconductividad en España: el estado de la cuestión". El Escorial, Julio
1988.
- Representante español en el Comité Científico del Institut Laue-Langevin
Enero 1989 a Enero 1991
- Miembro del Comité de Programas del centro de radiación sincrotrón L.U.R.E., París, Physique des
Solides y Difusión y Difracción, Enero 1990 a Enero 1991
- Miembro Comité Científico "ICMAS-90 From Modern Superconductivity towards Applications",
Grenoble 1990.
- Miembro del Comité Científico Internacional de "Materials and Mechanisms of superconductivity.
High temperature superconductors", Grenoble, Mayo 1994
- Miembro del Comité Científico Internacional de "European Conference of Applied Superconductivity"
Gottingen, Septiembre 1993
- Miembro del Local Advisory Committee de "European Ceramic Society Conference"
Madrid, Septiembre 1993
- Miembro de la Comisión de Area "Ciencia y Tecnología de Materiales", C.S.I.C.
Octubre 1993 - 1996
- Representante español en el Comité Científico del Instituto Laue Langevin de Grenoble
Octubre 1994 - 1996
- Miembro del International Advisory Committee de "European Ceramic Society Conference"
Rimini, Noviembre 1995
- Miembro del International Advisory Committee de "International Symposium on Metastable,
mechanically alloyed and nanocrystalline Materials", Roma, Junio 1996
- Miembro del International Advisory Committee de "International Workshop on Critical currents in
superconductors for practical applications", Xi'an, China, Marzo 1997
- Miembro del International Advisory Committee del 9th CIMTEC "Science and applications of HTc
Superconductivity", Florencia, Italia, Junio 1998
- Miembro del Organizing Committee de "International Symposium on Metastable, mechanically alloyed
and nanocrystalline Materials", Sitges, Septiembre 1997

- Miembro del Steering Committee de "Superconductivity Excellence Network" (SCENET) Programa ESPRIT - EURAM, 1996-2001
- Experto científico para la redacción del Plan Nacional de Materiales, CICYT, 1995
- Experto científico programa BRITE-EURAM, UE, 1993, 1994, 1996
- Miembro del International Advisory Committee de "World Ceramics Conference", Italia 1998
- Miembro del International Advisory Committee de 17th General Conference of the Condensed Matter Division, European Physical Society Grenoble, Francia, Agosto 1998
- Miembro de la Comissió d'Assessorament i Seguiment del II Pla de Recerca Generalitat de Catalunya, Setiembre 1997-2001
- Miembro del Steering Committee de la European Society of Applied Superconductivity, Junio 1998-
- Coordinador del Working Group "Fault Current Limiters" Superconductor European Network, SCENET-POWER, EURAM Program, 1998- 2006
- Experto científico en la readacción del Plan Nacional de Investigación Científica y Desarrollo Tecnológico, Areas Sectorial de Energía, Abril 1999
- Miembro del Directors Board de la International Cryogenic Materials Conference, Junio 1999-2007
- Fellow del Institute of Physics (Chartered Physicist), Gran Bretaña, 1999 -
- Miembro de la Real Acadèmia de Ciències i Arts de Barcelona, Diciembre de 1998 -
- Doctor Honoris Causa Universidad de Pitesti, Rumania, 14 de Junio de 1999
- Medalla al mérito científico y tecnológico de la Generalitat de Catalunya "Narcís Monturiol", Octubre 1999
- Award of Excellence "Processing and Applications of Superconducting ReBCO Large Grain Materials" PASREG-1999, Morioka, Japón
- Miembro de la comisión de expertos "Tecnologías para el transporte, distribución, almacenamiento y uso final de la energía" Observatorio de Prospectiva Tecnológica Industrial- CIEMAT, Septiembre 2000
- Miembro del International Advisory Committee del 14th International Symposium Superconductivity, Japón 2001
- Miembro del International Advisory Committee del International Conferences on Modern Materials and Technologies CIMTEC 2002, High Temperature superconductors, Florence, Italia, 2002
- Miembro del Comité de Programa del International Cryogenic Materials Conference, Anchorage, Alaska, 2003
- III Premio Duran Farell Investigación Tecnológica Gas natural – Fundació Universitat Politècnica de Catalunya, 2002 (conjuntamente con T. Puig, X. Granados, F. Sandiumenge) "Limitadors de corrent de falta superconductor: la tecnologia eléctrica del futur"
- Experto evaluador de proyectos Fondo para la Investigación científica y tecnológica, Argentina, Junio 2003-

- Miembro del Comité Científico Centenario de la Real Sociedad de Física y Química, Madrid, Julio, 2003
- Miembro del International Support Committee de Materials and Mechanisms of Superconductivity, Rio de Janeiro, Mayo 2003
- Miembro International Advisory Board 6th European Conference on Applied Superconductivity Sorrento Italia (2003)
- Miembro del Scientific Committee SCENET-POWER 2002-2006
- Experto científico en la redacción del Plan Nacional de Investigación Científica, Programa nacional de Materiales, Mayo 2003
- Premio nacional de investigación “Blas Cabrera” en el área de las ciencias físicas, de los materiales y de la Tierra, Ministerio de Ciencia y Tecnología (2003)
- Technical Editor del programa “Superconductivity” de la Applied Superconductivity Conference, Jacksonville, USA, Octubre 2004
- Chevalier dans l’Ordre des Palmes Academiques
Nombramiento por el Ministerio de la Educación Nacional de Francia (2005)
- Miembro del International Advisory Committee de International Symposium of Superconductivity, Japón, Noviembre 2005
- Premio Epsilon de Oro de la Sociedad Española de Cerámica y Vidrio (2005)
- Miembro del International Advisory Committee de Materials and Mechanisms of Superconductivity, Dresden, Alemania, Julio 2006
- Miembro del International Advisory Committee de International Symposium of Superconductivity, Japón, Noviembre 2006
- Miembro del Comité Científico Asesor del CSIC, 2004-2008
- Miembro del Comité de área “Ciencia y Tecnología de Materiales”, CSIC, 2004-2008
- Miembro International Advisory Board 8th European Conference on Applied Superconductivity Bruselas Bélgica (2007)
- Miembro del International Advisory Committee de International Symposium of Superconductivity, Japón, Noviembre 2007
- Premio NOVARE-ENDESA 2007, Eficiencia Energética
Cable superconductor para distribución y transporte eficiente y sostenible de la energía eléctrica, SUPERCABLE
- Miembro del International Advisory Committee de International Symposium of Superconductivity, Japón, Noviembre 2008
- Experto evaluador del Peer Review Program de “Advanced cables and conductors” del Department of Energy (DOE) de EEUU, Washington, Julio 2008
- Miembro International Advisory Board 9th European Conference on Applied Superconductivity Dresden, Alemania (2009)

- Miembro del International Advisory Committee de International Symposium of Superconductivity, Japón, Noviembre 2009
- Experto evaluador del Peer Review Program de “Advanced cables and conductors” del Department of Energy (DOE) de EEUU, Washington, Agosto 2009
- Asesor científico de la empresa “Lafarga Lacambra”, Septiembre 2010 - 2012
- Miembro del patronato de la Obra Social “Caixa de Manresa”, Enero 2007 – Noviembre 2010
- Miembro del patronato de la Obra Social “Catalunya Caixa”, Noviembre 2010 – Noviembre 2011
- Miembro del Consejo científico de CETAQUA, Enero 2009 –
- Experto evaluador del Peer Review Program de “Advanced cables and conductors” del Department of Energy (DOE) de EEUU, Washington, Julio 2010
- Miembro del Patronato del Parc de Recerca de la UAB como representante del CSIC, Enero 2009 –
- Miembro del Consejo Científico de la A.I.E. MATGAS como representante del CSIC, Noviembre 2010-2015
- Miembro del International Advisory Committee de International Symposium of Superconductivity, Japón, Noviembre 2010
- Miembro del International Advisory Committee de CIMTEC 2010, Italy, Junio 2010
- Miembro International Advisory Board 10th European Conference on Applied Superconductivity Den Haag, Holanda (2011)
- Miembro del International Advisory Committee de International Symposium of Superconductivity, Japón, Noviembre 2011
- Miembro International Advisory Board 10th Materials & Mechanisms of Superconductivity Conference, Washington, EEUU (2012)
- City of Barcelona Prize to Experimental Science and Technology, Teresa Puig and Xavier Obradors, Barcelona, February 2016
- Premi Ambaixador Regió 7 Manresa, Maig 2017

14 _____ ORGANIZATION OF COURSES, SEMINARS AND CONFERENCES

- Director del 2 Curso "Difusión de Neutrones", Blanes 1988.
- Director del Curso de la Universidad Internacional Menendez Pelayo "Superconductividad: Ciencia y Aplicaciones"
Barcelona, Junio 1990.
- Presidente del Comité organizador de "Superconductividad y Materiales Superconductores", SMATS-91, Programa MIDAS
Sitges, Nov. 1991
- Director del "Seminario Hispano -Mexicano de Física del Estado Sólido", patrocinado por el Instituto de Cooperación Iberoamericano, Bellaterra, Dic. 1991
- Presidente del Comité organizador de "Superconductividad y Materiales Superconductores", SMATS-94, Programa MIDAS
Sitges, Diciembre.1994
- Chairman del Comité de programa y del comité organizador del Workshop de transferencia de tecnología SCENET (Superconducting European Network)
Power applications of Superconductivity
FECSA, Barcelona, Noviembre 1997
- Presidente Comité organizador de European Conference on Applied Superconductivity EUCAS'99
Sitges, España, Septiembre 1999
- Presidente Comité Organizador de II Reunión Nacional de Física del estado Sólido
Calella, España, Febrero 2002
- Miembro del Comité organizador del International Workshop on Coated Conductors for Applications
Orta, Italia, Septiembre 2003
- Presidente Comité Organizador del SCENET Workshop "High Critical Current superconductors for applications"
Sant Feliu de Guíxols, Marzo 2003
- Miembro del Comité Organizador del SCENET Workshop "Chemical design, characterization and processing of high temperature superconductors and related materials"
Sant Feliu de Guíxols, Noviembre 2003
- Miembro del Comité organizador del International Workshop on Coated Conductors for Applications
Kanagawa, Japón, Noviembre 2004
- Co-program Chairman del Internacional Symposium on Superconductivity
Niigata, Japón, Noviembre de 2004
- Miembro del Comité de programa "Materials" de la Applied Superconductivity Conference,
Jacksonville, USA, Octubre 2004
- Organizador Jornades CeRMAE "Nous Materials per a l'energia del futur"
ICMAB-CSIC, Bellaterra, Noviembre 2004
- Organizador Jornades CeRMAE "Nous Materials per a l'energia del futur"
Sant Feliu de Guíxols, Noviembre 2005

- Miembro del Comité organizador del International Workshop on Coated Conductors for Applications Santa Fe, USA, Diciembre 2005
- Miembro del Comité organizador del International Workshop on Coated Conductors for Applications Stuttgart, Alemania, Julio 2006
- Session Organizer, Recent advances in superconductivity
Materials Research Society Symposium,
San Francisco, USA, Marzo 2006
- Experto invitado en Workshop on “Basic Research Needs for Superconductivity”
(www.sc.doe.gov/bes/reports)
Department of Energy, USA
Washington, USA, Mayo 2006
- Miembro del Comité organizador del Workshop “SCENET – HTS Chemistry: The present and the future”
Mallorca, Marzo 2006
- Miembro del Comité organizador del International Workshop on Coated Conductors for Applications Jeju Island, Corea, Noviembre 2007
- Miembro del Comité organizador del International Workshop on Coated Conductors for Applications Houston, EEUU, Noviembre 2008
- Co-chairman del International Workshop on Coated Conductors for Applications
Barcelona, Noviembre 2009
- Session Organizer BB, Solution synthesis of Inorganic Films and Nanostructured Materials
Materials Research Society Symposium,
San Francisco, USA, Abril 2012
- Chairman de “Òxids multifuncionals: de la captació de l’energia a la nanoelectrònica”
“Trobades científiques de la Mediterrànea”, Societat Catalana de Física
Maó, Menorca, Octubre 2012
- Session Organizer, Solution synthesis of Inorganic Functional Materials
Materials Research Society Symposium,
San Francisco, USA, Abril 2014
- Session Organizer, Solution synthesis of Inorganic Functional/Multifunctional Materials
Materials Research Society Symposium,
San Francisco, USA, Abril 2015

15 _____ **MEMBER SCIENTIFIC SOCIETIES AND JOURNAL EDITION DUTIES**

- Miembro del Advisory board de la revista "Superconducting Science and Technology" editada por el Institute of Physics (G.B.), (1996-97)
- Miembro del Executive board de la revista "Superconducting Science and Technology" editada por el Institute of Physics (G.B.), (1998-2001)
- Miembro de la American Physical Society
- Miembro de la European Physical Society
- Miembro de la Materials Research Society
- Miembro del Institute of Electrical and Electronic Engineering
- Miembro de la Societat Catalana de Física, Institut d'Estudis Catalans
- Miembro de la Societat Catalana de Tecnologia, Institut d'Estudis Catalans
- Miembro de la American Ceramic Society
- Referee habitual de las revistas internacionales: Journal of Solid State Chemistry, Journal of Magnetism and Magnetic Materials, I.E.E.E. Transactions on Applied Superconductivity, Superconductor Science and Technology, Physica C, Physical Review B, Physical Review Letters, Solid State Communications, Phys. Stat. Sol., Advances on Functional Materials, Europhysics Letters, Advanced Materials, European Journal of Physics, Materials Science and Engineering, Nature Nanotechnology, Nature Materials, Applied Physics Letters, Journal of Applied Physics, Chemistry of Materials, Nature Communications, Applied Physics Letters Materials, Journal of Advanced Ceramics, Reports on Progress in Physics, Applied Surface Science, Small, Micron, Journal of Less Common Metals, Scientific Reports, Crystal Growth and Design, Journal of Materials Chemistry, Thin Solid Films, Solid State Ionics, Cryogenics, Materials Letters, Journal of Applied Crystallography, Chemistry European Journal
- Miembro fundador de la European Society of Applied Superconductivity, Febrero 1998
- Miembro de la junta directiva del Grupo Especializado de Física del Estado Sólido, Real Sociedad Española de Física, Enero 2000-2003
- Presidente de la junta directiva del Grupo Especializado de Física del Estado Sólido, Real Sociedad Española de Física, 2003-2007
- Miembro del Consell de Direcció del Centre de Referència de Materials Avançats per a l'Energia. Generalitat de Catalunya, 2003- 2009
- Presidente de la European Society of Applied Superconductivity, Agosto 2006 –2011
- Journal Editor de la revista Physica C – : Superconductivity and its Applications Elsevier (Holanda), 2008-

16 _____ **PARTICIPATION IN PhD JURIES, HABILITATION AND DIRECTION COMMITTEES ABROAD**

- M.Maury, INSA de Toulouse, Francia, 1991
- M.San Miguel, Universidad de Paris, Francia, 1994
- Y. Fouad, INSA de Rennes, Francia, 1996
- L.Durand, Universidad de Paris, Francia, 1996
- L.Richard, Universidad de Poitiers, Francia, 1997
- M.Respaud, Universidad de Toulouse, Francia, 1997
- L.Porcar, Universidad de Grenoble, Francia, 1997
- T. Ould Ely, Universidad de Toulouse, Francia, 1998
- O. Belmont, Universidad de Grenoble, Francia, 1999
- M.Morales, Universidad de Grenoble, Francia, 1999
- F. Agnoli, Universidad de Toulouse, Francia, 2000
- E. Portabella, Universidad de Braunschweig, Alemania, 2000
- D.Isfort, Universidad de Grenoble, Francia, 2002
- S. Phok, Universidad de Annecy, Francia 2002
- C.Joos, Habilitación Universidad de Göttingen, Alemania 2003
- D. Bourgault, Habilitación Universidad de Grenoble, Francia 2002
- C.Peroz, Universidad de Grenoble, Francia, 2003
- J.Noudem, Habilitación Université de Caen, Francia 2003
- Comité de evaluación del "Laboratoire d'Electrodynamique des Matériaux Avancés" (LEMA) de l'Université de Tours, Tours, Febrero 2003
- Sébastien Donet, Institut National Polytechnique de Grenoble, Grenoble, Francia, 2004
- Awatf Hassini, Université François Rabelais Tours, Francia, 2004
- Sebastien Diaz, Universidad de Grenoble, Francia, 2006
- Comité de Dirección Laboratoire de Cristallographie, CNRS, Grenoble, Francia, 2006
- Miembro del Comité Científico Evaluador del Leibniz Institut fur Festkorper und Werkstofforschung Dresden, Septiembre 2006, Octubre 2007, Octubre 2008, Octubre 2009, Octubre 2010, Octubre 2011, Octubre 2012, Octubre 2013, Octubre 2014, Octubre 2015
- Comité de evaluación del "Centre d'elaboration de matériaux et d'études structurales" (CEMES) del CNRS, Toulouse, Febrero 2009
- D. C. Van der Beek, Habilitación Université Paris Sud 11 de Paris, Francia 2009

- Comité de evaluación de la « Unité de Physique CNRS-Thales », Paris, Marzo 2010
- J. Briático, Habilitación Université Paris Sud 11 de Paris, CNRS- Thales, Francia 2011
- Comité selección puesto Tenure track “Fluxonics and Plasmonics at the Nanometer scale“, Leuven University, Bélgica 2011
- Comité selección puesto Profesor encargado “Physique de la Matière Condensée“, Université de Liège, Bélgica 2011
- Comité selección proyecto METHUSALEM de Nanociencia, Research Foundation Flanders, Bélgica 2012
- Comité evaluación Research Proposals of Alexander von Humboldt Foundation, Germany, 2013
- Comité evaluación Research Proposals of University of Ghent, Belgium, 2013
- J. Villegas, Habilitación Université Paris Sud 11 de Paris, CNRS- Thales, Francia 2014
- Comité de evaluación del "Institut Louis Néel del CNRS, Grenoble, Febrero 2014
- Comité de evaluación Hercules-Science, Large-scale research infrastructure, Research Foundation Flanders (FWO), Bélgica 2016, 2018
- Miembro del Panel evaluador de Fundação para a Ciência e a Tecnologia, Lisboa, Portugal, 2015
- Member Evaluation Master “Materials Science” Agència per a la Qualitat del Sistema Universitari de Catalunya, 2018
- Miembro Comité evaluador del Luxemburg Institute of Science and Technology, Luxemburg, 2018
- Miembro Comité evaluador del Instituto de Nanociencia de Aragón, ACPUA, Zaragoza, 2018
- Miembro Comité evaluador del Instituto de Ciencia de Materiales de Aragón, ACPUA, Zaragoza, 2018
- Miembro Comité evaluador de “Professorship Goldsmith”, Cambridge University, 2018
- Miembro Comité evaluador de “Professeur Associé Quantum Materials”, Université de Genève, 2018