INSTITUT DE CIÈNCIA DE MATERIALS DE BARCELONA
BECAS INPhINIT 2017 – LA CAIXA

1.- *A molecular-scale investigation of organic hybrid structures for artificial photosynthesis*
BARRENA, Esther and OCAL, Carmen

2.- *Multiredox nanoclusters and nanoparticles for enhanced oxygen redox reactions in metal-air batteries*
CASAÑ, Nieves and TONTI, Dino

3.- *Organic free radicals for (spin)electronic applications*
CRIVILLERS, Nuria and ROVIRA, Concepció

4.- *Novel Perovskite Oxides for Solar Energy*
COLL, Mariona

5.- *Photo-writing in ferroelectric green memory devices*
FINA, Ignasi

6.- *Pure spin currents: a toggle for energy-efficient control of magnetic memories*
FONTCUBERTA, Josep

7.- *Breaking symmetry and conventional wisdoms for efficient photovoltaics*
FONTCUBERTA, Josep

8.- *Pushing the limits of X-ray diffraction techniques in epitaxial thin films: structure and strain distribution analysis*
FRONTERA, Carlos

9.- *New oxynitride materials with luminescent and magnetic properties*
FUERTES, Amparo

10.- Coupled ordering phenomena in novel frustrated and magnetoelectric oxides
GARCÍA-MUÑOZ, José Luis

11.- *Smart metal-organic frameworks for cancer theranostics*
GONZÁLEZ, Arantzazu and ALIAGA, Nuria

12.- *Using high pressure to unravel the physics of unconventional thermoelectric materials*
GOÑI, Alejandro R.

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13.- *Ultra-high field conductors for accelerators physics*
GUTIÉRREZ-ROYO, Joffre and PUIG MOLINA, Teresa

14.- *Low-Loss Multifunctional Plasmonic Metamaterials*
HERRANZ, Gervasi

15.- Dynamical modulation of electron spins with microwaves
HERRANZ, Gervasi

16.- *Bioinspired Magnetic Nanodevices*
MACIÀ, Ferran

17.- *Ferroelectric nano-oscillators for pattern recognition and social networks*
MACIÀ, Ferran

18.- *Organic field-effect transistors as low-cost electronic devices for sensing applications*
MAS-TORRENT, Marta

19.- *Smart materials for stimuli responsive devices*
MAS-TORRENT, Marta and CRIVILLERS, Nuria

20.- *Cellulose based photonic structures*
MIHI, Agustín

21- *New dyes based on p-conjugated systems incorporating boron clusters as good candidates for two photon microscopy imaging*
NÚÑEZ GUILERA, Rosario

22.- *Novel organic semiconductors active layers obtained by micro-droplet injection*
OCAL, Carmen and ALIAGA, Nuria

23.- *Hybrid Magnetic-Superconducting devices for Cryogenic Memory Applications*
PALAU, Anna

24.- *New Routes for the Synthesis of Nanocarbon-based Hybrid Electrodes for High-performance Supercapacitors*
PÉREZ DEL PINO, Ángel

25.- *Additive manufacturing ink jet printing of high temperature superconducting layers using combinatorial chemistry*
PUIG MOLINA, Teresa

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26.- *Dynamic supramolecular bio-interfaces and hydrogels as biomimetic materials for cancer immunotherapies*
RATERA, Imma and GUASCH, Judith

27.- *Colloidal Solutions for Nanocomposite Ceramics and Glasses*
RICART MIRÓ, Susagna

28.- *Thermal diodes and thermal transistors based on nanoscale semiconductors*
RURALI, Riccardo

29.- *Dislocation Engineering in Functional Oxides*
SANDIUMENGE ORTIZ, Felip

30.- *Electrochromic molecular materials with electroactive anions*
TEIXIDOR, Francesc

31.- *Improving stability of metal-air batteries by controlling the composition and architecture of discharge products*
TONTI, Dino

32.- *Highly Luminescent Organic Radical Nanoparticles (ONPs) for Bioimaging Applications*
VECIANA, Jaume and RATERA, Imma

33.- *Organic Radical Nanoparticles (ONPs) with Novel Multiferroic Characteristics as New Therapeutic Agents*
VECIANA, Jaume and RATERA, Imma

34.- *New approach to a glucose sensor based on radical dendrimers*
VIDAL GANCEDO, José

35.- *Quantum Rings in LEDs*
VIÑAS, Clara

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