

# Belen Ballesteros

## List of Publications by Year in descending order

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90  
papers

2,608  
citations

201674

27  
h-index

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48  
g-index

92  
all docs

92  
docs citations

92  
times ranked

4335  
citing authors

#	ARTICLE	IF	CITATIONS
1	Filled and glycosylated carbon nanotubes for in vivo radioemitter localization and imaging. <i>Nature Materials</i> , 2010, 9, 485-490.	27.5	267
2	The interaction of carbon nanotubes with an in vitro blood-brain barrier model and mouse brain in vivo. <i>Biomaterials</i> , 2015, 53, 437-452.	11.4	178
3	Fieldlike and antidamping spin-orbit torques in as-grown and annealed Ta/CoFeB/MgO layers. <i>Physical Review B</i> , 2014, 89, .	3.2	164
4	Removal of amorphous carbon for the efficient sidewall functionalisation of single-walled carbon nanotubes. <i>Chemical Communications</i> , 2007, , 5090.	4.1	108
5	Spray deposition of steam treated and functionalized single-walled and multi-walled carbon nanotube films for supercapacitors. <i>Nanotechnology</i> , 2009, 20, 065605.	2.6	93
6	Synthesis and Stabilization of Subnanometric Gold Oxide Nanoparticles on Multiwalled Carbon Nanotubes and Their Catalytic Activity. <i>Journal of the American Chemical Society</i> , 2011, 133, 10251-10261.	13.7	87
7	LSCMâ€“(YSZâ€“CGO) composites as improved symmetrical electrodes for solid oxide fuel cells. <i>Journal of the European Ceramic Society</i> , 2007, 27, 4223-4227.	5.7	79
8	Steam Purification for the Removal of Graphitic Shells Coating Catalytic Particles and the Shortening of Singleâ€“Walled Carbon Nanotubes. <i>Small</i> , 2008, 4, 1501-1506.	10.0	76
9	p-Type Ultrawide-Band-Gap Spinel ZnGa <sub>2</sub> O <sub>4</sub> : New Perspectives for Energy Electronics. <i>Crystal Growth and Design</i> , 2020, 20, 2535-2546.	3.0	68
10	Atomic-Scale Detection of Organic Molecules Coupled to Single-Walled Carbon Nanotubes. <i>Journal of the American Chemical Society</i> , 2007, 129, 10966-10967.	13.7	63
11	Fabrication of carbon-nanotube-reinforced glassâ€“ceramic nanocomposites by ultrasonic in situ solâ€“gel processing. <i>Journal of Materials Chemistry</i> , 2008, 18, 5344.	6.7	59
12	Coreâ€“Shell Pbl <sub>2</sub> @WS <sub>2</sub> Inorganic Nanotubes from Capillary Wetting. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 1230-1233.	13.8	56
13	Functionalization of Polypyrrole Nanopipes with Redoxâ€“Active Polyoxometalates for High Energy Density Supercapacitors. <i>ChemSusChem</i> , 2017, 10, 731-737.	6.8	53
14	Synthesis of Pbl <sub>2</sub> Singleâ€“Layered Inorganic Nanotubes Encapsulated Within Carbon Nanotubes. <i>Advanced Materials</i> , 2014, 26, 2016-2021.	21.0	52
15	Gadolinium-functionalised multi-walled carbon nanotubes as a T 1 contrast agent for MRI cell labelling and tracking. <i>Carbon</i> , 2016, 97, 126-133.	10.3	50
16	Multi-scale analysis of the diffusion barrier layer of gadolinia-doped ceria in a solid oxide fuel cell operated in a stack for 3000Âh. <i>Journal of Power Sources</i> , 2017, 344, 141-151.	7.8	50
17	Electrochemical Opening of Single-Walled Carbon Nanotubes Filled with Metal Halides and with Closed Ends. <i>Journal of Physical Chemistry C</i> , 2008, 112, 10389-10397.	3.1	49
18	Synthesis conditions, light intensity and temperature effect on the performance of ZnO nanorods-based dye sensitized solar cells. <i>Journal of Power Sources</i> , 2011, 196, 6609-6621.	7.8	47

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19	Carbon nanotubes allow capture of krypton, barium and lead for multichannel biological X-ray fluorescence imaging. <i>Nature Communications</i> , 2016, 7, 13118.	12.8	39
20	pH-triggered release of materials from single-walled carbon nanotubes using dimethylamino-functionalized fullerenes as removable "corks". <i>Carbon</i> , 2010, 48, 1912-1917.	10.3	38
21	Neutron Activated <sup>153</sup> Sm Sealed in Carbon Nanocapsules for <i>in Vivo</i> Imaging and Tumor Radiotherapy. <i>ACS Nano</i> , 2020, 14, 129-141.	14.6	37
22	Deposition of functionalized single wall carbon nanotubes through matrix assisted pulsed laser evaporation. <i>Carbon</i> , 2012, 50, 4450-4458.	10.3	36
23	Comparative study of shortening and cutting strategies of single-walled and multi-walled carbon nanotubes assessed by scanning electron microscopy. <i>Carbon</i> , 2018, 139, 922-932.	10.3	34
24	Covalent Functionalization of Multi-walled Carbon Nanotubes with a Gadolinium Chelate for Efficient T <sub>1</sub> -Weighted Magnetic Resonance Imaging. <i>Advanced Functional Materials</i> , 2014, 24, 7173-7186.	14.9	31
25	Tailoring the Architecture of Cationic Polymer Brush-Modified Carbon Nanotubes for Efficient siRNA Delivery in Cancer Immunotherapy. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 30284-30294.	8.0	30
26	Design of antibody-functionalized carbon nanotubes filled with radioactivable metals towards a targeted anticancer therapy. <i>Nanoscale</i> , 2016, 8, 12626-12638.	5.6	28
27	Quantitative Assessment of the Amount of Material Encapsulated in Filled Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2009, 113, 2653-2656.	3.1	27
28	Ultraviolet pulsed laser irradiation of multi-walled carbon nanotubes in nitrogen atmosphere. <i>Journal of Applied Physics</i> , 2014, 115, 093501.	2.5	27
29	Orbital moment anisotropy of Pt/Co/AlO <sub>x</sub> heterostructures with strong Rashba interaction. <i>Physical Review B</i> , 2011, 84, .	3.2	25
30	Cationic Liposome- Multi-Walled Carbon Nanotubes Hybrids for Dual siPLK1 and Doxorubicin Delivery In Vitro. <i>Pharmaceutical Research</i> , 2015, 32, 3293-3308.	3.5	25
31	Selective Laser-Assisted Synthesis of Tubular van der Waals Heterostructures of Single-Layered PbI <sub>2</sub> within Carbon Nanotubes Exhibiting Carrier Photogeneration. <i>ACS Nano</i> , 2018, 12, 6648-6656.	14.6	24
32	Effect of laser radiation on multi-wall carbon nanotubes: study of shell structure and immobilization process. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	1.9	22
33	Ionic and Electronic Conductivity of 5% Ca-Doped GdNbO <sub>4</sub> . <i>Journal of the Electrochemical Society</i> , 2006, 153, J87.	2.9	21
34	Sidewall functionalisation of carbon nanotubes by addition of diarylcarbene derivatives. <i>Journal of Materials Chemistry</i> , 2011, 21, 19080.	6.7	21
35	Encapsulation of two-dimensional materials inside carbon nanotubes: Towards an enhanced synthesis of single-layered metal halides. <i>Carbon</i> , 2017, 123, 129-134.	10.3	21
36	Protein-Corona-By-Design in 2D: A Reliable Platform to Decode Bio-Nano Interactions for the Next-Generation Quality-By-Design Nanomedicines. <i>Advanced Materials</i> , 2018, 30, e1802732.	21.0	21

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37	Microwave-Assisted Synthesis of SPION-Reduced Graphene Oxide Hybrids for Magnetic Resonance Imaging (MRI). <i>Nanomaterials</i> , 2019, 9, 1364.	4.1	20
38	Zinc oxide/carboxylic acid lamellar structures. <i>Materials Research Bulletin</i> , 2011, 46, 2191-2195.	5.2	19
39	Highly Dispersible and Stable Anionic Boron Cluster-Graphene Oxide Nanohybrids. <i>Chemistry - A European Journal</i> , 2016, 22, 5096-5101.	3.3	18
40	Neutron-irradiated antibody-functionalised carbon nanocapsules for targeted cancer radiotherapy. <i>Carbon</i> , 2020, 162, 410-422.	10.3	18
41	Filling Single-Walled Carbon Nanotubes with Lutetium Chloride: A Sustainable Production of Nanocapsules Free of Nonencapsulated Material. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 2501-2508.	6.7	17
42	Nanosecond Laser-Assisted Nitrogen Doping of Graphene Oxide Dispersions. <i>ChemPhysChem</i> , 2017, 18, 935-941.	2.1	17
43	Gadolinium-Incorporated Carbon Nanodots for $T_1$ -Weighted Magnetic Resonance Imaging. <i>ACS Applied Nano Materials</i> , 2021, 4, 1467-1477.	5.0	17
44	Heteroepitaxial orientation control of YSZ thin films by selective growth on SrO-, TiO <sub>2</sub> -terminated SrTiO <sub>3</sub> crystal surfaces. <i>CrystEngComm</i> , 2011, 13, 1625-1631.	2.6	16
45	Synthesis and Laser Immobilization onto Solid Substrates of CdSe/ZnS Core-Shell Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2011, 115, 15210-15216.	3.1	16
46	Magnetic properties of planar nanowire arrays of Co fabricated on oxidized step-bunched silicon templates. <i>Nanotechnology</i> , 2012, 23, 235702.	2.6	16
47	Four Molecular Superconductors Isolated as Nanoparticles. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 4010-4016.	2.0	16
48	Non-cytotoxic carbon nanocapsules synthesized via one-pot filling and end-closing of multi-walled carbon nanotubes. <i>Carbon</i> , 2019, 141, 782-793.	10.3	16
49	Synthesis and characterization of WS <sub>2</sub> inorganic nanotubes with encapsulated/intercalated CsI. <i>Nano Research</i> , 2010, 3, 170-173.	10.4	14
50	One-dimensional composites based on single walled carbon nanotubes and poly(o-phenylenediamine). <i>Synthetic Metals</i> , 2011, 161, 2344-2354.	3.9	14
51	Synthesis of dry SmCl <sub>3</sub> from Sm <sub>2</sub> O <sub>3</sub> revisited. Implications for the encapsulation of samarium compounds into carbon nanotubes. <i>Polyhedron</i> , 2016, 116, 116-121.	2.2	13
52	Optimisation of growth parameters to obtain epitaxial Y-doped BaZrO <sub>3</sub> proton conducting thin films. <i>Solid State Ionics</i> , 2018, 314, 9-16.	2.7	13
53	Quantitative monitoring of the removal of non-encapsulated material external to filled carbon nanotube samples. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 31662-31669.	2.8	12
54	Superelasticity preservation in dissimilar joint of NiTi shape memory alloy to biomedical PtIr. <i>Materialia</i> , 2021, 16, 101090.	2.7	12

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55	Enhanced Sidewall Functionalization of Single-Wall Carbon Nanotubes Using Nitric Acid. Journal of Nanoscience and Nanotechnology, 2009, 9, 6072-6077.	0.9	11
56	Carbon nanocapsules: blocking materials inside carbon nanotubes. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2739-2742.	0.8	11
57	Effect of Steam Treatment Time on the Length and Structure of Single-Walled and Double-Walled Carbon Nanotubes. ChemNanoMat, 2016, 2, 108-116.	2.8	11
58	Evaluation of the immunological profile of antibody-functionalized metal-filled single-walled carbon nanocapsules for targeted radiotherapy. Scientific Reports, 2017, 7, 42605.	3.3	11
59	Multi-approach analysis to assess the chromium(III) immobilization by Ochrobactrum anthropi DE2010. Chemosphere, 2020, 238, 124663.	8.2	11
60	Production of Water-Soluble Few-Layer Graphene Mesosheets by Dry Milling with Hydrophobic Drug. Langmuir, 2014, 30, 14999-15008.	3.5	10
61	Spin density wave and superconducting properties of nanoparticle organic conductor assemblies. Physical Review B, 2015, 91, .	3.2	10
62	Synthesis, characterization, and thermoelectric properties of superconducting (BEDT-TTF) <sub>2</sub> I <sub>3</sub> nanoparticles. Journal of Materials Chemistry C, 2016, 4, 7449-7454.	5.5	10
63	In vivo behaviour of glyco-Nal@SWCNT "nanobottles"™. Inorganica Chimica Acta, 2019, 495, 118933.	2.4	10
64	Determination of the length of single-walled carbon nanotubes by scanning electron microscopy. MethodsX, 2018, 5, 1465-1472.	1.6	9
65	An <i>in operando</i> study of chemical expansion and oxygen surface exchange rates in epitaxial GdBaCo <sub>2</sub> O <sub>5.5</sub> electrodes in a solid-state electrochemical cell by time-resolved X-ray diffraction. Journal of Materials Chemistry A, 2018, 6, 12430-12439.	10.3	8
66	Epoxidation of Carbon Nanocapsules: Decoration of Single-Walled Carbon Nanotubes Filled with Metal Halides. Nanomaterials, 2018, 8, 137.	4.1	8
67	Facile synthesis of nanoparticles of the molecule-based superconductor $\hat{\Gamma}$ -(BEDT-TTF) <sub>2</sub> Cu(NCS) <sub>2</sub> . Comptes Rendus Chimie, 2018, 21, 809-813.	0.5	7
68	Charge transfer in steam purified arc discharge single walled carbon nanotubes filled with lutetium halides. Physical Chemistry Chemical Physics, 2020, 22, 10063-10075.	2.8	7
69	Synthesis and characterization of CdSe/ZnS core-shell quantum dots immobilized on solid substrates through laser irradiation. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 2201-2207.	1.8	6
70	Fractal porosity in metals synthesized by a simple combustion reaction. RSC Advances, 2013, 3, 2351.	3.6	6
71	Encapsulation of cationic iridium(III) tetrazole complexes into a silica matrix: synthesis, characterization and optical properties. New Journal of Chemistry, 2018, 42, 9635-9644.	2.8	6
72	Functionalization of filled radioactive multi-walled carbon nanocapsules by arylation reaction for <i>in vivo</i> delivery of radio-therapy. Journal of Materials Chemistry B, 2021, 10, 47-56.	5.8	6

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73	Structural and magnetic properties of planar nanowire arrays of Co grown on oxidized vicinal silicon (111) templates. Journal of Applied Physics, 2012, 111, 07E342.	2.5	5
74	Functionalization of Carbon Nanotubes. , 2012, , 911-919.		5
75	Differential properties and effects of fluorescent carbon nanoparticles towards intestinal theranostics. Colloids and Surfaces B: Biointerfaces, 2020, 185, 110612.	5.0	5
76	Large thermoelectric power variations in epitaxial thin films of layered perovskite $\text{GdBaCo}_{2-x}\text{O}_{5.5\pm\delta}$ with a different preferred orientation and strain. Journal of Materials Chemistry A, 2020, 8, 19975-19983.	10.3	5
77	Role of $\text{p-O}_{2-x}$ and film microstructure on the memristive properties of $\text{La}_{2-x}\text{NiO}_{4+\delta}/\text{LaNiO}_{3-\delta}$ bilayers. Journal of Materials Chemistry A, 2022, 10, 6523-6530.	10.3	5
78	Epitaxial films of the proton-conducting Ca-doped $\text{LaNbO}_4$ material and a study of their charge transport properties. Solid State Ionics, 2012, 216, 25-30.	2.7	4
79	Observation of out-of-plane unidirectional anisotropy in MgO-capped planar nanowire arrays of Fe. Journal of Applied Physics, 2013, 114, 133903.	2.5	4
80	Vertically Aligned $\text{ZnO}/\text{In}_x\text{S}_y$ Core-Shell Nanorods for High Efficient Dye-Sensitized Solar Cells. Nano, 2015, 10, 1550103.	1.0	4
81	Functionalization of Carbon Nanotubes. , 2016, , 1281-1291.		4
82	Raman antenna effect from exciton-phonon coupling in organic semiconducting nanobelts. Nanoscale, 2017, 9, 19328-19336.	5.6	4
83	Finite Element Methods for Computational Nano-optics. , 2012, , 837-843.		3
84	The Role of Temperature on the Degree of End-Closing and Filling of Single-Walled Carbon Nanotubes. Nanomaterials, 2021, 11, 3365.	4.1	3
85	Fullerenes for Drug Delivery. , 2012, , 898-911.		1
86	Carbon Nanotubes: Synthesis of $\text{PbI}_2$ Single-Layered Inorganic Nanotubes Encapsulated Within Carbon Nanotubes (Adv. Mater. 13/2014). Advanced Materials, 2014, 26, 2108-2108.	21.0	1
87	Magnetization Reversal Behaviour of Planar Nanowire Arrays of Fe. Current Nanoscience, 2013, 9, 609-614.	1.2	1
88	Functionalization of Carbon Nanotubes. , 2015, , 1-12.		1
89	Fundamental Properties of Zinc Oxide Nanowires. , 2012, , 919-927.		0
90	Frontispiece: Highly Dispersible and Stable Anionic Boron Cluster-Graphene Oxide Nanohybrids. Chemistry - A European Journal, 2016, 22, .	3.3	0