Elena M EcheverrÃ-a

List of Publications by Year
in descending order

52	943	566801 15	476904 29
papers	citations	h-index	g-index

52	52	52	1563
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Porphyrin-Metalation-Mediated Tuning of Photoredox Catalytic Properties in Metalâ€“Organic Frameworks. ACS Catalysis, 2015, 5, 5283-5291.	5.5	212
2	A New Approach to Non-Coordinating Anions: Lewis Acid Enhancement of Porphyrin Metal Centers in a Zwitterionic Metalâ€“Organic Framework. Journal of the American Chemical Society, 2016, 138, 10293-10298.	6.6	85
3	Enhancement in the performance of nanostructured CuOâ€“ZnO solar cells by band alignment. RSC Advances, 2020, 10, 7839-7854.	1.7	70
4	Lead-Free Halide Light-Emitting Diodes with External Quantum Efficiency Exceeding 7% Using Hostâ€“Dopant Strategy. ACS Energy Letters, 2021, 6, 2584-2593.	8.8	48
5	Use of thiolated oligonucleotides as anti-fouling diluents in electrochemical peptide-based sensors. Chemical Communications, 2014, 50, 4690.	2.2	43
6	Band structure characterization of WS2 grown by chemical vapor deposition. Applied Physics Letters, 2016, 108, .	1.5	40
7	The sp2-sp3 carbon hybridization content of nanocrystalline graphite from pyrolyzed vegetable oil, comparison of electrochemistry and physical properties with other carbon forms and allotropes. Carbon, 2019, 144, 831-840.	5.4	30
8	Synthesis of Magnetite Nanorods from the Reduction of Iron Oxy-Hydroxide with Hydrazine. ACS Omega, 2020, 5, 22440-22448.	1.6	24
9	Boron substituted MFI-type zeolite-coated mesh for oil-water separation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 550, 108-114.	2.3	20
10	Improving antifouling property of alumina microfiltration membranes by using atomic layer deposition technique for produced water treatment. Desalination, 2022, 523, 115400.	4.0	20
11	Semiconducting boron carbides with better charge extraction through the addition of pyridine moieties. Journal Physics D: Applied Physics, 2016, 49, 355302.	1.3	19
12	Enhancement of the catalytic performance of silica nanosprings (NS)-supported iron catalyst with copper, molybdenum, cobalt and ruthenium promoters for Fischer-Tropsch synthesis. Fuel Processing Technology, 2018, 177, 89-100.	3.7	19
13	Synthesis of hexagonal boron nitride films on silicon and sapphire substrates by low-pressure chemical vapor deposition. Thin Solid Films, 2021, 733, 138812.	0.8	17
14	Novel semiconducting boron carbide/pyridine polymers for neutron detection at zero bias. Applied Physics A: Materials Science and Processing, 2015, 118, 113-118.	1.1	16
15	Interface characterization of atomic layer deposited Al₂O₃ on mâ€plane GaN. Physica Status Solidi (B): Basic Research, 2017, 254, 1600681.	0.7	16
16	Gold Dispersion and Activation on the Basal Plane of Single-Layer MoS₂. Journal of Physical Chemistry C, 2018, 122, 267-273.	1.5	16
17	Electronic structure of cyclodextrinâ€“carbon nanotube composite films. RSC Advances, 2017, 7, 10968-10972.	1.7	14
18	Emergent Electrical Properties of Ensembles of 1D Nanostructures and Their Impact on Room Temperature Electrical Sensing of Ammonium Nitrate Vapor. ACS Sensors, 2018, 3, 2367-2374.	4.0	14

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19	Evolution of the Stoichiometry and Electronic Structure of Cobalt Oxide in Thermally Treated Co-Doped ZnO Nanorods for Solar Cells. ACS Applied Nano Materials, 2019, 2, 4113-4120.	2.4	13
20	Buckypaperâ€“Bilirubin Oxidase Biointerface for Electrocatalytic Applications: Buckypaper Thickness. ACS Applied Bio Materials, 2019, 2, 2229-2236.	2.3	13
21	Novel Cross-Linked Ortho-Carborane and Ortho-Carborane:Y (Y=1,4-Diaminobenzene, Pyridine, Benzene) Polymer Films: A New Class of Carborane-Based Materials with Tunable Electronic Structure. ECS Transactions, 2013, 53, 303-310.	0.3	12
22	Thermo-Optical Properties of Cobalt-Doped Zinc Oxide (ZnO) Nanorods. Journal of Nanoscience and Nanotechnology, 2019, 19, 3893-3904.	0.9	12
23	High-Temperature Atomic Layer Deposition of GaN on 1D Nanostructures. Nanomaterials, 2020, 10, 2434.	1.9	11
24	Increased drift carrier lifetime in semiconducting boron carbides deposited by plasma enhanced chemical vapor deposition from carboranes and benzene. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	0.9	10
25	Characterization and catalytic behavior of EDTA modified silica nanosprings (NS)-supported cobalt catalyst for Fischer-Tropsch CO-hydrogenation. Journal of Fuel Chemistry and Technology, 2018, 46, 957-966.	0.9	10
26	Electrical characterization of ZnO-coated nanospring ensemble by impedance spectroscopy: probing the effect of thermal annealing. Nanotechnology, 2019, 30, 234006.	1.3	10
27	Thermal Modification of Graphite for Fast Electron Transport and Increased Capacitance. ACS Applied Nano Materials, 2019, 2, 228-240.	2.4	10
28	Roughened graphite biointerfaced with P450 liver microsomes: Surface and electrochemical characterizations. Colloids and Surfaces B: Biointerfaces, 2020, 189, 110790.	2.5	10
29	Significant magneto-resistive effects in boron carbide thin films. Materials Letters, 2013, 110, 20-23.	1.3	9
30	The Effect of UV Illumination on the Room Temperature Detection of Vaporized Ammonium Nitrate by a ZnO Coated Nanospring-Based Sensor. Materials, 2019, 12, 302.	1.3	9
31	Strong binding at the gold (Au) boron carbide interface. Surface and Coatings Technology, 2017, 314, 51-54.	2.2	8
32	Alumina Coated Silica Nanosprings (NS) Support Based Cobalt Catalysts for Liquid Hydrocarbon Fuel Production From Syngas. Materials, 2019, 12, 1810.	1.3	8
33	Iron Pyrite Nanocrystals: A Potential Catalyst for Selective Transfer Hydrogenation of Functionalized Nitroarenes. ACS Omega, 2020, 5, 14104-14110.	1.6	8
34	Electrochemical determination of chemical oxygen demand on functionalized pseudo-graphite electrode. Journal of Electroanalytical Chemistry, 2019, 851, 113448.	1.9	7
35	Electrochemical stability and capacitance of in-situ synthesized Prussian blue on thermally-activated graphite. SN Applied Sciences, 2019, 1, 1.	1.5	7
36	Pyrenyl-carbon nanostructures for scalable enzyme electrocatalysis and biological fuel cells. Analyst, The, 2018, 143, 2876-2882.	1.7	6

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37	Critical-point model dielectric function analysis of WO3 thin films deposited by atomic layer deposition techniques. Journal of Applied Physics, 2018, 124, .	1.1	5
38	Band Bending at the Gold (Au)/Boron Carbide-Based Semiconductor Interface. Zeitschrift Fur Physikalische Chemie, 2018, 232, 893-905.	1.4	5
39	Electrical and structural characterization of neutron irradiated amorphous boron carbide/silicon p-n heterojunctions. Nuclear Instruments & Methods in Physics Research B, 2018, 432, 48-54.	0.6	5
40	Neutron Detection Signatures at Zero Bias in Novel Semiconducting Boron Carbide/Pyridine Polymers. Materials Research Society Symposia Proceedings, 2015, 1743, 51.	0.1	4
41	Electrochemical Aspects of a Nitrogen-Doped Pseudo-Graphitic Carbon Material: Resistance to Electrode Fouling by Air-Aging and Dopamine Electro-Oxidation. Journal of Carbon Research, 2020, 6, 68.	1.4	4
42	Highly Stable, Low-Cost Metal-Free Oxygen Reduction Reaction Electrocatalyst Based on Nitrogen-Doped Pseudo-Graphite. Energy & Fuels, 2021, 35, 10146-10155.	2.5	4
43	The metal/organic interface in cobalt/vinylidene fluoride heterostructures. Materials Research Express, 2016, 3, 116403.	0.8	3
44	Chemical and electronic structure of composite films deposited by plasma-enhanced chemical vapor deposition from orthocarborane and pyridine source compounds. Journal of Electron Spectroscopy and Related Phenomena, 2018, 223, 21-28.	0.8	3
45	Increased electron transfer kinetics and thermally treated graphite stability through improved tunneling paths. Journal of Materials Science, 2020, 55, 11411-11430.	1.7	3
46	The chromium site in doped glassy lithium tetraborate. Materials Chemistry and Physics, 2014, 147, 492-495.	2.0	2
47	ZnO Microfiltration Membranes for Desalination by a Vacuum Flow-Through Evaporation Method. Membranes, 2019, 9, 156.	1.4	2
48	Biodiesel flames as a unique pyrolyzing carbon source for the synthesis of hydrophobic carbon films. Carbon Letters, 2021, 31, 389-406.	3.3	2
49	Optimization of the U parameter in CoO groupings in ZnO (101Â¯0) and (112Â¯0) surfaces: A DFT+U and UPS study. Computational Materials Science, 2021, 198, 110700.	1.4	2
50	Laser-assisted nanofabrication of multielement complex oxide coreâ€“shell nanoparticles. Materials and Design, 2022, 220, 110882.	3.3	2
51	Addressing crosstalk in crossbar memory arrays with a resistive switching ZnO homojunction diode. Journal of Applied Physics, 2021, 129, .	1.1	1
52	Boron-induced metamorphosis of graphitic structures - a new form of mesoscopic carbon. Carbon Trends, 2021, 2, 100012.	1.4	0