Beatriz MartÃ-n-GarcÃ-a

List of Publications by Year in descending order

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69 papers 2,690 citations

30 h-index 197535 49 g-index

72 all docs

72 docs citations

times ranked

72

4340 citing authors

#	Article	lF	Citations
1	Mixed Dimethylammonium/Methylammonium Lead Halide Perovskite Crystals for Improved Structural Stability and Enhanced Photodetection. Advanced Materials, 2022, 34, e2106160.	11.1	18
2	Tuning the magnetic properties of NiPS ₃ through organic-ion intercalation. Nanoscale, 2022, 14, 1165-1173.	2.8	14
3	Sulfonated NbS ₂ -based proton-exchange membranes for vanadium redox flow batteries. Nanoscale, 2022, 14, 6152-6161.	2.8	8
4	Exchange Bias in Molecule/Fe ₃ GeTe ₂ van der Waals Heterostructures via Spinterface Effects. Advanced Materials, 2022, 34, e2200474.	11.1	17
5	Gate-tuneable and chirality-dependent charge-to-spin conversion in tellurium nanowires. Nature Materials, 2022, 21, 526-532.	13.3	62
6	Topochemical Transformation of Two-Dimensional VSe ₂ into Metallic Nonlayered VO ₂ for Water Splitting Reactions in Acidic and Alkaline Media. ACS Nano, 2022, 16, 351-367.	7.3	23
7	Tailoring Photoluminescence by Strain-Engineering in Layered Perovskite Flakes. Nano Letters, 2022, 22, 4153-4160.	4.5	8
8	Integration of two-dimensional materials-based perovskite solar panels into a stand-alone solar farm. Nature Energy, 2022, 7, 597-607.	19.8	66
9	Raman spectroscopy in layered hybrid organic-inorganic metal halide perovskites. JPhys Materials, 2022, 5, 034004.	1.8	7
10	Scalable spray-coated graphene-based electrodes for high-power electrochemical double-layer capacitors operating over a wide range of temperature. Energy Storage Materials, 2021, 34, 1-11.	9.5	61
11	Phase Transitions in Low-Dimensional Layered Double Perovskites: The Role of the Organic Moieties. Journal of Physical Chemistry Letters, 2021, 12, 280-286.	2.1	23
12	Manufacturing ordered films of nanoparticles by Langmuir–Blodgett technique. , 2021, , 121-138.		1
13	Functionalized metallic transition metal dichalcogenide (TaS ₂) for nanocomposite membranes in direct methanol fuel cells. Journal of Materials Chemistry A, 2021, 9, 6368-6381.	5.2	22
14	Modeling Photodetection at the Graphene/Ag 2 S Interface. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100120.	1.2	1
15	Graphene-Based Electrodes in a Vanadium Redox Flow Battery Produced by Rapid Low-Pressure Combined Gas Plasma Treatments. Chemistry of Materials, 2021, 33, 4106-4121.	3.2	35
16	Inverted perovskite solar cells with enhanced lifetime and thermal stability enabled by a metallic tantalum disulfide buffer layer. Nanoscale Advances, 2021, 3, 3124-3135.	2.2	23
17	Paper Sensors Based on Fluorescence Changes of Carbon Nanodots for Optical Detection of Nanomaterials. Sustainability, 2021, 13, 11896.	1.6	3
18	Methylammonium Governs Structural and Optical Properties of Hybrid Lead Halide Perovskites through Dynamic Hydrogen Bonding. Chemistry of Materials, 2021, 33, 8524-8533.	3.2	14

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19	Core/Shell CdSe/CdS Boneâ€Shaped Nanocrystals with a Thick and Anisotropic Shell as Optical Emitters. Advanced Optical Materials, 2020, 8, 1901463.	3.6	12
20	Angle and Polarization Selective Spontaneous Emission in Dyeâ€Doped Metal/Insulator/Metal Nanocavities. Advanced Optical Materials, 2020, 8, 1901215.	3.6	18
21	TaS ₂ , TaSe ₂ , and Their Heterogeneous Films as Catalysts for the Hydrogen Evolution Reaction. ACS Catalysis, 2020, 10, 3313-3325.	5.5	60
22	Microwaveâ€Induced Structural Engineering and Pt Trapping in <i>6R</i> â€TaS ₂ for the Hydrogen Evolution Reaction. Small, 2020, 16, e2003372.	5.2	18
23	Impact of local structure on halogen ion migration in layered methylammonium copper halide memory devices. Journal of Materials Chemistry A, 2020, 8, 17516-17526.	5.2	14
24	Liquid-Phase Exfoliated GeSe Nanoflakes for Photoelectrochemical-Type Photodetectors and Photoelectrochemical Water Splitting. ACS Applied Materials & Eamp; Interfaces, 2020, 12, 48598-48613.	4.0	56
25	Nanocrystals of Lead Chalcohalides: A Series of Kinetically Trapped Metastable Nanostructures. Journal of the American Chemical Society, 2020, 142, 10198-10211.	6.6	34
26	A two-fold engineering approach based on Bi ₂ Te ₃ flakes towards efficient and stable inverted perovskite solar cells. Materials Advances, 2020, 1, 450-462.	2.6	21
27	Water-dispersible few-layer graphene flakes for selective and rapid ion mercury (Hg ²⁺)-rejecting membranes. Materials Advances, 2020, 1, 387-402.	2.6	11
28	Biodegradable and Insoluble Cellulose Photonic Crystals and Metasurfaces. ACS Nano, 2020, 14, 9502-9511.	7.3	36
29	Metastable CdTe@HgTe Core@Shell Nanostructures Obtained by Partial Cation Exchange Evolve into Sintered CdTe Films Upon Annealing. Chemistry of Materials, 2020, 32, 2978-2985.	3.2	10
30	Composition-, Size-, and Surface Functionalization-Dependent Optical Properties of Lead Bromide Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2020, 11, 2079-2085.	2.1	37
31	Liquid Phase Exfoliated Indium Selenide Based Highly Sensitive Photodetectors. Advanced Functional Materials, 2020, 30, 1908427.	7.8	42
32	Permanent Lattice Compression of Lead-Halide Perovskite for Persistently Enhanced Optoelectronic Properties. ACS Energy Letters, 2020, 5, 642-649.	8.8	52
33	Octapod-Shaped CdSe Nanocrystals Hosting Pt with High Mass Activity for the Hydrogen Evolution Reaction. Chemistry of Materials, 2020, 32, 2420-2429.	3.2	26
34	Solutionâ€Processed GaSe Nanoflakeâ€Based Films for Photoelectrochemical Water Splitting and Photoelectrochemicalâ€Type Photodetectors. Advanced Functional Materials, 2020, 30, 1909572.	7.8	81
35	Semiconductor Nanocrystal Heterostructures: Near-Infrared Emitting PbSe-Tipped CdSe Tetrapods. Chemistry of Materials, 2020, 32, 4045-4053.	3.2	8
36	Increasing responsivity and air stability of PbS colloidal quantum dot photoconductors with iodine surface ligands. Nanotechnology, 2019, 30, 405204.	1.3	18

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37	Single-/Few-Layer Graphene as Long-Lasting Electrocatalyst for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 5373-5379.	2.5	28
38	Ultrathin Orthorhombic PbS Nanosheets. Chemistry of Materials, 2019, 31, 8145-8153.	3.2	37
39	Tunable and Efficient Red to Near-Infrared Photoluminescence by Synergistic Exploitation of Core and Surface Silver Doping of CdSe Nanoplatelets. Chemistry of Materials, 2019, 31, 1450-1459.	3.2	64
40	Two-Dimensional Material Interface Engineering for Efficient Perovskite Large-Area Modules. ACS Energy Letters, 2019, 4, 1862-1871.	8.8	125
41	Colloidal PbSe Nanoplatelets of Varied Thickness with Tunable Optical Properties. Chemistry of Materials, 2019, 31, 3803-3811.	3.2	32
42	Flexible Graphene/Carbon Nanotube Electrochemical Double‣ayer Capacitors with Ultrahigh Areal Performance. ChemPlusChem, 2019, 84, 882-892.	1.3	28
43	Planar Aperiodic Arrays as Metasurfaces for Optical Near-Field Patterning. ACS Nano, 2019, 13, 5646-5654.	7.3	8
44	Carbon Nanotube-Supported MoSe ₂ Holey Flake:Mo ₂ C Ball Hybrids for Bifunctional pH-Universal Water Splitting. ACS Nano, 2019, 13, 3162-3176.	7.3	120
45	"lon sliding―on graphene: a novel concept to boost supercapacitor performance. Nanoscale Horizons, 2019, 4, 1077-1091.	4.1	22
46	Scalable Production of Graphene Inks via Wetâ€Jet Milling Exfoliation for Screenâ€Printed Microâ€Supercapacitors. Advanced Functional Materials, 2019, 29, 1807659.	7.8	174
47	Extending the Colloidal Transition Metal Dichalcogenide Library to ReS ₂ Nanosheets for Application in Gas Sensing and Electrocatalysis. Small, 2019, 15, e1904670.	5.2	38
48	Niobium disulphide (NbS ₂)-based (heterogeneous) electrocatalysts for an efficient hydrogen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 25593-25608.	5.2	50
49	Giant-Shell CdSe/CdS Nanocrystals: Exciton Coupling to Shell Phonons Investigated by Resonant Raman Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 399-405.	2.1	11
50	Reduction of moisture sensitivity of PbS quantum dot solar cells by incorporation of reduced graphene oxide. Solar Energy Materials and Solar Cells, 2018, 183, 1-7.	3.0	68
51	Near-Infrared Cu–In–Se-Based Colloidal Nanocrystals via Cation Exchange. Chemistry of Materials, 2018, 30, 2607-2617.	3.2	45
52	Solution-processed silver sulphide nanocrystal film for resistive switching memories. Journal of Materials Chemistry C, 2018, 6, 13128-13135.	2.7	13
53	MoS ₂ Quantum Dot/Graphene Hybrids for Advanced Interface Engineering of a CH ₃ NH ₃ Perovskite Solar Cell with an Efficiency of over 20%. ACS Nano, 2018, 12, 10736-10754.	7. 3	201
54	Chloride-Induced Thickness Control in CdSe Nanoplatelets. Nano Letters, 2018, 18, 6248-6254.	4.5	135

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55	Near-Infrared Emitting Colloidal PbS Nanoplatelets: Lateral Size Control and Optical Spectroscopy. Chemistry of Materials, 2017, 29, 2883-2889.	3.2	42
56	Synthesis of Air-Stable CdSe/ZnS Core–Shell Nanoplatelets with Tunable Emission Wavelength. Chemistry of Materials, 2017, 29, 5671-5680.	3.2	96
57	Graphene-Based Hole-Selective Layers for High-Efficiency, Solution-Processed, Large-Area, Flexible, Hydrogen-Evolving Organic Photocathodes. Journal of Physical Chemistry C, 2017, 121, 21887-21903.	1.5	30
58	Solution-Processed Hybrid Graphene Flake/2H-MoS ₂ Quantum Dot Heterostructures for Efficient Electrochemical Hydrogen Evolution. Chemistry of Materials, 2017, 29, 5782-5786.	3.2	93
59	Mechanically flexible and optically transparent three-dimensional nanofibrous amorphous aerocellulose. Carbohydrate Polymers, 2016, 149, 217-223.	5.1	10
60	Revisiting the Anion Framework Conservation in Cation Exchange Processes. Chemistry of Materials, 2016, 28, 7872-7877.	3.2	15
61	Efficient charge transfer in solution-processed PbS quantum dot–reduced graphene oxide hybrid materials. Journal of Materials Chemistry C, 2015, 3, 7088-7095.	2.7	43
62	Graphene-based technologies for energy applications, challenges and perspectives. 2D Materials, 2015, 2, 030204.	2.0	74
63	Nanoparticle Self-Assembly Assisted by Polymers: The Role of Shear Stress in the Nanoparticle Arrangement of Langmuir and Langmuir–Blodgett Films. Langmuir, 2014, 30, 509-516.	1.6	27
64	Block copolymer assisted self-assembly of nanoparticles into Langmuir–Blodgett films: Effect of polymer concentration. Materials Chemistry and Physics, 2013, 141, 324-332.	2.0	16
65	Photoluminescence Dynamics of CdSe QD/Polymer Langmuir–Blodgett Thin Films: Morphology Effects. Journal of Physical Chemistry C, 2013, 117, 14787-14795.	1.5	21
66	QDs Supported on Langmuir-Blodgett Films of Polymers and Gemini Surfactant. Journal of Nanomaterials, 2013, 2013, 1-10.	1.5	7
67	Functionalization of Reduced Graphite Oxide Sheets with a Zwitterionic Surfactant. ChemPhysChem, 2012, 13, 3682-3690.	1.0	33
68	Langmuir and Langmuirâ^'Blodgett Films of a Maleic Anhydride Derivative: Effect of Subphase Divalent Cations. Langmuir, 2010, 26, 14556-14562.	1.6	20
69	Langmuirâ€Blodgett Methodology: A Versatile Technique to Build 2D Material Films. , 0, , .		4