

Beatriz MartÃ-n-GarcÃ-a

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/988603/publications.pdf>

Version: 2024-02-01

69
papers

2,690
citations

159358

30
h-index

197535

49
g-index

72
all docs

72
docs citations

72
times ranked

4340
citing authors

#	ARTICLE	IF	CITATIONS
1	MoS ₂ Quantum Dot/Graphene Hybrids for Advanced Interface Engineering of a CH ₃ NH ₃ PbI ₃ Perovskite Solar Cell with an Efficiency of over 20%. ACS Nano, 2018, 12, 10736-10754.	7.3	201
2	Scalable Production of Graphene Inks via Wet-Jet Milling Exfoliation for Screen-Printed Micro-Supercapacitors. Advanced Functional Materials, 2019, 29, 1807659.	7.8	174
3	Chloride-Induced Thickness Control in CdSe Nanoplatelets. Nano Letters, 2018, 18, 6248-6254.	4.5	135
4	Two-Dimensional Material Interface Engineering for Efficient Perovskite Large-Area Modules. ACS Energy Letters, 2019, 4, 1862-1871.	8.8	125
5	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
6	Synthesis of Air-Stable CdSe/ZnS Core-Shell Nanoplatelets with Tunable Emission Wavelength. Chemistry of Materials, 2017, 29, 5671-5680.	3.2	96
7	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
8	Solution-Processed GaSe Nanoflake-Based Films for Photoelectrochemical Water Splitting and Photoelectrochemical-Type Photodetectors. Advanced Functional Materials, 2020, 30, 1909572.	7.8	81
9	Graphene-based technologies for energy applications, challenges and perspectives. 2D Materials, 2015, 2, 030204.	2.0	74
10	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
11	Integration of two-dimensional materials-based perovskite solar panels into a stand-alone solar farm. Nature Energy, 2022, 7, 597-607.	19.8	66
12	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
13	Gate-tuneable and chirality-dependent charge-to-spin conversion in tellurium nanowires. Nature Materials, 2022, 21, 526-532.	13.3	62
14	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
15	Ta ₂ S ₅ , TaSe ₂ , and Their Heterogeneous Films as Catalysts for the Hydrogen Evolution Reaction. ACS Catalysis, 2020, 10, 3313-3325.	5.5	60
16	Liquid-Phase Exfoliated GeSe Nanoflakes for Photoelectrochemical-Type Photodetectors and Photoelectrochemical Water Splitting. ACS Applied Materials & Interfaces, 2020, 12, 48598-48613.	4.0	56
17	Permanent Lattice Compression of Lead-Halide Perovskite for Persistently Enhanced Optoelectronic Properties. ACS Energy Letters, 2020, 5, 642-649.	8.8	52
18	Niobium disulphide (Nb ₂ S ₅)-based (heterogeneous) electrocatalysts for an efficient hydrogen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 25593-25608.	5.2	50

#	ARTICLE	IF	CITATIONS
19	Near-Infrared Cu ²⁺ /In ³⁺ /Se-Based Colloidal Nanocrystals via Cation Exchange. <i>Chemistry of Materials</i> , 2018, 30, 2607-2617.	3.2	45
20	Efficient charge transfer in solution-processed PbS quantum dot/reduced graphene oxide hybrid materials. <i>Journal of Materials Chemistry C</i> , 2015, 3, 7088-7095.	2.7	43
21	Near-Infrared Emitting Colloidal PbS Nanoplatelets: Lateral Size Control and Optical Spectroscopy. <i>Chemistry of Materials</i> , 2017, 29, 2883-2889.	3.2	42
22	Liquid Phase Exfoliated Indium Selenide Based Highly Sensitive Photodetectors. <i>Advanced Functional Materials</i> , 2020, 30, 1908427.	7.8	42
23	Extending the Colloidal Transition Metal Dichalcogenide Library to ReS ₂ Nanosheets for Application in Gas Sensing and Electrocatalysis. <i>Small</i> , 2019, 15, e1904670.	5.2	38
24	Ultrathin Orthorhombic PbS Nanosheets. <i>Chemistry of Materials</i> , 2019, 31, 8145-8153.	3.2	37
25	Composition-, Size-, and Surface Functionalization-Dependent Optical Properties of Lead Bromide Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 2079-2085.	2.1	37
26	Biodegradable and Insoluble Cellulose Photonic Crystals and Metasurfaces. <i>ACS Nano</i> , 2020, 14, 9502-9511.	7.3	36
27	Graphene-Based Electrodes in a Vanadium Redox Flow Battery Produced by Rapid Low-Pressure Combined Gas Plasma Treatments. <i>Chemistry of Materials</i> , 2021, 33, 4106-4121.	3.2	35
28	Nanocrystals of Lead Chalcogenides: A Series of Kinetically Trapped Metastable Nanostructures. <i>Journal of the American Chemical Society</i> , 2020, 142, 10198-10211.	6.6	34
29	Functionalization of Reduced Graphite Oxide Sheets with a Zwitterionic Surfactant. <i>ChemPhysChem</i> , 2012, 13, 3682-3690.	1.0	33
30	Colloidal PbSe Nanoplatelets of Varied Thickness with Tunable Optical Properties. <i>Chemistry of Materials</i> , 2019, 31, 3803-3811.	3.2	32
31	Graphene-Based Hole-Selective Layers for High-Efficiency, Solution-Processed, Large-Area, Flexible, Hydrogen-Evolving Organic Photocathodes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 21887-21903.	1.5	30
32	Single-/Few-Layer Graphene as Long-Lasting Electrocatalyst for Hydrogen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2019, 2, 5373-5379.	2.5	28
33	Flexible Graphene/Carbon Nanotube Electrochemical Double-Layer Capacitors with Ultrahigh Areal Performance. <i>ChemPlusChem</i> , 2019, 84, 882-892.	1.3	28
34	Nanoparticle Self-Assembly Assisted by Polymers: The Role of Shear Stress in the Nanoparticle Arrangement of Langmuir and Langmuir-Blodgett Films. <i>Langmuir</i> , 2014, 30, 509-516.	1.6	27
35	Octapod-Shaped CdSe Nanocrystals Hosting Pt with High Mass Activity for the Hydrogen Evolution Reaction. <i>Chemistry of Materials</i> , 2020, 32, 2420-2429.	3.2	26
36	Phase Transitions in Low-Dimensional Layered Double Perovskites: The Role of the Organic Moieties. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 280-286.	2.1	23

#	ARTICLE	IF	CITATIONS
37	Inverted perovskite solar cells with enhanced lifetime and thermal stability enabled by a metallic tantalum disulfide buffer layer. <i>Nanoscale Advances</i> , 2021, 3, 3124-3135.	2.2	23
38	Topochemical Transformation of Two-Dimensional VSe_2 into Metallic Nonlayered VO_2 for Water Splitting Reactions in Acidic and Alkaline Media. <i>ACS Nano</i> , 2022, 16, 351-367.	7.3	23
39	œlon sliding on graphene: a novel concept to boost supercapacitor performance. <i>Nanoscale Horizons</i> , 2019, 4, 1077-1091.	4.1	22
40	Functionalized metallic transition metal dichalcogenide (TaS_2) for nanocomposite membranes in direct methanol fuel cells. <i>Journal of Materials Chemistry A</i> , 2021, 9, 6368-6381.	5.2	22
41	Photoluminescence Dynamics of CdSe QD/Polymer Langmuir-Blodgett Thin Films: Morphology Effects. <i>Journal of Physical Chemistry C</i> , 2013, 117, 14787-14795.	1.5	21
42	A two-fold engineering approach based on Bi_2Te_3 flakes towards efficient and stable inverted perovskite solar cells. <i>Materials Advances</i> , 2020, 1, 450-462.	2.6	21
43	Langmuir and Langmuir-Blodgett Films of a Maleic Anhydride Derivative: Effect of Subphase Divalent Cations. <i>Langmuir</i> , 2010, 26, 14556-14562.	1.6	20
44	Increasing responsivity and air stability of PbS colloidal quantum dot photoconductors with iodine surface ligands. <i>Nanotechnology</i> , 2019, 30, 405204.	1.3	18
45	Angle and Polarization Selective Spontaneous Emission in Dye-Doped Metal/Insulator/Metal Nanocavities. <i>Advanced Optical Materials</i> , 2020, 8, 1901215.	3.6	18
46	Microwave-Induced Structural Engineering and Pt Trapping in TaS_2 for the Hydrogen Evolution Reaction. <i>Small</i> , 2020, 16, e2003372.	5.2	18
47	Mixed Dimethylammonium/Methylammonium Lead Halide Perovskite Crystals for Improved Structural Stability and Enhanced Photodetection. <i>Advanced Materials</i> , 2022, 34, e2106160.	11.1	18
48	Exchange Bias in Molecule/ Fe_3GeTe_2 van der Waals Heterostructures via Spinterface Effects. <i>Advanced Materials</i> , 2022, 34, e2200474.	11.1	17
49	Block copolymer assisted self-assembly of nanoparticles into Langmuir-Blodgett films: Effect of polymer concentration. <i>Materials Chemistry and Physics</i> , 2013, 141, 324-332.	2.0	16
50	Revisiting the Anion Framework Conservation in Cation Exchange Processes. <i>Chemistry of Materials</i> , 2016, 28, 7872-7877.	3.2	15
51	Impact of local structure on halogen ion migration in layered methylammonium copper halide memory devices. <i>Journal of Materials Chemistry A</i> , 2020, 8, 17516-17526.	5.2	14
52	Methylammonium Governs Structural and Optical Properties of Hybrid Lead Halide Perovskites through Dynamic Hydrogen Bonding. <i>Chemistry of Materials</i> , 2021, 33, 8524-8533.	3.2	14
53	Tuning the magnetic properties of $NiPS_3$ through organic-ion intercalation. <i>Nanoscale</i> , 2022, 14, 1165-1173.	2.8	14
54	Solution-processed silver sulphide nanocrystal film for resistive switching memories. <i>Journal of Materials Chemistry C</i> , 2018, 6, 13128-13135.	2.7	13

#	ARTICLE	IF	CITATIONS
55	Core/Shell CdSe/CdS Bone- ∞ -Shaped Nanocrystals with a Thick and Anisotropic Shell as Optical Emitters. <i>Advanced Optical Materials</i> , 2020, 8, 1901463.	3.6	12
56	Giant-Shell CdSe/CdS Nanocrystals: Exciton Coupling to Shell Phonons Investigated by Resonant Raman Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 399-405.	2.1	11
57	Water-dispersible few-layer graphene flakes for selective and rapid ion mercury (Hg ²⁺)-rejecting membranes. <i>Materials Advances</i> , 2020, 1, 387-402.	2.6	11
58	Mechanically flexible and optically transparent three-dimensional nanofibrous amorphous aerocellulose. <i>Carbohydrate Polymers</i> , 2016, 149, 217-223.	5.1	10
59	Metastable CdTe@HgTe Core@Shell Nanostructures Obtained by Partial Cation Exchange Evolve into Sintered CdTe Films Upon Annealing. <i>Chemistry of Materials</i> , 2020, 32, 2978-2985.	3.2	10
60	Planar Aperiodic Arrays as Metasurfaces for Optical Near-Field Patterning. <i>ACS Nano</i> , 2019, 13, 5646-5654.	7.3	8
61	Semiconductor Nanocrystal Heterostructures: Near-Infrared Emitting PbSe-Tipped CdSe Tetrapods. <i>Chemistry of Materials</i> , 2020, 32, 4045-4053.	3.2	8
62	Sulfonated NbS ₂ -based proton-exchange membranes for vanadium redox flow batteries. <i>Nanoscale</i> , 2022, 14, 6152-6161.	2.8	8
63	Tailoring Photoluminescence by Strain-Engineering in Layered Perovskite Flakes. <i>Nano Letters</i> , 2022, 22, 4153-4160.	4.5	8
64	QDs Supported on Langmuir-Blodgett Films of Polymers and Gemini Surfactant. <i>Journal of Nanomaterials</i> , 2013, 2013, 1-10.	1.5	7
65	Raman spectroscopy in layered hybrid organic-inorganic metal halide perovskites. <i>JPhys Materials</i> , 2022, 5, 034004.	1.8	7
66	Langmuir-Blodgett Methodology: A Versatile Technique to Build 2D Material Films. , 0, , .		4
67	Paper Sensors Based on Fluorescence Changes of Carbon Nanodots for Optical Detection of Nanomaterials. <i>Sustainability</i> , 2021, 13, 11896.	1.6	3
68	Manufacturing ordered films of nanoparticles by Langmuir-Blodgett technique. , 2021, , 121-138.		1
69	Modeling Photodetection at the Graphene/Ag 2 S Interface. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2100120.	1.2	1