Baochang Cheng

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2701640/publications.pdf

Version: 2024-02-01

75 papers	1,793 citations	279487 23 h-index	315357 38 g-index
75 all docs	75 docs citations	75 times ranked	2601 citing authors

#	Article	IF	Citations
1	Highly sensitive humidity sensor based on amorphous Al₂O₃nanotubes. Journal of Materials Chemistry, 2011, 21, 1907-1912.	6.7	123
2	Nickel formate induced high-levelin situNi-doping of g-C₃N₄for a tunable band structure and enhanced photocatalytic performance. Journal of Materials Chemistry A, 2019, 7, 22385-22397.	5.2	101
3	Indiumâ€Free Perovskite Solar Cells Enabled by Impermeable Tinâ€Oxide Electron Extraction Layers. Advanced Materials, 2017, 29, 1606656.	11.1	88
4	From weed to multi-heteroatom-doped honeycomb-like porous carbon for advanced supercapacitors: A gelatinization-controlled one-step carbonization. Journal of Power Sources, 2018, 402, 203-212.	4.0	78
5	Direct growth of nickel terephthalate on Ni foam with large mass-loading for high-performance supercapacitors. Journal of Materials Chemistry A, 2017, 5, 19323-19332.	5.2	69
6	General synthesis of rare-earth orthochromites with quasi-hollow nanostructures and their magnetic properties. Journal of Materials Chemistry A, 2013, 1, 11982.	5.2	64
7	Spinel Indium Sulfide Precursor for the Phase-Selective Synthesis of Cuâ€“Inâ€“S Nanocrystals with Zinc-Blende, Wurtzite, and Spinel Structures. Chemistry of Materials, 2013, 25, 2991-2997.	3.2	63
8	Long-persistent phosphorescent SrAl₂O₄:Eu²⁺, Dy³⁺nanotubes. Chemical Communications, 2009, , 944-946.	2.2	48
9	SnO2 hierarchical nanostructure and its strong narrow-band photoluminescence. Journal of Materials Chemistry, 2009, 19, 1320.	6.7	45
10	Conversion of biomass waste to multi-heteroatom-doped carbon networks with high surface area and hierarchical porosity for advanced supercapacitors. Journal of Materials Science, 2018, 53, 14536-14547.	1.7	44
11	BaAl₂O₄:Eu²⁺, Dy³⁺ Nanotube Synthesis by Heating Conversion of Homogeneous Coprecipitates and Afterglow Characteristics. Journal of Physical Chemistry C, 2011, 115, 1708-1713.	1.5	43
12	Surface state controlled ultrahigh selectivity and sensitivity for UV photodetectors based on individual SnO₂ nanowires. Journal of Materials Chemistry C, 2016, 4, 8399-8406.	2.7	43
13	Terephthalate-based cobalt hydroxide: a new electrode material for supercapacitors with ultrahigh capacitance. Dalton Transactions, 2018, 47, 14958-14967.	1.6	38
14	Disorderâ€induced Raman scattering effects in oneâ€dimensional ZnO nanostructures by incorporation and anisotropic distribution of Dy and Li codopants. Journal of Raman Spectroscopy, 2010, 41, 1221-1226.	1.2	36
15	PMMA interlayer-modulated memory effects by space charge polarization in resistive switching based on CuSCN-nanopyramids/ZnO-nanorods p-n heterojunction. Scientific Reports, 2015, 5, 17859.	1.6	34
16	Power- and energy-dependent photoluminescence of Eu3+ incorporated and segregated ZnO polycrystalline nanobelts synthesized by a facile combustion method followed by heat treatment. Journal of Materials Chemistry, 2010, 20, 7821.	6.7	33
17	Individual Ohmic contacted ZnO/Zn2SnO4 radial heterostructured nanowires as photodetectors with a broad-spectral-response: injection of electrons into/from interface states. Journal of Materials Chemistry C, 2014, 2, 1808.	2.7	33
18	Self-template formation and properties study of Cr₂O₃nanoparticle tubes. Journal of Materials Chemistry, 2012, 22, 1643-1651.	6.7	32

#	Article	IF	Citations
19	SrAlxOy:Eu2+, Dy3+ (x = 4) nanostructures: Structure and morphology transformations and long-lasting phosphorescence properties. CrystEngComm, 2011, 13, 3545.	1.3	31
20	Individual Zn2SnO4-sheathed ZnO heterostructure nanowires for efficient resistive switching memory controlled by interface states. Scientific Reports, 2013, 3, 3249.	1.6	31
21	Synergistic engineering of cobalt selenide and biomass-derived S, N, P co-doped hierarchical porous carbon for modulation of stable Li-S batteries. Journal of Materials Science and Technology, 2023, 134, 11-21.	5.6	30
22	Individual ZnO nanowires for photodetectors with wide response range from solar-blind ultraviolet to near-infrared modulated by bias voltage and illumination intensity. Optics Express, 2013, 21, 29719.	1.7	29
23	Lightâ€Induced Anomalous Resistive Switches Based on Individual Organicâ€“Inorganic Halide Perovskite Microâ€/Nanofibers. Advanced Electronic Materials, 2018, 4, 1800206.	2.6	26
24	Effects of Interface States on Photoexcited Carriers in ZnO/Zn₂SnO₄ Type-II Radial Heterostructure Nanowires. ACS Applied Materials & Interfaces, 2014, 6, 4057-4062.	4.0	23
25	Tunable hysteresis behaviour related to trap filling dependence of surface barrier in an individual CH₃NH₃PbI₃ micro/nanowire. Nanoscale, 2019, 11, 3360-3369.	2.8	23
26	Phase-controlled growth of nickel hydroxide nanostructures on nickel foam for enhanced supercapacitor performance. Journal of Energy Storage, 2021, 43, 103171.	3.9	22
27	Unique multi-hierarchical Z-scheme heterojunction of branching SnIn4S8 nanosheets on ZnIn2S4 nanopetals for boosted photocatalytic performance. Separation and Purification Technology, 2022, 295, 121267.	3.9	22
28	A facile in situ reduction route for preparation of spinel CoCr₂O₄polycrystalline nanosheets and their magnetic properties. CrystEngComm, 2014, 16, 277-286.	1.3	21
29	Space charge polarization-induced symmetrical negative resistive switching in individual p-type GeSe₂:Bi superstructure nanobelts for non-volatile memory. Journal of Materials Chemistry C, 2015, 3, 5207-5213.	2.7	21
30	A surface state-controlled, high-performance, self-powered photovoltaic detector based on an individual SnS nanorod with a symmetrical electrode structure. Journal of Materials Chemistry C, 2018, 6, 9071-9080.	2.7	21
31	Bias-Controlled Tunable Electronic Transport with Memory Characteristics in an Individual ZnO Nanowire for Realization of a Self-Driven UV Photodetector with Two Symmetrical Electrodes. ACS Applied Materials & Interfaces, 2019, 11, 14932-14943.	4.0	20
32	Solution Growth of BiSI Nanorod Arrays on a Tungsten Substrate for Solar Cell Application. ACS Sustainable Chemistry and Engineering, 2020, 8, 13488-13496.	3.2	20
33	Modulation of Surface Trap Induced Resistive Switching by Electrode Annealing in Individual PbS Micro/Nanowire-Based Devices for Resistance Random Access Memory. ACS Applied Materials & Interfaces, 2014, 6, 20812-20818.	4.0	19
34	Synthesis and magnetic properties of MNb₂O₆(M = Fe, Co, Ni) nanoparticles. RSC Advances, 2014, 4, 52740-52748.	1.7	19
35	Fabrication of Bi₁₉S₂₇I₃ nanorod cluster films for enhanced photodetection performance. Dalton Transactions, 2018, 47, 3408-3416.	1.6	18
36	Trapâ€Related Nonvolatile Negative Photoconductivity in a Single Ag@Al₂O₃ Hybrid Nanorod for a Photomemory with Lightâ€Writing and Biasâ€Erasing. Advanced Optical Materials, 2019, 7, 1901154.	3.6	18

#	Article	IF	Citations
37	Controllable switching properties in an individual CH3NH3PbI3 micro/nanowire-based transistor for gate voltage and illumination dual-driving non-volatile memory. Journal of Materials Chemistry C, 2019, 7, 4259-4266.	2.7	18
38	Enhanced effect of electron-hole plasma emission in Dy, Li codoped ZnO nanostructures. Journal of Applied Physics, 2009, 105, 014311.	1.1	17
39	SrAl₂O₄:Eu²⁺,Dy³⁺ nanobelts: Synthesis by combustion and properties of long-persistent phosphorescence. Journal of Materials Research, 2011, 26, 2311-2315.	1.2	17
40	Pore regulation of well-developed honeycomb-like carbon materials from Zizania latifolia for supercapacitors. Journal of Energy Storage, 2022, 52, 104910.	3.9	16
41	Ordered Zinc Antimonate Nanoisland Attachment and Morphology Control of ZnO Nanobelts by Sb Doping. Journal of Physical Chemistry C, 2009, 113, 9638-9643.	1.5	15
42	Trapping states in CdS:Eu nanobelts studied by excitation-dependent photoluminescence. Journal of Applied Physics, 2010, 108, .	1.1	15
43	Spatially distributed Z-scheme heterojunction of g-C3N4/SnIn4S8 for enhanced photocatalytic hydrogen production and pollutant degradation. Applied Surface Science, 2022, 598, 153870.	3.1	15
44	Preparation and magnetic and microwave absorption properties of MnNb₂O₆ ellipsoid-like hierarchical structures. CrystEngComm, 2014, 16, 7949-7955.	1.3	14
45	Erasable memory properties of spectral selectivity modulated by temperature and bias in an individual CdS nanobelt-based photodetector. Nanoscale Horizons, 2019, 4, 138-147.	4.1	14
46	Enhanced visible light catalysis activity of CdS-sheathed SrAl₂O₄:Eu²⁺,Dy³⁺nanocomposites. Dalton Transactions, 2018, 47, 7941-7948.	1.6	13
47	Bi₁₉S₂₇I₃ nanorods: a new candidate for photothermal therapy in the first and second biological near-infrared windows. Nanoscale, 2021, 13, 5369-5382.	2.8	13
48	An individual sandwich hybrid nanostructure of cobalt disulfide in-situ grown on N doped carbon layer wrapped on multi-walled carbon nanotubes for high-efficiency lithium sulfur batteries. Journal of Colloid and Interface Science, 2022, 610, 560-572.	5.0	13
49	Self-supported electrode based on two-dimensional NiPS3 for supercapacitor application. Journal of Colloid and Interface Science, 2022, 616, 401-412.	5.0	13
50	Lattice variation and Raman spectroscopy in hierarchical heterostructures of zinc antimonate nanoislands on ZnO nanobelts. Nanotechnology, 2010, 21, 025704.	1.3	12
51	The ferromagneticâ€“antiferromagnetic properties of Niâ€“Cr₂O₃composite hollow spheres prepared by an in situ reduction method. CrystEngComm, 2014, 16, 1322-1333.	1.3	12
52	Isomorphous Substitution Synthesis and Photoelectric Properties of Spinel AgInSnS₄ Nanosheets. Chemistry of Materials, 2020, 32, 9713-9720.	3.2	12
53	Rewritable non-volatile stress information memory by bulk trap-induced giant piezoresistance effect in individual PbS micro/nanowires. Journal of Materials Chemistry C, 2017, 5, 229-237.	2.7	11
54	Reversible Negative Resistive Switching in an Individual Fe@Al₂O₃ Hybrid Nanotube for Nonvolatile Memory. ACS Applied Materials & Interfaces, 2018, 10, 19002-19009.	4.0	11

#	Article	IF	Citations
55	Electric modulation of conduction in MAPbBr3 single crystals. Journal of Advanced Ceramics, 2021, 10, 320-327.	8.9	11
56	Revealing the synergistic mechanism of multiply nanostructured V2O3 hollow nanospheres integrated with doped N, Ni heteroatoms, in-situ grown carbon nanotubes and coated carbon nanolayers for the enhancement of lithium-sulfur batteries. Journal of Colloid and Interface Science, 2022, 612, 760-771.	5.0	11
57	Carbon-encapsulated CdSe quantum dot inorganic hybrid nanobelts for high performance photoelectronic devices based on the efficient separation and transfer of photoinduced holes. Journal of Materials Chemistry C, 2015, 3, 2471-2478.	2.7	10
58	Enhanced Giant Piezoresistance Performance of Sandwiched ZnS/Si/SiO₂ Radial Heterostructure Nanotubes for Nonvolatile Stress Memory with Repeatable Writing and Erasing. ACS Applied Materials & Interfaces, 2016, 8, 34648-34658.	4.0	10
59	A surface photovoltaic effect-related high-performance photodetector based on a single CH3NH3PbI3 micro/nanowire. Journal of Materials Chemistry C, 2020, 8, 6558-6564.	2.7	8
60	Ultrahigh performance negative thermal-resistance switching based on individual ZnO:K, Cl micro/nanowires for multibit nonvolatile resistance random access memory dual-written/erased repeatedly by temperature or bias. Journal of Materials Chemistry C, 2015, 3, 12220-12229.	2.7	7
61	Gateâ€Free Controlled Multibit Memories Based on Individual ZnO:In Micro/Nanowire Backâ€toâ€Back Diodes. Advanced Electronic Materials, 2016, 2, 1500395.	2.6	7
62	A Hierarchically Porous Hollow Structure of Layered Bi₂TiO₄F₂ for Efficient Photocatalysis. European Journal of Inorganic Chemistry, 2017, 2017, 1892-1899.	1.0	7
63	Modulable hysteresis behavior controlled by water-promoted decomposition in a single CH3NH3PbI3 micro/nanowire. Applied Surface Science, 2020, 507, 145048.	3.1	6
64	Switchable photovoltaic and enhanced photoelectricity in a single PbS@CH3NH3PbI3 hybrid composite micro/nanowire. Chemical Engineering Journal, 2021, 422, 130136.	6.6	6
65	Synthesis and photoluminescence properties of a new green emitting phosphor La2SrB10O19:Tb3+. Optical Materials, 2013, 35, 1609-1611.	1.7	5
66	Ultrahigh stress response and storage properties in a single CdS nanobelt-based flexible device for an erasable nonvolatile stress sensing and memory effect. Journal of Materials Chemistry C, 2019, 7, 7654-7663.	2.7	5
67	Back-to-back Interface diodes induced symmetrical negative differential resistance and reversible bipolar resistive switching in Î²-CuSCN trigonal pyramid micro/nanoarray. Applied Surface Science, 2019, 480, 13-25.	3.1	5
68	Preparation of quinary CuNi Zn2â^'InS4 nanocrystals with wurtzite structure and tunable band gap. Journal of Alloys and Compounds, 2020, 820, 153436.	2.8	5
69	Wurtzite CuNi₂InS₄ Nanocrystals: A Quaternary Chalcogenide Magnetic Semiconductor. Inorganic Chemistry, 2019, 58, 15283-15290.	1.9	4
70	Surface traps-related nonvolatile resistive switching memory effect in a single SnO2:Sm nanowire. Journal of Semiconductors, 2020, 41, 012101.	2.0	2
71	Novel Strategy toward Chromium-Based Thiospinel Multifunctional Magnetic Materials from Amorphous Chromites. Crystal Growth and Design, 2022, 22, 4277-4287.	1.4	2
72	Hydrothermal growth of ferrous hydroxide terephthalate as a new positive electrode material for supercapacitors. Dalton Transactions, 2018, 47, 12056-12060.	1.6	1

#	Article	IF	Citations
73	Sulfur-source-dependent phase-selective preparation of Cu₃NiInSnS₆ nanocrystals and their optical and magnetic properties. Dalton Transactions, 0, , .	1.6	1
74	Perovskite Solar Cells: Indium-Free Perovskite Solar Cells Enabled by Impermeable Tin-Oxide Electron Extraction Layers (Adv. Mater. 27/2017). Advanced Materials, 2017, 29, .	11.1	0
75	Giant Piezoresistive Effect of CdS@C Hybrid Nanobelts for Volatile Real-Time Sensor and Erasable Nonvolatile Memory to Stress. ACS Applied Materials & Interfaces, 2021, 13, 22785-22795.	4.0	0