Jun Xu

List of Publications by Year
in descending order

84 papers	8,773 citations	66234 42 h-index	54797 84 g-index
86 all docs	86 docs citations	86 times ranked	12244 citing authors

#	Article	IF	Citations
1	Simultaneous phase and size control of upconversion nanocrystals through lanthanide doping. Nature, 2010, 463, 1061-1065.	13.7	2,872
2	Incorporation of Graphenes in Nanostructured TiO₂ Films <i>via</i> Molecular Grafting for Dye-Sensitized Solar Cell Application. ACS Nano, 2010, 4, 3482-3488.	7.3	471
3	Hierarchical nanotubes assembled from MoS 2 -carbon monolayer sandwiched superstructure nanosheets for high-performance sodium ion batteries. Nano Energy, 2016, 22, 27-37.	8.2	333
4	Interlayer Nanoarchitectonics of Twoâ€Dimensional Transitionâ€Metal Dichalcogenides Nanosheets for Energy Storage and Conversion Applications. Advanced Energy Materials, 2017, 7, 1700571.	10.2	303
5	Cu₂ZnSnS₄ Hierarchical Microspheres as an Effective Counter Electrode Material for Quantum Dot Sensitized Solar Cells. Journal of Physical Chemistry C, 2012, 116, 19718-19723.	1.5	193
6	Synthesis of MOF-derived nanostructures and their applications as anodes in lithium and sodium ion batteries. Coordination Chemistry Reviews, 2019, 388, 172-201.	9.5	192
7	Synthesis of 1T-MoSe₂ ultrathin nanosheets with an expanded interlayer spacing of 1.17 nm for efficient hydrogen evolution reaction. Journal of Materials Chemistry A, 2016, 4, 14949-14953.	5.2	190
8	Arrays of ZnO/Zn_{<i>x</i>}Cd_{1â€“<i>x</i>}Se Nanocables: Band Gap Engineering and Photovoltaic Applications. Nano Letters, 2011, 11, 4138-4143.	4.5	185
9	Synergistic Interlayer and Defect Engineering in VS₂ Nanosheets toward Efficient Electrocatalytic Hydrogen Evolution Reaction. Small, 2018, 14, 1703098.	5.2	180
10	Three-dimensional MoS2/rGO foams as efficient sulfur hosts for high-performance lithium-sulfur batteries. Chemical Engineering Journal, 2019, 355, 671-678.	6.6	164
11	Surface Engineering of ZnO Nanostructures for Semiconductorâ€Sensitized Solar Cells. Advanced Materials, 2014, 26, 5337-5367.	11.1	149
12	Recent progress in layered metal dichalcogenide nanostructures as electrodes for high-performance sodium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 7667-7690.	5.2	144
13	Bimetallic PtPd nanoparticles on Nafionâ€“graphene film as catalyst for ethanol electro-oxidation. Journal of Materials Chemistry, 2012, 22, 8057.	6.7	143
14	Largeâ€Scale Synthesis of Long Crystalline Cu_{2â€x}Se Nanowire Bundles by Waterâ€Evaporationâ€Induced Selfâ€Assembly and Their Application in Gas Sensing. Advanced Functional Materials, 2009, 19, 1759-1766.	7.8	137
15	Pyrite FeS₂ microspheres wrapped by reduced graphene oxide as high-performance lithium-ion battery anodes. Journal of Materials Chemistry A, 2015, 3, 7945-7949.	5.2	134
16	Porous CuCo₂O₄ nanocubes wrapped by reduced graphene oxide as high-performance lithium-ion battery anodes. Nanoscale, 2014, 6, 6551-6556.	2.8	130
17	Synthesis of Porous ZnS:Ag₂S Nanosheets by Ion Exchange for Photocatalytic H₂ Generation. ACS Applied Materials & Interfaces, 2014, 6, 9078-9084.	4.0	128
18	Controlled synthesis of CuO nanostructures by a simple solution route. Journal of Solid State Chemistry, 2007, 180, 1390-1396.	1.4	127

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19	Large-Scale Synthesis and Phase Transformation of CuSe, CuInSe₂, and CuInSe₂/CuInS₂ Core/Shell Nanowire Bundles. ACS Nano, 2010, 4, 1845-1850.	7.3	105
20	Conversion of 1T-MoSe₂to 2H-MoS_{2x}Se_{2âˆ'2x}mesoporous nanospheres for superior sodium storage performance. Nanoscale, 2017, 9, 1484-1490.	2.8	104
21	Arrays of ZnO/MoS2 nanocables and MoS2 nanotubes with phase engineering for bifunctional photoelectrochemical and electrochemical water splitting. Chemical Engineering Journal, 2017, 328, 474-483.	6.6	103
22	Optical properties of highly ordered AlN nanowire arrays grown on sapphire substrate. Applied Physics Letters, 2005, 86, 193101.	1.5	102
23	Carbon Quantum Dotsâ€"Modified Interfacial Interactions and Ion Conductivity for Enhanced High Current Density Performance in Lithiumâ€"Sulfur Batteries. Advanced Energy Materials, 2019, 9, 1802955.	10.2	102
24	Large-scale synthesis of Cu2SnS3 and Cu1.8S hierarchical microspheres as efficient counter electrode materials for quantum dot sensitized solar cells. Nanoscale, 2012, 4, 6537.	2.8	101
25	In Situ Carbon-Doped Mo(Se_{0.85}S_{0.15})₂Hierarchical Nanotubes as Stable Anodes for High-Performance Sodium-Ion Batteries. Small, 2015, 11, 5667-5674.	5.2	101
26	Arrays of CdSe sensitized ZnO/ZnSe nanocables for efficient solar cells with high open-circuit voltage. Journal of Materials Chemistry, 2012, 22, 13374.	6.7	98
27	Hierarchical nanotubes constructed from interlayer-expanded MoSe₂ nanosheets as a highly durable electrode for sodium storage. Journal of Materials Chemistry A, 2017, 5, 24859-24866.	5.2	88
28	Low-Temperature Synthesis of CuInSe₂ Nanotube Array on Conducting Glass Substrates for Solar Cell Application. ACS Nano, 2010, 4, 6064-6070.	7.3	86
29	Synthesis of Honeycombâ€like Mesoporous Pyrite FeS₂ Microspheres as Efficient Counter Electrode in Quantum Dots Sensitized Solar Cells. Small, 2014, 10, 4754-4759.	5.2	83
30	Combinational modulations of NiSe₂ nanodendrites by phase engineering and iron-doping towards an efficient oxygen evolution reaction. Journal of Materials Chemistry A, 2020, 8, 8113-8120.	5.2	82
31	Composition and Interface Engineering of Alloyed MoS₂<i>_x</i>Se_{2(1â€"}<i>_x</i>₎ Nanotubes for Enhanced Hydrogen Evolution Reaction Activity. Small, 2016, 12, 4379-4385.	5.2	72
32	CdS/CdSe Double-Sensitized ZnO Nanocable Arrays Synthesized by Chemical Solution Method and Their Photovoltaic Applications. Journal of Physical Chemistry C, 2012, 116, 2656-2661.	1.5	65
33	Sandwiched Cathodes Assembled from CoS₂â€Modified Carbon Clothes for Highâ€Performance Lithiumâ€Sulfur Batteries. Advanced Science, 2021, 8, e2101019.	5.6	64
34	Facile solution growth of vertically aligned ZnO nanorods sensitized with aqueous CdS and CdSe quantum dots for photovoltaic applications. Nanoscale Research Letters, 2011, 6, 340.	3.1	61
35	Synthesis of In2O3â€"In2S3 coreâ€"shell nanorods with inverted type-I structure for photocatalytic H2 generation. Physical Chemistry Chemical Physics, 2013, 15, 12688.	1.3	61
36	Preparation, Conversion, and Comparison of the Photocatalytic and Electrochemical Properties of ZnS(en)0.5, ZnS, and ZnO. Crystal Growth and Design, 2007, 7, 280-285.	1.4	56

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37	Synthesis of Homogeneously Alloyed Cu_{2âˆ’<i>x</i>}(S_{<i>y</i>}Se_{1âˆ’<i>y</i>}) Nanowire Bundles with Tunable Compositions and Bandgaps. Advanced Functional Materials, 2010, 20, 4190-4195.	7.8	55
38	Multifunctional MoSe2@rGO coating on the cathode versus the separator as an efficient polysulfide barrier for high-performance lithium-sulfur battery. Applied Surface Science, 2020, 527, 146785.	3.1	49
39	Lithography inside Cu(OH)2 Nanorods:â€‰ A General Route to Controllable Synthesis of the Arrays of Copper Chalcogenide Nanotubes with Double Walls. Inorganic Chemistry, 2008, 47, 699-704.	1.9	48
40	Tunable p-Type Conductivity and Transport Properties of AlN Nanowires <i>via</i> Mg Doping. ACS Nano, 2011, 5, 3591-3598.	7.3	47
41	Phase Conversion from Hexagonal CuS_{<i>y</i>}Se_{1â€“<i>y</i>} to Cubic Cu_{2â€“<i>x</i>}S_{<i>y</i>}Se_{1â€“<i>y</i>}: Composition Variation, Morphology Evolution, Optical Tuning, and Solar Cell Applications. ACS Applied Materials & Interfaces, 2014, 6, 16352-16359.	4.0	46
42	Phase transformation and sulfur vacancy modulation of 2D layered tin sulfide nanoplates as highly durable anodes for pseudocapacitive lithium storage. Chemical Engineering Journal, 2020, 392, 123722.	6.6	46
43	Polyvinylpyrrolidone-Assisted Ultrasonic Synthesis of SnO Nanosheets and Their Use as Conformal Templates for Tin Dioxide Nanostructures. Langmuir, 2012, 28, 10597-10601.	1.6	41
44	A novel anion-exchange strategy for constructing high performance PbS quantum dot-sensitized solar cells. Nano Energy, 2016, 30, 559-569.	8.2	40
45	Arrays of ZnSe/MoSe₂ Nanotubes with Electronic Modulation as Efficient Electrocatalysts for Hydrogen Evolution Reaction. Advanced Materials Interfaces, 2017, 4, 1700948.	1.9	39
46	Metallic 1T-VS₂ nanosheets featuring V²⁺ self-doping and mesopores towards an efficient hydrogen evolution reaction. Inorganic Chemistry Frontiers, 2019, 6, 3510-3517.	3.0	39
47	Copper selenide (Cu₃Se₂ and Cu_{2âˆ’x}Se) thin films: electrochemical deposition and electrocatalytic application in quantum dot-sensitized solar cells. Dalton Transactions, 2018, 47, 16587-16595.	1.6	38
48	Fabrication of Architectures with Dual Hollow Structures: Arrays of Cu₂O Nanotubes Organized by Hollow Nanospheres. Crystal Growth and Design, 2009, 9, 4524-4528.	1.4	34
49	Water Evaporation Induced Conversion of CuSe Nanoflakes to Cu_{2âˆ’<i>x</i>}Se Hierarchical Columnar Superstructures for High-Performance Solar Cell Applications. Particle and Particle Systems Characterization, 2015, 32, 840-847.	1.2	34
50	Microwave-assisted synthesis of Cu2ZnSnS4 nanocrystals as a novel anode material for lithium ion battery. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	32
51	Mesoscale organization of Cu7S4 nanowires: Formation of novel sheath-like nanotube array. Chemical Physics Letters, 2007, 434, 256-259.	1.2	28
52	One-pot synthesis of graphene/In2S3 nanoparticle composites for stable rechargeable lithium ion battery. CrystEngComm, 2013, 15, 6578.	1.3	28
53	Oxygen-Doped VS₄ Microspheres with Abundant Sulfur Vacancies as a Superior Electrocatalyst for the Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2020, 8, 15055-15064.	3.2	25
54	Cu2ZnSnS4 and Cu2ZnSn(S1âˆ’xSex)4 nanocrystals: room-temperature synthesis and efficient photoelectrochemical water splitting. Journal of Materials Chemistry A, 2017, 5, 25230-25236.	5.2	24

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55	Electronics from solution-processed 2D semiconductors. Journal of Materials Chemistry C, 2019, 7, 12835-12861.	2.7	24
56	Synthesis of double-shelled copper chalcogenide hollow nanocages as efficient counter electrodes for quantum dot-sensitized solar cells. Materials Today Energy, 2017, 5, 331-337.	2.5	23
57	Vanadium-doping in interlayer-expanded MoS₂ nanosheets for the efficient electrocatalytic hydrogen evolution reaction. Inorganic Chemistry Frontiers, 2020, 7, 2497-2505.	3.0	23
58	Nanoscale engineering and Mo-doping of 2D ultrathin ReS₂ nanosheets for remarkable electrocatalytic hydrogen generation. Nanoscale, 2020, 12, 17045-17052.	2.8	22
59	Oxygen-incorporated and layer-by-layer stacked WS₂ nanosheets for broadband, self-driven and fast-response photodetection. Nanoscale, 2019, 11, 6810-6816.	2.8	21
60	Transformation of Two-Dimensional Iron Sulfide Nanosheets from FeS₂ to FeS as High-Rate Anodes for Pseudocapacitive Sodium Storage. ACS Applied Energy Materials, 2020, 3, 12672-12681.	2.5	20
61	Nearâ€Infrared Photoactive Semiconductor Quantum Dots for Solar Cells. Advanced Energy Materials, 2021, 11, 2101923.	10.2	20
62	A top-down synthesis of wurtzite Cu₂SnS₃ nanocrystals for efficient photoelectrochemical performance. Journal of Materials Chemistry A, 2018, 6, 8221-8226.	5.2	19
63	Controllable Synthesis of Bandgapâ€Tunable CuS_{<i>x</i>}Se_{1âˆ’<i>x</i>} Nanoplate Alloys. Chemistry - an Asian Journal, 2015, 10, 1490-1495.	1.7	18
64	Simple template fabrication of porous MnCo₂O₄hollow nanocages as high-performance cathode catalysts for rechargeable Li-O₂batteries. Nanotechnology, 2016, 27, 135703.	1.3	17
65	Interlayer-expanded and defect-rich metal dichalcogenide (MX₂) nanosheets for active and stable hydrogen evolution. Inorganic Chemistry Frontiers, 2018, 5, 3140-3147.	3.0	16
66	Facile synthesis of ZnO/PdSe2 core-shell heterojunction for efficient photodetector application. Chemical Engineering Journal, 2021, 413, 127484.	6.6	14
67	Fluorinated Euâ€Doped SnO₂ Nanostructures with Simultaneous Phase and Shape Control and Improved Photoluminescence. Particle and Particle Systems Characterization, 2013, 30, 332-337.	1.2	13
68	High performance nonvolatile memory devices based on Cu_{2âˆ’x}Se nanowires. Applied Physics Letters, 2013, 103, 193501.	1.5	13
69	Metastable marcasite NiSe₂ nanodendrites on carbon fiber clothes to suppress polysulfide shuttling for high-performance lithiumâ€“sulfur batteries. Nanoscale, 2021, 13, 16487-16498.	2.8	13
70	A top-down strategy to synthesize wurtzite Cu₂ZnSnS₄ nanocrystals by green chemistry. Chemical Communications, 2016, 52, 9821-9824.	2.2	12
71	Green and room-temperature synthesis of aqueous CuInS2 and Cu2SnS3 nanocrystals for efficient photoelectrochemical water splitting. Materials Today Energy, 2018, 10, 200-207.	2.5	12
72	Cu2SnS3 nanocrystals decorated rGO nanosheets towards efficient and stable hydrogen evolution reaction in both acid and alkaline solutions. Materials Today Energy, 2020, 17, 100435.	2.5	12

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73	Arrays of ZnO/CuInxGa1âˆ’xSe2 nanocables with tunable shell composition for efficient photovoltaics. Journal of Applied Physics, 2015, 117, .	1.1	11
74	Gallium doped <i>n</i>-type Zn_xCd_{1-x}S nanoribbons: Synthesis and photoconductivity properties. Journal of Applied Physics, 2014, 115, 063108.	1.1	8
75	n-Type KCu₃S₂microbelts: optical, electrical, and optoelectronic properties. RSC Advances, 2014, 4, 59221-59225.	1.7	6
76	Constructing CdS-Based Electron Transporting Layers With Efficient Electron Extraction for Perovskite Solar Cells. IEEE Journal of Photovoltaics, 2021, 11, 1014-1021.	1.5	6
77	Sub-picosecond passively mode-locked thulium-doped fiber laser by ReS₂ nanoparticles. Japanese Journal of Applied Physics, 2021, 60, 011001.	0.8	6
78	Construction of amorphous Fe0.95S1.05 nanorods with high electrocatalytic activity for enhanced hydrogen evolution reaction. Electrochimica Acta, 2022, 402, 139554.	2.6	6
79	Fabrication of highly ordered CuInSe2 films with hollow nanocones for anti-reflection. Applied Surface Science, 2011, 257, 10893-10897.	3.1	3
80	(SiC/AlN)₂ multilayer film as an effective protective coating for sintered NdFeB by magnetron sputtering. Materials Research Express, 2017, 4, 086407.	0.8	3
81	Commercial Upconversion Phosphors with High Light Harvesting: A Superior Candidate for Highâ€Performance Dyeâ€Sensitized Solar Cells. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900382.	0.8	3
82	Enhanced performance of all solid-state quantum dot-sensitized solar cells <i>via</i> synchronous deposition of PbS and CdS quantum dots. New Journal of Chemistry, 2020, 44, 505-512.	1.4	3
83	Sodium-ion nanomachining to shape microcrystals into nanostructures and tune their properties. RSC Advances, 2016, 6, 42223-42228.	1.7	1
84	Enhanced Sodium Storage Performance of Co₇Se₈ Enabled Through Inâ€…Situ Formation of a Nanoporous Architecture. ChemElectroChem, 2020, 7, 4361-4368.	1.7	1