Xiang-Heng Xiao

List of Publications by Year
in descending order

202	8,687	36203 51	54797 84
papers	citations	h-index	g-index

207	207	207	12993
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High Mobility MoS₂ Transistor with Low Schottky Barrier Contact by Using Atomic Thick hâ€BN as a Tunneling Layer. Advanced Materials, 2016, 28, 8302-8308.	11.1	398
2	Electron density modulation of NiCo2S4 nanowires by nitrogen incorporation for highly efficient hydrogen evolution catalysis. Nature Communications, 2018, 9, 1425.	5.8	356
3	Interface Engineering for Highâ€Performance Topâ€Gated MoS₂ Fieldâ€Effect Transistors. Advanced Materials, 2014, 26, 6255-6261.	11.1	272
4	Breaking the Currentâ€Retention Dilemma in Cationâ€Based Resistive Switching Devices Utilizing Graphene with Controlled Defects. Advanced Materials, 2018, 30, e1705193.	11.1	190
5	3D Flowerlike Î±-Fe₂O₃@TiO₂ Coreâ€“Shell Nanostructures: General Synthesis and Enhanced Photocatalytic Performance. ACS Sustainable Chemistry and Engineering, 2015, 3, 2975-2984.	3.2	184
6	Plasmon-driven reaction controlled by the number of graphene layers and localized surface plasmon distribution during optical excitation. Light: Science and Applications, 2015, 4, e342-e342.	7.7	178
7	Controllable Synthesis, Magnetic Properties, and Enhanced Photocatalytic Activity of Spindlelike Mesoporous Î±-Fe₂O₃/ZnO Coreâ€“Shell Heterostructures. ACS Applied Materials & Interfaces, 2012, 4, 3602-3609.	4.0	168
8	Hydrogen gas sensor based on metal oxide nanoparticles decorated graphene transistor. Nanoscale, 2015, 7, 10078-10084.	2.8	163
9	Significantly Enhanced Visible Light Photoelectrochemical Activity in TiO₂ Nanowire Arrays by Nitrogen Implantation. Nano Letters, 2015, 15, 4692-4698.	4.5	159
10	Volumeâ€Enhanced Raman Scattering Detection of Viruses. Small, 2019, 15, e1805516.	5.2	150
11	Active Electron Density Modulation of Co₃O₄â€Based Catalysts Enhances their Oxygen Evolution Performance. Angewandte Chemie - International Edition, 2020, 59, 6929-6935.	7.2	148
12	Confining Cation Injection to Enhance CBRAM Performance by Nanopore Graphene Layer. Small, 2017, 13, 1603948.	5.2	147
13	A one-pot route to the synthesis of alloyed Cu/Ag bimetallic nanoparticles with different mass ratios for catalytic reduction of 4-nitrophenol. Journal of Materials Chemistry A, 2015, 3, 3450-3455.	5.2	145
14	Rational Design of Sub-Parts per Million Specific Gas Sensors Array Based on Metal Nanoparticles Decorated Nanowire Enhancement-Mode Transistors. Nano Letters, 2013, 13, 3287-3292.	4.5	132
15	Large-Scale and Controlled Synthesis of Iron Oxide Magnetic Short Nanotubes: Shape Evolution, Growth Mechanism, and Magnetic Properties. Journal of Physical Chemistry C, 2010, 114, 16092-16103.	1.5	121
16	Ultrasensitive SERS performance in 3D â€œsunflower-likeâ€•nanoarrays decorated with Ag nanoparticles. Nanoscale, 2017, 9, 3114-3120.	2.8	118
17	Synthesis and Magnetic Properties of Maghemite (Î³-Fe2O3) Short-Nanotubes. Nanoscale Research Letters, 2010, 5, 1474-1479.	3.1	113
18	Fe-Doped BiOCl Nanosheets with Light-Switchable Oxygen Vacancies for Photocatalytic Nitrogen Fixation. ACS Applied Energy Materials, 2019, 2, 8394-8398.	2.5	109

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19	Fully Tensile Strained Pd₃Pb/Pd Tetragonal Nanosheets Enhance Oxygen Reduction Catalysis. Nano Letters, 2019, 19, 1336-1342.	4.5	109
20	Low-Cost, Disposable, Flexible and Highly Reproducible Screen Printed SERS Substrates for the Detection of Various Chemicals. Scientific Reports, 2015, 5, 10208.	1.6	106
21	Transparent, Highâ€Performance Thinâ€Film Transistors with an InGaZnO/Alignedâ€SnO₂â€Nanowire Composite and their Application in Photodetectors. Advanced Materials, 2014, 26, 7399-7404.	11.1	104
22	Floating Gate Memory-based Monolayer MoS₂Transistor with Metal Nanocrystals Embedded in the Gate Dielectrics. Small, 2015, 11, 208-213.	5.2	102
23	Beehive-Inspired Macroporous SERS Probe for Cancer Detection through Capturing and Analyzing Exosomes in Plasma. ACS Applied Materials & Interfaces, 2020, 12, 5136-5146.	4.0	102
24	Ultrasensitive SERS Substrate Integrated with Uniform Subnanometer Scale â€œHot Spotsâ€•Created by a Graphene Spacer for the Detection of Mercury Ions. Small, 2017, 13, 1603347.	5.2	101
25	Sizeâ€Dependent Nickelâ€Based Electrocatalysts for Selective CO₂ Reduction. Angewandte Chemie - International Edition, 2020, 59, 18572-18577.	7.2	100
26	Forceâ€Induced Turnâ€On Persistent Roomâ€Temperature Phosphorescence in Purely Organic Luminogen. Angewandte Chemie - International Edition, 2021, 60, 12335-12340.	7.2	98
27	Mechanism of the enhancement and quenching of ZnO photoluminescence by ZnO-Ag coupling. Europhysics Letters, 2011, 93, 57009.	0.7	96
28	Sub-ppb detection of acetone using Au-modified flower-like hierarchical ZnO structures. Sensors and Actuators B: Chemical, 2015, 219, 209-217.	4.0	95
29	Facile method to synthesize magnetic iron oxides/TiO2 hybrid nanoparticles and their photodegradation application of methylene blue. Nanoscale Research Letters, 2011, 6, 533.	3.1	90
30	Controlled synthesis of magnetic iron oxides@SnO2 quasi-hollow coreâ€“shell heterostructures: formation mechanism, and enhanced photocatalytic activity. Nanoscale, 2011, 3, 4676.	2.8	87
31	Ag-decorated ultra-thin porous single-crystalline ZnO nanosheets prepared by sunlight induced solvent reduction and their highly sensitive detection of ethanol. Sensors and Actuators B: Chemical, 2015, 209, 975-982.	4.0	87
32	Controllable Electrical Properties of Metal-Doped In₂O₃ Nanowires for High-Performance Enhancement-Mode Transistors. ACS Nano, 2013, 7, 804-810.	7.3	85
33	Rational Design of Amorphous Indium Zinc Oxide/Carbon Nanotube Hybrid Film for Unique Performance Transistors. Nano Letters, 2012, 12, 3596-3601.	4.5	83
34	Tube-Like Ternary Î±-Fe₂O₃@SnO₂@Cu₂O Sandwich Heterostructures: Synthesis and Enhanced Photocatalytic Properties. ACS Applied Materials & Interfaces, 2014, 6, 13088-13097.	4.0	81
35	The â€œMidas Touchâ€•Transformation of TiO₂ Nanowire Arrays during Visible Light Photoelectrochemical Performance by Carbon/Nitrogen Coimplantation. Advanced Energy Materials, 2018, 8, 1800165.	10.2	77
36	Rational Design of ZnO:H/ZnO Bilayer Structure for High-Performance Thin-Film Transistors. ACS Applied Materials & Interfaces, 2016, 8, 7862-7868.	4.0	76

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37	Near-Infrared Light-Triggered Porous AuPd Alloy Nanoparticles To Produce Mild Localized Heat To Accelerate Bone Regeneration. Journal of Physical Chemistry Letters, 2019, 10, 4185-4191.	2.1	76
38	Integration of Highâ€k Oxide on MoS₂ by Using Ozone Pretreatment for Highâ€Performance MoS₂ Topâ€Gated Transistor with Thicknessâ€Dependent Carrier Scattering Investigation. Small, 2015, 11, 5932-5938.	5.2	74
39	WSe2/GeSe heterojunction photodiode with giant gate tunability. Nano Energy, 2018, 49, 103-108.	8.2	73
40	A Review of Recent Applications of Ion Beam Techniques on Nanomaterial Surface Modification: Design of Nanostructures and Energy Harvesting. Small, 2019, 15, e1901820.	5.2	72
41	SiO2â€“Agâ€“SiO2â€“TiO2 multi-shell structures: plasmon enhanced photocatalysts with wide-spectral-response. Journal of Materials Chemistry A, 2013, 1, 13128.	5.2	71
42	Template and Silica Interlayer Tailorable Synthesis of Spindle-like Multilayer Î±-Fe₂O₃/Ag/SnO₂ Ternary Hybrid Architectures and Their Enhanced Photocatalytic Activity. ACS Applied Materials & Interfaces, 2014, 6, 1113-1124.	4.0	67
43	Preparation and characterization of spindle-like Fe3O4 mesoporous nanoparticles. Nanoscale Research Letters, 2011, 6, 89.	3.1	66
44	Wetting properties and SERS applications of ZnO/Ag nanowire arrays patterned by a screen printing method. Journal of Materials Chemistry C, 2016, 4, 6371-6379.	2.7	65
45	Exploring Bi₂Te₃ Nanoplates as Versatile Catalysts for Electrochemical Reduction of Small Molecules. Advanced Materials, 2020, 32, e1906477.	11.1	65
46	Scalable Integration of Indium Zinc Oxide/Photosensitiveâ€Nanowire Composite Thinâ€Film Transistors for Transparent Multicolor Photodetectors Array. Advanced Materials, 2014, 26, 2919-2924.	11.1	62
47	Shape-controlled iron oxide nanocrystals: synthesis, magnetic properties and energy conversion applications. CrystEngComm, 2016, 18, 6303-6326.	1.3	61
48	Surfaceâ€Regulated Rhodiumâ€“Antimony Nanorods for Nitrogen Fixation. Angewandte Chemie - International Edition, 2020, 59, 8066-8071.	7.2	58
49	Controlled Synthesis of Monodisperse Subâ€100â€…nm Hollow SnO₂ Nanospheres: A Templateâ€• and Surfactantâ€Free Solutionâ€Phase Route, the Growth Mechanism, Optical Properties, and Application as a Photocatalyst. Chemistry - A European Journal, 2011, 17, 9708-9719.	1.7	57
50	Controllable synthesis of recyclable coreâ€“shell Î³-Fe2O3@SnO2 hollow nanoparticles with enhanced photocatalytic and gas sensing properties. Physical Chemistry Chemical Physics, 2013, 15, 8228.	1.3	57
51	Optimizing Hydrogen Adsorption by dâ€“d Orbital Modulation for Efficient Hydrogen Evolution Catalysis. Advanced Energy Materials, 2022, 12, .	10.2	57
52	Greatly reduced leakage current in BiFeO3thin film by oxygen ion implantation. Journal Physics D: Applied Physics, 2007, 40, 5775-5777.	1.3	51
53	Non-centrosymmetric Auâ€“SnO2 hybrid nanostructures with strong localization of plasmonic for enhanced photocatalysis application. Nanoscale, 2013, 5, 5628.	2.8	51
54	Preparation of M@BiFeO₃ Nanocomposites (MÂ=ÂAg, Au) Bowl Arrays with Enhanced Visible Light Photocatalytic Activity. Journal of the American Ceramic Society, 2015, 98, 2255-2263.	1.9	50

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55	Oxygen vacancies enable the visible light photoactivity of chromium-implanted TiO2 nanowires. Journal of Energy Chemistry, 2021, 55, 154-161.	7.1	50
56	Significant Radiation Tolerance and Moderate Reduction in Thermal Transport of a Tungsten Nanofilm by Inserting Monolayer Graphene. Advanced Materials, 2017, 29, 1604623.	11.1	49
57	In situ Oxidation and Self-Assembly Synthesis of Dumbbell-like Î±-Fe₂O₃/Ag/AgX (X = Cl, Br, I) Heterostructures with Enhanced Photocatalytic Properties. ACS Sustainable Chemistry and Engineering, 2016, 4, 1521-1530.	3.2	48
58	Size effects of Ag nanoparticles on plasmon-induced enhancement of photocatalysis of Ag-Î±-Fe2O3 nanocomposites. Journal of Colloid and Interface Science, 2014, 427, 29-34.	5.0	46
59	Oxygen Vacancyâ€induced Electron Density Tuning of Fe₃O₄ for Enhanced Oxygen Evolution Catalysis. Energy and Environmental Materials, 2021, 4, 392-398.	7.3	45
60	In situRaman scattering study on a controllable plasmon-driven surface catalysis reaction on Ag nanoparticle arrays. Nanotechnology, 2012, 23, 335701.	1.3	44
61	One-Pot Reaction and Subsequent Annealing to Synthesis Hollow Spherical Magnetite and Maghemite Nanocages. Nanoscale Research Letters, 2009, 4, 926-931.	3.1	43
62	Enhanced photocatalysis by coupling of anatase TiO2 film to triangular Ag nanoparticle island. Nanoscale Research Letters, 2012, 7, 239.	3.1	43
63	Improved Thermal Stability of Graphene-Veiled Noble Metal Nanoarrays as Recyclable SERS Substrates. ACS Applied Materials & Interfaces, 2017, 9, 40726-40733.	4.0	43
64	Recent progress in perovskite-based photodetectors: the design of materials and structures. Advances in Physics: X, 2019, 4, 1592709.	1.5	42
65	Anisotropic Lowâ€Dimensional Materials for Polarizationâ€Sensitive Photodetectors: From Materials to Devices. Advanced Optical Materials, 2022, 10, .	3.6	42
66	Sideâ€Gated In₂O₃ Nanowire Ferroelectric FETs for Highâ€Performance Nonvolatile Memory Applications. Advanced Science, 2016, 3, 1600078.	5.6	41
67	Springtailâ€Inspired Superamphiphobic Ordered Nanohoodoo Arrays with Quasiâ€Doubly Reentrant Structures. Small, 2020, 16, e2000779.	5.2	41
68	Large-area, well-ordered, uniform-sized bowtie nanoantenna arrays for surface enhanced Raman scattering substrate with ultra-sensitive detection. Applied Physics Letters, 2013, 103, .	1.5	39
69	Efficient enhancement of hydrogen production by Ag/Cu2O/ZnO tandem triple-junction photoelectrochemical cell. Applied Physics Letters, 2015, 106, .	1.5	39
70	Efficiency enhancements in Ag nanoparticles-SiO2-TiO2 sandwiched structure via plasmonic effect-enhanced light capturing. Nanoscale Research Letters, 2013, 8, 73.	3.1	38
71	Anchoring of Ag₆Si₂O₇ nanoparticles on Î±-Fe₂O₃ short nanotubes as a Z-scheme photocatalyst for improving their photocatalytic performances. Dalton Transactions, 2016, 45, 12745-12755.	1.6	38
72	Advanced Catalysts Derived from Compositionâ€Segregated Platinumâ€“Nickel Nanostructures: New Opportunities and Challenges. Advanced Functional Materials, 2019, 29, 1808161.	7.8	38

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73	Performance Limits of the Selfâ€Aligned Nanowire Topâ€Gated MoS₂ Transistors. Advanced Functional Materials, 2017, 27, 1602250.	7.8	37
74	Engineering embedded metal nanoparticles with ion beam technology. Applied Physics A: Materials Science and Processing, 2009, 96, 317-325.	1.1	36
75	Active Electron Density Modulation of Co₃O₄â€Based Catalysts Enhances their Oxygen Evolution Performance. Angewandte Chemie, 2020, 132, 6996-7002.	1.6	34
76	Enhanced radiation tolerance in nitride multilayered nanofilms with small period-thicknesses. Applied Physics Letters, 2012, 101, .	1.5	32
77	Ag Nanoparticles Located on Three-Dimensional Pine Tree-Like Hierarchical TiO2 Nanotube Array Films as High-Efficiency Plasmonic Photocatalysts. Nanoscale Research Letters, 2017, 12, 54.	3.1	32
78	Precise Modulation of Gold Nanorods for Protecting against Malignant Ventricular Arrhythmias via Nearâ€Infrared Neuromodulation. Advanced Functional Materials, 2019, 29, 1902128.	7.8	31
79	Obviously Angular, Cuboid-Shaped TiO2 Nanowire Arrays Decorated with Ag Nanoparticle as Ultrasensitive 3D Surface-Enhanced Raman Scattering Substrates. Journal of Physical Chemistry C, 2014, 118, 22711-22718.	1.5	30
80	Metal ion-mediated synthesis and shape-dependent magnetic properties of single-crystalline Î±-Fe₂O₃ nanoparticles. CrystEngComm, 2014, 16, 5566-5572.	1.3	30
81	Sizeâ€Dependent Nickelâ€Based Electrocatalysts for Selective CO₂ Reduction. Angewandte Chemie, 2020, 132, 18731-18736.	1.6	30
82	Third-order nonlinearity in Ag-nanoparticles embedded 56GeS2â€“24Ga2S3â€“20KBr chalcohalide glasses. Journal of Non-Crystalline Solids, 2011, 357, 2320-2323.	1.5	28
83	Polymerâ€Supported Bimetallic Ag@AgAu Nanocomposites: Synthesis and Catalytic Properties. Chemistry - an Asian Journal, 2012, 7, 1781-1788.	1.7	28
84	Characterization of DC reactive magnetron sputtered NiO films using spectroscopic ellipsometry. Applied Surface Science, 2011, 257, 5908-5912.	3.1	27
85	Design of wafer-scale uniform Au nanotip array by ion irradiation for enhanced single conductive filament resistive switching. Nano Energy, 2020, 67, 104213.	8.2	26
86	Manipulating Coordination Structures of Mixed-Valence Copper Single Atoms on 1T-MoS₂ for Efficient Hydrogen Evolution. ACS Catalysis, 2022, 12, 7687-7695.	5.5	26
87	Carbon and silica interlayer influence for the photocatalytic performances of spindle-like Î±-Fe 2 O 3 /Bi 2 O 3 p â€“ n heterostructures. Materials Science in Semiconductor Processing, 2016, 41, 411-419.	1.9	25
88	Forceâ€Induced Turnâ€On Persistent Roomâ€Temperature Phosphorescence in Purely Organic Luminogen. Angewandte Chemie, 2021, 133, 12443-12448.	1.6	24
89	Enhancement of third-order nonlinearity in Ag-nanoparticles-contained chalcohalide glasses. Journal of Nanoparticle Research, 2011, 13, 3693-3697.	0.8	23
90	Anion-mediated synthesis of monodisperse silver nanoparticles useful for screen printing of high-conductivity patterns on flexible substrates for printed electronics. RSC Advances, 2015, 5, 9783-9791.	1.7	23

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91	Monolayer graphene on nanostructured Ag for enhancement of surface-enhanced Raman scattering stable platform. Nanotechnology, 2015, 26, 125603.	1.3	23
92	Design of Enhanced Catalysts by Coupling of Noble Metals (Au,Ag) with Semiconductor SnO₂ for Catalytic Reduction of 4â€Nitrophenol. Particle and Particle Systems Characterization, 2016, 33, 212-220.	1.2	23
93	Catalytic Application and Mechanism Studies of Argentic Chloride Coupled Ag/Au Hollow Heterostructures: Considering the Interface Between Ag/Au Bimetals. Nanoscale Research Letters, 2019, 14, 35.	3.1	23
94	Flammable gases produced by TiO2 nanoparticles under magnetic stirring in water. Friction, 2022, 10, 1127-1133.	3.4	23
95	Strong Penetrationâ€Induced Effective Photothermal Therapy by Exosomeâ€Mediated Black Phosphorus Quantum Dots. Small, 2021, 17, e2104585.	5.2	23
96	High-Mobility Solution-Processed Amorphous Indium Zinc $hbox{Oxide/In}_{2}hbox{O}_{3}$ Nanocrystal Hybrid Thin-Film Transistor. IEEE Electron Device Letters, 2013, 34, 72-74.	2.2	22
97	Microâ€“Nanosized Nontraditional Evaporated Structures Based on Closely Packed Monolayer Binary Colloidal Crystals and Their Fine Structure Enhanced Properties. Journal of Physical Chemistry C, 2014, 118, 20521-20528.	1.5	22
98	Tube-like Î±-Fe₂O₃@Ag/AgCl heterostructure: controllable synthesis and enhanced plasmonic photocatalytic activity. RSC Advances, 2015, 5, 61239-61248.	1.7	22
99	Synthesis and optical properties of gold nanorods with controllable morphology. Journal of Physics Condensed Matter, 2016, 28, 434002.	0.7	22
100	Ion implantation inducing nanovoids characterized by TEM and STEM. Solid State Communications, 2006, 137, 362-365.	0.9	21
101	A Comparative Study of the Magnetic Behavior of Single and Tubular Clustered Magnetite Nanoparticles. Journal of Low Temperature Physics, 2012, 168, 306-313.	0.6	21
102	â€œRings of saturn-likeâ€•nanoarrays with high number density of hot spots for surface-enhanced Raman scattering. Applied Physics Letters, 2014, 105, 033515.	1.5	21
103	Competitive Reaction Pathway for Siteâ€Selective Conjugation of Raman Dyes to Hotspots on Gold Nanorods for Greatly Enhanced SERS Performance. Small, 2014, 10, 4012-4019.	5.2	21
104	The different roles of contact materials between oxidation interlayer and doping effect for high performance ZnO thin film transistors. Applied Physics Letters, 2015, 106, 051607.	1.5	21
105	Irradiation-induced TiO2 nanorods for photoelectrochemical hydrogen production. International Journal of Hydrogen Energy, 2015, 40, 5034-5041.	3.8	21
106	Design of high-performance memristor cell using W-implanted SiO2 films. Applied Physics Letters, 2016, 108, .	1.5	21
107	The Study for Solution-Processed Alkali Metal-Doped Indiumâ€“Zinc Oxide Thin-Film Transistors. IEEE Electron Device Letters, 2016, 37, 50-52.	2.2	21
108	Ultrasensitive Au Nanooctahedron Micropinball Sensor for Mercury Ions. ACS Applied Materials & Interfaces, 2018, 10, 25737-25743.	4.0	21

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109	Enhanced and polarization dependence of surface-enhanced Raman scattering in silver nanoparticle array-nanowire systems. Applied Physics Letters, 2013, 102, 163108.	1.5	20
110	Modulating the threshold voltage of oxide nanowire field-effect transistors by a Ga+ ion beam. Nano Research, 2014, 7, 1691-1698.	5.8	20
111	Anionic Dopant Delocalization through pâ€Band Modulation to Endow Metal Oxides with Enhanced Visibleâ€Light Photoactivity. Angewandte Chemie - International Edition, 2019, 58, 16660-16667.	7.2	20
112	Rational design of ordered Pdâ€“Pb nanocubes as highly active, selective and durable catalysts for solvent-free benzyl alcohol oxidation. Nanoscale, 2019, 11, 5145-5150.	2.8	20
113	Uniform, Fast, and Reliable Li_xSiO_y-Based Resistive Switching Memory. IEEE Electron Device Letters, 2019, 40, 554-557.	2.2	20
114	Ultrastable Laurionite Spontaneously Encapsulates Reduced-dimensional Lead Halide Perovskites. Nano Letters, 2020, 20, 2316-2325.	4.5	20
115	Controllable synthesis and catalysis application of hierarchical PS/Au coreâ€“shell nanocomposites. Journal of Colloid and Interface Science, 2012, 387, 47-55.	5.0	19
116	In situ TEM observation of helium bubble evolution in V/Ag multilayer during annealing. Journal of Nuclear Materials, 2015, 467, 537-543.	1.3	19
117	Formation of aligned silver nanoparticles by ion implantation. Materials Letters, 2007, 61, 4435-4437.	1.3	18
118	Modified in situ and self-catalytic growth method for fabrication of Ag-coated nanocomposites with tailorable optical properties. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	18
119	Enhanced radiation tolerance of nanochannel V films through defects release. Nuclear Instruments & Methods in Physics Research B, 2014, 334, 1-7.	0.6	18
120	Solar-assisted co-electrolysis of glycerol and water for concurrent production of formic acid and hydrogen. Journal of Materials Chemistry A, 2021, 9, 19975-19983.	5.2	18
121	Growth of non-polar ZnO films on a-GaN/r-Al2O3 templates by radio-frequency magnetron sputtering. Journal of Alloys and Compounds, 2010, 489, 519-522.	2.8	17
122	High mobility amorphous InGaZnO thin film transistor with single wall carbon nanotubes enhanced-current path. Applied Physics Letters, 2013, 103, 223108.	1.5	17
123	Efficient enhancement of solar-water-splitting by modified â€œZ-schemeâ€•structural WO3-W-Si photoelectrodes. Applied Physics Letters, 2014, 105, 143902.	1.5	17
124	Formation of Carbonized Polystyrene Sphere/hemisphere Shell Arrays by Ion Beam Irradiation and Subsequent Annealing or Chloroform Treatment. Scientific Reports, 2015, 5, 17529.	1.6	17
125	Controlling Injection Barriers for Ambipolar 2D Semiconductors via Quasiâ€van der Waals Contacts. Advanced Science, 2019, 6, 1801841.	5.6	17
126	Parallel measurement of conductive and convective thermal transport of micro/nanowires based on Raman mapping. Applied Physics Letters, 2015, 106, .	1.5	16

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127	Recent progress in periodic patterning fabricated by self-assembly of colloidal spheres for optical applications. Science China Materials, 2020, 63, 1418-1437.	3.5	16
128	Electronic Coupling of Single Atom and FePS₃ Boosts Water Electrolysis. Energy and Environmental Materials, 2022, 5, 899-905.	7.3	16
129	Controllable Synthesis and Optical Properties of Connected Zinc Oxide Nanoparticles. Chemistry - an Asian Journal, 2010, 5, 315-321.	1.7	15
130	Helium release and amorphization resistance in ion irradiated nanochannel films. Europhysics Letters, 2014, 106, 12001.	0.7	15
131	Significantly enhanced visible light response in single TiO2 nanowire by nitrogen ion implantation. Nanotechnology, 2018, 29, 184005.	1.3	15
132	Construct Fe2+ species and Au particles for significantly enhanced photoelectrochemical performance of Î±-Fe2O3 by ion implantation. Science China Materials, 2018, 61, 878-886.	3.5	15
133	Recent progress of radiation response in nanostructured tungsten for nuclear application. Tungsten, 2021, 3, 20-37.	2.0	15
134	Facile Fabrication of Ultrafine Hollow Silica and Magnetic Hollow Silica Nanoparticles by a Dual-Templating Approach. Nanoscale Research Letters, 2010, 5, 116-123.	3.1	14
135	Side-to-side alignment of gold nanorods with polarization-free characteristic for highly reproducible surface enhanced Raman scattering. Applied Physics Letters, 2014, 105, 211902.	1.5	14
136	Low Interface Trap Densities and Enhanced Performance of AlGaN/GaN MOS High- Electron Mobility Transistors Using Thermal Oxidized Y₂O₃ Interlayer. IEEE Electron Device Letters, 2015, 36, 1284-1286.	2.2	14
137	Synthesis and photocatalytic application of trinary structural g-C3N4/Ag/Ag3PO4 composite nanomaterials. Journal of Environmental Chemical Engineering, 2017, 5, 5777-5785.	3.3	14
138	Flexible cation-based threshold selector for resistive switching memory integration. Science China Information Sciences, 2018, 61, 1.	2.7	14
139	Recent progress about 2D metal dichalcogenides: Synthesis and application in photodetectors. Nano Research, 2021, 14, 1819-1839.	5.8	14
140	Fabrication of single-crystal ZnO film by Zn ion implantation and subsequent annealing. Nanotechnology, 2007, 18, 285609.	1.3	13
141	Fabrication and properties of TiO₂nanofilms on different substrates by a novel and universal method of Ti-ion implantation and subsequent annealing. Nanotechnology, 2013, 24, 255603.	1.3	13
142	Size-dependent radiation tolerance and corrosion resistance in ion irradiated CrN/AlTiN nanofilms. Nuclear Instruments & Methods in Physics Research B, 2015, 342, 137-143.	0.6	13
143	Design of high performance MoS ₂ -based non-volatile memory via ion beam defect engineering. 2D Materials, 2019, 6, 034002.	2.0	12
144	In-situ structural evolution of Bi₂O₃ nanoparticle catalysts for CO₂ electroreduction. International Journal of Extreme Manufacturing, 2022, 4, 035002.	6.3	12

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145	Formation of TiO2nanorods by ion irradiation. Journal of Applied Physics, 2014, 115, 184306.	1.1	11
146	Controlled preparation of hollow SnO2@M (M = Au, Ag) heterostructures through template-assist method for enhanced photocatalysis. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 482, 276-282.	2.3	11
147	Recent progress in the fabrication of SERS substrates based on the arrays of polystyrene nanospheres. Science China: Physics, Mechanics and Astronomy, 2016, 59, 1.	2.0	11
148	Formation of nanoripples on ZnO flat substrates and nanorods by gas cluster ion bombardment. Beilstein Journal of Nanotechnology, 2020, 11, 383-390.	1.5	11
149	Enhanced mechanical property and radiation resistance of reduced graphene oxide/tungsten composite with nacre-like architecture. Composite Structures, 2020, 245, 112361.	3.1	11
150	High performance amorphous ZnMgO/carbon nanotube composite thin-film transistors with a tunable threshold voltage. Nanoscale, 2013, 5, 2830.	2.8	10
151	Structure and Growth Mechanism of V/Ag Multilayers with Different Periodic Thickness Fabricated by Magnetron Sputtering Deposition. Journal of Materials Science and Technology, 2014, 30, 1012-1019.	5.6	10
152	Morphology effect of polythiophene catalysts on photo-degradation of methylene blue. RSC Advances, 2016, 6, 74968-74972.	1.7	10
153	Surfaceâ€Regulated Rhodiumâ€“Antimony Nanorods for Nitrogen Fixation. Angewandte Chemie, 2020, 132, 8143-8148.	1.6	10
154	Photo/Bioâ€Electrochemical Systems for Environmental Remediation and Energy Harvesting. ChemSusChem, 2020, 13, 3391-3403.	3.6	10
155	A Highâ€Speed Photodetector Fabricated with Tungstenâ€Doped MoS₂ by Ion Implantation. Advanced Electronic Materials, 2022, 8, .	2.6	10
156	Controlling the growth of ZnO quantum dots embedded in silica by Zn/F sequential ion implantation and subsequent annealing. Nanotechnology, 2008, 19, 155610.	1.3	9
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