

# Xiang-Heng Xiao

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

196  
papers

6,519  
citations

46  
h-index

73  
g-index

207  
ext. papers

7,570  
ext. citations

7.2  
avg. IF

5.84  
L-index

#	Paper	IF	Citations
196	Low surface accessible area NanoCoral TiO for the reduction of foreign body reaction during implantation.. <i>Advanced Healthcare Materials</i> , <b>2022</b> , e2200382	10.1	0
195	Strong Penetration-Induced Effective Photothermal Therapy by Exosome-Mediated Black Phosphorus Quantum Dots. <i>Small</i> , <b>2021</b> , 17, e2104585	11	3
194	High performance perovskite LEDs via SPR and enhanced hole injection by incorporated MoS2. <i>Journal Physics D: Applied Physics</i> , <b>2021</b> , 54, 214002	3	2
193	Recent progress of radiation response in nanostructured tungsten for nuclear application. <i>Tungsten</i> , <b>2021</b> , 3, 20-37	4.6	5
192	Rapid and sensitive detection of 4-ethylbenzaldehyde by a plasmonic nose. <i>Journal Physics D: Applied Physics</i> , <b>2021</b> , 54, 255306	3	1
191	Force-Induced Turn-On Persistent Room-Temperature Phosphorescence in Purely Organic Luminogen. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 12443-12448	3.6	3
190	Force-Induced Turn-On Persistent Room-Temperature Phosphorescence in Purely Organic Luminogen. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 12335-12340	16.4	20
189	Oxygen Vacancy-induced Electron Density Tuning of Fe3O4 for Enhanced Oxygen Evolution Catalysis. <i>Energy and Environmental Materials</i> , <b>2021</b> , 4, 392-398	13	17
188	Oxygen vacancies enable the visible light photoactivity of chromium-implanted TiO2 nanowires. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 55, 154-161	12	13
187	Recent progress about 2D metal dichalcogenides: Synthesis and application in photodetectors. <i>Nano Research</i> , <b>2021</b> , 14, 1819-1839	10	5
186	Solar-assisted co-electrolysis of glycerol and water for concurrent production of formic acid and hydrogen. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 19975-19983	13	4
185	Strong Penetration-Induced Effective Photothermal Therapy by Exosome-Mediated Black Phosphorus Quantum Dots (Small 49/2021). <i>Small</i> , <b>2021</b> , 17, 2170258	11	
184	Ultrastable Laurionite Spontaneously Encapsulates Reduced-dimensional Lead Halide Perovskites. <i>Nano Letters</i> , <b>2020</b> , 20, 2316-2325	11.5	13
183	Formation of nanoripples on ZnO flat substrates and nanorods by gas cluster ion bombardment. <i>Beilstein Journal of Nanotechnology</i> , <b>2020</b> , 11, 383-390	3	6
182	Enhancing resistance to radiation hardening and radiation thermal conductivity degradation by tungsten/graphene interface engineering. <i>Journal of Nuclear Materials</i> , <b>2020</b> , 539, 152348	3.3	3
181	Active Electron Density Modulation of Co O -Based Catalysts Enhances their Oxygen Evolution Performance. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 6929-6935	16.4	61
180	Active Electron Density Modulation of Co3O4-Based Catalysts Enhances their Oxygen Evolution Performance. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 6996-7002	3.6	20

179	Surface-Regulated Rhodium-Antimony Nanorods for Nitrogen Fixation. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 8066-8071	16.4	32
178	Surface-Regulated Rhodium-Antimony Nanorods for Nitrogen Fixation. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 8143-8148	3.6	7
177	Photo/Bio-Electrochemical Systems for Environmental Remediation and Energy Harvesting. <i>ChemSusChem</i> , <b>2020</b> , 13, 3391-3403	8.3	5
176	Exploring Bi Te Nanoplates as Versatile Catalysts for Electrochemical Reduction of Small Molecules. <i>Advanced Materials</i> , <b>2020</b> , 32, e1906477	24	37
175	Beehive-Inspired Macroporous SERS Probe for Cancer Detection through Capturing and Analyzing Exosomes in Plasma. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 5136-5146	9.5	54
174	Modulating the filament rupture degree of threshold switching device for self-selective and low-current nonvolatile memory application. <i>Nanotechnology</i> , <b>2020</b> , 31, 144002	3.4	2
173	Size-Dependent Nickel-Based Electrocatalysts for Selective CO Reduction. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 18572-18577	16.4	37
172	Size-Dependent Nickel-Based Electrocatalysts for Selective CO <sub>2</sub> Reduction. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 18731-18736	3.6	13
171	Design of wafer-scale uniform Au nanotip array by ion irradiation for enhanced single conductive filament resistive switching. <i>Nano Energy</i> , <b>2020</b> , 67, 104213	17.1	16
170	Innenfunktionalbild: Active Electron Density Modulation of Co <sub>3</sub> O <sub>4</sub> -Based Catalysts Enhances their Oxygen Evolution Performance (Angew. Chem. 17/2020). <i>Angewandte Chemie</i> , <b>2020</b> , 132, 7003-7003	3.6	
169	Recent progress in periodic patterning fabricated by self-assembly of colloidal spheres for optical applications. <i>Science China Materials</i> , <b>2020</b> , 63, 1418-1437	7.1	7
168	Springtail-Inspired Superamphiphobic Ordered Nanohoodoo Arrays with Quasi-Doubly Reentrant Structures. <i>Small</i> , <b>2020</b> , 16, e2000779	11	18
167	Enhanced mechanical property and radiation resistance of reduced graphene oxide/tungsten composite with nacre-like architecture. <i>Composite Structures</i> , <b>2020</b> , 245, 112361	5.3	6
166	Anionic Dopant Delocalization through p-Band Modulation to Endow Metal Oxides with Enhanced Visible-Light Photoactivity. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 16660-16667	16.4	13
165	Rational design of ordered Pd-Pb nanocubes as highly active, selective and durable catalysts for solvent-free benzyl alcohol oxidation. <i>Nanoscale</i> , <b>2019</b> , 11, 5145-5150	7.7	12
164	Volume-Enhanced Raman Scattering Detection of Viruses. <i>Small</i> , <b>2019</b> , 15, e1805516	11	104
163	Sputtering of silicon nanopowders by an argon cluster ion beam. <i>Beilstein Journal of Nanotechnology</i> , <b>2019</b> , 10, 135-143	3	7
162	Precise Modulation of Gold Nanorods for Protecting against Malignant Ventricular Arrhythmias via Near-Infrared Neuromodulation. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1902128	15.6	17

161	Small Al cluster ion implantation into Si and 4H-SiC. <i>Rapid Communications in Mass Spectrometry</i> , <b>2019</b> , 33, 1449-1454	2.2	4
160	A Review of Recent Applications of Ion Beam Techniques on Nanomaterial Surface Modification: Design of Nanostructures and Energy Harvesting. <i>Small</i> , <b>2019</b> , 15, e1901820	11	38
159	Controlling Injection Barriers for Ambipolar 2D Semiconductors via Quasi-van der Waals Contacts. <i>Advanced Science</i> , <b>2019</b> , 6, 1801841	13.6	7
158	Exploring and suppressing the kink effect of black phosphorus field-effect transistors operating in the saturation regime. <i>Nanoscale</i> , <b>2019</b> , 11, 10420-10428	7.7	4
157	Regulation of Two-Dimensional Lattice Deformation Recovery. <i>IScience</i> , <b>2019</b> , 13, 277-283	6.1	5
156	Recent progress in perovskite-based photodetectors: the design of materials and structures. <i>Advances in Physics: X</i> , <b>2019</b> , 4, 1592709	5.1	22
155	Design of high performance MoS <sub>2</sub> -based non-volatile memory via ion beam defect engineering. <i>2D Materials</i> , <b>2019</b> , 6, 034002	5.9	8
154	Advanced Catalysts Derived from Composition-Segregated Platinum/Nickel Nanostructures: New Opportunities and Challenges. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1808161	15.6	30
153	Near-Infrared Light-Triggered Porous AuPd Alloy Nanoparticles To Produce Mild Localized Heat To Accelerate Bone Regeneration. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 4185-4191	6.4	36
152	Near Infrared Neuromodulation: Precise Modulation of Gold Nanorods for Protecting against Malignant Ventricular Arrhythmias via Near-Infrared Neuromodulation (Adv. Funct. Mater. 36/2019). <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1970251	15.6	
151	Catalytic Application and Mechanism Studies of Argentite Chloride Coupled Ag/Au Hollow Heterostructures: Considering the Interface Between Ag/Au Bimetals. <i>Nanoscale Research Letters</i> , <b>2019</b> , 14, 35	5	18
150	Anionic Dopant Delocalization through p-Band Modulation to Endow Metal Oxides with Enhanced Visible-Light Photoactivity. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 16813-16820	3.6	2
149	. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 554-557	4.4	15
148	Fe-Doped BiOCl Nanosheets with Light-Switchable Oxygen Vacancies for Photocatalytic Nitrogen Fixation. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 8394-8398	6.1	45
147	Fully Tensile Strained PdPb/Pd Tetragonal Nanosheets Enhance Oxygen Reduction Catalysis. <i>Nano Letters</i> , <b>2019</b> , 19, 1336-1342	11.5	74
146	The Midas Touch Transformation of TiO <sub>2</sub> Nanowire Arrays during Visible Light Photoelectrochemical Performance by Carbon/Nitrogen Coimplantation. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1800165	21.8	60
145	WSe <sub>2</sub> /GeSe heterojunction photodiode with giant gate tunability. <i>Nano Energy</i> , <b>2018</b> , 49, 103-108	17.1	49
144	Significantly enhanced visible light response in single TiO nanowire by nitrogen ion implantation. <i>Nanotechnology</i> , <b>2018</b> , 29, 184005	3.4	12

143	Breaking the Current-Retention Dilemma in Cation-Based Resistive Switching Devices Utilizing Graphene with Controlled Defects. <i>Advanced Materials</i> , <b>2018</b> , 30, e1705193	24	157
142	Construct Fe <sup>2+</sup> species and Au particles for significantly enhanced photoelectrochemical performance of Fe <sub>2</sub> O <sub>3</sub> by ion implantation. <i>Science China Materials</i> , <b>2018</b> , 61, 878-886	7.1	12
141	Ultrasensitive Au Nanooctahedron Micropinball Sensor for Mercury Ions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 25737-25743	9.5	15
140	Electron density modulation of NiCoS nanowires by nitrogen incorporation for highly efficient hydrogen evolution catalysis. <i>Nature Communications</i> , <b>2018</b> , 9, 1425	17.4	266
139	Flexible cation-based threshold selector for resistive switching memory integration. <i>Science China Information Sciences</i> , <b>2018</b> , 61, 1	3.4	9
138	Resistive Switching: Breaking the Current-Retention Dilemma in Cation-Based Resistive Switching Devices Utilizing Graphene with Controlled Defects (Adv. Mater. 14/2018). <i>Advanced Materials</i> , <b>2018</b> , 30, 1870100	24	4
137	CoP Nanoparticles Wrapped in Amorphous Porous Carbon as an Efficient and Stable Catalyst for Water Oxidation. <i>Frontiers in Chemistry</i> , <b>2018</b> , 6, 580	5	6
136	Ultrasensitive SERS performance in 3D "sunflower-like" nanoarrays decorated with Ag nanoparticles. <i>Nanoscale</i> , <b>2017</b> , 9, 3114-3120	7.7	100
135	Confining Cation Injection to Enhance CBRAM Performance by Nanopore Graphene Layer. <i>Small</i> , <b>2017</b> , 13, 1603948	11	113
134	Ag Nanoparticles Located on Three-Dimensional Pine Tree-Like Hierarchical TiO Nanotube Array Films as High-Efficiency Plasmonic Photocatalysts. <i>Nanoscale Research Letters</i> , <b>2017</b> , 12, 54	5	29
133	Controllable synthesis of Au@SnO <sub>2</sub> core-shell nanohybrids with enhanced photocatalytic activities. <i>Materials Research Express</i> , <b>2017</b> , 4, 055502	1.7	3
132	Ultrasensitive SERS Substrate Integrated with Uniform Subnanometer Scale Hot Spots Created by a Graphene Spacer for the Detection of Mercury Ions. <i>Small</i> , <b>2017</b> , 13, 1603347	11	79
131	Broadband light generation from Au/Al <sub>2</sub> O <sub>3</sub> /Al sub-10 nm plasmonic gap structures. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 6771-6776	7.1	4
130	Improved Thermal Stability of Graphene-Veiled Noble Metal Nanoarrays as Recyclable SERS Substrates. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 40726-40733	9.5	28
129	Interface Energy Coupling between Tungsten Nanofilm and Few-layered Graphene. <i>Scientific Reports</i> , <b>2017</b> , 7, 12213	4.9	5
128	Graphene: Confining Cation Injection to Enhance CBRAM Performance by Nanopore Graphene Layer (Small 35/2017). <i>Small</i> , <b>2017</b> , 13,	11	1
127	Synthesis and photocatalytic application of ternary structural g-C <sub>3</sub> N <sub>4</sub> /Ag/Ag <sub>3</sub> PO <sub>4</sub> composite nanomaterials. <i>Journal of Environmental Chemical Engineering</i> , <b>2017</b> , 5, 5777-5785	6.8	6
126	Significant Radiation Tolerance and Moderate Reduction in Thermal Transport of a Tungsten Nanofilm by Inserting Monolayer Graphene. <i>Advanced Materials</i> , <b>2017</b> , 29, 1604623	24	36

125	Performance Limits of the Self-Aligned Nanowire Top-Gated MoS <sub>2</sub> Transistors. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1602250	15.6	31
124	Recent progress in the fabrication of SERS substrates based on the arrays of polystyrene nanospheres. <i>Science China: Physics, Mechanics and Astronomy</i> , <b>2016</b> , 59, 1	3.6	9
123	High Mobility MoS Transistor with Low Schottky Barrier Contact by Using Atomic Thick h-BN as a Tunneling Layer. <i>Advanced Materials</i> , <b>2016</b> , 28, 8302-8308	24	282
122	Anchoring of Ag <sub>6</sub> Si <sub>2</sub> O <sub>7</sub> nanoparticles on Fe <sub>2</sub> O <sub>3</sub> short nanotubes as a Z-scheme photocatalyst for improving their photocatalytic performances. <i>Dalton Transactions</i> , <b>2016</b> , 45, 12745-55	4.3	31
121	Side-Gated InO Nanowire Ferroelectric FETs for High-Performance Nonvolatile Memory Applications. <i>Advanced Science</i> , <b>2016</b> , 3, 1600078	13.6	34
120	Wetting properties and SERS applications of ZnO/Ag nanowire arrays patterned by a screen printing method. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 6371-6379	7.1	48
119	The Study for Solution-Processed Alkali Metal-Doped Indium-Zinc Oxide Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 37, 50-52	4.4	19
118	Rational Design of ZnO:H/ZnO Bilayer Structure for High-Performance Thin-Film Transistors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 7862-8	9.5	61
117	Transparent megahertz circuits from solution-processed composite thin films. <i>Nanoscale</i> , <b>2016</b> , 8, 7978-837	8.3	2
116	In situ Oxidation and Self-Assembly Synthesis of Dumbbell-like Fe <sub>2</sub> O <sub>3</sub> /Ag/AgX (X = Cl, Br, I) Heterostructures with Enhanced Photocatalytic Properties. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 1521-1530	8.3	41
115	Carbon and silica interlayer influence for the photocatalytic performances of spindle-like Fe <sub>2</sub> O <sub>3</sub> /Bi <sub>2</sub> O <sub>3</sub> p-n heterostructures. <i>Materials Science in Semiconductor Processing</i> , <b>2016</b> , 41, 411-419	4.3	18
114	Design of Enhanced Catalysts by Coupling of Noble Metals (Au,Ag) with Semiconductor SnO <sub>2</sub> for Catalytic Reduction of 4-Nitrophenol. <i>Particle and Particle Systems Characterization</i> , <b>2016</b> , 33, 212-220	3.1	18
113	Design of high-performance memristor cell using W-implanted SiO <sub>2</sub> films. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 153501	3.4	19
112	Gate dielectric ion implantation to modulate the threshold voltage of In <sub>2</sub> O <sub>3</sub> nanowire field effect transistors. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 193505	3.4	7
111	Fabrication of highly homogeneous surface-enhanced Raman scattering substrates using Ag ion implantation. <i>Journal of Physics Condensed Matter</i> , <b>2016</b> , 28, 254003	1.8	4
110	Synthesis and optical properties of gold nanorods with controllable morphology. <i>Journal of Physics Condensed Matter</i> , <b>2016</b> , 28, 434002	1.8	18
109	Morphology effect of polythiophene catalysts on photo-degradation of methylene blue. <i>RSC Advances</i> , <b>2016</b> , 6, 74968-74972	3.7	10
108	Shape-controlled iron oxide nanocrystals: synthesis, magnetic properties and energy conversion applications. <i>CrystEngComm</i> , <b>2016</b> , 18, 6303-6326	3.3	47



107	A one-pot route to the synthesis of alloyed Cu/Ag bimetallic nanoparticles with different mass ratios for catalytic reduction of 4-nitrophenol. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 3450-3455	13	128
106	Low-Cost, Disposable, Flexible and Highly Reproducible Screen Printed SERS Substrates for the Detection of Various Chemicals. <i>Scientific Reports</i> , <b>2015</b> , 5, 10208	4.9	89
105	Tube-like Fe <sub>2</sub> O <sub>3</sub> @Ag/AgCl heterostructure: controllable synthesis and enhanced plasmonic photocatalytic activity. <i>RSC Advances</i> , <b>2015</b> , 5, 61239-61248	3.7	17
104	Controlled preparation of hollow SnO <sub>2</sub> @M (M = Au, Ag) heterostructures through template-assist method for enhanced photocatalysis. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2015</b> , 482, 276-282	5.1	8
103	Irradiation-induced TiO <sub>2</sub> nanorods for photoelectrochemical hydrogen production. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 5034-5041	6.7	18
102	Monolayer graphene on nanostructured Ag for enhancement of surface-enhanced Raman scattering stable platform. <i>Nanotechnology</i> , <b>2015</b> , 26, 125603	3.4	21
101	Hydrogen gas sensor based on metal oxide nanoparticles decorated graphene transistor. <i>Nanoscale</i> , <b>2015</b> , 7, 10078-84	7.7	135
100	Efficient enhancement of hydrogen production by Ag/Cu <sub>2</sub> O/ZnO tandem triple-junction photoelectrochemical cell. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 123901	3.4	33
99	3D Flowerlike Fe <sub>2</sub> O <sub>3</sub> @TiO <sub>2</sub> Core-Shell Nanostructures: General Synthesis and Enhanced Photocatalytic Performance. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2015</b> , 3, 2975-2984	8.3	154
98	In situ TEM observation of helium bubble evolution in V/Ag multilayer during annealing. <i>Journal of Nuclear Materials</i> , <b>2015</b> , 467, 537-543	3.3	19
97	Floating gate memory-based monolayer MoS <sub>2</sub> transistor with metal nanocrystals embedded in the gate dielectrics. <i>Small</i> , <b>2015</b> , 11, 208-13	11	85
96	Size-dependent radiation tolerance and corrosion resistance in ion irradiated CrN/AlTiN nanofilms. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2015</b> , 342, 137-143	1.2	10
95	Formation of Carbonized Polystyrene Sphere/hemisphere Shell Arrays by Ion Beam Irradiation and Subsequent Annealing or Chloroform Treatment. <i>Scientific Reports</i> , <b>2015</b> , 5, 17529	4.9	14
94	Parallel measurement of conductive and convective thermal transport of micro/nanowires based on Raman mapping. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 253108	3.4	12
93	Preparation of M@BiFeO <sub>3</sub> Nanocomposites (M = Ag, Au) Bowl Arrays with Enhanced Visible Light Photocatalytic Activity. <i>Journal of the American Ceramic Society</i> , <b>2015</b> , 98, 2255-2263	3.8	46
92	Integration of High-k Oxide on MoS <sub>2</sub> by Using Ozone Pretreatment for High-Performance MoS <sub>2</sub> Top-Gated Transistor with Thickness-Dependent Carrier Scattering Investigation. <i>Small</i> , <b>2015</b> , 11, 5932-8 <sup>11</sup>		48
91	Significantly Enhanced Visible Light Photoelectrochemical Activity in TiO <sub>2</sub> Nanowire Arrays by Nitrogen Implantation. <i>Nano Letters</i> , <b>2015</b> , 15, 4692-8	11.5	138
90	Sub-ppb detection of acetone using Au-modified flower-like hierarchical ZnO structures. <i>Sensors and Actuators B: Chemical</i> , <b>2015</b> , 219, 209-217	8.5	82

89	Plasmon-driven reaction controlled by the number of graphene layers and localized surface plasmon distribution during optical excitation. <i>Light: Science and Applications</i> , <b>2015</b> , 4, e342-e342	16.7	154
88	Low Interface Trap Densities and Enhanced Performance of AlGaIn/GaN MOS High-Electron Mobility Transistors Using Thermal Oxidized Y <sub>2</sub> O <sub>3</sub> Interlayer. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 1284-1286 <sup>13</sup>	4.4	13
87	Ag-decorated ultra-thin porous single-crystalline ZnO nanosheets prepared by sunlight induced solvent reduction and their highly sensitive detection of ethanol. <i>Sensors and Actuators B: Chemical</i> , <b>2015</b> , 209, 975-982	8.5	76
86	The different roles of contact materials between oxidation interlayer and doping effect for high performance ZnO thin film transistors. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 051607	3.4	19
85	Anion-mediated synthesis of monodisperse silver nanoparticles useful for screen printing of high-conductivity patterns on flexible substrates for printed electronics. <i>RSC Advances</i> , <b>2015</b> , 5, 9783-9791	3.7	22
84	Scalable integration of indium zinc oxide/photosensitive-nanowire composite thin-film transistors for transparent multicolor photodetectors array. <i>Advanced Materials</i> , <b>2014</b> , 26, 2919-24	24	57
83	Interface engineering for high-performance top-gated MoS <sub>2</sub> field-effect transistors. <i>Advanced Materials</i> , <b>2014</b> , 26, 6255-61	24	227
82	Rings of saturn-like nanoarrays with high number density of hot spots for surface-enhanced Raman scattering. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 033515	3.4	20
81	Efficient enhancement of solar-water-splitting by modified Z-scheme structural WO <sub>3</sub> -W-Si photoelectrodes. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 143902	3.4	17
80	Tunable Electrical Properties in High-Valent Transition-Metal-Doped ZnO Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2014</b> , 35, 759-761	4.4	7
79	Template and silica interlayer tailorable synthesis of spindle-like multilayer Fe <sub>2</sub> O <sub>3</sub> /Ag/SnO <sub>2</sub> ternary hybrid architectures and their enhanced photocatalytic activity. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 1113-24	9.5	60
78	Micro/nanosized Nontraditional Evaporated Structures Based on Closely Packed Monolayer Binary Colloidal Crystals and Their Fine Structure Enhanced Properties. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 20521-20528	3.8	20
77	Obviously Angular, Cuboid-Shaped TiO <sub>2</sub> Nanowire Arrays Decorated with Ag Nanoparticle as Ultrasensitive 3D Surface-Enhanced Raman Scattering Substrates. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 22711-22718	3.8	28
76	Tube-like ternary Fe <sub>2</sub> O <sub>3</sub> @SnO <sub>2</sub> @Cu <sub>2</sub> O sandwich heterostructures: synthesis and enhanced photocatalytic properties. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 13088-97	9.5	70
75	Energy dependence on formation of TiO <sub>2</sub> nanofilms by Ti ion implantation and annealing. <i>Materials Research Bulletin</i> , <b>2014</b> , 51, 376-380	5.1	6
74	Metal ion-mediated synthesis and shape-dependent magnetic properties of single-crystalline Fe <sub>2</sub> O <sub>3</sub> nanoparticles. <i>CrystEngComm</i> , <b>2014</b> , 16, 5566-5572	3.3	25
73	Competitive reaction pathway for site-selective conjugation of Raman dyes to hotspots on gold nanorods for greatly enhanced SERS performance. <i>Small</i> , <b>2014</b> , 10, 4012-9	11	16
72	Enhanced radiation tolerance of nanochannel V films through defects release. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2014</b> , 334, 1-7	1.2	12



71	Size effects of Ag nanoparticles on plasmon-induced enhancement of photocatalysis of Ag-Fe <sub>3</sub> O <sub>4</sub> nanocomposites. <i>Journal of Colloid and Interface Science</i> , <b>2014</b> , 427, 29-34	9.3	38
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68	Formation of TiO <sub>2</sub> nanorods by ion irradiation. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 184306	2.5	10
67	Transparent, high-performance thin-film transistors with an InGaZnO/aligned-SnO <sub>2</sub> -nanowire composite and their application in photodetectors. <i>Advanced Materials</i> , <b>2014</b> , 26, 7399-404	24	91
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65	Synergistic effect of V/N codoping by ion implantation on the electronic and optical properties of TiO <sub>2</sub> . <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 143106	2.5	6
64	Fabrication of TiO <sub>2</sub> -based composite films by sequential ion implantation and subsequent annealing. <i>Materials Research Express</i> , <b>2014</b> , 1, 025703	1.7	2
63	Helium release and amorphization resistance in ion irradiated nanochannel films. <i>Europhysics Letters</i> , <b>2014</b> , 106, 12001	1.6	11
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60	Fabrication and optical properties of controlled Ag nanostructures for plasmonic applications. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 083523	2.5	7
59	Efficiency enhancements in Ag nanoparticles-SiO <sub>2</sub> -TiO <sub>2</sub> sandwiched structure via plasmonic effect-enhanced light capturing. <i>Nanoscale Research Letters</i> , <b>2013</b> , 8, 73	5	32
58	Fabrication and evolution of nanostructure in Al <sub>2</sub> O <sub>3</sub> single crystals by Zn <sup>+</sup> ion implantation and thermal annealing. <i>Vacuum</i> , <b>2013</b> , 89, 132-135	3.7	
57	Heteroepitaxial growth and structural characterization of rutile TiO <sub>2</sub> thin films on GaN (0001) templates prepared by pulsed laser deposition. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2013</b> , 307, 477-481	1.2	3
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55	Large-area, well-ordered, uniform-sized bowtie nanoantenna arrays for surface enhanced Raman scattering substrate with ultra-sensitive detection. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 041903	3.4	35
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51	Non-centrosymmetric Au-SnO <sub>2</sub> hybrid nanostructures with strong localization of plasmonic for enhanced photocatalysis application. <i>Nanoscale</i> , <b>2013</b> , 5, 5628-36	7.7	46
50	Rational design of sub-parts per million specific gas sensors array based on metal nanoparticles decorated nanowire enhancement-mode transistors. <i>Nano Letters</i> , <b>2013</b> , 13, 3287-92	11.5	117
49	Spindle-like alpha-Fe <sub>2</sub> O <sub>3</sub> embedded with TiO <sub>2</sub> nanocrystalline: ion implantation preparation and enhanced magnetic properties. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2013</b> , 13, 5428-33	1.3	7
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47	High-Mobility Solution-Processed Amorphous Indium Zinc Oxide/In <sub>2</sub> O <sub>3</sub> Nanocrystal Hybrid Thin-Film Transistor. <i>IEEE Electron Device Letters</i> , <b>2013</b> , 34, 72-74	4.4	20
46	Fabrication and properties of TiO <sub>2</sub> nanofilms on different substrates by a novel and universal method of Ti-ion implantation and subsequent annealing. <i>Nanotechnology</i> , <b>2013</b> , 24, 255603	3.4	11
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44	Size control and magnetic properties of single layer monodisperse Ni nanoparticles prepared by magnetron sputtering. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 508-513	4.3	7
43	Modified in situ and self-catalytic growth method for fabrication of Ag-coated nanocomposites with tailorable optical properties. <i>Journal of Nanoparticle Research</i> , <b>2012</b> , 14, 1	2.3	16
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41	A Comparative Study of the Magnetic Behavior of Single and Tubular Clustered Magnetite Nanoparticles. <i>Journal of Low Temperature Physics</i> , <b>2012</b> , 168, 306-313	1.3	20
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31	Third-order nonlinearity in Ag-nanoparticles embedded 56GeS <sub>2</sub> 4Ga <sub>2</sub> S <sub>3</sub> 0KBr chalcogenide glasses. <i>Journal of Non-Crystalline Solids</i> , <b>2011</b> , 357, 2320-2323	3.9	19
30	Enhancement of third-order nonlinearity in Ag-nanoparticles-contained chalcogenide glasses. <i>Journal of Nanoparticle Research</i> , <b>2011</b> , 13, 3693-3697	2.3	22
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28	Preparation and characterization of spindle-like Fe <sub>3</sub> O <sub>4</sub> mesoporous nanoparticles. <i>Nanoscale Research Letters</i> , <b>2011</b> , 6, 89	5	52
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21	Controllable synthesis and optical properties of connected zinc oxide nanoparticles. <i>Chemistry - an Asian Journal</i> , <b>2010</b> , 5, 315-21	4.5	13
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4	Electronic Coupling of Single Atom and FePS <sub>3</sub> Boosts Water Electrolysis. <i>Energy and Environmental Materials</i> ,	13	2
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