Ki Tae Nam

List of Publications by Year in Descending Order

203 papers	11,351 citations	56 h-index	102 g-index
220 ext. papers	13,471 ext. citations	11.9 avg, IF	6.49 L-index

#	Paper	IF	Citations
203	Ultrasensitive Near-Infrared Circularly Polarized Light Detection Using 3D Perovskite Embedded with Chiral Plasmonic Nanoparticles.. *Advanced Science*, **2022**, e2104598	13.6	3
202	A Sn doped, strained CuAg film for electrochemical CO2 reduction. *Journal of Materials Chemistry A*, **2022**, 10, 7082-7089	13	0
201	Fabrication of NiMo-based Electrocatalysts by Modified Zn Phosphating for Hydrogen Evolution Reaction. *Journal of Electrochemical Science and Technology*, **2022**, 13, 54-62	3.2	
200	Second Harmonic Optical Circular Dichroism of Plasmonic Chiral Helicoid-III Nanoparticles.. *ACS Photonics*, **2022**, 9, 784-792	6.3	4
199	Humidity-induced synaptic plasticity of ZnO artificial synapses using peptide insulator for neuromorphic computing. *Journal of Materials Science and Technology*, **2022**, 119, 150-155	9.1	0
198	Synaptic transistors based on a tyrosine-rich peptide for neuromorphic computing.. *RSC Advances*, **2021**, 11, 39619-39624	3.7	0
197	Controlling the size and circular dichroism of chiral gold helicoids. *Materials Advances*, **2021**, 2, 6988-6995	3.3	3
196	Gold meets peptides in a hybrid coil. *Science*, **2021**, 371, 1311	33.3	1
195	Dimensionality reduction and unsupervised clustering for EELS-SI. *Ultramicroscopy*, **2021**, 231, 113314	3.1	2
194	Synergistic Effects of Nonmagnetic Carbon Nanotubes on the Performance and Stability of Magnetorheological Fluids Containing Carbon Nanotube-CoFeNi Nanocomposite Particles. *Nano Letters*, **2021**, 21, 4973-4980	11.5	3
193	In Situ Growth of CoMnPOxHy for Oxygen Evolution Reaction by Cobalt-Modified Commercial Manganese Phosphating and Electrochemical Activation. *ACS Applied Energy Materials*, **2021**, 4, 5392-5396	6.1	1
192	Fully Degradable Memristors and Humidity Sensors Based on a Tyrosine-Rich Peptide. *ACS Applied Electronic Materials*, **2021**, 3, 3372-3378	4	3
191	Tyrosyltyrosylcysteine-Directed Synthesis of Chiral Cobalt Oxide Nanoparticles and Peptide Conformation Analysis. *ACS Nano*, **2021**, 15, 979-988	16.7	7
190	Capturing Manganese Oxide Intermediates in Electrochemical Water Oxidation at Neutral pH by In Situ Raman Spectroscopy. *Angewandte Chemie*, **2021**, 133, 4723-4731	3.6	2
189	Capturing Manganese Oxide Intermediates in Electrochemical Water Oxidation at Neutral pH by In Situ Raman Spectroscopy. *Angewandte Chemie - International Edition*, **2021**, 60, 4673-4681	16.4	17
188	Engineered Dissolution for Better Electrocatalysts. *CheM*, **2021**, 7, 20-22	16.2	
187	Revealing Structural Disorder in Hydrogenated Amorphous Silicon for a Low-Loss Photonic Platform at Visible Frequencies. *Advanced Materials*, **2021**, 33, e2005893	24	31

186	Effects of paramagnetic fluctuations on the thermochemistry of MnO(100) surfaces in the oxygen evolution reaction. *Physical Chemistry Chemical Physics*, **2021**, 23, 859-865	3.6	2
185	Complex Impedance Analysis on Charge Accumulation Step of MnO Nanoparticles during Water Oxidation. *ACS Omega*, **2021**, 6, 18404-18413	3.9	0
184	Electrochemical Synthesis of Glycine from Oxalic Acid and Nitrate. *Angewandte Chemie*, **2021**, 133, 22114-22122	3.6	2
183	Electrochemical Synthesis of Glycine from Oxalic Acid and Nitrate. *Angewandte Chemie - International Edition*, **2021**, 60, 21943-21951	16.4	6
182	Metal Halide Perovskites for Solar Fuel Production and Photoreactions. *Journal of Physical Chemistry Letters*, **2021**, 12, 8292-8301	6.4	8
181	Inorganic Hollow Nanocoils Fabricated by Controlled Interfacial Reaction and Their Electrocatalytic Properties. *Small*, **2021**, 17, e2103575	11	
180	Electrochemically Activated NiFeOxHy for Enhanced Oxygen Evolution. *ACS Applied Energy Materials*, **2021**, 4, 595-601	6.1	5
179	Valley Polarization: A Single Chiral Nanoparticle Induced Valley Polarization Enhancement (Small 37/2020). *Small*, **2020**, 16, 2070204	11	
178	-Glutamylcysteine- and Cysteinylglycine-Directed Growth of Chiral Gold Nanoparticles and their Crystallographic Analysis. *Angewandte Chemie*, **2020**, 132, 13076-13083	3.6	3
177	Chirality control of inorganic materials and metals by peptides or amino acids. *Materials Advances*, **2020**, 1, 512-524	3.3	15
176	A scalable Al-Ni alloy powder catalyst prepared by metallurgical microstructure control. *Journal of Materials Chemistry A*, **2020**, 8, 11133-11140	13	4
175	Manganese oxide-based heterogeneous electrocatalysts for water oxidation. *Energy and Environmental Science*, **2020**, 13, 2310-2340	35.4	41
174	Electrocatalytic Reduction of CO to Ethylene by Molecular Cu-Complex Immobilized on Graphitized Mesoporous Carbon. *Small*, **2020**, 16, e2000955	11	21
173	Single Nanoparticle Chiroptics in a Liquid: Optical Activity in Hyper-Rayleigh Scattering from Au Helicoids. *Nano Letters*, **2020**, 20, 5792-5798	11.5	16
172	Probing the Structure and Binding Mode of EDTA on the Surface of MnO Nanoparticles for Water Oxidation by Advanced Electron Paramagnetic Resonance Spectroscopy. *Inorganic Chemistry*, **2020**, 59, 8846-8854	5.1	1
171	Quantitative analysis of the coupling between proton and electron transport in peptide/manganese oxide hybrid films. *Physical Chemistry Chemical Physics*, **2020**, 22, 7537-7545	3.6	5
170	Uniform Chiral Gap Synthesis for High Dissymmetry Factor in Single Plasmonic Gold Nanoparticle. *ACS Nano*, **2020**, 14, 3595-3602	16.7	28
169	Electrochemical cell in the brain. *Nature Nanotechnology*, **2020**, 15, 625-626	28.7	1

168	Cysteine-encoded chirality evolution in plasmonic rhombic dodecahedral gold nanoparticles. *Nature Communications*, **2020**, 11, 263	17.4	54
167	Redox-Active Tyrosine-Mediated Peptide Template for Large-Scale Single-Crystalline Two-Dimensional Silver Nanosheets. *ACS Nano*, **2020**, 14, 1738-1744	16.7	10
166	Nickel-Doping Effect on Mn3O4 Nanoparticles for Electrochemical Water Oxidation under Neutral Condition. *Small Methods*, **2020**, 4, 1900733	12.8	16
165	Uniform, Assembled 4 nm Mn3O4 Nanoparticles as Efficient Water Oxidation Electrocatalysts at Neutral pH. *Advanced Functional Materials*, **2020**, 30, 1910424	15.6	32
164	Mechanistic Investigation of Biomass Oxidation Using Nickel Oxide Nanoparticles in a CO-Saturated Electrolyte for Paired Electrolysis. *Journal of Physical Chemistry Letters*, **2020**, 11, 2941-2948	6.4	36
163	□Glutamylcysteine- and Cysteinylglycine-Directed Growth of Chiral Gold Nanoparticles and their Crystallographic Analysis. *Angewandte Chemie - International Edition*, **2020**, 59, 12976-12983	16.4	15
162	Chiral 432 Helicoid II Nanoparticle Synthesized with Glutathione and Poly(T)20 Nucleotide. *ChemNanoMat*, **2020**, 6, 362-367	3.5	10
161	Plasmonic metamaterials for chiral sensing applications. *Nanoscale*, **2020**, 12, 58-66	7.7	52
160	Importance of Interfacial Band Structure between the Substrate and Mn3O4 Nanocatalysts during Electrochemical Water Oxidation. *ACS Catalysis*, **2020**, 10, 1237-1245	13.1	14
159	Electrochemical □Selective Hydrocarboxylation of Styrene Using CO and Water. *Advanced Science*, **2020**, 7, 1900137	13.6	11
158	Chiral Surface and Geometry of Metal Nanocrystals. *Advanced Materials*, **2020**, 32, e1905758	24	33
157	Chemically Deposited Amorphous Zn-Doped NiFeOxHy for Enhanced Water Oxidation. *ACS Catalysis*, **2020**, 10, 235-244	13.1	50
156	Metal Nanocrystals: Chiral Surface and Geometry of Metal Nanocrystals (Adv. Mater. 41/2020). *Advanced Materials*, **2020**, 32, 2070308	24	
155	Electrochemical C□N Bond Formation for Sustainable Amine Synthesis. *Trends in Chemistry*, **2020**, 2, 1004-1089	14.8	20
154	Spectroscopic capture of a low-spin Mn(IV)-oxo species in Ni-MnO nanoparticles during water oxidation catalysis. *Nature Communications*, **2020**, 11, 5230	17.4	7
153	Proton-enabled activation of peptide materials for biological bimodal memory. *Nature Communications*, **2020**, 11, 5896	17.4	12
152	Hierarchically Structured Fe3O4 Nanoparticles for High-Performance Magnetorheological Fluids with Long-Term Stability. *ACS Applied Nano Materials*, **2020**, 3, 10931-10940	5.6	12
151	Tyrosine-Rich Peptide Insulator for Rapidly Dissolving Transient Electronics. *Advanced Materials Technologies*, **2020**, 5, 2000516	6.8	4

150	A Single Chiral Nanoparticle Induced Valley Polarization Enhancement. *Small*, **2020**, 16, e2003005	11	9
149	An Implantable Ionic Wireless Power Transfer System Facilitating Electrosynthesis. *ACS Nano*, **2020**, 14, 11743-11752	16.7	4
148	Vitamin B12-Immobilized Graphene Oxide for Efficient Electrocatalytic Carbon Dioxide Reduction Reaction. *ChemSusChem*, **2020**, 13, 5620-5624	8.3	7
147	Recent advances in heterogeneous Mn-based electrocatalysts toward biological photosynthetic Mn4Ca cluster. *Catalysis Today*, **2020**, 353, 232-241	5.3	6
146	Light polarization dependency existing in the biological photosystem and possible implications for artificial antenna systems. *Photosynthesis Research*, **2020**, 143, 205-220	3.7	1
145	Cyclic two-step electrolysis for stable electrochemical conversion of carbon dioxide to formate. *Nature Communications*, **2019**, 10, 3919	17.4	45
144	Bioinspired Toolkit Based on Intermolecular Encoder toward Evolutionary 4D Chiral Plasmonic Materials. *Accounts of Chemical Research*, **2019**, 52, 2768-2783	24.3	20
143	Methylamine Treated Mn3O4 Nanoparticles as a Highly Efficient Water Oxidation Catalyst under Neutral Condition. *ChemCatChem*, **2019**, 11, 1665-1672	5.2	11
142	Mechanistic Investigation with Kinetic Parameters on Water Oxidation Catalyzed by Manganese Oxide Nanoparticle Film. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 10595-10604	8.3	18
141	Reversible and cooperative photoactivation of single-atom Cu/TiO photocatalysts. *Nature Materials* , **2019**, 18, 620-626	27	275
140	Size-controllable and uniform gold bumpy nanocubes for single-particle-level surface-enhanced Raman scattering sensitivity. *Physical Chemistry Chemical Physics*, **2019**, 21, 9044-9051	3.6	9
139	Cysteine Induced Chiral Morphology in Palladium Nanoparticle. *Particle and Particle Systems Characterization*, **2019**, 36, 1900062	3.1	17
138	Achieving highly efficient CO2 to CO electroreduction exceeding 300 mA cm⁻² with single-atom nickel electrocatalysts. *Journal of Materials Chemistry A*, **2019**, 7, 10651-10661	13	97
137	Tunable Metasurfaces: Kerker-Conditioned Dynamic Cryptographic Nanoprints (Advanced Optical Materials 4/2019). *Advanced Optical Materials*, **2019**, 7, 1970016	8.1	42
136	DNA translocation through a nanopore in an ultrathin self-assembled peptide membrane. *Nanotechnology*, **2019**, 30, 195602	3.4	1
135	Chiral Scatterometry on Chemically Synthesized Single Plasmonic Nanoparticles. *ACS Nano*, **2019**, 13, 8659-8668	16.7	36
134	Defect-engineered MoS2 with extended photoluminescence lifetime for high-performance hydrogen evolution. *Journal of Materials Chemistry C*, **2019**, 7, 10173-10178	7.1	15
133	Importance of Entropic Contribution to Electrochemical Water Oxidation Catalysis. *ACS Energy Letters*, **2019**, 4, 1918-1929	20.1	17

132	Wavelength-decoupled geometric metasurfaces by arbitrary dispersion control. *Communications Physics*, **2019**, 2,	5.4	33
131	Anion Extraction-Induced Polymorph Control of Transition Metal Dichalcogenides. *Nano Letters*, **2019**, 19, 8644-8652	11.5	9
130	Highly Selective Active Chlorine Generation Electrocatalyzed by CoO Nanoparticles: Mechanistic Investigation through in Situ Electrokinetic and Spectroscopic Analyses. *Journal of Physical Chemistry Letters*, **2019**, 10, 1226-1233	6.4	15
129	Demonstration of the nanosize effect of carbon nanomaterials on the dehydrogenation temperature of ammonia borane. *Nanoscale Advances*, **2019**, 1, 4697-4703	5.1	7
128	Metasurface zone plate for light manipulation in vectorial regime. *Communications Physics*, **2019**, 2,	5.4	21
127	Tyrosine-Rich Peptides as a Platform for Assembly and Material Synthesis. *Advanced Science*, **2019**, 6, 1801255	13.6	47
126	Hydrogen Production via Water Electrolysis: The Benefits of a Solar Cell-Powered Process. *IEEE Electrification Magazine*, **2018**, 6, 19-25	2.6	8
125	Identifying peptide sequences that can control the assembly of gold nanostructures. *Molecular Systems Design and Engineering*, **2018**, 3, 581-590	4.6	18
124	Amino-acid- and peptide-directed synthesis of chiral plasmonic gold nanoparticles. *Nature*, **2018**, 556, 360-365	50.4	446
123	Tailoring a Tyrosine-Rich Peptide into Size- and Thickness-Controllable Nanofilms. *ACS Omega*, **2018**, 3, 3901-3907	3.9	13
122	Electrochemical Analysis of Carbon Nanosheet Catalyst on Silicon Photocathode for Hydrogen Generation. *Bulletin of the Korean Chemical Society*, **2018**, 39, 356-362	1.2	4
121	Defining a Materials Database for the Design of Copper Binary Alloy Catalysts for Electrochemical CO Conversion. *Advanced Materials*, **2018**, 30, e1704717	24	110
120	Selective Electrochemical Production of Formate from Carbon Dioxide with Bismuth-Based Catalysts in an Aqueous Electrolyte. *ACS Catalysis*, **2018**, 8, 931-937	13.1	132
119	Pragmatic Metasurface Hologram at Visible Wavelength: The Balance between Diffraction Efficiency and Fabrication Compatibility. *ACS Photonics*, **2018**, 5, 1643-1647	6.3	66
118	Synthetic Mechanism Discovery of Monophase Cuprous Oxide for Record High Photoelectrochemical Conversion of CO to Methanol in Water. *ACS Nano*, **2018**, 12, 8187-8196	16.7	24
117	Active Color Control in a Metasurface by Polarization Rotation. *Applied Sciences (Switzerland)*, **2018**, 8, 982	2.6	27
116	Geometric metasurface enabling polarization independent beam splitting. *Scientific Reports*, **2018**, 8, 9468	4.9	40
115	New challenges of electrokinetic studies in investigating the reaction mechanism of electrochemical CO2 reduction. *Journal of Materials Chemistry A*, **2018**, 6, 14043-14057	13	83

114	Efficient Water Splitting Cascade Photoanodes with Ligand-Engineered MnO Cocatalysts. *Advanced Science*, **2018**, 5, 1800727	13.6	20
113	Tris(2-benzimidazolylmethyl)amine-Directed Synthesis of Single-Atom Nickel Catalysts for Electrochemical CO Production from CO. *Chemistry - A European Journal*, **2018**, 24, 18444-18454	4.8	40
112	Polydopamine–Copper Hybrid Films as Source and Drain for Oxide Semiconductor Field-Effect Transistors. *Advanced Electronic Materials*, **2018**, 4, 1800046	6.4	1
111	"Crypto-Display" in Dual-Mode Metasurfaces by Simultaneous Control of Phase and Spectral Responses. *ACS Nano*, **2018**, 12, 6421-6428	16.7	94
110	Electrophoretic kinetics of concentrated TiO2 nanoparticle suspensions in aprotic solvent. *Electronic Materials Letters*, **2018**, 14, 79-82	2.9	2
109	Effects of proton conduction on dielectric properties of peptides.. *RSC Advances*, **2018**, 8, 34047-34055	3.7	6
108	Kerker-Conditioned Dynamic Cryptographic Nanoprints. *Advanced Optical Materials*, **2018**, 7, 1801070	8.1	35
107	Involvement of high-valent manganese-oxo intermediates in oxidation reactions: realisation in nature, nano and molecular systems. *Nano Convergence*, **2018**, 5, 18	9.2	20
106	Recent advances and perspectives of halide perovskite photocatalyst. *Current Opinion in Electrochemistry*, **2018**, 11, 98-104	7.2	18
105	Solar Water Splitting: Efficient Water Splitting Cascade Photoanodes with Ligand-Engineered MnO Cocatalysts (Adv. Sci. 10/2018). *Advanced Science*, **2018**, 5, 1870061	13.6	78
104	Physically Transient Field-Effect Transistors Based on Black Phosphorus. *ACS Applied Materials & Interfaces*, **2018**, 10, 42630-42636	9.5	15
103	Outfitting Next Generation Displays with Optical Metasurfaces. *ACS Photonics*, **2018**, 5, 3876-3895	6.3	85
102	Quantitative Analysis of Calcium Phosphate Nanocluster Growth Using Time-of-Flight Medium-Energy-Ion-Scattering Spectroscopy. *ACS Central Science*, **2018**, 4, 1253-1260	16.8	4
101	Hierarchical carbon-silicon nanowire heterostructures for the hydrogen evolution reaction. *Nanoscale*, **2018**, 10, 13936-13941	7.7	16
100	Catalytic synergy effect of MoS2/reduced graphene oxide hybrids for a highly efficient hydrogen evolution reaction. *RSC Advances*, **2017**, 7, 5480-5487	3.7	47
99	Double-Layer Graphene Outperforming Monolayer as Catalyst on Silicon Photocathode for Hydrogen Production. *ACS Applied Materials & Interfaces*, **2017**, 9, 3570-3580	9.5	15
98	Current Status and Bioinspired Perspective of Electrochemical Conversion of CO to a Long-Chain Hydrocarbon. *Journal of Physical Chemistry Letters*, **2017**, 8, 538-545	6.4	83
97	Controlled Molybdenum Disulfide Assembly inside Carbon Nanofiber by Boudouard Reaction Inspired Selective Carbon Oxidation. *Advanced Materials*, **2017**, 29, 1605327	24	11

96	Sulfur-Modified Graphitic Carbon Nitride Nanostructures as an Efficient Electrocatalyst for Water Oxidation. *Small*, **2017**, 13, 1603893	11	38
95	High-Density Single-Layer Coating of Gold Nanoparticles onto Multiple Substrates by Using an Intrinsically Disordered Protein of □Synuclein for Nanoapplications. *ACS Applied Materials & Interfaces*, **2017**, 9, 8519-8532	9.5	8
94	Photocatalytic hydrogen generation from hydriodic acid using methylammonium lead iodide in dynamic equilibrium with aqueous solution. *Nature Energy*, **2017**, 2,	62.3	301
93	Reaction Mechanisms of the Electrochemical Conversion of Carbon Dioxide to Formic Acid on Tin Oxide Electrodes. *ChemElectroChem*, **2017**, 4, 2130-2136	4.3	54
92	Plasmon Enhanced Fluorescence Based on Porphyrin-Peptoid Hybridized Gold Nanoparticle Platform. *Small*, **2017**, 13, 1700071	11	18
91	Screening of Pro-Asp Sequences Exposed on Bacteriophage M13 as an Ideal Anchor for Gold Nanocubes. *ACS Synthetic Biology*, **2017**, 6, 1635-1641	5.7	3
90	Chondroitin Sulfate-Based Biomineralizing Surface Hydrogels for Bone Tissue Engineering. *ACS Applied Materials & Interfaces*, **2017**, 9, 21639-21650	9.5	78
89	Amorphous Cobalt Phyllosilicate with Layered Crystalline Motifs as Water Oxidation Catalyst. *Advanced Materials*, **2017**, 29, 1606893	24	57
88	Design Principle and Loss Engineering for Photovoltaic-Electrolysis Cell System. *ACS Omega*, **2017**, 2, 1009-1018	3.9	39
87	Mechanistic Investigation of Water Oxidation Catalyzed by Uniform, Assembled MnO Nanoparticles. *Journal of the American Chemical Society*, **2017**, 139, 2277-2285	16.4	102
86	p-Type CuBi2O4 thin films prepared by flux-mediated one-pot solution process with improved structural and photoelectrochemical characteristics. *Materials Letters*, **2017**, 188, 192-196	3.3	27
85	Morphology-Directed Selective Production of Ethylene or Ethane from CO2 on a Cu Mesopore Electrode. *Angewandte Chemie*, **2017**, 129, 814-818	3.6	34
84	Morphology-Directed Selective Production of Ethylene or Ethane from CO on a Cu Mesopore Electrode. *Angewandte Chemie - International Edition*, **2017**, 56, 796-800	16.4	183
83	Increased electrical conductivity of peptides through annealing process. *APL Materials*, **2017**, 5, 086109	5.7	5
82	Reverse Electrodialysis-Assisted Solar Water Splitting. *Scientific Reports*, **2017**, 7, 12281	4.9	4
81	Arginine-Presenting Peptide Hydrogels Decorated with Hydroxyapatite as Biomimetic Scaffolds for Bone Regeneration. *Biomacromolecules*, **2017**, 18, 3541-3550	6.9	57
80	Dielectric Meta-Holograms Enabled with Dual Magnetic Resonances in Visible Light. *ACS Nano*, **2017**, 11, 9382-9389	16.7	122
79	Biomolecule-Enabled Chiral Assembly of Plasmonic Nanostructures. *ChemNanoMat*, **2017**, 3, 685-697	3.5	34

78	Proton Conduction in a Tyrosine-Rich Peptide/Manganese Oxide Hybrid Nanofilm. *Advanced Functional Materials*, **2017**, 27, 1702185	15.6	17
77	Rise of nano effects in electrode during electrocatalytic CO conversion. *Nanotechnology*, **2017**, 28, 352001	3.4	17
76	Biomimetic whitlockite inorganic nanoparticles-mediated in situ remodeling and rapid bone regeneration. *Biomaterials*, **2017**, 112, 31-43	15.6	82
75	Water Oxidation Mechanism for 3d Transition Metal Oxide Catalysts under Neutral Condition. *Journal of the Korean Ceramic Society*, **2017**, 54, 1-8	2.2	18
74	Water-Floating Giant Nanosheets from Helical Peptide Pentamers. *ACS Nano*, **2016**, 10, 8263-70	16.7	33
73	Material science lesson from the biological photosystem. *Nano Convergence*, **2016**, 3, 19	9.2	12
72	Growth Mechanism of Strain-Dependent Morphological Change in PEDOT:PSS Films. *Scientific Reports*, **2016**, 6, 25332	4.9	22
71	Highly Stretchable and Notch-Insensitive Hydrogel Based on Polyacrylamide and Milk Protein. *ACS Applied Materials & Interfaces*, **2016**, 8, 29220-29226	9.5	60
70	Graphene Quantum Sheet Catalyzed Silicon Photocathode for Selective CO2 Conversion to CO. *Advanced Functional Materials*, **2016**, 26, 233-242	15.6	66
69	Organolead Halide Perovskites for Low Operating Voltage Multilevel Resistive Switching. *Advanced Materials*, **2016**, 28, 6562-7	24	219
68	Wafer-scale transferable molybdenum disulfide thin-film catalysts for photoelectrochemical hydrogen production. *Energy and Environmental Science*, **2016**, 9, 2240-2248	35.4	150
67	In Vitro and In Vivo Evaluation of Whitlockite Biocompatibility: Comparative Study with Hydroxyapatite and Tricalcium Phosphate. *Advanced Healthcare Materials*, **2016**, 5, 128-36	10.1	78
66	Spontaneously polarized lithium-doped zinc oxide nanowires as photoanodes for electrical water splitting. *Journal of Materials Chemistry A*, **2016**, 4, 3223-3227	13	12
65	Highly Active MnO Catalysts Integrated onto Fe2O3 Nanorods for Efficient Water Splitting. *Advanced Materials Interfaces*, **2016**, 3, 1600176	4.6	18
64	A wafer-scale antireflective protection layer of solution-processed TiO2 nanorods for high performance silicon-based water splitting photocathodes. *Journal of Materials Chemistry A*, **2016**, 4, 9477-9485	13	41
63	Theoretical and Experimental Studies of Epidermal Heat Flux Sensors for Measurements of Core Body Temperature. *Advanced Healthcare Materials*, **2016**, 5, 119-27	10.1	83
62	Flexible Electronics: Theoretical and Experimental Studies of Epidermal Heat Flux Sensors for Measurements of Core Body Temperature (Adv. Healthcare Mater. 1/2016). *Advanced Healthcare Materials*, **2016**, 5, 2	10.1	4
61	Mn5O8 Nanoparticles as Efficient Water Oxidation Catalysts at Neutral pH. *ACS Catalysis*, **2015**, 5, 4624-4628	10.1	109

60	Nano-hydroxyapatite modulates osteoblast lineage commitment by stimulation of DNA methylation and regulation of gene expression. *Biomaterials*, **2015**, 65, 32-42	15.6	86
59	Concave Rhombic Dodecahedral Au Nanocatalyst with Multiple High-Index Facets for CO2 Reduction. *ACS Nano*, **2015**, 9, 8384-93	16.7	199
58	Hybrid Z-Scheme Using Photosystem I and BiVO4 for Hydrogen Production. *Advanced Functional Materials*, **2015**, 25, 2369-2377	15.6	53
57	Biofunctionalized ceramic with self-assembled networks of nanochannels. *ACS Nano*, **2015**, 9, 4447-57	16.7	11
56	Epidermal devices for noninvasive, precise, and continuous mapping of macrovascular and microvascular blood flow. *Science Advances*, **2015**, 1, e1500701	14.3	145
55	Coordination tuning of cobalt phosphates towards efficient water oxidation catalyst. *Nature Communications*, **2015**, 6, 8253	17.4	283
54	A tyrosine-rich peptide induced flower-like palladium nanostructure and its catalytic activity. *RSC Advances*, **2015**, 5, 78026-78029	3.7	7
53	Hydrogen Production by Electrolysis and Photoelectrochemical System **2015**, 1-42		
52	Partially Oxidized Sub-10 nm MnO Nanocrystals with High Activity for Water Oxidation Catalysis. *Scientific Reports*, **2015**, 5, 10279	4.9	90
51	Phase transformation from hydroxyapatite to the secondary bone mineral, whitlockite. *Journal of Materials Chemistry B*, **2015**, 3, 1342-1349	7.3	44
50	N-doped graphene quantum sheets on silicon nanowire photocathodes for hydrogen production. *Energy and Environmental Science*, **2015**, 8, 1329-1338	35.4	113
49	Thermal transport characteristics of human skin measured in vivo using ultrathin conformal arrays of thermal sensors and actuators. *PLoS ONE*, **2015**, 10, e0118131	3.7	55
48	Angle-resolved light scattering of individual rod-shaped bacteria based on Fourier transform light scattering. *Scientific Reports*, **2014**, 4, 5090	4.9	34
47	Tyrosine-mediated two-dimensional peptide assembly and its role as a bio-inspired catalytic scaffold. *Nature Communications*, **2014**, 5, 3665	17.4	83
46	One-step synthesis of N-doped graphene quantum sheets from monolayer graphene by nitrogen plasma. *Advanced Materials*, **2014**, 26, 3501-5	24	98
45	An iron oxide photoanode with hierarchical nanostructure for efficient water oxidation. *Journal of Materials Chemistry A*, **2014**, 2, 2297-2305	13	68
44	Revisiting whitlockite, the second most abundant biomineral in bone: nanocrystal synthesis in physiologically relevant conditions and biocompatibility evaluation. *ACS Nano*, **2014**, 8, 634-41	16.7	103
43	A ferroelectric photocatalyst for enhancing hydrogen evolution: polarized particulate suspension. *Physical Chemistry Chemical Physics*, **2014**, 16, 10408-13	3.6	74

42	Hydrated manganese(II) phosphate ($Mn_3(PO_4)_2 \cdot 3H_2O$) as a water oxidation catalyst. *Journal of the American Chemical Society*, **2014**, 136, 7435-43	16.4	266
41	Hybrid system of semiconductor and photosynthetic protein. *Nanotechnology*, **2014**, 25, 342001	3.4	45
40	Full-field subwavelength imaging using a scattering superlens. *Physical Review Letters*, **2014**, 113, 113901	7.4	58
39	A new water oxidation catalyst: lithium manganese pyrophosphate with tunable Mn valency. *Journal of the American Chemical Society*, **2014**, 136, 4201-11	16.4	116
38	Self-assembled magnetic nanospheres with three-dimensional magnetic vortex. *Applied Physics Letters*, **2014**, 105, 232402	3.4	18
37	Virus templated gold nanocube chain for SERS nanoprobe. *Small*, **2014**, 10, 3007-11	11	36
36	Extended gold nano-morphology diagram: synthesis of rhombic dodecahedra using CTAB and ascorbic acid. *Journal of Materials Chemistry C*, **2013**, 1, 6861	7.1	48
35	Enhanced conductivity of solution-processed indium tin oxide nanoparticle films by oxygen partial pressure controlled annealing. *Journal of Materials Chemistry C*, **2013**, 1, 5953	7.1	18
34	N-doped monolayer graphene catalyst on silicon photocathode for hydrogen production. *Energy and Environmental Science*, **2013**, 6, 3658	35.4	119
33	A new hematite photoanode doping strategy for solar water splitting: oxygen vacancy generation. *Physical Chemistry Chemical Physics*, **2013**, 15, 2117-24	3.6	115
32	Stretching-Induced Growth of PEDOT-Rich Cores: A New Mechanism for Strain-Dependent Resistivity Change in PEDOT:PSS Films. *Advanced Functional Materials*, **2013**, 23, 4020-4027	15.6	45
31	Subwavelength light focusing using random nanoparticles. *Nature Photonics*, **2013**, 7, 454-458	33.9	125
30	Protein/peptide based nanomaterials for energy application. *Current Opinion in Biotechnology*, **2013** , 24, 599-605	11.4	31
29	Self-assembly of "S-bilayers", a step toward expanding the dimensionality of S-layer assemblies. *ACS Nano*, **2013**, 7, 4946-53	16.7	16
28	Redox cofactor from biological energy transduction as molecularly tunable energy-storage compound. *Angewandte Chemie - International Edition*, **2013**, 52, 8322-8	16.4	113
27	Nanostructural dependence of hydrogen production in silicon photocathodes. *Journal of Materials Chemistry A*, **2013**, 1, 5414	13	51
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