## Ki Tae Nam

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/647779/publications.pdf

Version: 2024-02-01

209 papers 15,358 citations

14655 66 h-index 19190 118 g-index

220 all docs 220 docs citations

times ranked

220

20661 citing authors

#	Article	lF	CITATIONS
1	Virus-Enabled Synthesis and Assembly of Nanowires for Lithium Ion Battery Electrodes. Science, 2006, 312, 885-888.	12.6	1,756
2	Amino-acid- and peptide-directed synthesis of chiral plasmonic gold nanoparticles. Nature, 2018, 556, 360-365.	27.8	785
3	Reversible and cooperative photoactivation of single-atom Cu/TiO2 photocatalysts. Nature Materials, 2019, 18, 620-626.	27.5	501
4	Photocatalytic hydrogen generation from hydriodic acid using methylammonium lead iodide in dynamic equilibrium with aqueous solution. Nature Energy, $2017, 2, .$	39.5	438
5	Free-floating ultrathin two-dimensional crystals from sequence-specific peptoid polymers. Nature Materials, 2010, 9, 454-460.	27.5	384
6	Coordination tuning of cobalt phosphates towards efficient water oxidation catalyst. Nature Communications, 2015, 6, 8253.	12.8	352
7	Hydrated Manganese(II) Phosphate (Mn <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> ·3H <sub>2</sub> O) as a Water Oxidation Catalyst. Journal of the American Chemical Society, 2014, 136, 7435-7443.	13.7	324
8	Spontaneous assembly of viruses on multilayered polymer surfaces. Nature Materials, 2006, 5, 234-240.	27.5	308
9	Organolead Halide Perovskites for Low Operating Voltage Multilevel Resistive Switching. Advanced Materials, 2016, 28, 6562-6567.	21.0	285
10	Morphologyâ€Directed Selective Production of Ethylene or Ethane from CO <sub>2</sub> on a Cu Mesopore Electrode. Angewandte Chemie - International Edition, 2017, 56, 796-800.	13.8	268
11	Concave Rhombic Dodecahedral Au Nanocatalyst with Multiple High-Index Facets for CO <sub>2</sub> Reduction. ACS Nano, 2015, 9, 8384-8393.	14.6	242
12	Selective Electrochemical Production of Formate from Carbon Dioxide with Bismuth-Based Catalysts in an Aqueous Electrolyte. ACS Catalysis, 2018, 8, 931-937.	11.2	190
13	Epidermal devices for noninvasive, precise, and continuous mapping of macrovascular and microvascular blood flow. Science Advances, 2015, 1, e1500701.	10.3	189
14	Wafer-scale transferable molybdenum disulfide thin-film catalysts for photoelectrochemical hydrogen production. Energy and Environmental Science, 2016, 9, 2240-2248.	30.8	174
15	Achieving highly efficient CO <sub>2</sub> to CO electroreduction exceeding 300 mA cm <sup>â^2</sup> with single-atom nickel electrocatalysts. Journal of Materials Chemistry A, 2019, 7, 10651-10661.	10.3	165
16	Subwavelength light focusing using random nanoparticles. Nature Photonics, 2013, 7, 454-458.	31.4	160
17	Dielectric Meta-Holograms Enabled with Dual Magnetic Resonances in Visible Light. ACS Nano, 2017, 11, 9382-9389.	14.6	157
18	Revisiting Whitlockite, the Second Most Abundant Biomineral in Bone: Nanocrystal Synthesis in Physiologically Relevant Conditions and Biocompatibility Evaluation. ACS Nano, 2014, 8, 634-641.	14.6	151

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19	Defining a Materials Database for the Design of Copper Binary Alloy Catalysts for Electrochemical CO <sub>2</sub> Conversion. Advanced Materials, 2018, 30, e1704717.	21.0	150
20	Redox Cofactor from Biological Energy Transduction as Molecularly Tunable Energyâ€Storage Compound. Angewandte Chemie - International Edition, 2013, 52, 8322-8328.	13.8	147
21	Cysteine-encoded chirality evolution in plasmonic rhombic dodecahedral gold nanoparticles. Nature Communications, 2020, 11, 263.	12.8	145
22	Stamped microbattery electrodes based on self-assembled M13 viruses. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17227-17231.	7.1	144
23	Peptide-Mediated Reduction of Silver Ions on Engineered Biological Scaffolds. ACS Nano, 2008, 2, 1480-1486.	14.6	139
24	A New Water Oxidation Catalyst: Lithium Manganese Pyrophosphate with Tunable Mn Valency. Journal of the American Chemical Society, 2014, 136, 4201-4211.	13.7	136
25	N-doped graphene quantum sheets on silicon nanowire photocathodes for hydrogen production. Energy and Environmental Science, 2015, 8, 1329-1338.	30.8	136
26	N-doped monolayer graphene catalyst on silicon photocathode for hydrogen production. Energy and Environmental Science, 2013, 6, 3658.	30.8	134
27	Mechanistic Investigation of Water Oxidation Catalyzed by Uniform, Assembled MnO Nanoparticles. Journal of the American Chemical Society, 2017, 139, 2277-2285.	13.7	133
28	Synthesis and Microcontact Printing of Dual Endâ€Functionalized Mucinâ€like Glycopolymers for Microarray Applications. Angewandte Chemie - International Edition, 2009, 48, 4973-4976.	13.8	132
29	"Crypto-Display―in Dual-Mode Metasurfaces by Simultaneous Control of Phase and Spectral Responses. ACS Nano, 2018, 12, 6421-6428.	14.6	130
30	A new hematite photoanode doping strategy for solar water splitting: oxygen vacancy generation. Physical Chemistry Chemical Physics, 2013, 15, 2117.	2.8	126
31	Biomimetic whitlockite inorganic nanoparticles-mediated in situ remodeling and rapid bone regeneration. Biomaterials, 2017, 112, 31-43.	11.4	124
32	Layer-by-Layer Surface Modification and Patterned Electrostatic Deposition of Quantum Dots. Nano Letters, 2004, 4, 1421-1425.	9.1	123
33	Mn <sub>5</sub> O <sub>8</sub> Nanoparticles as Efficient Water Oxidation Catalysts at Neutral pH. ACS Catalysis, 2015, 5, 4624-4628.	11.2	123
34	Chondroitin Sulfate-Based Biomineralizing Surface Hydrogels for Bone Tissue Engineering. ACS Applied Materials & Diterfaces, 2017, 9, 21639-21650.	8.0	118
35	Outfitting Next Generation Displays with Optical Metasurfaces. ACS Photonics, 2018, 5, 3876-3895.	6.6	118
36	New challenges of electrokinetic studies in investigating the reaction mechanism of electrochemical CO <sub>2</sub> reduction. Journal of Materials Chemistry A, 2018, 6, 14043-14057.	10.3	118

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37	Oneâ€Step Synthesis of Nâ€doped Graphene Quantum Sheets from Monolayer Graphene by Nitrogen Plasma. Advanced Materials, 2014, 26, 3501-3505.	21.0	109
38	Current Status and Bioinspired Perspective of Electrochemical Conversion of CO <sub>2</sub> to a Long-Chain Hydrocarbon. Journal of Physical Chemistry Letters, 2017, 8, 538-545.	4.6	109
39	Genetically Driven Assembly of Nanorings Based on the M13 Virus. Nano Letters, 2004, 4, 23-27.	9.1	108
40	Nano-hydroxyapatite modulates osteoblast lineage commitment by stimulation of DNA methylation and regulation of gene expression. Biomaterials, 2015, 65, 32-42.	11.4	106
41	In Vitro and In Vivo Evaluation of Whitlockite Biocompatibility: Comparative Study with Hydroxyapatite and ⟨i⟩β⟨/i⟩â€₁ricalcium Phosphate. Advanced Healthcare Materials, 2016, 5, 128-136.	7.6	103
42	Theoretical and Experimental Studies of Epidermal Heat Flux Sensors for Measurements of Core Body Temperature. Advanced Healthcare Materials, 2016, 5, 119-127.	7.6	101
43	Partially Oxidized Sub-10 nm MnO Nanocrystals with High Activity for Water Oxidation Catalysis. Scientific Reports, 2015, 5, 10279.	3.3	99
44	Tyrosine-mediated two-dimensional peptide assembly and its role as a bio-inspired catalytic scaffold. Nature Communications, 2014, 5, 3665.	12.8	98
45	Plasmonic metamaterials for chiral sensing applications. Nanoscale, 2020, 12, 58-66.	5.6	98
46	A ferroelectric photocatalyst for enhancing hydrogen evolution: polarized particulate suspension. Physical Chemistry Chemical Physics, 2014, 16, 10408-10413.	2.8	95
47	Tyrosineâ€Rich Peptides as a Platform for Assembly and Material Synthesis. Advanced Science, 2019, 6, 1801255.	11.2	91
48	BMHP1-Derived Self-Assembling Peptides: Hierarchically Assembled Structures with Self-Healing Propensity and Potential for Tissue Engineering Applications. ACS Nano, 2011, 5, 1845-1859.	14.6	90
49	Folding of a singleâ€chain, informationâ€rich polypeptoid sequence into a highly ordered nanosheet. Biopolymers, 2011, 96, 586-595.	2.4	89
50	Mechanistic Investigation of Biomass Oxidation Using Nickel Oxide Nanoparticles in a CO <sub>2</sub> -Saturated Electrolyte for Paired Electrolysis. Journal of Physical Chemistry Letters, 2020, 11, 2941-2948.	4.6	88
51	Electronic interaction between transition metal single-atoms and anatase TiO <sub>2</sub> boosts CO <sub>2</sub> photoreduction with H <sub>2</sub> O. Energy and Environmental Science, 2022, 15, 601-609.	30.8	88
52	Pragmatic Metasurface Hologram at Visible Wavelength: The Balance between Diffraction Efficiency and Fabrication Compatibility. ACS Photonics, 2018, 5, 1643-1647.	6.6	87
53	Chemically Deposited Amorphous Zn-Doped NiFeO <i><sub><i>x</i></sub></i>	11.2	86
54	Chiral Surface and Geometry of Metal Nanocrystals. Advanced Materials, 2020, 32, e1905758.	21.0	85

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55	Amorphous Cobalt Phyllosilicate with Layered Crystalline Motifs as Water Oxidation Catalyst. Advanced Materials, 2017, 29, 1606893.	21.0	84
56	Uniform Chiral Gap Synthesis for High Dissymmetry Factor in Single Plasmonic Gold Nanoparticle. ACS Nano, 2020, 14, 3595-3602.	14.6	84
57	Full-Field Subwavelength Imaging Using a Scattering Superlens. Physical Review Letters, 2014, 113, 113901.	7.8	81
58	Highly Stretchable and Notch-Insensitive Hydrogel Based on Polyacrylamide and Milk Protein. ACS Applied Materials & Samp; Interfaces, 2016, 8, 29220-29226.	8.0	81
59	Manganese oxide-based heterogeneous electrocatalysts for water oxidation. Energy and Environmental Science, 2020, 13, 2310-2340.	30.8	81
60	Controlling Surface Mobility in Interdiffusing Polyelectrolyte Multilayers. ACS Nano, 2008, 2, 561-571.	14.6	78
61	Arginine-Presenting Peptide Hydrogels Decorated with Hydroxyapatite as Biomimetic Scaffolds for Bone Regeneration. Biomacromolecules, 2017, 18, 3541-3550.	5.4	78
62	Graphene Quantum Sheet Catalyzed Silicon Photocathode for Selective CO <sub>2</sub> Conversion to CO. Advanced Functional Materials, 2016, 26, 233-242.	14.9	77
63	Reaction Mechanisms of the Electrochemical Conversion of Carbon Dioxide to Formic Acid on Tin Oxide Electrodes. ChemElectroChem, 2017, 4, 2130-2136.	3.4	76
64	Cyclic two-step electrolysis for stable electrochemical conversion of carbon dioxide to formate. Nature Communications, 2019, 10, 3919.	12.8	76
65	An iron oxide photoanode with hierarchical nanostructure for efficient water oxidation. Journal of Materials Chemistry A, 2014, 2, 2297-2305.	10.3	72
66	Thermal Transport Characteristics of Human Skin Measured In Vivo Using Ultrathin Conformal Arrays of Thermal Sensors and Actuators. PLoS ONE, 2015, 10, e0118131.	2.5	70
67	Chiral Scatterometry on Chemically Synthesized Single Plasmonic Nanoparticles. ACS Nano, 2019, 13, 8659-8668.	14.6	69
68	Revealing Structural Disorder in Hydrogenated Amorphous Silicon for a Low‣oss Photonic Platform at Visible Frequencies. Advanced Materials, 2021, 33, e2005893.	21.0	69
69	Catalytic synergy effect of MoS <sub>2</sub> /reduced graphene oxide hybrids for a highly efficient hydrogen evolution reaction. RSC Advances, 2017, 7, 5480-5487.	3.6	67
70	Solvent-Assisted Patterning of Polyelectrolyte Multilayers and Selective Deposition of Virus Assemblies. Nano Letters, 2008, 8, 1081-1089.	9.1	66
71	Phase transformation from hydroxyapatite to the secondary bone mineral, whitlockite. Journal of Materials Chemistry B, 2015, 3, 1342-1349.	5.8	66
72	Extended gold nano-morphology diagram: synthesis of rhombic dodecahedra using CTAB and ascorbic acid. Journal of Materials Chemistry C, 2013, 1, 6861.	5.5	65

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73	Hybrid Zâ€Scheme Using Photosystem I and BiVO <sub>4</sub> for Hydrogen Production. Advanced Functional Materials, 2015, 25, 2369-2377.	14.9	65
74	γâ€Glutamylcysteine―and Cysteinylglycineâ€Directed Growth of Chiral Gold Nanoparticles and their Crystallographic Analysis. Angewandte Chemie - International Edition, 2020, 59, 12976-12983.	13.8	59
<b>7</b> 5	Tunable Metasurfaces: Kerkerâ€Conditioned Dynamic Cryptographic Nanoprints (Advanced Optical) Tj ETQq1	1 0.784314 7.3	rgBT  Overlo
76	Design Principle and Loss Engineering for Photovoltaic–Electrolysis Cell System. ACS Omega, 2017, 2, 1009-1018.	3.5	57
77	Morphologyâ€Directed Selective Production of Ethylene or Ethane from CO <sub>2</sub> on a Cu Mesopore Electrode. Angewandte Chemie, 2017, 129, 814-818.	2.0	57
78	Electrochemical C–N Bond Formation for Sustainable Amine Synthesis. Trends in Chemistry, 2020, 2, 1004-1019.	8.5	56
79	Nanostructural dependence of hydrogen production in silicon photocathodes. Journal of Materials Chemistry A, 2013, 1, 5414.	10.3	55
80	Uniform, Assembled 4 nm Mn <sub>3</sub> O <sub>4</sub> Nanoparticles as Efficient Water Oxidation Electrocatalysts at Neutral pH. Advanced Functional Materials, 2020, 30, 1910424.	14.9	55
81	Redox-neutral electrochemical conversion of CO2 to dimethyl carbonate. Nature Energy, 2021, 6, 733-741.	39.5	55
82	Electrochemical Synthesis of Glycine from Oxalic Acid and Nitrate. Angewandte Chemie - International Edition, 2021, 60, 21943-21951.	13.8	55
83	Stretchingâ€Induced Growth of PEDOTâ€Rich Cores: A New Mechanism for Strainâ€Dependent Resistivity Change in PEDOT:PSS Films. Advanced Functional Materials, 2013, 23, 4020-4027.	14.9	54
84	Geometric metasurface enabling polarization independent beam splitting. Scientific Reports, 2018, 8, 9468.	3.3	53
85	Sulfur-Modified Graphitic Carbon Nitride Nanostructures as an Efficient Electrocatalyst for Water Oxidation. Small, 2017, 13, 1603893.	10.0	52
86	Kerkerâ€Conditioned Dynamic Cryptographic Nanoprints. Advanced Optical Materials, 2019, 7, 1801070.	7.3	50
87	Tris(2â€benzimidazolylmethyl)amineâ€Directed Synthesis of Singleâ€Atom Nickel Catalysts for Electrochemical CO Production from CO <sub>2</sub> . Chemistry - A European Journal, 2018, 24, 18444-18454.	3.3	50
88	Fatigueâ€Free, Electrically Reliable Copper Electrode with Nanohole Array. Small, 2012, 8, 3300-3306.	10.0	48
89	Hybrid system of semiconductor and photosynthetic protein. Nanotechnology, 2014, 25, 342001.	2.6	48
90	Electrocatalytic Reduction of CO <sub>2</sub> to Ethylene by Molecular Cuâ€Complex Immobilized on Graphitized Mesoporous Carbon. Small, 2020, 16, e2000955.	10.0	48

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91	A wafer-scale antireflective protection layer of solution-processed TiO <sub>2</sub> nanorods for high performance silicon-based water splitting photocathodes. Journal of Materials Chemistry A, 2016, 4, 9477-9485.	10.3	47
92	Angle-resolved light scattering of individual rod-shaped bacteria based on Fourier transform light scattering. Scientific Reports, 2014, 4, 5090.	3.3	45
93	Enhanced performance of NaTaO3 using molecular co-catalyst [Mo3S4]4+ for water splitting into H2 and O2. Chemical Communications, 2012, 48, 10452.	4.1	44
94	Synthetic Mechanism Discovery of Monophase Cuprous Oxide for Record High Photoelectrochemical Conversion of CO <sub>2</sub> to Methanol in Water. ACS Nano, 2018, 12, 8187-8196.	14.6	44
95	Wavelength-decoupled geometric metasurfaces by arbitrary dispersion control. Communications Physics, 2019, 2, .	5.3	44
96	Highly Selective Active Chlorine Generation Electrocatalyzed by Co <sub>3</sub> O <sub>4</sub> Nanoparticles: Mechanistic Investigation through in Situ Electrokinetic and Spectroscopic Analyses. Journal of Physical Chemistry Letters, 2019, 10, 1226-1233.	4.6	44
97	Virus Templated Gold Nanocube Chain for SERS Nanoprobe. Small, 2014, 10, 3007-3011.	10.0	43
98	Improved diffusion barrier by stuffing the grain boundaries of TiN with a thin Al interlayer for Cu metallization. Applied Physics Letters, 2001, 79, 2549-2551.	3.3	42
99	Electric-Field-Assisted Layer-by-Layer Assembly of Weakly Charged Polyelectrolyte Multilayers. Macromolecules, 2011, 44, 2866-2872.	4.8	42
100	Active Color Control in a Metasurface by Polarization Rotation. Applied Sciences (Switzerland), 2018, 8, 982.	2.5	42
101	Biomoleculeâ€Enabled Chiral Assembly of Plasmonic Nanostructures. ChemNanoMat, 2017, 3, 685-697.	2.8	41
102	Bioinspired Toolkit Based on Intermolecular Encoder toward Evolutionary 4D Chiral Plasmonic Materials. Accounts of Chemical Research, 2019, 52, 2768-2783.	15.6	41
103	Capturing Manganese Oxide Intermediates in Electrochemical Water Oxidation at Neutral pH by In Situ Raman Spectroscopy. Angewandte Chemie - International Edition, 2021, 60, 4673-4681.	13.8	41
104	Water-Floating Giant Nanosheets from Helical Peptide Pentamers. ACS Nano, 2016, 10, 8263-8270.	14.6	40
105	Electrochemical β‧elective Hydrocarboxylation of Styrene Using CO <sub>2</sub> and Water. Advanced Science, 2020, 7, 1900137.	11.2	38
106	Proton-enabled activation of peptide materials for biological bimodal memory. Nature Communications, 2020, 11, 5896.	12.8	36
107	Nickelâ€Doping Effect on Mn <sub>3</sub> O <sub>4</sub> Nanoparticles for Electrochemical Water Oxidation under Neutral Condition. Small Methods, 2020, 4, 1900733.	8.6	36
108	Metasurface zone plate for light manipulation in vectorial regime. Communications Physics, 2019, 2, .	5.3	35

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109	p-Type CuBi 2 O 4 thin films prepared by flux-mediated one-pot solution process with improved structural and photoelectrochemical characteristics. Materials Letters, 2017, 188, 192-196.	2.6	34
110	Defect-engineered MoS <sub>2</sub> with extended photoluminescence lifetime for high-performance hydrogen evolution. Journal of Materials Chemistry C, 2019, 7, 10173-10178.	5.5	34
111	Protein/peptide based nanomaterials for energy application. Current Opinion in Biotechnology, 2013, 24, 599-605.	6.6	33
112	Growth Mechanism of Strain-Dependent Morphological Change in PEDOT:PSS Films. Scientific Reports, 2016, 6, 25332.	3.3	33
113	Single Nanoparticle Chiroptics in a Liquid: Optical Activity in Hyper-Rayleigh Scattering from Au Helicoids. Nano Letters, 2020, 20, 5792-5798.	9.1	32
114	Importance of Entropic Contribution to Electrochemical Water Oxidation Catalysis. ACS Energy Letters, 2019, 4, 1918-1929.	17.4	31
115	Adenine oligomer directed synthesis of chiral gold nanoparticles. Nature Communications, 2022, 13, .	12.8	31
116	Involvement of high-valent manganese-oxo intermediates in oxidation reactions: realisation in nature, nano and molecular systems. Nano Convergence, 2018, 5, 18.	12.1	30
117	Efficient Water Splitting Cascade Photoanodes with Ligandâ€Engineered MnO Cocatalysts. Advanced Science, 2018, 5, 1800727.	11.2	30
118	Cysteine Induced Chiral Morphology in Palladium Nanoparticle. Particle and Particle Systems Characterization, 2019, 36, 1900062.	2.3	29
119	Chirality control of inorganic materials and metals by peptides or amino acids. Materials Advances, 2020, 1, 512-524.	5.4	29
120	Mechanistic Investigation with Kinetic Parameters on Water Oxidation Catalyzed by Manganese Oxide Nanoparticle Film. ACS Sustainable Chemistry and Engineering, 2019, 7, 10595-10604.	6.7	28
121	Identifying peptide sequences that can control the assembly of gold nanostructures. Molecular Systems Design and Engineering, 2018, 3, 581-590.	3.4	25
122	Recent advances and perspectives of halide perovskite photocatalyst. Current Opinion in Electrochemistry, 2018, 11, 98-104.	4.8	24
123	Water Oxidation Mechanism for 3d Transition Metal Oxide Catalysts under Neutral Condition. Journal of the Korean Ceramic Society, 2017, 54, 1-8.	2.3	24
124	Proton Conduction in a Tyrosineâ€Rich Peptide/Manganese Oxide Hybrid Nanofilm. Advanced Functional Materials, 2017, 27, 1702185.	14.9	23
125	Importance of Interfacial Band Structure between the Substrate and Mn <sub>3</sub> O <sub>4</sub> Nanocatalysts during Electrochemical Water Oxidation. ACS Catalysis, 2020, 10, 1237-1245.	11.2	23
126	Ultrasensitive Nearâ€Infrared Circularly Polarized Light Detection Using 3D Perovskite Embedded with Chiral Plasmonic Nanoparticles. Advanced Science, 2022, 9, e2104598.	11.2	23

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127	Multilayer diffusion barrier for copper metallization using a thin interlayer metal (M=Ru, Cr, and Zr) between two TiN films. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 804.	1.6	22
128	Self-assembled magnetic nanospheres with three-dimensional magnetic vortex. Applied Physics Letters, 2014, 105, .	3.3	22
129	Highly Active MnO Catalysts Integrated onto Fe <sub>2</sub> O <sub>3</sub> Nanorods for Efficient Water Splitting. Advanced Materials Interfaces, 2016, 3, 1600176.	3.7	22
130	Physically Transient Field-Effect Transistors Based on Black Phosphorus. ACS Applied Materials & Interfaces, 2018, 10, 42630-42636.	8.0	22
131	Enhanced conductivity of solution-processed indium tin oxide nanoparticle films by oxygen partial pressure controlled annealing. Journal of Materials Chemistry C, 2013, 1, 5953.	5.5	21
132	Plasmon Enhanced Fluorescence Based on Porphyrin–Peptoid Hybridized Gold Nanoparticle Platform. Small, 2017, 13, 1700071.	10.0	21
133	Spectroscopic capture of a low-spin Mn(IV)-oxo species in Ni–Mn3O4 nanoparticles during water oxidation catalysis. Nature Communications, 2020, 11, 5230.	12.8	21
134	Hierarchically Structured Fe <sub>3</sub> O <sub>4</sub> Nanoparticles for High-Performance Magnetorheological Fluids with Long-Term Stability. ACS Applied Nano Materials, 2020, 3, 10931-10940.	5.0	21
135	Double-Layer Graphene Outperforming Monolayer as Catalyst on Silicon Photocathode for Hydrogen Production. ACS Applied Materials & Samp; Interfaces, 2017, 9, 3570-3580.	8.0	20
136	Hierarchical carbon–silicon nanowire heterostructures for the hydrogen evolution reaction. Nanoscale, 2018, 10, 13936-13941.	5.6	20
137	Chiral 432 Helicoid II Nanoparticle Synthesized with Glutathione and Poly(T) <sub>20</sub> Nucleotide. ChemNanoMat, 2020, 6, 362-367.	2.8	20
138	Controlling the size and circular dichroism of chiral gold helicoids. Materials Advances, 2021, 2, 6988-6995.	5.4	20
139	Optimization of Al interlayer thickness for the multilayer diffusion barrier scheme in Cu metallization. Journal of Applied Physics, 2002, 92, 1099-1105.	2.5	19
140	Rise of nano effects in electrode during electrocatalytic CO <sub>2</sub> conversion. Nanotechnology, 2017, 28, 352001.	2.6	19
141	Tyrosyltyrosylcysteine-Directed Synthesis of Chiral Cobalt Oxide Nanoparticles and Peptide Conformation Analysis. ACS Nano, 2021, 15, 979-988.	14.6	19
142	Material science lesson from the biological photosystem. Nano Convergence, 2016, 3, 19.	12.1	18
143	A Single Chiral Nanoparticle Induced Valley Polarization Enhancement. Small, 2020, 16, e2003005.	10.0	18
144	Failure mechanism of a multilayer (TiN/Al/TiN) diffusion barrier between copper and silicon. Journal of Applied Physics, 2002, 92, 5512-5519.	2.5	17

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145	Tailoring a Tyrosine-Rich Peptide into Size- and Thickness-Controllable Nanofilms. ACS Omega, 2018, 3, 3901-3907.	3.5	17
146	Metal Halide Perovskites for Solar Fuel Production and Photoreactions. Journal of Physical Chemistry Letters, 2021, 12, 8292-8301.	4.6	17
147	Self-Assembly of "S-Bilayersâ€, a Step Toward Expanding the Dimensionality of S-Layer Assemblies. ACS Nano, 2013, 7, 4946-4953.	14.6	16
148	Redox-Active Tyrosine-Mediated Peptide Template for Large-Scale Single-Crystalline Two-Dimensional Silver Nanosheets. ACS Nano, 2020, 14, 1738-1744.	14.6	16
149	Second Harmonic Optical Circular Dichroism of Plasmonic Chiral Helicoid-III Nanoparticles. ACS Photonics, 2022, 9, 784-792.	6.6	16
150	Biofunctionalized Ceramic with Self-Assembled Networks of Nanochannels. ACS Nano, 2015, 9, 4447-4457.	14.6	15
151	Spontaneously polarized lithium-doped zinc oxide nanowires as photoanodes for electrical water splitting. Journal of Materials Chemistry A, 2016, 4, 3223-3227.	10.3	14
152	Controlled Molybdenum Disulfide Assembly inside Carbon Nanofiber by Boudouard Reaction Inspired Selective Carbon Oxidation. Advanced Materials, 2017, 29, 1605327.	21.0	14
153	Methylamine Treated Mn3O4Nanoparticles as a Highly Efficient Water Oxidation Catalyst under Neutral Condition. ChemCatChem, 2019, 11, 1665-1672.	3.7	14
154	Fully Degradable Memristors and Humidity Sensors Based on a Tyrosine-Rich Peptide. ACS Applied Electronic Materials, 2021, 3, 3372-3378.	4.3	14
155	Demonstration of the nanosize effect of carbon nanomaterials on the dehydrogenation temperature of ammonia borane. Nanoscale Advances, 2019, 1, 4697-4703.	4.6	13
156	Hydrogen Production via Water Electrolysis: The Benefits of a Solar Cell-Powered Process. IEEE Electrification Magazine, 2018, 6, 19-25.	1.8	12
157	Anion Extraction-Induced Polymorph Control of Transition Metal Dichalcogenides. Nano Letters, 2019, 19, 8644-8652.	9.1	12
158	Synergistic Effects of Nonmagnetic Carbon Nanotubes on the Performance and Stability of Magnetorheological Fluids Containing Carbon Nanotube-Co <sub>0.4</sub> Fe <sub>0.4</sub> Ni <sub>0.2</sub> Nanocomposite Particles. Nano Letters, 2021, 21, 4973-4980.	9.1	12
159	Humidity-induced synaptic plasticity of ZnO artificial synapses using peptide insulator for neuromorphic computing. Journal of Materials Science and Technology, 2022, 119, 150-155.	10.7	11
160	Size-controllable and uniform gold bumpy nanocubes for single-particle-level surface-enhanced Raman scattering sensitivity. Physical Chemistry Chemical Physics, 2019, 21, 9044-9051.	2.8	10
161	An Implantable Ionic Wireless Power Transfer System Facilitating Electrosynthesis. ACS Nano, 2020, 14, 11743-11752.	14.6	10
162	Vitamin B12â€Immobilized Graphene Oxide for Efficient Electrocatalytic Carbon Dioxide Reduction Reaction. ChemSusChem, 2020, 13, 5620-5624.	6.8	10

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163	Electrochemically Activated NiFeO <sub><i>x</i></sub> H <sub><i>y</i></sub> for Enhanced Oxygen Evolution. ACS Applied Energy Materials, 2021, 4, 595-601.	5.1	10
164	A tyrosine-rich peptide induced flower-like palladium nanostructure and its catalytic activity. RSC Advances, 2015, 5, 78026-78029.	3.6	9
165	Increased electrical conductivity of peptides through annealing process. APL Materials, 2017, 5, .	5.1	9
166	Effects of proton conduction on dielectric properties of peptides. RSC Advances, 2018, 8, 34047-34055.	3.6	9
167	Recent advances in heterogeneous Mn-based electrocatalysts toward biological photosynthetic Mn4Ca cluster. Catalysis Today, 2020, 353, 232-241.	4.4	9
168	Dimensionality reduction and unsupervised clustering for EELS-SI. Ultramicroscopy, 2021, 231, 113314.	1.9	9
169	Random Lasing with a High Degree of Circular Dichroism by Chiral Plasmonic Gold Nanoparticles. ACS Photonics, 2022, 9, 613-620.	6.6	9
170	High-Density Single-Layer Coating of Gold Nanoparticles onto Multiple Substrates by Using an Intrinsically Disordered Protein of α-Synuclein for Nanoapplications. ACS Applied Materials & Samp; Interfaces, 2017, 9, 8519-8532.	8.0	8
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.	2.8	8
172	Highâ€Throughput Pb Recycling for Perovskite Solar Cells Using Biomimetic Whitlockite. Energy and Environmental Materials, 2023, 6, .	12.8	8
173	Invited paper: Application of chitin and Chitosan toward electrochemical hybrid device. Electronic Materials Letters, 2011, 7, 13-16.	2.2	7
174	Reverse Electrodialysis-Assisted Solar Water Splitting. Scientific Reports, 2017, 7, 12281.	3.3	7
175	Tyrosineâ€Rich Peptide Insulator for Rapidly Dissolving Transient Electronics. Advanced Materials Technologies, 2020, 5, 2000516.	5.8	7
176	γâ€Glutamylcysteine―and Cysteinylglycineâ€Directed Growth of Chiral Gold Nanoparticles and their Crystallographic Analysis. Angewandte Chemie, 2020, 132, 13076-13083.	2.0	7
177	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, 2-2.	7.6	6
178	A scalable Al–Ni alloy powder catalyst prepared by metallurgical microstructure control. Journal of Materials Chemistry A, 2020, 8, 11133-11140.	10.3	6
179	A Sn doped, strained CuAg film for electrochemical CO <sub>2</sub> reduction. Journal of Materials Chemistry A, 2022, 10, 7082-7089.	10.3	6
180	Quantitative Analysis of Calcium Phosphate Nanocluster Growth Using Time-of-Flight Medium-Energy-Ion-Scattering Spectroscopy. ACS Central Science, 2018, 4, 1253-1260.	11.3	5

#	Article	IF	CITATIONS
181	Capturing Manganese Oxide Intermediates in Electrochemical Water Oxidation at Neutral pH by In Situ Raman Spectroscopy. Angewandte Chemie, 2021, 133, 4723-4731.	2.0	5
182	Complex Impedance Analysis on Charge Accumulation Step of Mn <sub>3</sub> O <sub>4</sub> Nanoparticles during Water Oxidation. ACS Omega, 2021, 6, 18404-18413.	3.5	5
183	Screening of Pro–Asp Sequences Exposed on Bacteriophage M13 as an Ideal Anchor for Gold Nanocubes. ACS Synthetic Biology, 2017, 6, 1635-1641.	3.8	4
184	Electrochemical Analysis of Carbon Nanosheet Catalyst on Silicon Photocathode for Hydrogen Generation. Bulletin of the Korean Chemical Society, 2018, 39, 356-362.	1.9	4
185	Effects of paramagnetic fluctuations on the thermochemistry of MnO(100) surfaces in the oxygen evolution reaction. Physical Chemistry Chemical Physics, 2021, 23, 859-865.	2.8	4
186	Gold meets peptides in a hybrid coil. Science, 2021, 371, 1311-1311.	12.6	4
187	Electrochemical Synthesis of Glycine from Oxalic Acid and Nitrate. Angewandte Chemie, 2021, 133, 22114-22122.	2.0	4
188	Electrolysis of iron with oxygen gas evolution from molten sodium borate electrolytes. Ironmaking and Steelmaking, 2021, 48, 1030-1037.	2.1	4
189	Multidimensional Assembly of S-Layer Proteins on Mobility-Controlled Polyelectrolyte Multilayers. ACS Macro Letters, 2012, 1, 1254-1257.	4.8	3
190	Electrophoretic kinetics of concentrated TiO2 nanoparticle suspensions in aprotic solvent. Electronic Materials Letters, 2018, 14, 79-82.	2.2	2
191	DNA translocation through a nanopore in an ultrathin self-assembled peptide membrane. Nanotechnology, 2019, 30, 195602.	2.6	2
192	Light polarization dependency existing in the biological photosystem and possible implications for artificial antenna systems. Photosynthesis Research, 2020, 143, 205-220.	2.9	2
193	Probing the Structure and Binding Mode of EDTA on the Surface of Mn <sub>3</sub> O <sub>4</sub> Nanoparticles for Water Oxidation by Advanced Electron Paramagnetic Resonance Spectroscopy. Inorganic Chemistry, 2020, 59, 8846-8854.	4.0	2
194	Electrochemical cell in the brain. Nature Nanotechnology, 2020, 15, 625-626.	31.5	2
195	Synaptic transistors based on a tyrosine-rich peptide for neuromorphic computing. RSC Advances, 2021, 11, 39619-39624.	3.6	2
196	Titelbild: Redox Cofactor from Biological Energy Transduction as Molecularly Tunable Energy-Storage Compound (Angew. Chem. 32/2013). Angewandte Chemie, 2013, 125, 8329-8329.	2.0	1
197	Polydopamine–Copper Hybrid Films as Source and Drain for Oxide Semiconductor Fieldâ€Effect Transistors. Advanced Electronic Materials, 2018, 4, 1800046.	5.1	1
198	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.	5.1	1

#	Article	IF	Citations
199	Inorganic Hollow Nanocoils Fabricated by Controlled Interfacial Reaction and Their Electrocatalytic Properties. Small, 2021, 17, e2103575.	10.0	1
200	Fabrication of Ni–Mo-based Electrocatalysts by Modified Zn Phosphating for Hydrogen Evolution Reaction. Journal of Electrochemical Science and Technology, 2022, 13, 54-62.	2.2	1
201	Clay nanoplate-chitosan hybrid hydrogels through electrostatic interaction. , 2011, , .		0
202	Frontispiece: Tris(2â€benzimidazolylmethyl)amineâ€Directed Synthesis of Singleâ€Atom Nickel Catalysts for Electrochemical CO Production from CO 2. Chemistry - A European Journal, 2018, 24, .	3.3	0
203	Historical Perspectives of the Development of Materials Science and Engineering Program at Seoul National University and Vision. Advanced Materials, 2018, 30, 1804800.	21.0	0
204	Solar Water Splitting: Efficient Water Splitting Cascade Photoanodes with Ligand-Engineered MnO Cocatalysts (Adv. Sci. 10/2018). Advanced Science, 2018, 5, 1870061.	11.2	0
205	Metal Nanocrystals: Chiral Surface and Geometry of Metal Nanocrystals (Adv. Mater. 41/2020). Advanced Materials, 2020, 32, 2070308.	21.0	0
206	Valley Polarization: A Single Chiral Nanoparticle Induced Valley Polarization Enhancement (Small) Tj ETQq0 0 0 rg	BT/Oyerlo	ock 10 Tf 50 4
207	Engineered Dissolution for Better Electrocatalysts. CheM, 2021, 7, 20-22.	11.7	0
208	Subwavelength Light Control via Wavefront Shaping in Complex Media., 2013,,.		0
209	Subwavelength Light Control via Wavefront Shaping in Complex Media. , 2013, , .		0