

# Tae-kyu Kim

## List of Publications by Year in descending order

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159  
papers

6,172  
citations

50276

46  
h-index

76900

74  
g-index

163  
all docs

163  
docs citations

163  
times ranked

6268  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrafast X-ray Diffraction of Transient Molecular Structures in Solution. <i>Science</i> , 2005, 309, 1223-1227.	12.6	230
2	Femtosecond Soft X-ray Spectroscopy of Solvated Transition-Metal Complexes: Deciphering the Interplay of Electronic and Structural Dynamics. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 880-884.	4.6	169
3	Ultrathin MoS <sub>2</sub> layers anchored exfoliated reduced graphene oxide nanosheet hybrid as a highly efficient cocatalyst for CdS nanorods towards enhanced photocatalytic hydrogen production. <i>Applied Catalysis B: Environmental</i> , 2017, 212, 7-14.	20.2	167
4	Heterostructured WS <sub>2</sub> /MoS <sub>2</sub> Ultrathin Nanosheets Integrated on CdS Nanorods to Promote Charge Separation and Migration and Improve Solar-Driven Photocatalytic Hydrogen Evolution. <i>ChemSusChem</i> , 2017, 10, 1563-1570.	6.8	150
5	Few layered black phosphorus/MoS <sub>2</sub> nanohybrid: A promising co-catalyst for solar driven hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2019, 241, 491-498.	20.2	146
6	Reduced graphene oxide wrapped ZnS/Ag <sub>2</sub> S ternary composites synthesized via hydrothermal method: Applications in photocatalyst degradation of organic pollutants. <i>Applied Surface Science</i> , 2015, 324, 725-735.	6.1	145
7	Photo-Induced Spin-State Conversion in Solvated Transition Metal Complexes Probed via Time-Resolved Soft X-ray Spectroscopy. <i>Journal of the American Chemical Society</i> , 2010, 132, 6809-6816.	13.7	135
8	Hierarchical dandelion-flower-like cobalt-phosphide modified CdS/reduced graphene oxide-MoS <sub>2</sub> nanocomposites as a noble-metal-free catalyst for efficient hydrogen evolution from water. <i>Catalysis Science and Technology</i> , 2016, 6, 6197-6206.	4.1	131
9	Rational Synthesis of Metal-Organic Framework-Derived Noble Metal-Free Nickel Phosphide Nanoparticles as a Highly Efficient Cocatalyst for Photocatalytic Hydrogen Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 7158-7166.	6.7	131
10	Surface oxygen vacancy assisted electron transfer and shuttling for enhanced photocatalytic activity of a Z-scheme CeO <sub>2</sub> /AgI nanocomposite. <i>RSC Advances</i> , 2016, 6, 19341-19350.	3.6	131
11	Self-assembly of CeO <sub>2</sub> nanostructures/reduced graphene oxide composite aerogels for efficient photocatalytic degradation of organic pollutants in water. <i>Journal of Alloys and Compounds</i> , 2016, 688, 527-536.	5.5	130
12	Hydrazine-assisted formation of ultrathin MoS <sub>2</sub> nanosheets for enhancing their co-catalytic activity in photocatalytic hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2017, 5, 6981-6991.	10.3	120
13	An oxygen-vacancy rich 3D novel hierarchical MoS <sub>2</sub> /BiOI/AgI ternary nanocomposite: enhanced photocatalytic activity through photogenerated electron shuttling in a Z-scheme manner. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 24984-24993.	2.8	119
14	Noble metal-free ultrathin MoS <sub>2</sub> nanosheet-decorated CdS nanorods as an efficient photocatalyst for spectacular hydrogen evolution under solar light irradiation. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18551-18558.	10.3	118
15	Self-assembled macro porous Zn/graphene aerogels for photocatalytic degradation of contaminants in water. <i>RSC Advances</i> , 2015, 5, 18342-18351.	3.6	108
16	Green synthesis of AgI nanoparticle-functionalized reduced graphene oxide aerogels with enhanced catalytic performance and facile recycling. <i>RSC Advances</i> , 2015, 5, 67394-67404.	3.6	103
17	Transformation of CeO <sub>2</sub> into a mixed phase CeO <sub>2</sub> /Ce <sub>2</sub> O <sub>3</sub> nanohybrid by liquid phase pulsed laser ablation for enhanced photocatalytic activity through Z-scheme pattern. <i>Ceramics International</i> , 2016, 42, 18495-18502.	4.8	103
18	Impulsive solvent heating probed by picosecond x-ray diffraction. <i>Journal of Chemical Physics</i> , 2006, 124, 124504.	3.0	102

#	ARTICLE	IF	CITATIONS
19	Multicomponent transition metal phosphides derived from layered double hydroxide double-shelled nanocages as an efficient non-precious co-catalyst for hydrogen production. <i>Journal of Materials Chemistry A</i> , 2016, 4, 13890-13898.	10.3	102
20	Excellent photocatalytic hydrogen production over CdS nanorods via using noble metal-free copper molybdenum sulfide (Cu <sub>2</sub> MoS <sub>4</sub> ) nanosheets as co-catalysts. <i>Applied Surface Science</i> , 2017, 396, 421-429.	6.1	100
21	In situ preparation of few-layered WS <sub>2</sub> nanosheets and exfoliation into bilayers on CdS nanorods for ultrafast charge carrier migrations toward enhanced photocatalytic hydrogen production. <i>Journal of Catalysis</i> , 2017, 351, 153-160.	6.2	98
22	Green synthesis of AgI-reduced graphene oxide nanocomposites: Toward enhanced visible-light photocatalytic activity for organic dye removal. <i>Applied Surface Science</i> , 2015, 341, 175-184.	6.1	95
23	Hierarchical BiOI nanostructures supported on a metal organic framework as efficient photocatalysts for degradation of organic pollutants in water. <i>Dalton Transactions</i> , 2017, 46, 6013-6023.	3.3	95
24	Noble metal-free metal-organic framework-derived onion slice-type hollow cobalt sulfide nanostructures: Enhanced activity of CdS for improving photocatalytic hydrogen production. <i>Applied Catalysis B: Environmental</i> , 2018, 224, 230-238.	20.2	93
25	Enhanced photocatalytic activity and anti-photocorrosion of AgI nanostructures by coupling with graphene-analogue boron nitride nanosheets. <i>Ceramics International</i> , 2015, 41, 13793-13803.	4.8	90
26	Highly Durable and Fully Dispersed Cobalt Diatomic Site Catalysts for CO <sub>2</sub> Photoreduction to CH <sub>4</sub> . <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	83
27	Influence of surface-functionalized multi-walled carbon nanotubes on CdS nanohybrids for effective photocatalytic hydrogen production. <i>Applied Catalysis B: Environmental</i> , 2018, 236, 294-303.	20.2	78
28	Modulation of charge carrier pathways in CdS nanospheres by integrating MoS <sub>2</sub> and Ni <sub>2</sub> P for improved migration and separation toward enhanced photocatalytic hydrogen evolution. <i>Catalysis Science and Technology</i> , 2017, 7, 641-649.	4.1	76
29	Spatiotemporal Kinetics in Solution Studied by Time-Resolved X-ray Liquidography (Solution) Tj ETQq1 1 0.784314 rgBT /QOverlock 1	2.1	75
30	Earth abundant transition metal-doped few-layered MoS <sub>2</sub> nanosheets on CdS nanorods for ultra-efficient photocatalytic hydrogen production. <i>Journal of Materials Chemistry A</i> , 2017, 5, 20851-20859.	10.3	75
31	Designing CdS Mesoporous Networks on Co@Co <sub>9</sub> S <sub>8</sub> Double-Shelled Nanocages as Redox-Mediator-Free Z-Scheme Photocatalyst. <i>ChemSusChem</i> , 2018, 11, 245-253.	6.8	74
32	Efficient photocatalytic degradation of methylene blue by heterostructured ZnO@RGO/RuO <sub>2</sub> nanocomposite under the simulated sunlight irradiation. <i>Ceramics International</i> , 2015, 41, 6999-7009.	4.8	73
33	Optimization of Active Sites of MoS <sub>2</sub> Nanosheets Using Nonmetal Doping and Exfoliation into Few Layers on CdS Nanorods for Enhanced Photocatalytic Hydrogen Production. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 7651-7658.	6.7	73
34	Enhanced Photocatalytic Hydrogen Evolution by Integrating Dual Co-Catalysts on Heterophase CdS Nano-Junctions. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 12835-12844.	6.7	73
35	Polycrystalline tungsten oxide nanofibers for gas-sensing applications. <i>Sensors and Actuators B: Chemical</i> , 2011, 160, 549-554.	7.8	72
36	Nanocatalyst-Based Assay Using DNA-Conjugated Au Nanoparticles for Electrochemical DNA Detection. <i>Langmuir</i> , 2008, 24, 9883-9888.	3.5	68

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37	Spatiotemporal reaction kinetics of an ultrafast photoreaction pathway visualized by time-resolved liquid x-ray diffraction. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 9410-9415.	7.1	64
38	Zeolitic imidazolate framework-67 (ZIF-67) rhombic dodecahedrons as full-spectrum light harvesting photocatalyst for environmental remediation. Solid State Sciences, 2016, 62, 82-89.	3.2	60
39	Synthesis of Ultra-small Palladium Nanoparticles Deposited on CdS Nanorods by Pulsed Laser Ablation in Liquid: Role of Metal Nanocrystal Size in the Photocatalytic Hydrogen Production. Chemistry - A European Journal, 2017, 23, 13112-13119.	3.3	59
40	Hydrogenation of 4-nitrophenol to 4-aminophenol at room temperature: Boosting palladium nanocrystals efficiency by coupling with copper via liquid phase pulsed laser ablation. Applied Surface Science, 2017, 401, 314-322.	6.1	56
41	Capturing Transient Structures in the Elimination Reaction of Haloalkane in Solution by Transient X-ray Diffraction. Journal of the American Chemical Society, 2008, 130, 5834-5835.	13.7	54
42	Transient X-ray Diffraction Reveals Global and Major Reaction Pathways for the Photolysis of Iodoform in Solution. Angewandte Chemie - International Edition, 2008, 47, 1047-1050.	13.8	53
43	Reduced-graphene-oxide-wrapped BiOI-AgI heterostructured nanocomposite as a high-performance photocatalyst for dye degradation under solar light irradiation. Solid State Sciences, 2016, 61, 32-39.	3.2	52
44	Time-Resolved X-ray Spectroscopy in the Water Window: Elucidating Transient Valence Charge Distributions in an Aqueous Fe(II) Complex. Journal of Physical Chemistry Letters, 2016, 7, 465-470.	4.6	50
45	Ligand-field symmetry effects in Fe(II) polypyridyl compounds probed by transient X-ray absorption spectroscopy. Faraday Discussions, 2012, 157, 463.	3.2	49
46	Thick-lens velocity-map imaging spectrometer with high resolution for high-energy charged particles. Journal of Instrumentation, 2014, 9, P05005-P05005.	1.2	49
47	Green synthesis of the reduced graphene oxide-CuI quasi-shell core nanocomposite: A highly efficient and stable solar-light-induced catalyst for organic dye degradation in water. Applied Surface Science, 2015, 358, 159-167.	6.1	48
48	Photodissociation dynamics of CF <sub>3</sub> Br at 234 nm: An implication of symmetry reduction during photodissociation. Journal of Chemical Physics, 2001, 115, 10745-10752.	3.0	46
49	Liquid-phase pulsed laser ablation synthesis of graphitized carbon-encapsulated palladium core-shell nanospheres for catalytic reduction of nitrobenzene to aniline. Applied Surface Science, 2015, 357, 2112-2120.	6.1	46
50	Drastic Improvement of 1D-CdS Solar-Driven Photocatalytic Hydrogen Evolution Rate by Integrating with NiFe Layered Double Hydroxide Nanosheets Synthesized by Liquid-Phase Pulsed-Laser Ablation. ACS Sustainable Chemistry and Engineering, 2018, 6, 16734-16743.	6.7	45
51	Tuning Band Alignments and Charge-Transport Properties through MoSe <sub>2</sub> Bridging between MoS <sub>2</sub> and Cadmium Sulfide for Enhanced Hydrogen Production. ACS Applied Materials & Interfaces, 2018, 10, 26153-26161.	8.0	43
52	Density Functional Theory Assessment of Molecular Structures and Energies of Neutral and Anionic Al <sub>n</sub> (n = 2-10) Clusters. Journal of Physical Chemistry A, 2013, 117, 9293-9303.	2.5	41
53	Controlled synthesis of heterostructured Ag@AgI/ZnS microspheres with enhanced photocatalytic activity and selective separation of methylene blue from mixture dyes. Journal of the Taiwan Institute of Chemical Engineers, 2016, 66, 200-209.	5.3	41
54	Synthesis of CeO <sub>2</sub> /Pd nanocomposites by pulsed laser ablation in liquids for the reduction of 4-nitrophenol to 4-aminophenol. Ceramics International, 2015, 41, 12432-12438.	4.8	40

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55	Pyrolic Nâ€Stabilized Monovalent Ni Singleâ€Atom Electrocatalyst for Efficient CO <sub>2</sub> Reduction: Identifying the Role of Pyrolicâ€N and Synergistic Electrocatalysis. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	40
56	Synthesis of Length-Controlled Aerosol Carbon Nanotubes and Their Dispersion Stability in Aqueous Solution. <i>Langmuir</i> , 2009, 25, 1739-1743.	3.5	39
57	Well-wrapped reduced graphene oxide nanosheets on Nb <sub>3</sub> O <sub>7</sub> (OH) nanostructures as good electron collectors and transporters for efficient photocatalytic degradation of rhodamine B and phenol. <i>RSC Advances</i> , 2016, 6, 37180-37188.	3.6	39
58	Highly efficient hydrogen generation in water using 1D CdS nanorods integrated with 2D SnS <sub>2</sub> nanosheets under solar light irradiation. <i>Applied Surface Science</i> , 2020, 508, 144803.	6.1	39
59	Recent advances in metalâ€organic framework-based photocatalysts for hydrogen production. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1597-1618.	4.9	39
60	Significant Improvements on BiVO <sub>4</sub> @CoPi Photoanode Solar Water Splitting Performance by Extending Visible-Light Harvesting Capacity and Charge Carrier Transportation. <i>ACS Applied Energy Materials</i> , 2020, 3, 4474-4483.	5.1	38
61	Avoided Curve Crossing between the A1 and B1 States in CF <sub>2</sub> Br <sub>2</sub> Photolysis at 234 and 265 nm. <i>Journal of Physical Chemistry A</i> , 2001, 105, 5606-5612.	2.5	36
62	The influence of laser wavelength and fluence on palladium nanoparticles produced by pulsed laser ablation in deionized water. <i>Solid State Sciences</i> , 2014, 37, 96-102.	3.2	36
63	Tracking reaction dynamics in solution by pumpâ€probe X-ray absorption spectroscopy and X-ray liquidography (solution scattering). <i>Chemical Communications</i> , 2016, 52, 3734-3749.	4.1	35
64	Photochemistry of HgBr <sub>2</sub> in methanol investigated using time-resolved X-ray liquidography. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 11536.	2.8	33
65	Element-Specific Characterization of Transient Electronic Structure of Solvated Fe(II) Complexes with Time-Resolved Soft X-ray Absorption Spectroscopy. <i>Accounts of Chemical Research</i> , 2015, 48, 2957-2966.	15.6	30
66	UV-Photochemistry of the Disulfide Bond: Evolution of Early Photoproducts from Picosecond X-ray Absorption Spectroscopy at the Sulfur K-Edge. <i>Journal of the American Chemical Society</i> , 2018, 140, 6554-6561.	13.7	30
67	Constructing ordered paths to improve the charge separation and light harvesting capacity towards efficient solar water oxidation performance. <i>Applied Catalysis B: Environmental</i> , 2020, 269, 118761.	20.2	30
68	Transient metal-centered states mediate isomerization of a photochromic ruthenium-sulfoxide complex. <i>Nature Communications</i> , 2018, 9, 1989.	12.8	29
69	Using Ultrafast X-ray Spectroscopy To Address Questions in Ligand-Field Theory: The Excited State Spin and Structure of [Fe(dcpp) <sub>2</sub> ] <sup>2+</sup> . <i>Inorganic Chemistry</i> , 2019, 58, 9341-9350.	4.0	29
70	Construction of a Highly Efficient and Durable 1D Ternary CdS/ZnS/Pt Nanohybrid Catalyst for Photocatalytic CO <sub>2</sub> Reduction into Chemical Fuels under Solar Light Irradiation. <i>ACS Applied Energy Materials</i> , 2020, 3, 10533-10540.	5.1	29
71	Photodissociation Reaction of 1,2-Diiodoethane in Solution:â€ A Theoretical and X-ray Diffraction Study. <i>Journal of Physical Chemistry A</i> , 2005, 109, 10451-10458.	2.5	28
72	Photolysis of Br <sub>2</sub> in CCl <sub>4</sub> studied by time-resolved X-ray scattering. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2010, 66, 252-260.	0.3	26

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73	Light-Induced Radical Formation and Isomerization of an Aromatic Thiol in Solution Followed by Time-Resolved X-ray Absorption Spectroscopy at the Sulfur K-Edge. <i>Journal of the American Chemical Society</i> , 2017, 139, 4797-4804.	13.7	26
74	Multidirectional-charge-transfer urchin-type Mo-doped $W_{18}O_{49}$ nanostructures on CdS nanorods for enhanced photocatalytic hydrogen evolution. <i>Catalysis Science and Technology</i> , 2018, 8, 1880-1891.	4.1	26
75	Construction of 1D TiO <sub>2</sub> nanotubes integrated ultrathin 2D ZnIn <sub>2</sub> S <sub>4</sub> nanosheets heterostructure for highly efficient and selective photocatalytic CO <sub>2</sub> reduction. <i>Applied Surface Science</i> , 2022, 587, 152895.	6.1	26
76	Analyzing solution-phase time-resolved x-ray diffraction data by isolated-solute models. <i>Journal of Chemical Physics</i> , 2006, 125, 174504.	3.0	23
77	Synergetic catalytic behavior of dual metal-organic framework coated hematite photoanode for photoelectrochemical water splitting performance. <i>Journal of Catalysis</i> , 2020, 391, 471-479.	6.2	23
78	Spectroscopic evidence of $\dot{I}^{\pm}$ -methylbenzyl radical in the gas phase. <i>Chemical Physics Letters</i> , 2008, 465, 193-196.	2.6	21
79	Density Functional and Ab Initio Study of Cr(CO) <sub>n</sub> (n = 1~6) Complexes. <i>Journal of Physical Chemistry A</i> , 2007, 111, 4697-4710.	2.5	20
80	Indium Phosphide Quantum Dots Integrated with Cadmium Sulfide Nanorods for Photocatalytic Carbon Dioxide Reduction. <i>ChemCatChem</i> , 2020, 12, 4550-4557.	3.7	20
81	<i>In situ</i> addition of Ni salt onto a skeletal Cu <sub>7</sub> S <sub>4</sub> integrated CdS nanorod photocatalyst for efficient production of H <sub>2</sub> under solar light irradiation. <i>Catalysis Science and Technology</i> , 2020, 10, 3542-3551.	4.1	20
82	Boosting Water Oxidation Performance of BiVO <sub>4</sub> Photoanode by Vertically Stacked NiO Nanosheets Coupled with Atomically Dispersed Iridium Sites. <i>ACS Applied Energy Materials</i> , 2021, 4, 11353-11366.	5.1	20
83	Highly Durable and Fully Dispersed Cobalt Diatomic Site Catalysts for CO <sub>2</sub> Photoreduction to CH <sub>4</sub> . <i>Angewandte Chemie</i> , 2022, 134, .	2.0	20
84	Electronic and Molecular Structure of the Transient Radical Photocatalyst Mn(CO) <sub>5</sub> and Its Parent Compound Mn <sub>2</sub> (CO) <sub>10</sub> . <i>Inorganic Chemistry</i> , 2016, 55, 5895-5903.	4.0	19
85	Global Reaction Pathways in the Photodissociation of I <sub>3</sub> <sup>+</sup> Ions in Solution at 267 and 400 nm Studied by Picosecond X-ray Liquidography. <i>ChemPhysChem</i> , 2013, 14, 3687-3697.	2.1	18
86	Synthesis and detailed spectroscopic characterization of various hydroxy-functionalized fluorescent chalcones: A combined experimental and theoretical study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 150, 557-564.	3.9	17
87	Skeletal Cu <sub>7</sub> S <sub>4</sub> Nanocages Wrapped by Few-Layered Black Phosphorus Nanosheets as an Efficient H <sub>2</sub> Production Photocatalyst. <i>ChemCatChem</i> , 2021, 13, 304-312.	3.7	17
88	Exposure of NiFe-LDH active sites by cation exchange to promote photoelectrochemical water splitting performance. <i>Applied Surface Science</i> , 2021, 570, 151134.	6.1	17
89	Ultrathin layered Zn-doped MoS <sub>2</sub> nanosheets deposited onto CdS nanorods for spectacular photocatalytic hydrogen evolution. <i>Journal of Alloys and Compounds</i> , 2022, 905, 164193.	5.5	17
90	Facile synthesis of cauliflower-like cobalt-doped Ni <sub>3</sub> Se <sub>2</sub> nanostructures as high-performance cathode materials for aqueous zinc-ion batteries. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 7741-7750.	7.1	16



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91	Identifying the major intermediate species by combining time-resolved X-ray solution scattering and X-ray absorption spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 23298-23302.	2.8	15
92	Anionic precursor-mediated morphology-controlled synthesis of ZnS nanostructures: Morphology-dependent tunable photoluminescence in the visible region and pulsed laser-induced efficient reduction of Cr(VI). <i>Ceramics International</i> , 2016, 42, 12046-12054.	4.8	15
93	Formation of hybrid nanostructures comprising perovskite (Ba <sub>5</sub> Nb <sub>4</sub> O <sub>15</sub> )-MoS <sub>2</sub> ultrathin nanosheets on CdS nanorods: Toward enhanced solar-driven H <sub>2</sub> production. <i>Journal of Catalysis</i> , 2017, 352, 617-626.	6.2	15
94	Photodissociation dynamics of CF <sub>3</sub> Br at 225nm: Direct dissociation via pseudo-linear geometry. <i>Chemical Physics Letters</i> , 2007, 446, 31-35.	2.6	13
95	<i>In situ</i> growth of Ag <sub>2</sub> S quantum dots on SnS <sub>2</sub> nanosheets with enhanced charge separation efficiency and CO <sub>2</sub> reduction performance. <i>Journal of Materials Chemistry A</i> , 2022, 10, 7291-7299.	10.3	13
96	Density Functional and Spin-Orbit Ab Initio Study of CF <sub>3</sub> Br: Molecular Properties and Electronic Curve Crossing. <i>Journal of Physical Chemistry A</i> , 2011, 115, 1264-1271.	2.5	12
97	Following Metal-to-Ligand Charge-Transfer Dynamics with Ligand and Spin Specificity Using Femtosecond Resonant Inelastic X-ray Scattering at the Nitrogen K-Edge. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 6676-6683.	4.6	12
98	In situ preparation of polymeric cobalt phthalocyanine-decorated TiO <sub>2</sub> nanorods for efficient photocatalytic CO <sub>2</sub> reduction. <i>Materials Today Chemistry</i> , 2021, 22, 100589.	3.5	12
99	Augmented photoelectrochemical water reduction: influence of copper vacancies and hole-transport layer on CuBi <sub>2</sub> O <sub>4</sub> photocathode. <i>Journal of Materials Chemistry A</i> , 2022, 10, 6623-6635.	10.3	12
100	Inverse Opal CuBi <sub>2</sub> O <sub>4</sub> Photocathodes for Robust Photoelectrochemical Water Splitting. <i>ACS Applied Energy Materials</i> , 2022, 5, 6050-6058.	5.1	12
101	Observation of vibronic emission spectra of difluorobenzyl radicals: Jet-cooled 2,5-difluorobenzyl radical. <i>Chemical Physics Letters</i> , 2008, 454, 207-211.	2.6	11
102	Performance of Density Functional Theory and Relativistic Effective Core Potential for Ru-Based Organometallic Complexes. <i>Journal of Physical Chemistry A</i> , 2016, 120, 2128-2134.	2.5	11
103	Ultra-small cobalt nanocrystals embedded in 2D-MoS <sub>2</sub> nano-sheets as efficient co-catalyst for solar-driven hydrogen production: Study of evolution rate dependence on cobalt nanocrystal size. <i>Applied Surface Science</i> , 2019, 494, 239-248.	6.1	11
104	Boosting charge transfers in cadmium sulfide nanorods with a few layered Ni-doped MoS <sub>2</sub> nanosheets for enhanced photocatalytic hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 40218-40226.	7.1	11
105	The dynamics of Br(2P <sub>j</sub> ) formation in the photodissociation of vinyl and perfluorovinyl bromides. <i>Journal of Chemical Physics</i> , 2005, 122, 034308.	3.0	10
106	Probing reaction dynamics of transition-metal complexes in solution via time-resolved X-ray spectroscopy. <i>Journal of Physics: Conference Series</i> , 2009, 148, 012043.	0.4	10
107	Hollow CoSe <sub>2</sub> nanocages derived from metal-organic frameworks as efficient non-precious metal co-catalysts for photocatalytic hydrogen production. <i>Catalysis Science and Technology</i> , 2019, 9, 4702-4710.	4.1	10
108	Intracluster Ion-Molecule Reactions of Ti <sup>+</sup> with C <sub>2</sub> H <sub>5</sub> OH and CF <sub>3</sub> CH <sub>2</sub> OH Clusters: Influence of Fluorine Substituents on Chemical Reactivity. <i>Journal of Physical Chemistry A</i> , 2006, 110, 13724-13730.	2.5	9

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109	Theoretical Study on the Reaction of Ti <sup>+</sup> with Acetone and the Role of Intersystem Crossing. <i>Journal of Physical Chemistry A</i> , 2009, 113, 11382-11389.	2.5	9
110	Impact of the number of surface-attached tungsten diselenide layers on cadmium sulfide nanorods on the charge transfer and photocatalytic hydrogen evolution rate. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 903-911.	9.4	9
111	Vibronic emission spectra of jet-cooled 2,3-difluorobenzyl radical in a corona excited supersonic expansion. <i>Chemical Physics Letters</i> , 2007, 447, 197-201.	2.6	8
112	Strong Spin-Orbit Coupling Facilitates C-H Activation in the Reactions of Os <sup>+</sup> with CH <sub>3</sub> F: Theoretical Investigations. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 1087-1092.	5.3	8
113	Development of a Paste-type Certified Reference Material of Tomato for Elemental Analysis: Certification and Long-term Stability Study. <i>Bulletin of the Korean Chemical Society</i> , 2017, 38, 211-218.	1.9	8
114	Membrane Inlet-based Portable Time-of-flight Mass Spectrometer for Analysis of Air Samples. <i>Bulletin of the Korean Chemical Society</i> , 2005, 26, 303-308.	1.9	8
115	Effects of Laser Energy Density on Size and Morphology of NiO Nanoparticles Prepared by Pulsed Laser Ablation in Liquid. <i>Bulletin of the Korean Chemical Society</i> , 2015, 36, 5-6.	1.9	7
116	Shot noise limited soft x-ray absorption spectroscopy in solution at a SASE-FEL using a transmission grating beam splitter. <i>Structural Dynamics</i> , 2021, 8, 014303.	2.3	7
117	Picosecond Diffraction at the ESRF: How Far Have We Come and Where Are We Going?. <i>AIP Conference Proceedings</i> , 2007, , .	0.4	6
118	Ground and low-lying excited states of PtCN and PdCN: theoretical investigation including spin-orbit coupling. <i>Theoretical Chemistry Accounts</i> , 2016, 135, 1.	1.4	6
119	Photodissociation Dynamics of C <sub>2</sub> H <sub>4</sub> BrCl: Nonadiabatic Dynamics with Intrinsic CsSymmetry. <i>Bulletin of the Korean Chemical Society</i> , 2009, 30, 2962-2968.	1.9	6
120	Development of Isotope Dilution LC-MS/MS Method for Accurate Determination of Arsenobetaine in Oyster Certified Reference Material. <i>Bulletin of the Korean Chemical Society</i> , 2014, 35, 821-827.	1.9	6
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