

# Shengwei Liu

## List of Publications by Year in descending order

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95  
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11,750  
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30070  
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37204  
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97  
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97  
docs citations

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times ranked

12954  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tunable Photocatalytic Selectivity of Hollow TiO <sub>2</sub> Microspheres Composed of Anatase Polyhedra with Exposed {001} Facets. <i>Journal of the American Chemical Society</i> , 2010, 132, 11914-11916.	13.7	979
2	Anatase TiO <sub>2</sub> with Dominant High-Energy {001} Facets: Synthesis, Properties, and Applications. <i>Chemistry of Materials</i> , 2011, 23, 4085-4093.	6.7	669
3	Fabrication and characterization of Ag@TiO <sub>2</sub> multiphase nanocomposite thin films with enhanced photocatalytic activity. <i>Applied Catalysis B: Environmental</i> , 2005, 60, 211-221.	20.2	660
4	Enhanced photocatalytic activity of mesoporous TiO <sub>2</sub> aggregates by embedding carbon nanotubes as electron-transfer channel. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 3491-3501.	2.8	476
5	Template-free Hydrothermal Synthesis of CuO/Cu <sub>2</sub> O Composite Hollow Microspheres. <i>Chemistry of Materials</i> , 2007, 19, 4327-4334.	6.7	450
6	Ag <sub>2</sub> O as a New Visible-Light Photocatalyst: Self-Stability and High Photocatalytic Activity. <i>Chemistry - A European Journal</i> , 2011, 17, 7777-7780.	3.3	423
7	Microstructures and photoactivity of mesoporous anatase hollow microspheres fabricated by fluoride-mediated self-transformation. <i>Journal of Catalysis</i> , 2007, 249, 59-66.	6.2	359
8	Sonochemical synthesis of nanocrystallite Bi <sub>2</sub> O <sub>3</sub> as a visible-light-driven photocatalyst. <i>Applied Catalysis A: General</i> , 2006, 308, 105-110.	4.3	356
9	A sonochemical route to visible-light-driven high-activity BiVO <sub>4</sub> photocatalyst. <i>Journal of Molecular Catalysis A</i> , 2006, 252, 120-124.	4.8	340
10	Improved visible-light photocatalytic activity of porous carbon self-doped ZnO nanosheet-assembled flowers. <i>CrystEngComm</i> , 2011, 13, 2533.	2.6	328
11	Enhanced photocatalytic conversion of greenhouse gas CO <sub>2</sub> into solar fuels over g-C <sub>3</sub> N <sub>4</sub> nanotubes with decorated transparent ZIF-8 nanoclusters. <i>Applied Catalysis B: Environmental</i> , 2017, 211, 1-10.	20.2	298
12	2D Transition Metal Dichalcogenides: Design, Modulation, and Challenges in Electrocatalysis. <i>Advanced Materials</i> , 2021, 33, e1907818.	21.0	284
13	Ion-Exchange Synthesis and Enhanced Visible-Light Photoactivity of CuS/ZnS Nanocomposite Hollow Spheres. <i>Journal of Physical Chemistry C</i> , 2010, 114, 13642-13649.	3.1	274
14	Performance and Mechanism of Piezo-Catalytic Degradation of 4-Chlorophenol: Finding of Effective Piezo-Dechlorination. <i>Environmental Science &amp; Technology</i> , 2017, 51, 6560-6569.	10.0	245
15	Superparamagnetic $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> @SiO <sub>2</sub> @TiO <sub>2</sub> composite microspheres with superior photocatalytic properties. <i>Applied Catalysis B: Environmental</i> , 2011, 104, 12-20.	20.2	209
16	Bifunctional S-scheme g-C <sub>3</sub> N <sub>4</sub> /Bi/BiVO <sub>4</sub> hybrid photocatalysts toward artificial carbon cycling. <i>Chinese Journal of Catalysis</i> , 2020, 41, 140-153.	14.0	204
17	A simple cation exchange approach to Bi-doped ZnS hollow spheres with enhanced UV and visible-light photocatalytic H <sub>2</sub> -production activity. <i>Journal of Materials Chemistry</i> , 2011, 21, 14655.	6.7	203
18	Hydrothermal preparation and photocatalytic activity of mesoporous Au@TiO <sub>2</sub> nanocomposite microspheres. <i>Journal of Colloid and Interface Science</i> , 2009, 334, 58-64.	9.4	200

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19	Enhanced photovoltaic performance of dye-sensitized solar cells based on TiO <sub>2</sub> nanosheets/graphene composite films. <i>Journal of Materials Chemistry</i> , 2012, 22, 17027.	6.7	200
20	Nitrogen-doped TiO <sub>2</sub> microsheets with enhanced visible light photocatalytic activity for CO <sub>2</sub> reduction. <i>Chinese Journal of Catalysis</i> , 2015, 36, 2127-2134.	14.0	197
21	Effects of calcination temperatures on photocatalytic activity of SnO <sub>2</sub> /TiO <sub>2</sub> composite films prepared by an EPD method. <i>Journal of Hazardous Materials</i> , 2008, 154, 1141-1148.	12.4	188
22	Unique photocatalytic oxidation reactivity and selectivity of TiO <sub>2</sub> @graphene nanocomposites. <i>Nanoscale</i> , 2012, 4, 3193.	5.6	176
23	Fluorinated semiconductor photocatalysts: Tunable synthesis and unique properties. <i>Advances in Colloid and Interface Science</i> , 2012, 173, 35-53.	14.7	159
24	Ionic-Liquid-Assisted Synthesis of Uniform Fluorinated B/Codoped TiO <sub>2</sub> Nanocrystals and Their Enhanced Visible-Light Photocatalytic Activity. <i>Chemistry - A European Journal</i> , 2013, 19, 2433-2441.	3.3	147
25	MOF-Based Transparent Passivation Layer Modified ZnO Nanorod Arrays for Enhanced Photo-Electrochemical Water Splitting. <i>Advanced Energy Materials</i> , 2018, 8, 1800101.	19.5	143
26	Boosting Hydrogen Transfer during Volmer Reaction at Oxides/Metal Nanocomposites for Efficient Alkaline Hydrogen Evolution. <i>ACS Energy Letters</i> , 2019, 4, 3002-3010.	17.4	142
27	Cooperative self-construction and enhanced optical absorption of nanoplates-assembled hierarchical Bi <sub>2</sub> WO <sub>6</sub> flowers. <i>Journal of Solid State Chemistry</i> , 2008, 181, 1048-1055.	2.9	131
28	Amine-Functionalized Titanate Nanosheet-Assembled Yolk@Shell Microspheres for Efficient Cocatalyst-Free Visible-Light Photocatalytic CO <sub>2</sub> Reduction. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 8166-8175.	8.0	128
29	Activation of peroxymonosulfate by nitrogen-functionalized sludge carbon for efficient degradation of organic pollutants in water. <i>Bioresource Technology</i> , 2017, 241, 244-251.	9.6	124
30	Tandem photocatalytic oxidation of Rhodamine B over surface fluorinated bismuth vanadate crystals. <i>Journal of Materials Chemistry</i> , 2012, 22, 17759.	6.7	114
31	Enhanced photocatalytic CO <sub>2</sub> valorization over TiO <sub>2</sub> hollow microspheres by synergetic surface tailoring and Au decoration. <i>Journal of Materials Chemistry A</i> , 2018, 6, 24245-24255.	10.3	113
32	Fabrication and enhanced CO <sub>2</sub> reduction performance of N-self-doped TiO <sub>2</sub> microsheet photocatalyst by bi-cocatalyst modification. <i>Journal of CO<sub>2</sub> Utilization</i> , 2016, 16, 442-449.	6.8	99
33	Synergetic Molecular Oxygen Activation and Catalytic Oxidation of Formaldehyde over Defective MIL-88B(Fe) Nanorods at Room Temperature. <i>Environmental Science &amp; Technology</i> , 2021, 55, 8341-8350.	10.0	98
34	Enhanced Photocatalytic Activity of Hollow Anatase Microspheres by Sn <sup>4+</sup> Incorporation. <i>Journal of Physical Chemistry C</i> , 2008, 112, 2050-2057.	3.1	96
35	Effects of annealing on the microstructures and photoactivity of fluorinated N-doped TiO <sub>2</sub> . <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 12308.	2.8	96
36	Effects of fluorine on photocatalysis. <i>Chinese Journal of Catalysis</i> , 2020, 41, 1451-1467.	14.0	96

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37	Effect of PSS on morphology and optical properties of ZnO. Journal of Colloid and Interface Science, 2008, 326, 433-438.	9.4	95
38	Promotional role of Mn doping on catalytic oxidation of VOCs over mesoporous TiO <sub>2</sub> under vacuum ultraviolet (VUV) irradiation. Applied Catalysis B: Environmental, 2018, 220, 78-87.	20.2	95
39	Synergetic surface modulation of ZnO/Pt@ZIF-8 hybrid nanorods for enhanced photocatalytic CO <sub>2</sub> valorization. Applied Catalysis B: Environmental, 2021, 287, 119934.	20.2	91
40	Recovering solar fuels from photocatalytic CO <sub>2</sub> reduction over W <sub>6+</sub> -incorporated crystalline g-C <sub>3</sub> N <sub>4</sub> nanorods by synergetic modulation of active centers. Applied Catalysis B: Environmental, 2022, 304, 120978.	20.2	88
41	Synergetic Codoping in Fluorinated Ti <sub>1-x</sub> Zr <sub>x</sub> O <sub>2</sub> Hollow Microspheres. Journal of Physical Chemistry C, 2009, 113, 10712-10717.	3.1	82
42	Enhanced photocatalytic H <sub>2</sub> -production activity of TiO <sub>2</sub> using Ni(NO <sub>3</sub> ) <sub>2</sub> as an additive. Physical Chemistry Chemical Physics, 2013, 15, 12033-12039.	2.8	79
43	Two-Dimensional High-Entropy Metal Phosphorus Trichalcogenides for Enhanced Hydrogen Evolution Reaction. ACS Nano, 2022, 16, 3593-3603.	14.6	77
44	Synergetic degradation of VOCs by vacuum ultraviolet photolysis and catalytic ozonation over Mn-xCe/ZSM-5. Journal of Hazardous Materials, 2019, 364, 770-779.	12.4	74
45	Spontaneous construction of photoactive hollow TiO <sub>2</sub> microspheres and chains. Nanotechnology, 2009, 20, 325606.	2.6	73
46	Porous Fluorinated SnO <sub>2</sub> Hollow Nanospheres: Transformative Self-assembly and Photocatalytic Inactivation of Bacteria. ACS Applied Materials & Interfaces, 2014, 6, 2407-2414.	8.0	72
47	Degradation of TBBPA and BPA from aqueous solution using organo-montmorillonite supported nanoscale zero-valent iron. Chemical Engineering Journal, 2017, 309, 717-724.	12.7	72
48	ZIF-8 derived bimodal carbon modified ZnO photocatalysts with enhanced photocatalytic CO <sub>2</sub> reduction performance. RSC Advances, 2016, 6, 59998-60006.	3.6	64
49	Engineering metal-organic frameworks for efficient photocatalytic conversion of CO <sub>2</sub> into solar fuels. Coordination Chemistry Reviews, 2022, 450, 214245.	18.8	64
50	Facile synthesis of few-layer-thick carbon nitride nanosheets by liquid ammonia-assisted lithiation method and their photocatalytic redox properties. RSC Advances, 2014, 4, 32690-32697.	3.6	63
51	Co-doped MgAl-LDHs nanosheets supported Au nanoparticles for complete catalytic oxidation of HCHO at room temperature. Applied Surface Science, 2019, 487, 260-271.	6.1	59
52	Spray-hydrolytic synthesis of highly photoactive mesoporous anatase nanospheres for the photocatalytic degradation of toluene in air. Applied Catalysis B: Environmental, 2009, 89, 160-166.	20.2	58
53	Ternary reduced-graphene-oxide/Bi <sub>2</sub> MoO <sub>6</sub> /Au nanocomposites with enhanced photocatalytic activity under visible light. Journal of Alloys and Compounds, 2015, 649, 28-34.	5.5	57
54	Novel preparation and photocatalytic activity of one-dimensional TiO <sub>2</sub> hollow structures. Nanotechnology, 2007, 18, 065604.	2.6	56

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55	Efficient degradation of tetrabromobisphenol A by synergistic integration of Fe/Ni bimetallic catalysis and microbial acclimation. <i>Water Research</i> , 2017, 122, 471-480.	11.3	52
56	Ternary gâ€C<sub>3</sub>N<sub>4</sub>/ZnNCN@ZIFâ€8 Hybrid Photocatalysts with Robust Interfacial Interactions and Enhanced CO<sub>2</sub> Reduction Performance. <i>Solar Rrl</i> , 2020, 4, 1900440.	5.8	49
57	Hydrogen producing water treatment through mesoporous TiO2 nanofibers with oriented nanocrystals. <i>Chinese Journal of Catalysis</i> , 2020, 41, 50-61.	14.0	46
58	Electrochemical properties of TiO2 hollow microspheres from a template-free and green wet-chemical route. <i>Journal of Power Sources</i> , 2008, 180, 869-874.	7.8	45
59	Synergetic tuning charge dynamics and potentials of Ag3PO4 photocatalysts with boosting activity and stability by facile in-situ fluorination. <i>Applied Surface Science</i> , 2018, 455, 1137-1149.	6.1	42
60	Selective and adsorptive removal of anionic dyes and CO2 with azolium-based metal-organic frameworks. <i>Journal of Colloid and Interface Science</i> , 2018, 519, 214-223.	9.4	41
61	Î²-Caryophyllene suppresses ferroptosis induced by cerebral ischemia reperfusion via activation of the NRF2/HO-1 signaling pathway in MCAO/R rats. <i>Phytomedicine</i> , 2022, 102, 154112.	5.3	41
62	Controlled Synthesis of Hollow Bimetallic Prussian Blue Analog for Conversion into Efficient Oxygen Evolution Electrocatalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 1319-1328.	6.7	39
63	Efficient transformative HCHO capture by defective NH<sub>2</sub>-LiO-66(Zr) at room temperature. <i>Environmental Science: Nano</i> , 2019, 6, 2931-2936.	4.3	38
64	Enhancing the room-temperature catalytic degradation of formaldehyde through constructing surface lewis pairs on carbon-based catalyst. <i>Applied Catalysis B: Environmental</i> , 2020, 272, 118992.	20.2	38
65	Three-dimensional Î±-Fe2O3/amino-functionalization carbon nanotube sponge for adsorption and oxidative removal of tetrabromobisphenol A. <i>Separation and Purification Technology</i> , 2019, 211, 359-367.	7.9	36
66	Effects of PSMA additive on morphology of barite particles. <i>Journal of Crystal Growth</i> , 2005, 275, 572-579.	1.5	34
67	Role of Ni2+ ions in TiO2 and Pt/TiO2 photocatalysis for phenol degradation in aqueous suspensions. <i>Applied Catalysis B: Environmental</i> , 2019, 258, 117903.	20.2	34
68	Poly(methacrylic acid)-mediated morphosynthesis of PbWO4 micro-crystals. <i>Applied Physics A: Materials Science and Processing</i> , 2007, 87, 113-120.	2.3	33
69	Formation of assimilable organic carbon (AOC) during drinking water disinfection: A microbiological prospect of disinfection byproducts. <i>Environment International</i> , 2020, 135, 105389.	10.0	33
70	TiO2 nanodots anchored on nitrogen-doped carbon nanotubes encapsulated cobalt nanoparticles as photocatalysts with photo-enhanced catalytic activity towards the pollutant removal. <i>Journal of Colloid and Interface Science</i> , 2018, 526, 158-166.	9.4	32
71	Efficient removal of gaseous formaldehyde in air using hierarchical titanate nanospheres with in situ amine functionalization. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 18161-18168.	2.8	30
72	Selective photocatalytic oxidation of gaseous ammonia at ppb level over Pt and F modified TiO2. <i>Applied Catalysis B: Environmental</i> , 2022, 300, 120688.	20.2	30

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73	Characterization and visible light photocatalytic properties of nanocrystalline TiO <sub>2</sub> synthesized by reactive plasma processing. <i>Solar Energy Materials and Solar Cells</i> , 2009, 93, 1540-1549.	6.2	27
74	Sustained production of H <sub>2</sub> O <sub>2</sub> in alkaline water solution using borate and phosphate-modified Au/TiO <sub>2</sub> photocatalysts. <i>Photochemical and Photobiological Sciences</i> , 2018, 17, 1018-1022.	2.9	27
75	Hydrogen production from natural organic matter via cascading oxic-anoxic photocatalytic processes: An energy recovering water purification technology. <i>Water Research</i> , 2020, 175, 115684.	11.3	23
76	Silver vanadium oxides nanobelts and their chemical reduction to silver nanobelts. <i>Journal of Crystal Growth</i> , 2006, 293, 404-408.	1.5	22
77	Single-crystalline melem (C <sub>6</sub> N <sub>10</sub> H <sub>6</sub> ) nanorods: a novel stable molecular crystal photocatalyst with modulated charge potentials and dynamics. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13234-13241.	10.3	22
78	Beyond 1Tâ€‘ phase? Synergistic Electronic Structure and Defects Engineering in 2Hâ€‘MoS <sub>2</sub> Se(1â€‘x) Nanosheets for Enhanced Hydrogen Evolution Reaction and Sodium Storage. <i>ChemCatChem</i> , 2019, 11, 3200-3211.	3.7	21
79	Low-temperature hydrothermal synthesis of highly photoactive mesoporous spherical TiO <sub>2</sub> nanocrystalline. <i>Journal of Physics and Chemistry of Solids</i> , 2010, 71, 507-510.	4.0	20
80	Facile fabrication of monodispersed mesoporous celestine particles with peanut-shaped morphology. <i>Journal of Crystal Growth</i> , 2005, 279, 461-465.	1.5	19
81	Positive effect of Fe <sup>3+</sup> ions on Bi <sub>2</sub> WO <sub>6</sub> , Bi <sub>2</sub> MoO <sub>6</sub> and BiVO <sub>4</sub> photocatalysis for phenol oxidation under visible light. <i>Catalysis Science and Technology</i> , 2019, 9, 4413-4421.	4.1	19
82	Bexarotene Attenuates Focal Cerebral Ischemiaâ€‘Reperfusion Injury via the Suppression of JNK/Caspase-3 Signaling Pathway. <i>Neurochemical Research</i> , 2019, 44, 2809-2820.	3.3	16
83	Polymer-directed large-scale synthesis of single-crystal vanadium oxide nanobelts. <i>Materials Chemistry and Physics</i> , 2006, 95, 206-210.	4.0	15
84	Different effects of fluoride and phosphate anions on TiO <sub>2</sub> photocatalysis (rutile). <i>Catalysis Science and Technology</i> , 2020, 10, 6552-6561.	4.1	15
85	Cationic nickel metal-organic frameworks for adsorption of negatively charged dye molecules. <i>Data in Brief</i> , 2018, 18, 1952-1961.	1.0	14
86	Effects of polyvinylpyrrolidone and cetyltrimethylammonium bromide on morphology of lead tungstate particles. <i>Journal of Alloys and Compounds</i> , 2007, 433, 73-78.	5.5	13
87	Extracellular proteins of <i>Desulfovibrio vulgaris</i> as adsorbents and redox shuttles promote biomineralization of antimony. <i>Journal of Hazardous Materials</i> , 2022, 426, 127795.	12.4	13
88	Controlled Synthesis of Novel Flower-shaped BaCrO <sub>4</sub> Crystals. <i>Chemistry Letters</i> , 2005, 34, 564-565.	1.3	10
89	Electrocatalysts: 2D Transition Metal Dichalcogenides: Design, Modulation, and Challenges in Electrocatalysis ( <i>Adv. Mater.</i> 6/2021). <i>Advanced Materials</i> , 2021, 33, 2170045.	21.0	9
90	Differentially expressed genes induced by Î²-caryophyllene in a rat model of cerebral ischemia-reperfusion injury. <i>Life Sciences</i> , 2021, 273, 119293.	4.3	9

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91	In-Flight Formation of Nano-Crystalline Titanium Dioxide Powder in a Plasma Jet and Its Characterization. Plasma Science and Technology, 2010, 12, 426-432.	1.5	5
92	Enhancing and Complementary Mechanisms of Synergistic Action of Acori Tatarinowii Rhizoma and Codonopsis Radix for Alzheimer's Disease Based on Systems Pharmacology. Evidence-based Complementary and Alternative Medicine, 2020, 2020, 1-26.	1.2	4
93	Effect of F-Doping on the Photocatalytic Activity and Microstructures of Nanocrystalline TiO <sub>2</sub> Powders. Nanostructure Science and Technology, 2016, , 187-200.	0.1	3
94	iTRAQ-derived quantitative proteomics uncovers the neuroprotective property of bexarotene in a mice model of cerebral ischemia's reperfusion injury. Saudi Pharmaceutical Journal, 2022, 30, 585-594.	2.7	3
95	Larger Adsorption Effect of Fluoride than Phosphate on Phenol Degradation over the Irradiated Anatase TiO <sub>2</sub> and Pt/TiO <sub>2</sub> . Acta Chimica Sinica, 2019, 77, 351.	1.4	1