

Shengwei Liu

List of Publications by Year in descending order

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95
papers

11,750
citations

29994

54
h-index

37111

96
g-index

97
all docs

97
docs citations

97
times ranked

12954
citing authors

#	ARTICLE	IF	CITATIONS
1	Tunable Photocatalytic Selectivity of Hollow TiO ₂ Microspheres Composed of Anatase Polyhedra with Exposed {001} Facets. <i>Journal of the American Chemical Society</i> , 2010, 132, 11914-11916.	6.6	979
2	Anatase TiO ₂ with Dominant High-Energy {001} Facets: Synthesis, Properties, and Applications. <i>Chemistry of Materials</i> , 2011, 23, 4085-4093.	3.2	669
3	Fabrication and characterization of Ag@TiO ₂ multiphase nanocomposite thin films with enhanced photocatalytic activity. <i>Applied Catalysis B: Environmental</i> , 2005, 60, 211-221.	10.8	660
4	Enhanced photocatalytic activity of mesoporous TiO ₂ aggregates by embedding carbon nanotubes as electron-transfer channel. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 3491-3501.	1.3	476
5	Template-free Hydrothermal Synthesis of CuO/Cu ₂ O Composite Hollow Microspheres. <i>Chemistry of Materials</i> , 2007, 19, 4327-4334.	3.2	450
6	Ag ₂ O as a New Visible-Light Photocatalyst: Self-Stability and High Photocatalytic Activity. <i>Chemistry - A European Journal</i> , 2011, 17, 7777-7780.	1.7	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.	3.1	359
8	Sonochemical synthesis of nanocrystallite Bi ₂ O ₃ as a visible-light-driven photocatalyst. <i>Applied Catalysis A: General</i> , 2006, 308, 105-110.	2.2	356
9	A sonochemical route to visible-light-driven high-activity BiVO ₄ 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.	1.3	328
11	Enhanced photocatalytic conversion of greenhouse gas CO ₂ into solar fuels over g-C ₃ N ₄ nanotubes with decorated transparent ZIF-8 nanoclusters. <i>Applied Catalysis B: Environmental</i> , 2017, 211, 1-10.	10.8	298
12	2D Transition Metal Dichalcogenides: Design, Modulation, and Challenges in Electrocatalysis. <i>Advanced Materials</i> , 2021, 33, e1907818.	11.1	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.	1.5	274
14	Performance and Mechanism of Piezo-Catalytic Degradation of 4-Chlorophenol: Finding of Effective Piezo-Dechlorination. <i>Environmental Science & Technology</i> , 2017, 51, 6560-6569.	4.6	245
15	Superparamagnetic γ -Fe ₂ O ₃ @SiO ₂ @TiO ₂ composite microspheres with superior photocatalytic properties. <i>Applied Catalysis B: Environmental</i> , 2011, 104, 12-20.	10.8	209
16	Bifunctional S-scheme g-C ₃ N ₄ /Bi/BiVO ₄ hybrid photocatalysts toward artificial carbon cycling. <i>Chinese Journal of Catalysis</i> , 2020, 41, 140-153.	6.9	204
17	A simple cation exchange approach to Bi-doped ZnS hollow spheres with enhanced UV and visible-light photocatalytic H ₂ -production activity. <i>Journal of Materials Chemistry</i> , 2011, 21, 14655.	6.7	203
18	Hydrothermal preparation and photocatalytic activity of mesoporous Au@TiO ₂ nanocomposite microspheres. <i>Journal of Colloid and Interface Science</i> , 2009, 334, 58-64.	5.0	200

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19	Enhanced photovoltaic performance of dye-sensitized solar cells based on TiO ₂ nanosheets/graphene composite films. <i>Journal of Materials Chemistry</i> , 2012, 22, 17027.	6.7	200
20	Nitrogen-doped TiO ₂ microsheets with enhanced visible light photocatalytic activity for CO ₂ reduction. <i>Chinese Journal of Catalysis</i> , 2015, 36, 2127-2134.	6.9	197
21	Effects of calcination temperatures on photocatalytic activity of SnO ₂ /TiO ₂ composite films prepared by an EPD method. <i>Journal of Hazardous Materials</i> , 2008, 154, 1141-1148.	6.5	188
22	Unique photocatalytic oxidation reactivity and selectivity of TiO ₂ @graphene nanocomposites. <i>Nanoscale</i> , 2012, 4, 3193.	2.8	176
23	Fluorinated semiconductor photocatalysts: Tunable synthesis and unique properties. <i>Advances in Colloid and Interface Science</i> , 2012, 173, 35-53.	7.0	159
24	Ionic-Liquid-Assisted Synthesis of Uniform Fluorinated B/Codoped TiO ₂ Nanocrystals and Their Enhanced Visible-Light Photocatalytic Activity. <i>Chemistry - A European Journal</i> , 2013, 19, 2433-2441.	1.7	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.	10.2	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.	8.8	142
27	Cooperative self-construction and enhanced optical absorption of nanoplates-assembled hierarchical Bi ₂ WO ₆ flowers. <i>Journal of Solid State Chemistry</i> , 2008, 181, 1048-1055.	1.4	131
28	Amine-Functionalized Titanate Nanosheet-Assembled Yolk@Shell Microspheres for Efficient Cocatalyst-Free Visible-Light Photocatalytic CO ₂ Reduction. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 8166-8175.	4.0	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.	4.8	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 ₂ valorization over TiO ₂ hollow microspheres by synergetic surface tailoring and Au decoration. <i>Journal of Materials Chemistry A</i> , 2018, 6, 24245-24255.	5.2	113
32	Fabrication and enhanced CO ₂ reduction performance of N-self-doped TiO ₂ microsheet photocatalyst by bi-cocatalyst modification. <i>Journal of CO₂ Utilization</i> , 2016, 16, 442-449.	3.3	99
33	Synergetic Molecular Oxygen Activation and Catalytic Oxidation of Formaldehyde over Defective MIL-88B(Fe) Nanorods at Room Temperature. <i>Environmental Science & Technology</i> , 2021, 55, 8341-8350.	4.6	98
34	Enhanced Photocatalytic Activity of Hollow Anatase Microspheres by Sn ⁴⁺ Incorporation. <i>Journal of Physical Chemistry C</i> , 2008, 112, 2050-2057.	1.5	96
35	Effects of annealing on the microstructures and photoactivity of fluorinated N-doped TiO ₂ . <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 12308.	1.3	96
36	Effects of fluorine on photocatalysis. <i>Chinese Journal of Catalysis</i> , 2020, 41, 1451-1467.	6.9	96

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37	Effect of PSS on morphology and optical properties of ZnO. <i>Journal of Colloid and Interface Science</i> , 2008, 326, 433-438.	5.0	95
38	Promotional role of Mn doping on catalytic oxidation of VOCs over mesoporous TiO ₂ under vacuum ultraviolet (VUV) irradiation. <i>Applied Catalysis B: Environmental</i> , 2018, 220, 78-87.	10.8	95
39	Synergetic surface modulation of ZnO/Pt@ZIF-8 hybrid nanorods for enhanced photocatalytic CO ₂ valorization. <i>Applied Catalysis B: Environmental</i> , 2021, 287, 119934.	10.8	91
40	Recovering solar fuels from photocatalytic CO ₂ reduction over W ⁶⁺ -incorporated crystalline g-C ₃ N ₄ nanorods by synergetic modulation of active centers. <i>Applied Catalysis B: Environmental</i> , 2022, 304, 120978.	10.8	88
41	Synergetic Codoping in Fluorinated Ti _{1-x} Zr _x O ₂ Hollow Microspheres. <i>Journal of Physical Chemistry C</i> , 2009, 113, 10712-10717.	1.5	82
42	Enhanced photocatalytic H ₂ -production activity of TiO ₂ using Ni(NO ₃) ₂ as an additive. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 12033-12039.	1.3	79
43	Two-Dimensional High-Entropy Metal Phosphorus Trichalcogenides for Enhanced Hydrogen Evolution Reaction. <i>ACS Nano</i> , 2022, 16, 3593-3603.	7.3	77
44	Synergetic degradation of VOCs by vacuum ultraviolet photolysis and catalytic ozonation over Mn-xCe/ZSM-5. <i>Journal of Hazardous Materials</i> , 2019, 364, 770-779.	6.5	74
45	Spontaneous construction of photoactive hollow TiO ₂ microspheres and chains. <i>Nanotechnology</i> , 2009, 20, 325606.	1.3	73
46	Porous Fluorinated SnO ₂ Hollow Nanospheres: Transformative Self-assembly and Photocatalytic Inactivation of Bacteria. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 2407-2414.	4.0	72
47	Degradation of TBBPA and BPA from aqueous solution using organo-montmorillonite supported nanoscale zero-valent iron. <i>Chemical Engineering Journal</i> , 2017, 309, 717-724.	6.6	72
48	ZIF-8 derived bimodal carbon modified ZnO photocatalysts with enhanced photocatalytic CO ₂ reduction performance. <i>RSC Advances</i> , 2016, 6, 59998-60006.	1.7	64
49	Engineering metal-organic frameworks for efficient photocatalytic conversion of CO ₂ into solar fuels. <i>Coordination Chemistry Reviews</i> , 2022, 450, 214245.	9.5	64
50	Facile synthesis of few-layer-thick carbon nitride nanosheets by liquid ammonia-assisted lithiation method and their photocatalytic redox properties. <i>RSC Advances</i> , 2014, 4, 32690-32697.	1.7	63
51	Co-doped MgAl-LDHs nanosheets supported Au nanoparticles for complete catalytic oxidation of HCHO at room temperature. <i>Applied Surface Science</i> , 2019, 487, 260-271.	3.1	59
52	Spray-hydrolytic synthesis of highly photoactive mesoporous anatase nanospheres for the photocatalytic degradation of toluene in air. <i>Applied Catalysis B: Environmental</i> , 2009, 89, 160-166.	10.8	58
53	Ternary reduced-graphene-oxide/Bi ₂ MoO ₆ /Au nanocomposites with enhanced photocatalytic activity under visible light. <i>Journal of Alloys and Compounds</i> , 2015, 649, 28-34.	2.8	57
54	Novel preparation and photocatalytic activity of one-dimensional TiO ₂ hollow structures. <i>Nanotechnology</i> , 2007, 18, 065604.	1.3	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.	5.3	52
56	Ternary gâ€C₃N₄/ZnNCN@ZIFâ€ Hybrid Photocatalysts with Robust Interfacial Interactions and Enhanced CO₂ Reduction Performance. <i>Solar Rrl</i> , 2020, 4, 1900440.	3.1	49
57	Hydrogen producing water treatment through mesoporous TiO2 nanofibers with oriented nanocrystals. <i>Chinese Journal of Catalysis</i> , 2020, 41, 50-61.	6.9	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.	4.0	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.	3.1	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.	5.0	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.	2.3	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.	3.2	39
63	Efficient transformative HCHO capture by defective NH₂-UiO-66(Zr) at room temperature. <i>Environmental Science: Nano</i> , 2019, 6, 2931-2936.	2.2	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.	10.8	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.	3.9	36
66	Effects of PSMA additive on morphology of barite particles. <i>Journal of Crystal Growth</i> , 2005, 275, 572-579.	0.7	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.	10.8	34
68	Poly(methacrylic acid)-mediated morphosynthesis of PbWO4 micro-crystals. <i>Applied Physics A: Materials Science and Processing</i> , 2007, 87, 113-120.	1.1	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.	4.8	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.	5.0	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.	1.3	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.	10.8	30

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73	Characterization and visible light photocatalytic properties of nanocrystalline TiO ₂ synthesized by reactive plasma processing. <i>Solar Energy Materials and Solar Cells</i> , 2009, 93, 1540-1549.	3.0	27
74	Sustained production of H ₂ O ₂ in alkaline water solution using borate and phosphate-modified Au/TiO ₂ photocatalysts. <i>Photochemical and Photobiological Sciences</i> , 2018, 17, 1018-1022.	1.6	27
75	Hydrogen production from natural organic matter via cascading oxidic-anoxic photocatalytic processes: An energy recovering water purification technology. <i>Water Research</i> , 2020, 175, 115684.	5.3	23
76	Silver vanadium oxides nanobelts and their chemical reduction to silver nanobelts. <i>Journal of Crystal Growth</i> , 2006, 293, 404-408.	0.7	22
77	Single-crystalline melem (C ₆ N ₁₀ H ₆) nanorods: a novel stable molecular crystal photocatalyst with modulated charge potentials and dynamics. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13234-13241.	5.2	22
78	Beyond 1Tâ€¢ phase? Synergistic Electronic Structure and Defects Engineering in 2Hâ€¢MoS ₂ Se(1â€¢) Nanosheets for Enhanced Hydrogen Evolution Reaction and Sodium Storage. <i>ChemCatChem</i> , 2019, 11, 3200-3211.	1.8	21
79	Low-temperature hydrothermal synthesis of highly photoactive mesoporous spherical TiO ₂ nanocrystalline. <i>Journal of Physics and Chemistry of Solids</i> , 2010, 71, 507-510.	1.9	20
80	Facile fabrication of monodispersed mesoporous celestine particles with peanut-shaped morphology. <i>Journal of Crystal Growth</i> , 2005, 279, 461-465.	0.7	19
81	Positive effect of Fe ³⁺ ions on Bi ₂ WO ₆ , Bi ₂ MoO ₆ and BiVO ₄ photocatalysis for phenol oxidation under visible light. <i>Catalysis Science and Technology</i> , 2019, 9, 4413-4421.	2.1	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.	1.6	16
83	Polymer-directed large-scale synthesis of single-crystal vanadium oxide nanobelts. <i>Materials Chemistry and Physics</i> , 2006, 95, 206-210.	2.0	15
84	Different effects of fluoride and phosphate anions on TiO ₂ photocatalysis (rutile). <i>Catalysis Science and Technology</i> , 2020, 10, 6552-6561.	2.1	15
85	Cationic nickel metal-organic frameworks for adsorption of negatively charged dye molecules. <i>Data in Brief</i> , 2018, 18, 1952-1961.	0.5	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.	2.8	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.	6.5	13
88	Controlled Synthesis of Novel Flower-shaped BaCrO ₄ Crystals. <i>Chemistry Letters</i> , 2005, 34, 564-565.	0.7	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.	11.1	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.	2.0	9

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91	In-Flight Formation of Nano-Crystalline Titanium Dioxide Powder in a Plasma Jet and Its Characterization. <i>Plasma Science and Technology</i> , 2010, 12, 426-432.	0.7	5
92	Enhancing and Complementary Mechanisms of Synergistic Action of Acori Tatarinowii Rhizoma and Codonopsis Radix for Alzheimer's Disease Based on Systems Pharmacology. <i>Evidence-based Complementary and Alternative Medicine</i> , 2020, 2020, 1-26.	0.5	4
93	Effect of F-Doping on the Photocatalytic Activity and Microstructures of Nanocrystalline TiO ₂ Powders. <i>Nanostructure Science and Technology</i> , 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. <i>Saudi Pharmaceutical Journal</i> , 2022, 30, 585-594.	1.2	3
95	Larger Adsorption Effect of Fluoride than Phosphate on Phenol Degradation over the Irradiated Anatase TiO ₂ and Pt/TiO ₂ . <i>Acta Chimica Sinica</i> , 2019, 77, 351.	0.5	1