

Yuanzhi Li

List of Publications by Year in descending order

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87
papers

6,769
citations

43973

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60497

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docs citations

87
times ranked

7520
citing authors

#	ARTICLE	IF	CITATIONS
1	Tuning the Relative Concentration Ratio of Bulk Defects to Surface Defects in TiO ₂ Nanocrystals Leads to High Photocatalytic Efficiency. <i>Journal of the American Chemical Society</i> , 2011, 133, 16414-16417.	6.6	963
2	Synergetic Effect between Photocatalysis on TiO ₂ and Thermocatalysis on CeO ₂ for Gas-Phase Oxidation of Benzene on TiO ₂ /CeO ₂ Nanocomposites. <i>ACS Catalysis</i> , 2015, 5, 3278-3286.	5.5	302
3	Effect of giant oxygen vacancy defects on the catalytic oxidation of OMS-2 nanorods. <i>Journal of Materials Chemistry A</i> , 2013, 1, 6736.	5.2	256
4	Surface modification of ZnO with Ag improves its photocatalytic efficiency and photostability. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2010, 216, 149-155.	2.0	254
5	Comparison of Dye Photodegradation and its Coupling with Light-to-Electricity Conversion over TiO ₂ and ZnO. <i>Langmuir</i> , 2010, 26, 591-597.	1.6	254
6	Tuning the K ⁺ Concentration in the Tunnel of OMS-2 Nanorods Leads to a Significant Enhancement of the Catalytic Activity for Benzene Oxidation. <i>Environmental Science & Technology</i> , 2013, 47, 13730-13736.	4.6	198
7	Highly Efficient Visible-Light-Induced Photocatalytic Activity of Nanostructured AgI/TiO ₂ Photocatalyst. <i>Langmuir</i> , 2008, 24, 8351-8357.	1.6	190
8	Tremendous Effect of the Morphology of Birnessite-Type Manganese Oxide Nanostructures on Catalytic Activity. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 14981-14987.	4.0	175
9	Efficient Fabrication and Enhanced Photocatalytic Activities of 3D-Ordered Films of Titania Hollow Spheres. <i>Journal of Physical Chemistry B</i> , 2006, 110, 13000-13004.	1.2	141
10	Metal Support Interaction in Pt Nanoparticles Partially Confined in the Mesopores of Microsized Mesoporous CeO ₂ for Highly Efficient Purification of Volatile Organic Compounds. <i>ACS Catalysis</i> , 2016, 6, 418-427.	5.5	136
11	Coupling Oxygen Ion Conduction to Photocatalysis in Mesoporous Nanorod-like Ceria Significantly Improves Photocatalytic Efficiency. <i>Journal of Physical Chemistry C</i> , 2011, 115, 14050-14057.	1.5	119
12	UV-Visible-Infrared Light Driven Thermocatalytic Activity of Octahedral Layered Birnessite Nanoflowers Enhanced by a Novel Photoactivation. <i>Advanced Functional Materials</i> , 2016, 26, 4518-4526.	7.8	112
13	Solar-Light-Driven CO ₂ Reduction by CH ₄ on Silica-Cluster-Modified Ni Nanocrystals with a High Solar-to-Fuel Efficiency and Excellent Durability. <i>Advanced Energy Materials</i> , 2018, 8, 1702472.	10.2	111
14	Synthesis and Characterization of Nano titania Particles Embedded in Mesoporous Silica with Both High Photocatalytic Activity and Adsorption Capability. <i>Journal of Physical Chemistry B</i> , 2005, 109, 12309-12315.	1.2	109
15	Visible-light-enhanced photothermocatalytic activity of ABO ₃ -type perovskites for the decontamination of gaseous styrene. <i>Applied Catalysis B: Environmental</i> , 2017, 209, 146-154.	10.8	108
16	Synthesis and Characterization of Nano Titania Powder with High Photoactivity for Gas-Phase Photo-oxidation of Benzene from TiOCl ₂ Aqueous Solution at Low Temperatures. <i>Langmuir</i> , 2004, 20, 10838-10844.	1.6	107
17	Extremely efficient full solar spectrum light driven thermocatalytic activity for the oxidation of VOCs on OMS-2 nanorod catalyst. <i>Applied Catalysis B: Environmental</i> , 2015, 174-175, 496-503.	10.8	105
18	Low-temperature preparation and visible-light-induced catalytic activity of anatase F ⁻ N-codoped TiO ₂ . <i>Journal of Molecular Catalysis A</i> , 2007, 277, 119-126.	4.8	104

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19	Preparation and Enhanced Photocatalytic Activity of TiO ₂ Nanocrystals with Internal Pores. ACS Applied Materials & Interfaces, 2014, 6, 1608-1615.	4.0	101
20	The pivotal effect of the interaction between reactant and anatase TiO ₂ nanosheets with exposed {0 0 1} facets on photocatalysis for the photocatalytic purification of VOCs. Applied Catalysis B: Environmental, 2016, 181, 625-634.	10.8	95
21	The effect of titania polymorph on the strong metal-support interaction of Pd/TiO ₂ catalysts and their application in the liquid phase selective hydrogenation of long chain alkadienes. Journal of Molecular Catalysis A, 2004, 216, 107-114.	4.8	94
22	Novel photoactivation promoted light-driven CO ₂ reduction by CH ₄ on Ni/CeO ₂ nanocomposite with high light-to-fuel efficiency and enhanced stability. Applied Catalysis B: Environmental, 2018, 239, 555-564.	10.8	92
23	High light-to-fuel efficiency and CO ₂ reduction rates achieved on a unique nanocomposite of Co/Co doped Al ₂ O ₃ nanosheets with UV-vis-IR irradiation. Energy and Environmental Science, 2019, 12, 2581-2590.	15.6	91
24	Visible photocatalysis and photostability of Ag ₃ PO ₄ photocatalyst. Applied Surface Science, 2014, 319, 332-338.	3.1	89
25	Solar-light-driven CO ₂ reduction by methane on Pt nanocrystals partially embedded in mesoporous CeO ₂ nanorods with high light-to-fuel efficiency. Green Chemistry, 2018, 20, 2857-2869.	4.6	87
26	Synergetic effect between photocatalysis on TiO ₂ and solar light-driven thermocatalysis on MnO _x for benzene purification on MnO _x /TiO ₂ nanocomposites. Journal of Materials Chemistry A, 2015, 3, 5509-5516.	5.2	86
27	Full solar spectrum light driven thermocatalysis with extremely high efficiency on nanostructured Ce ion substituted OMS-2 catalyst for VOCs purification. Nanoscale, 2015, 7, 2633-2640.	2.8	85
28	Efficient UV-vis-infrared light-driven catalytic abatement of benzene on amorphous manganese oxide supported on anatase TiO ₂ nanosheet with dominant {001} facets promoted by a photothermocatalytic synergetic effect. Applied Catalysis B: Environmental, 2017, 203, 494-504.	10.8	85
29	UV-vis-infrared light-driven photothermocatalytic abatement of CO on Cu doped ramsdellite MnO ₂ nanosheets enhanced by a photoactivation effect. Applied Catalysis B: Environmental, 2018, 224, 751-760.	10.8	82
30	UV-Visible-Infrared Light Driven Thermocatalysis for Environmental Purification on Ramsdellite MnO ₂ Hollow Spheres Considerably Promoted by a Novel Photoactivation. ACS Applied Materials & Interfaces, 2017, 9, 2350-2357.	4.0	76
31	Defects lead to a massive enhancement in the UV-Vis-IR driven thermocatalytic activity of Co ₃ O ₄ mesoporous nanorods. Journal of Materials Chemistry A, 2018, 6, 7194-7205.	5.2	74
32	Photothermocatalytic Synergetic Effect Leads to High Efficient Detoxification of Benzene on TiO ₂ and Pt/TiO ₂ Nanocomposite. ChemCatChem, 2010, 2, 1082-1087.	1.8	72
33	Formation of AgI/TiO ₂ nanocomposite leads to excellent thermochromic reversibility and photostability. Journal of Materials Chemistry, 2011, 21, 9263.	6.7	70
34	Formation of NiCo Alloy Nanoparticles on Co Doped Al ₂ O ₃ Leads to High Fuel Production Rate, Large Light-to-Fuel Efficiency, and Excellent Durability for Photothermocatalytic CO ₂ Reduction. Advanced Energy Materials, 2020, 10, 2002602.	10.2	67
35	Synthesis, characterization and its visible-light-induced photocatalytic property of carbon doped ZnO. Materials Letters, 2009, 63, 1747-1749.	1.3	66
36	Photothermocatalysis for efficient abatement of CO and VOCs. Journal of Materials Chemistry A, 2020, 8, 8171-8194.	5.2	66

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37	Novel photothermocatalytic synergetic effect leads to high catalytic activity and excellent durability of anatase TiO ₂ nanosheets with dominant {001} facets for benzene abatement. Applied Catalysis B: Environmental, 2016, 198, 303-310.	10.8	63
38	The effect of Ce ion substituted OMS-2 nanostructure in catalytic activity for benzene oxidation. Nanoscale, 2014, 6, 15048-15058.	2.8	62
39	The remarkable effect of the coexisting arsenite and arsenate species ratios on arsenic removal by manganese oxide. Chemical Engineering Journal, 2017, 315, 159-166.	6.6	58
40	Low Temperature Preparation and Characterization of N-doped and N-S-codoped TiO ₂ by Sol-gel Route. Catalysis Letters, 2007, 118, 231-237.	1.4	56
41	CTAB-assisted synthesis of mesoporous N-codoped TiO ₂ powders with high visible-light-driven catalytic activity and adsorption capacity. Journal of Solid State Chemistry, 2008, 181, 1936-1942.	1.4	56
42	Densely populated mesopores in microcuboid CeO ₂ crystal leading to a significant enhancement of catalytic activity. Journal of Materials Chemistry A, 2013, 1, 728-734.	5.2	55
43	Novel photoactivation and solar-light-driven thermocatalysis on μ-MnO ₂ nanosheets lead to highly efficient catalytic abatement of ethyl acetate without acetaldehyde as unfavorable by-product. Journal of Materials Chemistry A, 2018, 6, 14195-14206.	5.2	54
44	Highly efficient UV-Vis-infrared catalytic purification of benzene on CeMn _x O _y /TiO ₂ nanocomposite, caused by its high thermocatalytic activity and strong absorption in the full solar spectrum region. Journal of Materials Chemistry A, 2016, 4, 9890-9899.	5.2	52
45	UV-Vis-infrared light-driven thermocatalytic abatement of benzene on Fe doped OMS-2 nanorods enhanced by a novel photoactivation. Chemical Engineering Journal, 2018, 332, 205-215.	6.6	52
46	Co ₃ O ₄ /TiO ₂ Nanocomposite Formation Leads to Improvement in Ultraviolet-Visible-Infrared-Driven Thermocatalytic Activity Due to Photoactivation and Photocatalysis Thermocatalysis Synergetic Effect. ACS Sustainable Chemistry and Engineering, 2018, 6, 16503-16514.	3.2	52
47	Formation of Surface Complex Leading to Efficient Visible Photocatalytic Activity and Improvement of Photostability of ZnO. Journal of Physical Chemistry C, 2009, 113, 16188-16192.	1.5	50
48	Cu doped OL-1 nanoflower: A UV-vis-infrared light-driven catalyst for gas-phase environmental purification with very high efficiency. Applied Catalysis B: Environmental, 2017, 200, 521-529.	10.8	49
49	Highly selective photocatalytic and sensing properties of 2D-ordered dome films of nano titania and nano Ag ²⁺ doped titania. Journal of Materials Chemistry, 2012, 22, 1469-1476.	6.7	47
50	Significant improvement in activity, durability, and light-to-fuel efficiency of Ni nanoparticles by La ₂ O ₃ cluster modification for photothermocatalytic CO ₂ reduction. Applied Catalysis B: Environmental, 2020, 264, 118544.	10.8	46
51	Tremendous effect of oxygen vacancy defects on the oxidation of arsenite to arsenate on cryptomelane-type manganese oxide. Chemical Engineering Journal, 2016, 306, 597-606.	6.6	43
52	Efficient Visible-Light-Induced Photocatalytic Activity of a 3D-Ordered Titania Hybrid Photocatalyst with a Core/Shell Structure of Dye-Containing Polymer/Titania. Journal of Physical Chemistry C, 2008, 112, 14973-14979.	1.5	42
53	Novel effect of significant enhancement of gas-phase photocatalytic efficiency for nano ZnO. Chemical Engineering Journal, 2012, 213, 218-224.	6.6	39
54	Ultralow density, hollow silica foams produced through interfacial reaction and their exceptional properties for environmental and energy applications. Journal of Materials Chemistry, 2011, 21, 12041.	6.7	38

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55	High-Performance UV Photodetection of Unique ZnO Nanowires from Zinc Carbonate Hydroxide Nanobelts. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 5861-5867.	4.0	38
56	Significant improvement in photocatalytic activity by forming homojunction between anatase TiO ₂ nanosheets and anatase TiO ₂ nanoparticles. <i>Applied Surface Science</i> , 2019, 490, 283-292.	3.1	31
57	Mg-doped OMS-2 nanorods: a highly efficient catalyst for purification of volatile organic compounds with full solar spectrum irradiation. <i>Environmental Science: Nano</i> , 2017, 4, 1798-1807.	2.2	30
58	Shape-controlled synthesis for silver: Triangular/hexagonal nanoplates, chain-like nanoplate assemblies, and nanobelts. <i>Journal of Materials Research</i> , 2009, 24, 2200-2209.	1.2	29
59	Efficient UV-vis-IR light-driven thermocatalytic purification of benzene on a Pt/CeO ₂ nanocomposite significantly promoted by hot electron-induced photoactivation. <i>Environmental Science: Nano</i> , 2017, 4, 373-384.	2.2	29
60	A novel nanocomposite of mesoporous silica supported Ni nanocrystals modified by ceria clusters with extremely high light-to-fuel efficiency for UV-vis-IR light-driven CO ₂ reduction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 4881-4892.	5.2	28
61	Thermal Insulation Monolith of Aluminum Tobermorite Nanosheets Prepared from Fly Ash. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 2866-2873.	3.2	27
62	A heterogeneous single Cu catalyst of Cu atoms confined in the spinel lattice of MgAl ₂ O ₄ with good catalytic activity and stability for NO reduction by CO. <i>Journal of Materials Chemistry A</i> , 2019, 7, 7202-7212.	5.2	27
63	Novel photoactivation promotes catalytic abatement of CO on CuO mesoporous nanosheets with full solar spectrum illumination. <i>Applied Catalysis B: Environmental</i> , 2018, 225, 314-323.	10.8	26
64	UV-vis-IR driven thermocatalytic activity of OMS-2/SnO ₂ nanocomposite significantly enhanced by novel photoactivation and synergetic photocatalysis-thermocatalysis. <i>Applied Surface Science</i> , 2018, 462, 590-597.	3.1	26
65	The formation of CuO/OMS-2 nanocomposite leads to a significant improvement in catalytic performance for NO reduction by CO. <i>Applied Catalysis A: General</i> , 2017, 530, 1-11.	2.2	25
66	Photothermocatalytic Dry Reforming of Methane for Efficient CO ₂ Reduction and Solar Energy Storage. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 11635-11651.	3.2	25
67	Highly Efficient Photothermocatalytic CO ₂ Reduction in Ni/Mg-Doped Al ₂ O ₃ with High Fuel Production Rate, Large Light-to-Fuel Efficiency, and Good Durability. <i>Energy and Environmental Materials</i> , 2022, 5, 582-591.	7.3	24
68	Contact angle and biocompatibility of sol-gel prepared TiO ₂ thin films for their use as semiconductor-based cell viability sensors. <i>Surface and Interface Analysis</i> , 2008, 40, 579-583.	0.8	20
69	Highly efficient UV-visible-infrared photothermocatalytic removal of ethyl acetate over a nanocomposite of CeO ₂ and Ce-doped manganese oxide. <i>Chinese Journal of Catalysis</i> , 2022, 43, 379-390.	6.9	20
70	The remarkable effect of alkali earth metal ion on the catalytic activity of OMS-2 for benzene oxidation. <i>Chemosphere</i> , 2020, 250, 126211.	4.2	19
71	Highly efficient UV-visible-infrared light-driven photothermocatalytic steam biomass reforming to H ₂ on Ni nanoparticles loaded on mesoporous silica. <i>Energy and Environmental Science</i> , 2022, 15, 3041-3050.	15.6	19
72	UV-vis-IR irradiation driven CO ₂ reduction with high light-to-fuel efficiency on a unique nanocomposite of Ni nanoparticles loaded on Ni doped Al ₂ O ₃ nanosheets. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19800-19810.	5.2	18

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73	Efficient UV-vis-IR photothermocatalytic selective ethanol oxidation on MnO _x /TiO ₂ nanocomposites significantly enhanced by a novel photoactivation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1254-1264.	5.2	18
74	Highly effective UV-Vis-IR and IR photothermocatalytic CO abatement on Zn doped OMS-2 nanorods. <i>Applied Surface Science</i> , 2019, 483, 827-834.	3.1	15
75	Enhanced catalytic activity of OMS-2 for carcinogenic benzene elimination by tuning Sr ²⁺ contents in the tunnels. <i>Journal of Hazardous Materials</i> , 2020, 398, 122958.	6.5	15
76	A novel synergetic effect between Ru and Cu nanoparticles for Ru-Cu/Al ₂ O ₃ causes highly efficient photothermocatalytic CO ₂ reduction with good durability. <i>Applied Surface Science</i> , 2021, 556, 149821.	3.1	14
77	Unique mesoporous amorphous manganese iron oxide with excellent catalytic performance for benzene abatement under UV-vis-IR and IR irradiation. <i>Environmental Science: Nano</i> , 2019, 6, 1233-1245.	2.2	13
78	Fabrication and cavity-size-dependent photocatalytic property of TiO ₂ hollow nanoparticles with tunable cavity size. <i>Materials Research Bulletin</i> , 2020, 126, 110744.	2.7	12
79	Effect of the interface on UV-Vis-IR photodetection performance of PbS/ZnO nanocomposite photocatalysts. <i>Applied Surface Science</i> , 2015, 358, 498-505.	3.1	11
80	Formation of CeMn _x O _y /OMS-2 nanocomposite significantly enhances UV-vis-infrared light-driven catalytic activity. <i>Catalysis Today</i> , 2019, 326, 46-53.	2.2	11
81	UV-Vis-Infrared Light-Driven Photothermocatalytic Synergetic Effect Leading to Efficient Benzene Abatement by Pt Supported on Anatase TiO ₂ with {001} Facets. <i>ACS Applied Energy Materials</i> , 2020, 3, 7920-7930.	2.5	11
82	Intensive UV-Vis-IR driven catalytic activity of Pt supported on hierarchical ZnO porous nanosheets for benzene degradation via novel photothermocatalytic synergetic effect. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107694.	3.3	11
83	Photothermocatalytic CO ₂ Reduction on Magnesium Oxide-Cluster-Modified Ni Nanoparticles with High Fuel Production Rate, Large Light-to-Fuel Efficiency and Excellent Durability. <i>Solar Rrl</i> , 2021, 5, .	3.1	9
84	A Novel Synergetic Effect Between Ru and CeO ₂ Nanoparticles Leads to Highly Efficient Photothermocatalytic CO ₂ Reduction by CH ₄ with Excellent Coking Resistance. <i>Solar Rrl</i> , 2022, 6, 2101064.	3.1	9
85	Significantly enhancing the solar fuel production rate and catalytic durability for photothermocatalytic CO ₂ reduction by a synergetic effect between Pt and Co doped Al ₂ O ₃ nanosheets. <i>Journal of Materials Chemistry A</i> , 2022, 10, 7099-7110.	5.2	9
86	Quasi-Monolayer Rh Nanoclusters Stabilized on Spinel MgAl ₂ O ₄ Nanosheets for Catalytic CO ₂ Reforming of Methane. <i>ACS Applied Nano Materials</i> , 2021, 4, 9866-9875.	2.4	8
87	Preparation of the Monolith of Hierarchical Macro-/Mesoporous Calcium Silicate Ultrathin Nanosheets with Low Thermal Conductivity by Means of Ambient-Pressure Drying. <i>Chemistry - an Asian Journal</i> , 2015, 10, 1394-1401.	1.7	6