

Yuanzhi Li

List of Publications by Year in descending order

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papers

6,769
citations

44069

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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.	13.7	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.	11.2	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.	10.3	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.	3.9	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.	3.5	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.	10.0	198
7	Highly Efficient Visible-Light-Induced Photocatalytic Activity of Nanostructured AgI/TiO ₂ Photocatalyst. <i>Langmuir</i> , 2008, 24, 8351-8357.	3.5	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.	8.0	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.	2.6	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.	11.2	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.	3.1	119
12	UV-Vis-Infrared Light Driven Thermocatalytic Activity of Octahedral Layered Birnessite Nanoflowers Enhanced by a Novel Photoactivation. <i>Advanced Functional Materials</i> , 2016, 26, 4518-4526.	14.9	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.	19.5	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.	2.6	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.	20.2	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.	3.5	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.	20.2	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.	8.0	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.	20.2	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.	20.2	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.	30.8	91
24	Visible photocatalysis and photostability of Ag ₃ PO ₄ photocatalyst. Applied Surface Science, 2014, 319, 332-338.	6.1	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.	9.0	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.	10.3	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.	5.6	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.	20.2	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.	20.2	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.	8.0	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.	10.3	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.	3.7	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.	19.5	67
35	Synthesis, characterization and its visible-light-induced photocatalytic property of carbon doped ZnO. Materials Letters, 2009, 63, 1747-1749.	2.6	66
36	Photothermocatalysis for efficient abatement of CO and VOCs. Journal of Materials Chemistry A, 2020, 8, 8171-8194.	10.3	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.	20.2	63
38	The effect of Ce ion substituted OMS-2 nanostructure in catalytic activity for benzene oxidation. Nanoscale, 2014, 6, 15048-15058.	5.6	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.	12.7	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.	2.6	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.	2.9	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.	10.3	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.	10.3	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.	10.3	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.	12.7	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.	6.7	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.	3.1	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.	20.2	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.	20.2	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.	12.7	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.	3.1	42
53	Novel effect of significant enhancement of gas-phase photocatalytic efficiency for nano ZnO. Chemical Engineering Journal, 2012, 213, 218-224.	12.7	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. ACS Applied Materials & Interfaces, 2013, 5, 5861-5867.	8.0	38
56	Significant improvement in photocatalytic activity by forming homojunction between anatase TiO ₂ nanosheets and anatase TiO ₂ nanoparticles. Applied Surface Science, 2019, 490, 283-292.	6.1	31
57	Mg-doped OMS-2 nanorods: a highly efficient catalyst for purification of volatile organic compounds with full solar spectrum irradiation. Environmental Science: Nano, 2017, 4, 1798-1807.	4.3	30
58	Shape-controlled synthesis for silver: Triangular/hexagonal nanoplates, chain-like nanoplate assemblies, and nanobelts. Journal of Materials Research, 2009, 24, 2200-2209.	2.6	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. Environmental Science: Nano, 2017, 4, 373-384.	4.3	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. Journal of Materials Chemistry A, 2019, 7, 4881-4892.	10.3	28
61	Thermal Insulation Monolith of Aluminum Tobermorite Nanosheets Prepared from Fly Ash. ACS Sustainable Chemistry and Engineering, 2015, 3, 2866-2873.	6.7	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. Journal of Materials Chemistry A, 2019, 7, 7202-7212.	10.3	27
63	Novel photoactivation promotes catalytic abatement of CO on CuO mesoporous nanosheets with full solar spectrum illumination. Applied Catalysis B: Environmental, 2018, 225, 314-323.	20.2	26
64	UV-vis-IR driven thermocatalytic activity of OMS-2/SnO ₂ nanocomposite significantly enhanced by novel photoactivation and synergetic photocatalysis-thermocatalysis. Applied Surface Science, 2018, 462, 590-597.	6.1	26
65	The formation of CuO/OMS-2 nanocomposite leads to a significant improvement in catalytic performance for NO reduction by CO. Applied Catalysis A: General, 2017, 530, 1-11.	4.3	25
66	Photothermocatalytic Dry Reforming of Methane for Efficient CO ₂ Reduction and Solar Energy Storage. ACS Sustainable Chemistry and Engineering, 2021, 9, 11635-11651.	6.7	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. Energy and Environmental Materials, 2022, 5, 582-591.	12.8	24
68	Contact angle and biocompatibility of sol-gel prepared TiO ₂ thin films for their use as semiconductor-based cell viability sensors. Surface and Interface Analysis, 2008, 40, 579-583.	1.8	20
69	Highly efficient UV-visible-infrared photothermocatalytic removal of ethyl acetate over a nanocomposite of CeO ₂ and Ce-doped manganese oxide. Chinese Journal of Catalysis, 2022, 43, 379-390.	14.0	20
70	The remarkable effect of alkali earth metal ion on the catalytic activity of OMS-2 for benzene oxidation. Chemosphere, 2020, 250, 126211.	8.2	19
71	Highly efficient UV-visible-infrared light-driven photothermocatalytic steam biomass reforming to H ₂ on Ni nanoparticles loaded on mesoporous silica. Energy and Environmental Science, 2022, 15, 3041-3050.	30.8	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. Journal of Materials Chemistry A, 2019, 7, 19800-19810.	10.3	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. Journal of Materials Chemistry A, 2020, 8, 1254-1264.	10.3	18
74	Highly effective UV-Vis-IR and IR photothermocatalytic CO abatement on Zn doped OMS-2 nanorods. Applied Surface Science, 2019, 483, 827-834.	6.1	15
75	Enhanced catalytic activity of OMS-2 for carcinogenic benzene elimination by tuning Sr ²⁺ contents in the tunnels. Journal of Hazardous Materials, 2020, 398, 122958.	12.4	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. Applied Surface Science, 2021, 556, 149821.	6.1	14
77	Unique mesoporous amorphous manganese iron oxide with excellent catalytic performance for benzene abatement under UV-vis-IR and IR irradiation. Environmental Science: Nano, 2019, 6, 1233-1245.	4.3	13
78	Fabrication and cavity-size-dependent photocatalytic property of TiO ₂ hollow nanoparticles with tunable cavity size. Materials Research Bulletin, 2020, 126, 110744.	5.2	12
79	Effect of the interface on UV-Vis-IR photodetection performance of PbS/ZnO nanocomposite photocatalysts. Applied Surface Science, 2015, 358, 498-505.	6.1	11
80	Formation of CeMn _x O _y /OMS-2 nanocomposite significantly enhances UV-Vis-infrared light-driven catalytic activity. Catalysis Today, 2019, 326, 46-53.	4.4	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. ACS Applied Energy Materials, 2020, 3, 7920-7930.	5.1	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. Journal of Environmental Chemical Engineering, 2022, 10, 107694.	6.7	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. Solar Rrl, 2021, 5, .	5.8	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. Solar Rrl, 2022, 6, 2101064.	5.8	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. Journal of Materials Chemistry A, 2022, 10, 7099-7110.	10.3	9
86	Quasi-Monolayer Rh Nanoclusters Stabilized on Spinel MgAl ₂ O ₄ Nanosheets for Catalytic CO ₂ Reforming of Methane. ACS Applied Nano Materials, 2021, 4, 9866-9875.	5.0	8
87	Preparation of the Monolith of Hierarchical Macro-/Mesoporous Calcium Silicate Ultrathin Nanosheets with Low Thermal Conductivity by Means of Ambient-Pressure Drying. Chemistry - an Asian Journal, 2015, 10, 1394-1401.	3.3	6