Jieyuan Li

List of Publications by Year in Descending Order

70 papers	4,057 citations	35 h-index	63 g-index
74 ext. papers	5,366 ext. citations	13.2 avg, IF	6.12 L-index

#	Paper	IF	Citations
70	Porous Mn-doped Co3O4 nanosheets: Gas sensing performance and interfacial mechanism investigation with In situ DRIFTS. *Sensors and Actuators B: Chemical*, **2022**, 353, 131155	8.5	1
69	Light-induced secondary hydroxyl defects in Sr1-xSn(OH)6 enable sustained and efficient photocatalytic toluene mineralization. *Chemical Engineering Journal*, **2022**, 427, 131764	14.7	1
68	Promote the activation and ring opening of intermediates for stable photocatalytic toluene degradation over Zn-Ti-LDH. *Journal of Colloid and Interface Science*, **2022**, 606, 1435-1444	9.3	3
67	Subnanometric alkaline-earth oxide clusters for sustainable nitrate to ammonia photosynthesis.. *Nature Communications*, **2022**, 13, 1098	17.4	5
66	Enhanced Photocatalytic VOCs Mineralization via Special Ga-O-H Charge Transfer Channel in □Ga2O3/MgAl-LDH Heterojunction. *ACS ES&T Engineering*, **2021**, 1, 501-511		8
65	Optimizing the Electronic Structure of BiOBr Nanosheets via Combined Ba Doping and Oxygen Vacancies for Promoted Photocatalysis. *Journal of Physical Chemistry C*, **2021**, 125, 8597-8605	3.8	11
64	Enhanced Reactant Activation and Transformation for Efficient Photocatalytic Acetone Degradation on SnO2 via Hf Doping. *Advanced Sustainable Systems*, **2021**, 5, 2100115	5.9	2
63	Alkali/alkaline-earth metal intercalated g-C3N4 induced charge redistribution and optimized photocatalysis: status and challenges. *JPhys Energy*, **2021**, 3, 032008	4.9	3
62	Photocatalytic reaction mechanisms at a gas□solid interface for typical air pollutant decomposition. *Journal of Materials Chemistry A*, **2021**, 9, 20184-20210	13	5
61	Surface Lattice Oxygen Activation on SrSbO Enhances the Photocatalytic Mineralization of Toluene: from Reactant Activation, Intermediate Conversion to Product Desorption. *ACS Applied Materials & Interfaces*, **2021**, 13, 5153-5164	9.5	9
60	Ultrathin Two-Dimensional Bi-Based photocatalysts: Synthetic strategies, surface defects, and reaction mechanisms. *Chemical Engineering Journal*, **2021**, 417, 129305	14.7	17
59	Identification of deactivation-resistant origin of In(OH) for efficient and durable photodegradation of benzene, toluene and their mixtures. *Journal of Hazardous Materials*, **2021**, 416, 126208	12.8	7
58	In situ loading of MoO3 clusters on ultrathin Bi2MoO6 nanosheets for synergistically enhanced photocatalytic NO abatement. *Applied Catalysis B: Environmental*, **2021**, 292, 120159	21.8	17
57	Synergistic Effect of Cu Single Atoms and Au-Cu Alloy Nanoparticles on TiO for Efficient CO Photoreduction. *ACS Nano*, **2021**, 15, 14453-14464	16.7	36
56	Efficient photocatalytic toluene degradation over heterojunction of GQDs@BiOCl ultrathin nanosheets with selective benzoic acid activation. *Journal of Hazardous Materials*, **2021**, 420, 126577	12.8	4
55	Promote reactants activation and key intermediates formation for facilitated toluene photodecomposition via Ba active sites construction. *Applied Catalysis B: Environmental*, **2021**, 297, 120489	21.8	5
54	Rare-Earth Single-Atom La-N Charge-Transfer Bridge on Carbon Nitride for Highly Efficient and Selective Photocatalytic CO Reduction. *ACS Nano*, **2020**, 14, 15841-15852	16.7	123

53	Selective breakage of C H bonds in the key oxidation intermediates of gaseous formaldehyde on self-doped CaSn(OH)6 cubes for safe and efficient photocatalysis. *Applied Catalysis B: Environmental*, **2020**, 277, 119214	21.8	16
52	Nature-inspired CaCO3 loading TiO2 composites for efficient and durable photocatalytic mineralization of gaseous toluene. *Science Bulletin*, **2020**, 65, 1626-1634	10.6	34
51	Synergistic Photocatalytic Decomposition of a Volatile Organic Compound Mixture: High Efficiency, Reaction Mechanism, and Long-Term Stability. *ACS Catalysis*, **2020**, 10, 7230-7239	13.1	49
50	Interfacial activation of reactants and intermediates on CaSO4 insulator-based heterostructure for efficient photocatalytic NO removal. *Chemical Engineering Journal*, **2020**, 390, 124609	14.7	26
49	SrTiO3/BiOI heterostructure: Interfacial charge separation, enhanced photocatalytic activity, and reaction mechanism. *Chinese Journal of Catalysis*, **2020**, 41, 710-718	11.3	24
48	Synergistic effects of crystal structure and oxygen vacancy on Bi2O3 polymorphs: intermediates activation, photocatalytic reaction efficiency, and conversion pathway. *Science Bulletin*, **2020**, 65, 467-476	10.6	67
47	Bi quantum dots implanted 2D C-doped BiOCl nanosheets: Enhanced visible light photocatalysis efficiency and reaction pathway. *Chinese Journal of Catalysis*, **2020**, 41, 1430-1438	11.3	50
46	The high selectivity for benzoic acid formation on Ca2Sb2O7 enables efficient and stable toluene mineralization. *Applied Catalysis B: Environmental*, **2020**, 271, 118948	21.8	23
45	The pivotal roles of spatially separated charge localization centers on the molecules activation and photocatalysis mechanism. *Applied Catalysis B: Environmental*, **2020**, 262, 118251	21.8	70
44	An atomic insight into BiOBr/La2Ti2O7 p□ heterojunctions: interfacial charge transfer pathway and photocatalysis mechanism. *Catalysis Science and Technology*, **2020**, 10, 826-834	5.5	15
43	Bi metal prevents the deactivation of oxygen vacancies in Bi2O2CO3 for stable and efficient photocatalytic NO abatement. *Applied Catalysis B: Environmental*, **2020**, 264, 118545	21.8	102
42	OH/Na co-functionalized carbon nitride: directional charge transfer and enhanced photocatalytic oxidation ability. *Catalysis Science and Technology*, **2020**, 10, 529-535	5.5	6
41	Unveiling the unconventional roles of methyl number on the ring-opening barrier in photocatalytic decomposition of benzene, toluene and o-xylene. *Applied Catalysis B: Environmental*, **2020**, 278, 119318	21.8	25
40	Single-Atom Ru-Implanted Metal□Organic Framework/MnO2 for the Highly Selective Oxidation of NOx by Plasma Activation. *ACS Catalysis*, **2020**, 10, 10185-10196	13.1	26
39	Identification of Halogen-Associated Active Sites on Bismuth-Based Perovskite Quantum Dots for Efficient and Selective CO-to-CO Photoreduction. *ACS Nano*, **2020**, 14, 13103-13114	16.7	101
38	Mechanisms of Interfacial Charge Transfer and Photocatalytic NO Oxidation on BiOBr/SnO p-n Heterojunctions. *ACS Applied Materials & Interfaces*, **2020**, 12, 43741-43749	9.5	33
37	Nitrogen defect structure and NO+ intermediate promoted photocatalytic NO removal on H2 treated g-C3N4. *Chemical Engineering Journal*, **2020**, 379, 122282	14.7	161
36	Unraveling the mechanism of binary channel reactions in photocatalytic formaldehyde decomposition for promoted mineralization. *Applied Catalysis B: Environmental*, **2020**, 260, 118130	21.8	75

35	The importance of intermediates ring-opening in preventing photocatalyst deactivation during toluene decomposition. *Applied Catalysis B: Environmental*, **2020**, 272, 118977	21.8	46
34	Probing ring-opening pathways for efficient photocatalytic toluene decomposition. *Journal of Materials Chemistry A*, **2019**, 7, 3366-3374	13	110
33	Quantifying the activation energies of ROS-induced NOx conversion: Suppressed toxic intermediates generation and clarified reaction mechanism. *Chemical Engineering Journal*, **2019**, 375, 122026	14.7	11
32	Cu supported on polymeric carbon nitride for selective CO2 reduction into CH4: a combined kinetics and thermodynamics investigation. *Journal of Materials Chemistry A*, **2019**, 7, 17014-17021	13	63
31	High-surface energy enables efficient and stable photocatalytic toluene degradation via the suppression of intermediate byproducts. *Catalysis Science and Technology*, **2019**, 9, 2952-2959	5.5	13
30	Promoting ring-opening efficiency for suppressing toxic intermediates during photocatalytic toluene degradation via surface oxygen vacancies. *Science Bulletin*, **2019**, 64, 669-678	10.6	90
29	Ba-vacancy induces semiconductor-like photocatalysis on insulator BaSO4. *Applied Catalysis B: Environmental*, **2019**, 253, 293-299	21.8	51
28	Promoted reactants activation and charge separation leading to efficient photocatalytic activity on phosphate/potassium co-functionalized carbon nitride. *Chinese Chemical Letters*, **2019**, 30, 875-880	8.1	31
27	Reactant activation and photocatalysis mechanisms on Bi-metal@Bi2GeO5 with oxygen vacancies: A combined experimental and theoretical investigation. *Chemical Engineering Journal*, **2019**, 370, 1366-1375	14.7	103
26	Tuning the reaction pathway of photocatalytic NO oxidation process to control the secondary pollution on monodisperse Au nanoparticles@g-C3N4. *Chemical Engineering Journal*, **2019**, 378, 122184	14.7	42
25	Controlling the secondary pollutant on B-doped g-C3N4 during photocatalytic NO removal: a combined DRIFTS and DFT investigation. *Catalysis Science and Technology*, **2019**, 9, 4531-4537	5.5	13
24	Graphene oxide mediated co-generation of C-doping and oxygen defects in BiWO nanosheets: a combined DRIFTS and DFT investigation. *Nanoscale*, **2019**, 11, 20562-20570	7.7	24
23	Light-Induced Generation and Regeneration of Oxygen Vacancies in BiSbO for Sustainable Visible Light Photocatalysis. *ACS Applied Materials & Interfaces*, **2019**, 11, 47984-47991	9.5	36
22	Transformation pathway and toxic intermediates inhibition of photocatalytic NO removal on designed Bi metal@defective Bi2O2SiO3. *Applied Catalysis B: Environmental*, **2019**, 241, 187-195	21.8	105
21	Three-in-One Oxygen Vacancies: Whole Visible-Spectrum Absorption, Efficient Charge Separation, and Surface Site Activation for Robust CO Photoreduction. *Angewandte Chemie - International Edition*, **2019**, 58, 3880-3884	16.4	329
20	Three-in-One Oxygen Vacancies: Whole Visible-Spectrum Absorption, Efficient Charge Separation, and Surface Site Activation for Robust CO2 Photoreduction. *Angewandte Chemie*, **2019**, 131, 3920-3924	3.6	40
19	Directional electron delivery and enhanced reactants activation enable efficient photocatalytic air purification on amorphous carbon nitride co-functionalized with O/La. *Applied Catalysis B: Environmental*, **2019**, 242, 19-30	21.8	79
18	Facet-dependent interfacial charge separation and transfer in plasmonic photocatalysts. *Applied Catalysis B: Environmental*, **2018**, 226, 269-277	21.8	127

17	The activation of reactants and intermediates promotes the selective photocatalytic NO conversion on electron-localized Sr-intercalated g-C3N4. *Applied Catalysis B: Environmental*, **2018**, 232, 69-76	21.8	98
16	The Spatially Oriented Charge Flow and Photocatalysis Mechanism on Internal van der Waals Heterostructures Enhanced g-C3N4. *ACS Catalysis*, **2018**, 8, 8376-8385	13.1	174
15	Enhanced plasmonic photocatalytic disinfection on noble-metal-free bismuth nanospheres/graphene nanocomposites. *Catalysis Science and Technology*, **2018**, 8, 4600-4603	5.5	18
14	Tailoring the rate-determining step in photocatalysis via localized excess electrons for efficient and safe air cleaning. *Applied Catalysis B: Environmental*, **2018**, 239, 187-195	21.8	113
13	Highly enhanced visible light photocatalysis and in situ FT-IR studies on Bi metal@defective BiOCl hierarchical microspheres. *Applied Catalysis B: Environmental*, **2018**, 225, 218-227	21.8	178
12	Visible-light-induced charge transfer pathway and photocatalysis mechanism on Bi semimetal@defective BiOBr hierarchical microspheres. *Journal of Catalysis*, **2018**, 357, 41-50	7.3	187
11	Generation and transformation of ROS on g-C3N4 for efficient photocatalytic NO removal: A combined in situ DRIFTS and DFT investigation. *Chinese Journal of Catalysis*, **2018**, 39, 1695-1703	11.3	12
10	Local spatial charge separation and proton activation induced by surface hydroxylation promoting photocatalytic hydrogen evolution of polymeric carbon nitride. *Nano Energy*, **2018**, 50, 383-392	17.1	158
9	Enhancing ROS generation and suppressing toxic intermediate production in photocatalytic NO oxidation on O/Ba co-functionalized amorphous carbon nitride. *Applied Catalysis B: Environmental*, **2018**, 237, 938-946	21.8	110
8	Directional electron delivery via a vertical channel between g-C3N4 layers promotes photocatalytic efficiency. *Journal of Materials Chemistry A*, **2017**, 5, 9358-9364	13	140
7	Tailoring Active Sites via Synergy between Graphitic and Pyridinic N for Enhanced Catalytic Efficiency of a Carbocatalyst. *ACS Applied Materials & Interfaces*, **2017**, 9, 19861-19869	9.5	47
6	Highly Efficient Performance and Conversion Pathway of Photocatalytic NO Oxidation on SrO-Clusters@Amorphous Carbon Nitride. *Environmental Science & Technology*, **2017**, 51, 10682-10690	10.3	146
5	Steering the interlayer energy barrier and charge flow via bioriented transportation channels in g-C3N4: Enhanced photocatalysis and reaction mechanism. *Journal of Catalysis*, **2017**, 352, 351-360	7.3	147
4	Enhanced CO 2 capture on graphene via N, S dual-doping. *Applied Surface Science*, **2017**, 399, 420-425	6.7	36
3	Promotion mechanism of pyridine N-doped carbocatalyst for SO2 oxidation. *RSC Advances*, **2016**, 6, 86316-86323	3.7	23
2	Photochemical Transformation Pathways of Nitrates from Photocatalytic NOx Oxidation: Implications for Controlling Secondary Pollutants. *Environmental Science and Technology Letters*,	11	3
1	Optimizing the Gas-Solid Photocatalytic Reactions for Air Purification. *ACS ES&T Engineering*,		1