

# Shengyao Wang

## List of Publications by Year in descending order

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37  
papers

4,146  
citations

236833

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h-index

315616

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38  
docs citations

38  
times ranked

3651  
citing authors

#	ARTICLE	IF	CITATIONS
1	Unique S-scheme heterojunctions in self-assembled TiO <sub>2</sub> /CsPbBr <sub>3</sub> hybrids for CO <sub>2</sub> photoreduction. <i>Nature Communications</i> , 2020, 11, 4613.	5.8	776
2	Light-switchable Oxygen Vacancies in Ultrafine Bi <sub>5</sub> O <sub>7</sub> Br Nanotubes for Boosting Solar-Driven Nitrogen Fixation in Pure Water. <i>Advanced Materials</i> , 2017, 29, 1701774.	11.1	533
3	Identification of Halogen-Associated Active Sites on Bismuth-Based Perovskite Quantum Dots for Efficient and Selective CO <sub>2</sub> -to-CO Photoreduction. <i>ACS Nano</i> , 2020, 14, 13103-13114.	7.3	282
4	Direct and Selective Photocatalytic Oxidation of CH <sub>4</sub> to Oxygenates with O <sub>2</sub> on Cocatalysts/ZnO at Room Temperature in Water. <i>Journal of the American Chemical Society</i> , 2019, 141, 20507-20515.	6.6	253
5	A plate-on-plate sandwiched Z-scheme heterojunction photocatalyst: BiOBr-Bi <sub>2</sub> MoO <sub>6</sub> with enhanced photocatalytic performance. <i>Applied Surface Science</i> , 2017, 391, 194-201.	3.1	238
6	Oxygen vacancies induced special CO <sub>2</sub> adsorption modes on Bi <sub>2</sub> MoO <sub>6</sub> for highly selective conversion to CH <sub>4</sub> . <i>Applied Catalysis B: Environmental</i> , 2019, 259, 118088.	10.8	221
7	Nitrogen Fixation Reaction Derived from Nanostructured Catalytic Materials. <i>Advanced Functional Materials</i> , 2018, 28, 1803309.	7.8	212
8	Sustained CO <sub>2</sub> -photoreduction activity and high selectivity over Mn, C-codoped ZnO core-triple shell hollow spheres. <i>Nature Communications</i> , 2021, 12, 4936.	5.8	159
9	A selective Au-ZnO/TiO <sub>2</sub> hybrid photocatalyst for oxidative coupling of methane to ethane with dioxygen. <i>Nature Catalysis</i> , 2021, 4, 1032-1042.	16.1	156
10	Intermolecular cascaded $\pi$ -conjugation channels for electron delivery powering CO <sub>2</sub> photoreduction. <i>Nature Communications</i> , 2020, 11, 1149.	5.8	147
11	In Situ Carbon Homogeneous Doping on Ultrathin Bismuth Molybdate: A Dual-Purpose Strategy for Efficient Molecular Oxygen Activation. <i>Advanced Functional Materials</i> , 2017, 27, 1703923.	7.8	136
12	Facile Top-Down Strategy for Direct Metal Atomization and Coordination Achieving a High Turnover Number in CO <sub>2</sub> Photoreduction. <i>Journal of the American Chemical Society</i> , 2020, 142, 19259-19267.	6.6	128
13	Selective Photo-oxidation of Methane to Methanol with Oxygen over Dual-Cocatalyst-Modified Titanium Dioxide. <i>ACS Catalysis</i> , 2020, 10, 14318-14326.	5.5	114
14	Insight into the effect of bromine on facet-dependent surface oxygen vacancies construction and stabilization of Bi <sub>2</sub> MoO <sub>6</sub> for efficient photocatalytic NO removal. <i>Applied Catalysis B: Environmental</i> , 2020, 265, 118585.	10.8	96
15	Frustrated Lewis Pair Sites Boosting CO <sub>2</sub> Photoreduction on Cs <sub>2</sub> CuBr <sub>4</sub> Perovskite Quantum Dots. <i>ACS Catalysis</i> , 2022, 12, 2915-2926.	5.5	94
16	Low-temperature strategy toward Ni-NC@Ni core-shell nanostructure with Single-Ni sites for efficient CO <sub>2</sub> electroreduction. <i>Nano Energy</i> , 2020, 77, 105010.	8.2	70
17	A mesoporous non-precious metal boride system: synthesis of mesoporous cobalt boride by strictly controlled chemical reduction. <i>Chemical Science</i> , 2020, 11, 791-796.	3.7	58
18	Highly Intensified Molecular Oxygen Activation on Bi@Bi <sub>2</sub> MoO <sub>6</sub> via a Metallic Bi-Coordinated Facet-Dependent Effect. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 1867-1876.	4.0	54

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19	A highly stable all-in-one photocatalyst for aryl etherification: the Ni <sup>II</sup> embedded covalent organic framework. <i>Green Chemistry</i> , 2021, 23, 5797-5805.	4.6	47
20	An artificial photosynthesis system comprising a covalent triazine framework as an electron relay facilitator for photochemical carbon dioxide reduction. <i>Journal of Materials Chemistry C</i> , 2020, 8, 192-200.	2.7	43
21	Deep insight into ROS mediated direct and hydroxylated dichlorination process for efficient photocatalytic sodium pentachlorophenate mineralization. <i>Applied Catalysis B: Environmental</i> , 2021, 296, 120352.	10.8	42
22	Stabilizing CuGaS <sub>2</sub> by crystalline CdS through an interfacial Z-scheme charge transfer for enhanced photocatalytic CO <sub>2</sub> reduction under visible light. <i>Nanoscale</i> , 2020, 12, 8693-8700.	2.8	39
23	Simple fabrication of Fe <sub>3</sub> O <sub>4</sub> /C/g-C <sub>3</sub> N <sub>4</sub> two-dimensional composite by hydrothermal carbonization approach with enhanced photocatalytic performance under visible light. <i>Catalysis Science and Technology</i> , 2018, 8, 3484-3492.	2.1	32
24	Insights into the Surface/Interface Modifications of Bi <sub>2</sub> MoO <sub>6</sub> : Feasible Strategies and Photocatalytic Applications. <i>Solar Rrl</i> , 2021, 5, 2000442.	3.1	29
25	2D-C <sub>3</sub> N <sub>4</sub> encapsulated perovskite nanocrystals for efficient photo-assisted thermocatalytic CO <sub>2</sub> reduction. <i>Chemical Science</i> , 2022, 13, 1335-1341.	3.7	29
26	Comprehensive investigation on robust photocatalytic hydrogen production over C <sub>3</sub> N <sub>5</sub> . <i>Chinese Journal of Catalysis</i> , 2022, 43, 410-420.	6.9	25
27	Efficient photocatalytic CO <sub>2</sub> reduction mediated by transitional metal borides: metal site-dependent activity and selectivity. <i>Journal of Materials Chemistry A</i> , 2020, 8, 21833-21841.	5.2	23
28	Bacteria-Assisted Synthesis of Nanosheet-Assembled TiO <sub>2</sub> Hierarchical Architectures for Constructing TiO <sub>2</sub> -Based Composites for Photocatalytic and Electrocatalytic Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 37004-37012.	4.0	19
29	Chloridion-induced dual tunable fabrication of oxygen-deficient Bi <sub>2</sub> WO <sub>6</sub> atomic layers for deep oxidation of NO. <i>Chinese Journal of Catalysis</i> , 2021, 42, 1013-1023.	6.9	17
30	Two consecutive post-synthetic modifications of benzothiadiazole-based conjugated polymers for enhanced photocatalytic H <sub>2</sub> evolution: the significance of the sulfinyl group. <i>Journal of Materials Chemistry A</i> , 2021, 9, 10208-10216.	5.2	15
31	Interfacing Photosynthetic Membrane Protein with Mesoporous WO <sub>3</sub> Photoelectrode for Solar Water Oxidation. <i>Small</i> , 2018, 14, e1800104.	5.2	14
32	Integrating single Co sites into crystalline covalent triazine frameworks for photoreduction of CO <sub>2</sub> . <i>Chemical Communications</i> , 2022, 58, 8121-8124.	2.2	13
33	Construction of oxygen vacancy on Bi <sub>12</sub> O <sub>17</sub> Cl <sub>2</sub> nanosheets by heat-treatment in H <sub>2</sub> O vapor for photocatalytic NO oxidation. <i>Journal of Materials Science and Technology</i> , 2022, 123, 234-242.	5.6	12
34	Direct catalytic nitrogen oxide removal using thermal, electrical or solar energy. <i>Chinese Chemical Letters</i> , 2022, 33, 1117-1130.	4.8	8
35	Superoxide anion and singlet oxygen dominated faster photocatalytic elimination of nitric oxide over defective bismuth molybdates heterojunctions. <i>Journal of Colloid and Interface Science</i> , 2022, 618, 248-258.	5.0	4
36	Photocatalysis: Light-Switchable Oxygen Vacancies in Ultrafine Bi <sub>5</sub> O <sub>7</sub> Br Nanotubes for Boosting Solar-Driven Nitrogen Fixation in Pure Water (Adv. Mater. 31/2017). <i>Advanced Materials</i> , 2017, 29, .	11.1	2

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37	Ultrafast synthesis of near-zero-cost S-doped Ni(OH) <sub>2</sub> on C <sub>3</sub> N <sub>5</sub> under ambient conditions with enhanced photocatalytic activity. RSC Advances, 2021, 11, 36166-36173.	1.7	2