Wei Sun

List of Publications by Year
in descending order

45 papers	2,293 citations	331670 21 h-index	223800 46 g-index
49 all docs	49 docs citations	49 times ranked	2921 citing authors

#	ARTICLE	IF	CITATIONS
1	Reclamation of Oily Wastewater at High Temperatures Using Thermosetting Polyurethane-Nanosilicon Sponges. ACS Applied Polymer Materials, 2022, 4, 1544-1550.	4.4	4
2	Stable Cu Catalysts Supported by Twoâ€dimensional SiO₂ with Strong Metalâ€“Support Interaction. Advanced Science, 2022, 9, e2104972.	11.2	25
3	Solar CO2hydrogenation by photocatalytic foams. Chemical Engineering Journal, 2022, 435, 134864.	12.7	16
4	Standardization, accreditation, and real-world implementation of photothermal CO2 catalysis. Chem Catalysis, 2022, 2, 218-220.	6.1	2
5	Photothermal CO2 catalysis: From catalyst discovery to reactor design. Chem Catalysis, 2022, 2, 215-217.	6.1	7
6	Silica samurai: Aristocrat of energy and environmental catalysis. Chem Catalysis, 2022, 2, 1893-1918.	6.1	6
7	Allâ€Earthâ€Abundant Photothermal Silicon Platform for CO₂ Catalysis with Nearly 100% Sunlight Harvesting Ability. Solar Rrl, 2021, 5, 2000387.	5.8	21
8	Twoâ€Dimensional Silicon for (Photo)Catalysis. Solar Rrl, 2021, 5, 2000392.	5.8	11
9	CO₂ Footprint of Thermal Versus Photothermal CO₂ Catalysis. Small, 2021, 17, e2007025.	10.0	35
10	Wax-wetting sponges for oil droplets recovery from frigid waters. Science Advances, 2021, 7, .	10.3	23
11	Recent advances in nanostructured catalysts for photo-assisted dry reforming of methane. Materials Today Nano, 2021, 14, 100113.	4.6	11
12	Greenhouse-inspired supra-photothermal CO2 catalysis. Nature Energy, 2021, 6, 807-814.	39.5	198
13	Thermal Disproportionation for the Synthesis of Silicon Nanocrystals and Their Photoluminescent Properties. Frontiers in Chemistry, 2021, 9, 721454.	3.6	3
14	The next big thing for silicon nanostructures â€“ CO₂ photocatalysis. Faraday Discussions, 2020, 222, 424-432.	3.2	13
15	Surface-engineered sponges for recovery of crude oil microdroplets from wastewater. Nature Sustainability, 2020, 3, 136-143.	23.7	94
16	High-Performance, Scalable, and Low-Cost Copper Hydroxyapatite for Photothermal CO2 Reduction. ACS Catalysis, 2020, 10, 13668-13681.	11.2	55
17	Flash Solidâ€“Solid Synthesis of Silicon Oxide Nanorods. Small, 2020, 16, 2001435.	10.0	2
18	Black indium oxide a photothermal CO2 hydrogenation catalyst. Nature Communications, 2020, 11, 2432.	12.8	192

#	Article	IF	Citations
19	Building a Bridge from Papermaking to Solar Fuels. Angewandte Chemie - International Edition, 2019, 58, 14850-14854.	13.8	21
20	Frontispiece: Building a Bridge from Papermaking to Solar Fuels. Angewandte Chemie - International Edition, 2019, 58, .	13.8	0
21	Frontispiz: Building a Bridge from Papermaking to Solar Fuels. Angewandte Chemie, 2019, 131, .	2.0	0
22	Building a Bridge from Papermaking to Solar Fuels. Angewandte Chemie, 2019, 131, 14992-14996.	2.0	4
23	Cu2O nanocubes with mixed oxidation-state facets for (photo)catalytic hydrogenation of carbon dioxide. Nature Catalysis, 2019, 2, 889-898.	34.4	234
24	Living Atomically Dispersed Cu Ultrathin TiO₂ Nanosheet CO₂ Reduction Photocatalyst. Advanced Science, 2019, 6, 1900289.	11.2	128
25	Nickel@Siloxene catalytic nanosheets for high-performance CO2 methanation. Nature Communications, 2019, 10, 2608.	12.8	104
26	Towards Solar Methanol: Past, Present, and Future. Advanced Science, 2019, 6, 1801903.	11.2	63
27	Catalytic CO2 reduction by palladium-decorated siliconâ€“hydride nanosheets. Nature Catalysis, 2019, 2, 46-54.	34.4	116
28	Photocatalytic Hydrogenation of Carbon Dioxide with High Selectivity to Methanol at Atmospheric Pressure. Joule, 2018, 2, 1369-1381.	24.0	148
29	Promoting Charge Separation in Semiconductor Nanocrystal Superstructures for Enhanced Photocatalytic Activity. Advanced Materials Interfaces, 2018, 5, 1701694.	3.7	33
30	A general and mild route to highly dispersible anisotropic magnetic colloids for sensing weak magnetic fields. Journal of Materials Chemistry C, 2018, 6, 5528-5535.	5.5	21
31	Anomalous effect of the aging degree on the ionic permeability of silica shells. RSC Advances, 2018, 8, 38499-38505.	3.6	4
32	Sizeâ€Tunable Photothermal Germanium Nanocrystals. Angewandte Chemie, 2017, 129, 6426-6431.	2.0	6
33	Sizeâ€Tunable Photothermal Germanium Nanocrystals. Angewandte Chemie - International Edition, 2017, 56, 6329-6334.	13.8	47
34	UVâ€Blocking Photoluminescent Silicon Nanocrystal/Polydimethylsiloxane Composites. Advanced Optical Materials, 2017, 5, 1700237.	7.3	17
35	Tailoring CO₂ Reduction with Doped Silicon Nanocrystals. Advanced Sustainable Systems, 2017, 1, 1700118.	5.3	15
36	Synthesis of Black TiO<i>_x</i> Nanoparticles by Mg Reduction of TiO₂ Nanocrystals and their Application for Solar Water Evaporation. Advanced Energy Materials, 2017, 7, 1601811.	19.5	326

#	Article	IF	Citations
37	Silicon Nanocrystals: It's Simply a Matter of Size. ChemNanoMat, 2016, 2, 847-855.	2.8	11
38	Dye colour switching by hydride-terminated silicon particles and its application as an oxygen indicator. Journal of Materials Chemistry C, 2016, 4, 4577-4583.	5.5	9
39	Heterogeneous reduction of carbon dioxide by hydride-terminated silicon nanocrystals. Nature Communications, 2016, 7, 12553.	12.8	93
40	Porous NIR Photoluminescent Silicon Nanocrystalsâ€POSS Composites. Advanced Functional Materials, 2016, 26, 5102-5110.	14.9	31
41	Silicon monoxide â€" a convenient precursor for large scale synthesis of near infrared emitting monodisperse silicon nanocrystals. Nanoscale, 2016, 8, 3678-3684.	5.6	30
42	Switchingâ€On Quantum Size Effects in Silicon Nanocrystals. Advanced Materials, 2015, 27, 746-749.	21.0	43
43	Non-wettable, Oxidation-Stable, Brightly Luminescent, Perfluorodecyl-Capped Silicon Nanocrystal Film. Journal of the American Chemical Society, 2014, 136, 15849-15852.	13.7	32
44	Hydrosilylation kinetics of silicon nanocrystals. Chemical Communications, 2013, 49, 11361.	4.1	20
45	Manipulation of Cracks in Three-Dimensional Colloidal Crystal Films via Recognition of Surface Energy Patterns: An Approach to Regulating Crack Patterns and Shaping Microcrystals. Langmuir, 2011, 27, 8018-8026.	3.5	16