Photocatalytic CO₂ Conversion of M<sub> Directly from the Air with High Selectivity: Insight into Mechanism

Journal of the American Chemical Society 141, 5267-5274 DOI: 10.1021/jacs.8b12928

Citation Report

#	Article	IF	CITATIONS
1	Ag-Bridged Z-Scheme 2D/2D Bi ₅ FeTi ₃ O ₁₅ /g-C ₃ N ₄ Heterojunction for Enhanced Photocatalysis: Mediator-Induced Interfacial Charge Transfer and Mechanism Insights. ACS Applied Materials & amp; Interfaces, 2019, 11, 27686-27696.	4.0	200
2	CQDs modified PbBiO2Cl nanosheets with improved molecular oxygen activation ability for photodegradation of organic contaminants. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 382, 111921.	2.0	17
3	Dispersed Nickel Cobalt Oxyphosphide Nanoparticles Confined in Multichannel Hollow Carbon Fibers for Photocatalytic CO 2 Reduction. Angewandte Chemie, 2019, 131, 17396-17400.	1.6	17
4	Dispersed Nickel Cobalt Oxyphosphide Nanoparticles Confined in Multichannel Hollow Carbon Fibers for Photocatalytic CO ₂ Reduction. Angewandte Chemie - International Edition, 2019, 58, 17236-17240.	7.2	184
5	Iodineâ€Deficient BiO _{1.2} I _{0.6} Coupling with Bi ₂ O ₃ for Degradation of Volatile Organic Compounds under Simulated Sunlight Irradiation. ChemSusChem, 2019, 12, 4874-4881.	3.6	9
6	Efficient photo-Fenton like activity in modified MIL-53(Fe) for removal of pesticides: Regulation of photogenerated electron migration. Materials Research Bulletin, 2019, 119, 110570.	2.7	39
7	Surface-reduced Si-doped TiO ₂ nanotubes for high-efficiency photoelectrochemical water splitting. Functional Materials Letters, 2019, 12, 1940004.	0.7	2
8	Synergistic effect of N-Ho on photocatalytic CO2 reduction for N/Ho co-doped TiO2 nanorods. Materials Research Bulletin, 2019, 118, 110502.	2.7	14
9	Vis-NIR responsive Bi24O31Br10 and corresponding composite with up-conversion phosphor towards efficient photocatalytic oxidation. Applied Surface Science, 2019, 489, 210-219.	3.1	28
10	A Covalent Organic Framework Bearing Single Ni Sites as a Synergistic Photocatalyst for Selective Photoreduction of CO ₂ to CO. Journal of the American Chemical Society, 2019, 141, 7615-7621.	6.6	525
11	A local hydrophobic environment in a metal–organic framework for boosting photocatalytic CO ₂ reduction in the presence of water. Chemical Communications, 2019, 55, 14781-14784.	2.2	38
12	Boosting interfacial charge separation of Ba5Nb4O15/g-C3N4 photocatalysts by 2D/2D nanojunction towards efficient visible-light driven H2 generation. Applied Catalysis B: Environmental, 2020, 263, 117730.	10.8	168
13	A mechanistic study of amorphous CoSx cages as advanced oxidation catalysts for excellent peroxymonosulfate activation towards antibiotics degradation. Chemical Engineering Journal, 2020, 381, 122768.	6.6	113
14	Hierarchical NiCo2O4 hollow nanocages for photoreduction of diluted CO2: Adsorption and active sites engineering. Applied Catalysis B: Environmental, 2020, 260, 118208.	10.8	101
15	A dual transfer strategy for boosting reactive oxygen species generation in ultrathin Z-scheme heterojunction driven by electronic field. Chemical Engineering Journal, 2020, 384, 123236.	6.6	60
16	Enhanced photocatalytic activity and photothermal effects of cu-doped metal-organic frameworks for rapid treatment of bacteria-infected wounds. Applied Catalysis B: Environmental, 2020, 261, 118248.	10.8	255
17	Photodegradation of soluble microbial products (SMPs) from membrane bioreactor by GO-COOH/TiO2/Ag. Journal of Environmental Sciences, 2020, 88, 292-300.	3.2	9
18	Photo-oxidation efficient As (III) under visible light using microporous Zn doped-Fe ₃ O ₄ sphere. Materials Technology, 2020, 35, 335-348.	1.5	6

#	Article	IF	CITATIONS
19	Photoelectrochemical Conversion of Carbon Dioxide (CO ₂) into Fuels and Value-Added Products. ACS Energy Letters, 2020, 5, 486-519.	8.8	361
20	Defect State Assisted Z-scheme Charge Recombination in Bi ₂ O ₂ CO ₃ /Graphene Quantum Dot Composites For Photocatalytic Oxidation of NO. ACS Applied Nano Materials, 2020, 3, 772-781.	2.4	36
21	Highly photocatalytic p-type Cu2O thin films fabricated on a quartz glass substrate at 180°C in air, by spraying aqueous precursor solutions involving Cu(II) complexes. Materials Technology, 2020, 35, 553-564.	1.5	0
22	Self-templated synthesis of Co ₃ O ₄ hierarchical nanosheets from a metal–organic framework for efficient visible-light photocatalytic CO ₂ reduction. Nanoscale, 2020, 12, 755-762.	2.8	77
23	Fabrication of Z-scheme MoO3/Bi2O4 heterojunction photocatalyst with enhanced photocatalytic performance under visible light irradiation. Chinese Journal of Catalysis, 2020, 41, 161-169.	6.9	149
24	Efficient visible and NIR light-driven photocatalytic CO2 reduction over defect-engineered ZnO/carbon dot hybrid and mechanistic insights. Journal of Catalysis, 2020, 391, 298-311.	3.1	42
25	Plasmonic Enhanced Reactive Oxygen Species Activation on Lowâ€Workâ€Function Tungsten Nitride for Direct Nearâ€Infrared Driven Photocatalysis. Small, 2020, 16, e2004557.	5.2	22
26	Pt nanoparticles decorated Bi-doped TiO2 as an efficient photocatalyst for CO2 photo-reduction into CH4. Solar Energy, 2020, 211, 100-110.	2.9	58
27	The photothermal and adsorption properties of different surfactant-modified caesium tungsten bronze. Materials Technology, 2020, , 1-11.	1.5	2
28	Chemical and morphological mechanisms of synthesizing rectangular cesium tungsten bronze nanosheets with broadened visible-light absorption and strong photoresponse property. Materials and Design, 2020, 194, 108955.	3.3	13
29	Covalently Bonded Bi ₂ O ₃ Nanosheet/Bi ₂ WO ₆ Network Heterostructures for Efficient Photocatalytic CO ₂ Reduction. ACS Applied Energy Materials, 2020, 3, 12194-12203.	2.5	34
30	Carbon vacancies and hydroxyls in graphitic carbon nitride: Promoted photocatalytic NO removal activity and mechanism. Applied Catalysis B: Environmental, 2020, 279, 119376.	10.8	83
31	Metalloporphyrin-based covalent organic frameworks composed of the electron donor-acceptor dyads for visible-light-driven selective CO2 reduction. Science China Chemistry, 2020, 63, 1289-1294.	4.2	73
32	Semiconductor nanocrystals for small molecule activation <i>via</i> artificial photosynthesis. Chemical Society Reviews, 2020, 49, 9028-9056.	18.7	127
33	Free-standing and flexible 0D CeO ₂ nanodot/1D La(OH) ₃ nanofiber heterojunction net as a novel efficient and easily recyclable photocatalyst. Inorganic Chemistry Frontiers, 2020, 7, 4701-4710.	3.0	9
34	Synergistic effects of lanthanide surface adhesion and photon-upconversion for enhanced near-infrared responsive photodegradation of organic contaminants in wastewater. Environmental Science: Nano, 2020, 7, 3333-3342.	2.2	12
35	Edge activation of an inert polymeric carbon nitride matrix with boosted absorption kinetics and near-infrared response for efficient photocatalytic CO ₂ reduction. Journal of Materials Chemistry A, 2020, 8, 11761-11772.	5.2	42
36	A bimetallic-MOF catalyst for efficient CO ₂ photoreduction from simulated flue gas to value-added formate. Journal of Materials Chemistry A, 2020, 8, 11712-11718.	5.2	61

#	Article	IF	CITATIONS
37	Construction of 2D/2D Bi2Se3/g-C3N4 nanocomposite with High interfacial charge separation and photo-heat conversion efficiency for selective photocatalytic CO2 reduction. Applied Catalysis B: Environmental, 2020, 277, 119232.	10.8	140
38	Ag nanoparticles-embellished Bi12GeO20 composites: A plasmonic system featured with reinforced visible-light photocatalytic performance and ultra-stability. Applied Surface Science, 2020, 527, 146946.	3.1	14
39	Theoretical analysis on optical properties of Cs0.33WO3 nanoparticles with different sizes, shapes and structures. Materials Letters, 2020, 272, 127847.	1.3	6
40	600 nm-driven photoreduction of CO2 through the topological transformation of layered double hydroxides nanosheets. Applied Catalysis B: Environmental, 2020, 270, 118884.	10.8	46
41	Design, preparation and properties of high-performance Z-scheme Bi2MoO6/g-C3N4-x composite photocatalyst. Chemical Physics Letters, 2020, 748, 137381.	1.2	7
42	Assembling ultrafine TiO2 nanoparticles on UiO-66 octahedrons to promote selective photocatalytic conversion of CO2 to CH4 at a low concentration. Applied Catalysis B: Environmental, 2020, 270, 118856.	10.8	103
43	Recent progress on photocatalytic heterostructures with full solar spectral responses. Chemical Engineering Journal, 2020, 393, 124719.	6.6	123
44	Two-dimensional gersiloxenes with tunable bandgap for photocatalytic H2 evolution and CO2 photoreduction to CO. Nature Communications, 2020, 11, 1443.	5.8	84
45	Simultaneous construction of dual-site phosphorus modified g-C3N4 and its synergistic mechanism for enhanced visible-light photocatalytic hydrogen evolution. Applied Surface Science, 2020, 517, 146192.	3.1	29
46	A 1D/2D WO ₃ nanostructure coupled with a nanoparticulate CuO cocatalyst for enhancing solar-driven CO ₂ photoreduction: the impact of the crystal facet. Sustainable Energy and Fuels, 2020, 4, 2593-2603.	2.5	29
47	Carbon Capture and Conversion. Journal of the American Chemical Society, 2020, 142, 4955-4957.	6.6	85
48	Surface plasmon resonance and defects on tungsten oxides synergistically boost high-selective CO2 reduction for ethylene. Applied Materials Today, 2020, 20, 100744.	2.3	23
49	Recent advances on visible-light-driven CO2 reduction: Strategies for boosting solar energy transformation. APL Materials, 2020, 8, .	2.2	13
50	Facile polyol-triggered anatase–rutile heterophase TiO2-x nanoparticles for enhancing photocatalytic CO2 reduction. Journal of Colloid and Interface Science, 2020, 579, 872-877.	5.0	34
51	Exquisite design of porous carbon microtubule-scaffolding hierarchical In ₂ O ₃ -ZnIn ₂ S ₄ heterostructures toward efficient photocatalytic conversion of CO ₂ into CO. Nanoscale, 2020, 12, 14676-14681.	2.8	31
52	Nano-mineral induced nonlinear optical LiNbO3 with abundant oxygen vacancies for photocatalytic nitrogen fixation: boosting effect of polarization. Applied Nanoscience (Switzerland), 2020, 10, 3477-3490.	1.6	8
53	Magnetic yolk-shell structure of ZnFe2O4 nanoparticles for enhanced visible light photo-Fenton degradation towards antibiotics and mechanism study. Applied Surface Science, 2020, 513, 145820.	3.1	93
54	Microstructure Induced Thermodynamic and Kinetic Modulation to Enhance CO ₂ Photothermal Reduction: A Case of Atomic-Scale Dispersed Co–N Species Anchored Co@C Hybrid. ACS Catalysis, 2020, 10, 4726-4736.	5.5	84

#	Article	IF	CITATIONS
55	Crystal plane directed interaction of TiO2 [1Â0Â1] with AgNPs [1Â1 1] silver nanoparticles enhancing solar light induced photo-catalytic oxidation of ciprofloxacin: Experimental and theoretical studies. Chemical Engineering Journal, 2020, 394, 124286.	6.6	22
56	A bis(thiosemicarbazonato)-copper complex, a new catalyst for electro- and photo-reduction of CO2 to methanol. New Journal of Chemistry, 2020, 44, 2721-2726.	1.4	15
57	Tungsten bronze Cs0.33WO3 nanorods modified by molybdenum for improved photocatalytic CO2 reduction directly from air. Science China Materials, 2020, 63, 2206-2214.	3.5	32
58	Synthesis and characterization of Sb-doped SnO2 with high near-infrared shielding property for energy-efficient windows by a facile dual-titration co-precipitation method. Ceramics International, 2020, 46, 18518-18525.	2.3	28
59	Cuprous ion (Cu+) doping induced surface/interface engineering for enhancing the CO2 photoreduction capability of W18O49 nanowires. Journal of Colloid and Interface Science, 2020, 572, 306-317.	5.0	50
60	DFT study on Ag loaded 2H-MoS ₂ for understanding the mechanism of improved photocatalytic reduction of CO ₂ . Physical Chemistry Chemical Physics, 2020, 22, 10305-10313.	1.3	29
61	Structural engineering of 3D hierarchical Cd0.8Zn0.2S for selective photocatalytic CO2 reduction. Chinese Journal of Catalysis, 2021, 42, 131-140.	6.9	129
62	Ultra-small molybdenum sulfide nanodot-coupled graphitic carbon nitride nanosheets: Trifunctional ammonium tetrathiomolybdate-assisted synthesis and high photocatalytic hydrogen evolution. Journal of Colloid and Interface Science, 2021, 586, 719-729.	5.0	30
63	Highly Enhanced Full Solar Spectrumâ€Driven Photocatalytic CO ₂ Reduction Performance in Cu _{2–<i>x</i>} S/g ₃ N ₄ Composite: Efficient Charge Transfer and Mechanism Insight. Solar Rrl, 2021, 5, 2000326.	3.1	79
64	Thermally-assisted photocatalytic CO2 reduction to fuels. Chemical Engineering Journal, 2021, 408, 127280.	6.6	90
65	Boosted photoreduction of diluted CO2 through oxygen vacancy engineering in NiO nanoplatelets. Nano Research, 2021, 14, 730-737.	5.8	49
66	Photoconversion of anthropogenic CO2 into tunable syngas over industrial wastes derived metal-organic frameworks. Applied Catalysis B: Environmental, 2021, 283, 119594.	10.8	38
67	Enhanced photocatalytic CO2 reduction in H2O vapor by atomically thin Bi2WO6 nanosheets with hydrophobic and nonpolar surface. Applied Catalysis B: Environmental, 2021, 283, 119630.	10.8	131
68	Plasmonic Materials: Opportunities and Challenges on Reticular Chemistry for Photocatalytic Applications. ChemCatChem, 2021, 13, 1059-1073.	1.8	13
69	Photocatalytic carbon dioxide reduction to methanol catalyzed by ZnO, Pt, Au, and Cu nanoparticles decorated zeolitic imidazolate framework-8. Journal of CO2 Utilization, 2021, 43, 101373.	3.3	30
70	Two-dimensional MXene-based and MXene-derived photocatalysts: Recent developments and perspectives. Chemical Engineering Journal, 2021, 409, 128099.	6.6	230
71	The p and d hybridization interaction in Fe-N-C boosts peroxymonosulfate non-radical activation. Separation and Purification Technology, 2021, 258, 118025.	3.9	16
72	Novel Co3O4 @ CoFe2O4 double-shelled nanoboxes derived from Metal–Organic Framework for CO2 reduction. Journal of Alloys and Compounds, 2021, 854, 156942.	2.8	37

CITATION	DEDODT
CHAHON	REPORT

#	Article		CITATIONS
73	Remarkable Enhancement of Eu–TiO2–GO Composite for Photodegradation of Indigo Carmine: A Design Method Based on Computational and Experimental Perspectives. Catalysis Letters, 2021, 151, 1111-1126.	1.4	14
74	One‣tep Realization of Crystallization and Cyanoâ€Group Generation for gâ€C ₃ N ₄ Photocatalysts with Improved H ₂ Production. Solar Rrl, 2021, 5, 2000372.	3.1	91
75	Nearâ€Infraredâ€Driven Photocatalysts: Design, Construction, and Applications. Small, 2021, 17, e1904107.	5.2	63
76	Shedding light on <scp>CO₂</scp> : Catalytic synthesis of solar methanol. EcoMat, 2021, 3, e12078.	6.8	13
77	Selective visible-light driven highly efficient photocatalytic reduction of CO ₂ to C ₂ H ₅ OH by two-dimensional Cu ₂ S monolayers. Nanoscale Horizons, 2021, 6, 661-668.	4.1	15
78	Artificial Photosynthesis by 3D Graphene-based Composite Photocatalysts. Chemistry in the Environment, 2021, , 396-431.	0.2	0
79	Proton-insertion-pseudocapacitance of tungsten bronze tunnel structure enhanced by transition metal ion anchoring. Nanoscale, 2021, 13, 16790-16798.	2.8	5
80	Noble metal-free Cu(<scp>i</scp>)-anchored NHC-based MOF for highly recyclable fixation of CO ₂ under RT and atmospheric pressure conditions. Green Chemistry, 2021, 23, 5195-5204.	4.6	57
81	Intrinsic carbon-doping induced synthesis of oxygen vacancies-mediated TiO2 nanocrystals: Enhanced photocatalytic NO removal performance and mechanism. Journal of Catalysis, 2021, 393, 179-189.	3.1	25
82	Synergy of Fe dopants and oxygen vacancies confined in atomically-thin cobaltous oxide sheets for high-efficiency CO ₂ photoreduction. Journal of Materials Chemistry A, 2021, 9, 22353-22363.	5.2	12
83	Efficient chemical fixation of CO ₂ from direct air under environment-friendly co-catalyst and solvent-free ambient conditions. Journal of Materials Chemistry A, 2021, 9, 23127-23139.	5.2	51
84	Recent Progress on Photocatalytic CO ₂ Reduction with Ultrathin Nanostructures. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2022, 37, 3.	0.6	1
85	Integration of zirconium-based metal–organic framework with CdS for enhanced photocatalytic conversion of CO ₂ to CO. Nanoscale, 2021, 13, 16977-16985.	2.8	21
86	Preparation and characterization of <scp>PVC</scp> / <scp>Cs_xWO₃</scp> composite film with excellent nearâ€infrared light shielding and high visible light transmission. Journal of Vinyl and Additive Technology, 2021, 27, 356-366.	1.8	8
87	Construction of a Z-scheme heterojunction for high-efficiency visible-light-driven photocatalytic CO ₂ reduction. Nanoscale, 2021, 13, 4359-4389.	2.8	107
88	Lattice-strained nickel hydroxide nanosheets for the boosted diluted CO ₂ photoreduction. Environmental Science: Nano, 2021, 8, 2360-2371.	2.2	12
89	Integrated Sâ€Scheme Heterojunction of Amineâ€Functionalized 1D CdSe Nanorods Anchoring on Ultrathin 2D SnNb ₂ O ₆ Nanosheets for Robust Solarâ€Driven CO ₂ Conversion. Solar Rrl, 2021, 5, 2000805.	3.1	206
90	Strategies for Integrated Capture and Conversion of CO ₂ from Dilute Flue Gases and the Atmosphere. ChemSusChem, 2021, 14, 1805-1820.	3.6	37

CITATION REPORT

#	Article	IF	CITATIONS
91	Rational Construction of Light-Driven Catalysts for CO ₂ Reduction. Energy & Fuels, 2021, 35, 5696-5715.	2.5	18
93	Defect engineering of photocatalysts for solar-driven conversion of CO2 into valuable fuels. Materials Today, 2021, 50, 358-384.	8.3	66
94	Review on the hazardous applications and photodegradation mechanisms of chlorophenols over different photocatalysts. Environmental Research, 2021, 195, 110742.	3.7	111
95	Metal-organic framework membranes with single-atomic centers for photocatalytic CO2 and O2 reduction. Nature Communications, 2021, 12, 2682.	5.8	154
96	Rational Design of Cobaltate MCo ₂ O _{4â^Î} Hierarchical Nanomicrostructures with Bunch of Oxygen Vacancies toward Highly Efficient Photocatalytic Fixing of Carbon Dioxide. Journal of Physical Chemistry C, 2021, 125, 9782-9794.	1.5	12
97	Biomimetic inspired porphyrin-based nanoframes for highly efficient photocatalytic CO2 reduction. Chemical Engineering Journal, 2021, 411, 128414.	6.6	31
98	Atmospheric CO2 capture and photofixation to near-unity CO by Ti3+-Vo-Ti3+ sites confined in TiO2 ultrathin layers. Science China Chemistry, 2021, 64, 953-958.	4.2	12
99	Noble Metal-Free FeOOH/Li _{0.1} WO ₃ Core–Shell Nanorods for Selective Oxidation of Methane to Methanol with Visible–NIR Light. Environmental Science & Technology, 2021, 55, 7711-7720.	4.6	32
101	Porous catalytic membranes for CO2 conversion. Journal of Energy Chemistry, 2021, 63, 74-86.	7.1	14
102	In-situ synthesis of WO3–x/MoO3–x heterojunction with abundant oxygen vacancies for efficient photocatalytic reduction of CO2. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 621, 126582.	2.3	30
103	Cooperative Motion in Water–Methanol Clusters Controls the Reaction Rates of Heterogeneous Photocatalytic Reactions. Journal of the American Chemical Society, 2021, 143, 10940-10947.	6.6	12
104	Simultaneous Manipulation of Bulk Excitons and Surface Defects for Ultrastable and Highly Selective CO ₂ Photoreduction. Advanced Materials, 2021, 33, e2100143.	11.1	151
105	Dual Functions of CO ₂ Molecular Activation and 4 <i>f</i> Levels as Electron Transport Bridge in Dysprosium Single Atom Composite Photocatalysts with Enhanced Visible‣ight Photoactivities. Advanced Functional Materials, 2021, 31, 2104976.	7.8	43
106	The polarized electric field on Fe-N-C-S promotes non-radical process of peroxymonosulfate degrade diclofenac sodium. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 621, 126608.	2.3	8
107	Carbon dots modified bismuth antimonate for broad spectrum photocatalytic degradation of organic pollutants: Boosted charge separation, DFT calculations and mechanism unveiling. Chemical Engineering Journal, 2021, 418, 129460.	6.6	55
108	Plasmonic semiconductor photocatalyst: Non-stoichiometric tungsten oxide. Environmental Research, 2021, 199, 111259.	3.7	13
109	Hierarchical Double-Shelled CoP Nanocages for Efficient Visible-Light-Driven CO ₂ Reduction. ACS Applied Materials & Interfaces, 2021, 13, 45609-45618.	4.0	28
110	Synergetic effects of Bi5+ and oxygen vacancies in Bismuth(V)-rich Bi4O7 nanosheets for enhanced near-infrared light driven photocatalysis. Journal of Materials Science and Technology, 2021, 85, 1-10.	5.6	41

#	Article	IF	CITATIONS
111	Organic half-metal derived erythroid-like BiVO4/hm-C4N3 Z-Scheme photocatalyst: Reduction sites upgrading and rate-determining step modulation for overall CO2 and H2O conversion. Applied Catalysis B: Environmental, 2021, 295, 120277.	10.8	47
112	Promoted charge separation from nickel intervening in [Bi2O2]2+ layers of Bi2O2S crystals for enhanced photocatalytic CO2 conversion. Applied Catalysis B: Environmental, 2021, 294, 120249.	10.8	69
113	Conversion of CO2 to formic acid by integrated all-solar-driven artificial photosynthetic system. Journal of Power Sources, 2021, 512, 230532.	4.0	21
114	Direct CO ₂ capture and conversion to fuels on magnesium nanoparticles under ambient conditions simply using water. Chemical Science, 2021, 12, 5774-5786.	3.7	25
115	Dual origins of photocatalysis: Light-induced band-gap excitation of zirconium oxide and ambient heat activation of gold to enable 13CO2 photoreduction/conversion. Catalysis Today, 2020, 356, 544-556.	2.2	6
116	Synergetic effect of H ⁺ adsorption and ethylene functional groups of covalent organic frameworks on the CO ₂ photoreduction in aqueous solution. Chemical Communications, 2020, 56, 7261-7264.	2.2	19
117	Assembling an Affinal OD CsPbBr ₃ /2D CsPb ₂ Br ₅ Architecture by Synchronously In Situ Growing CsPbBr ₃ QDs and CsPb ₂ Br ₅ Nanosheets: Enhanced Activity and Reusability for Photocatalytic CO ₂ Reduction. ACS Applied Materials & amp; Interfaces, 2021, 13, 51161-51173.	4.0	30
119	Full solar spectrum driven CO2 conversion over S-Scheme natural mineral nanocomposite enhanced by LSPR effect. Powder Technology, 2022, 396, 615-625.	2.1	17
120	Research Progress on CO ₂ Photocatalytic Reduction with Full Solar Spectral Responses. Energy & Fuels, 2021, 35, 19920-19942.	2.5	41
121	Bismuth Vacancy-Induced Efficient CO ₂ Photoreduction in BiOCl Directly from Natural Air: A Progressive Step toward Photosynthesis in Nature. Nano Letters, 2021, 21, 10260-10266.	4.5	74
122	Recent Progress of Subâ€Nanometric Materials in Photothermal Energy Conversion. Advanced Science, 2022, 9, e2104225.	5.6	23
123	CO ₂ Dominated Bifunctional Catalytic Sites for Efficient Industrial Exhaust Conversion. Advanced Functional Materials, 2022, 32, .	7.8	25
124	The promising NIR light-driven MO3-x (MÂ=ÂMo, W) photocatalysts for energy conversion and environmental remediation. Chemical Engineering Journal, 2022, 431, 134044.	6.6	24
125	Properties, optimized morphologies, and advanced strategies for photocatalytic applications of WO3 based photocatalysts. Journal of Hazardous Materials, 2022, 428, 128218.	6.5	151
126	Europium single atom based heterojunction photocatalysts with enhanced visible-light catalytic activity. Journal of Materials Chemistry A, 2022, 10, 5990-5997.	5.2	24
127	2D WO _{3–<i>x</i>} Nanosheet with Rich Oxygen Vacancies for Efficient Visible-Light-Driven Photocatalytic Nitrogen Fixation. Langmuir, 2022, 38, 1178-1187.	1.6	32
128	Recent Advances in Porous Materials for Photocatalytic CO ₂ Reduction. Journal of Physical Chemistry Letters, 2022, 13, 1272-1282.	2.1	30
129	Efficient Visible-Light Photoreduction of CO ₂ to CH ₄ over an Fe-Based Metal–Organic Framework (PCN-250-Fe ₃) in a Solid–Gas Mode. ACS Applied Energy Materials, 2022, 5, 2384-2390.	2.5	27

#	Article	IF	CITATIONS
130	Selective CO2 photoreduction to CH4 mediated by dimension-matched 2D/2D Bi3NbO7/g-C3N4 S-scheme heterojunction. Chinese Journal of Catalysis, 2022, 43, 246-254.	6.9	85
131	Titanosilicates enhance carbon dioxide photocatalytic reduction. Applied Materials Today, 2022, 26, 101392.	2.3	5
132	A novel Bi2WO6/Si heterostructure photocatalyst with Fermi level shift in valence band realizes efficient reduction of CO2 under visible light. Applied Surface Science, 2022, 585, 152665.	3.1	23
133	High-throughput lateral and basal interface in CeO2@Ti3C2TX: Reverse and synergistic migration of carrier for enhanced photocatalytic CO2 reduction. Journal of Colloid and Interface Science, 2022, 615, 716-724.	5.0	11
134	Three-Dimensional Palm Frondlike Co3o4@Nio/Graphitic Carbon Composite: S-Scheme Heterojunction for Boosting Photocatalytic Co2 Reduction. SSRN Electronic Journal, 0, , .	0.4	0
135	Selective photocatalytic CO2 reduction in aerobic environment by microporous Pd-porphyrin-based polymers coated hollow TiO2. Nature Communications, 2022, 13, 1400.	5.8	131
136	Lightâ€Induced Redox Looping of a Rhodium/Ce _{<i>x</i>} WO ₃ Photocatalyst for Highly Active and Robust Dry Reforming of Methane. Angewandte Chemie - International Edition, 2022, 61, .	7.2	48
137	Ultrahigh Photocatalytic CO ₂ Reduction Efficiency and Selectivity Manipulation by Single‶ungstenâ€Atom Oxide at the Atomic Step of TiO ₂ . Advanced Materials, 2022, 34, e2109074.	11.1	107
138	Lightâ€Induced Redox Looping of a Rhodium/Ce _{<i>x</i>} WO ₃ Photocatalyst for Highly Active and Robust Dry Reforming of Methane. Angewandte Chemie, 2022, 134, .	1.6	7
139	New black indium oxide—tandem photothermal CO2-H2 methanol selective catalyst. Nature Communications, 2022, 13, 1512.	5.8	47
140	Reaction Mechanism of the Enhanced Reaction Activity and Rate of N-Doped CoO Photocatalysts for Photoreduction of CO ₂ in Air. ACS Applied Energy Materials, 2022, 5, 330-342.	2.5	6
141	Unlocking bimetallic active sites via a desalination strategy for photocatalytic reduction of atmospheric carbon dioxide. Nature Communications, 2022, 13, 2146.	5.8	60
142	Hydrogenation of CO2 by photocatalysis: An overview. , 2022, , 121-140.		0
143	Photocatalytic materials applications for sustainable agriculture. Progress in Materials Science, 2022, 130, 100965.	16.0	10
144	Electrostatic self-assembly of 2D/2D CoWO4/g-C3N4 p—n heterojunction for improved photocatalytic hydrogen evolution: Built-in electric field modulated charge separation and mechanism unveiling. Nano Research, 2022, 15, 6987-6998.	5.8	43
145	Growth of nano-branches on 1-D WO3 nanotrees by flame process and its photoelectrochemical performances. Journal of Alloys and Compounds, 2022, 912, 165202.	2.8	3
146	High–efficiency photoreduction of CO2 in low vacuum. Physical Chemistry Chemical Physics, 0, , .	1.3	0
147	Insight on Reaction Pathways of Photocatalytic CO ₂ Conversion. ACS Catalysis, 2022, 12, 7300-7316.	5.5	134

CITATION REPORT

#	Article		CITATIONS
148	Direct Conversion of CO2 into Hydrocarbon Solar Fuels by a Synergistic Photothermal Catalysis. Catalysts, 2022, 12, 612.	1.6	5
149	Efficient Co2 Photoreduction Triggered by Oxygen Vacancies in Ultrafine Bi5o7br Nanowires. SSRN Electronic Journal, 0, , .	0.4	0
150	Nb–O–C Charge Transfer Bridge in 2D/2D Nb ₂ O ₅ /gâ€C ₃ N ₄ Sâ€Scheme Heterojunction for Boosting Solarâ€Driven CO ₂ Reduction: In Situ Illuminated Xâ€Ray Photoelectron Spectroscopy Investigation and Mechanism Insight. Solar Rrl, 2022, 6, .	3.1	21
151	Fabrication of hetero-metal oxide NiCo2V2O8 hollow nanospheres for efficient visible light-driven CO2 photoreduction. Applied Catalysis B: Environmental, 2022, 316, 121663.	10.8	17
152	Application of MOFs and COFs for photocatalysis in CO2 reduction, H2 generation, and environmental treatment. EnergyChem, 2022, 4, 100078.	10.1	232
153	Plasmon Induced Nearâ€Infrared Active Photocatalysts: A Review. Advanced Materials Interfaces, 2022, 9,	1.9	11
154	In-situ growth of p-type Ag2O on n-type Bi2O2S with intimate interfacial contact for NIR light-driven photocatalytic CO2 reduction. Applied Surface Science, 2022, 601, 154185.	3.1	28
155	Construction of 2D Bismuth Silicate Heterojunctions from Natural Mineral toward Cost-Effective Photocatalytic Reduction of CO ₂ . Industrial & Engineering Chemistry Research, 2022, 61, 12294-12306.	1.8	7
156	Photochemical Systems for Solar-to-Fuel Production. Electrochemical Energy Reviews, 2022, 5, .	13.1	24
157	Recent progress in near-infrared light-harvesting nanosystems for photocatalytic applications. Applied Catalysis A: General, 2022, 644, 118836.	2.2	11
158	Linking oxidative and reductive clusters to prepare crystalline porous catalysts for photocatalytic CO2 reduction with H2O. Nature Communications, 2022, 13, .	5.8	158
159	Boosted charge transfer and selective photocatalytic CO2 reduction to CH4 over sulfur-doped K0.475WO3 nanorods under visible light: Performance and mechanism insight. Applied Surface Science, 2022, 605, 154632.	3.1	26
160	New insight into photocatalytic CO2 conversion with nearly 100% CO selectivity by CuO-Pd/HxMoO3â^'y hybrids. Applied Catalysis B: Environmental, 2023, 320, 121927.	10.8	17
161	Single-atom copper modified hexagonal tungsten oxide for efficient photocatalytic CO2 reduction to acetic acid. Chemical Engineering Journal, 2023, 451, 138801.	6.6	16
162	Efficient CO2 photoreduction triggered by oxygen vacancies in ultrafine Bi5O7Br nanowires. Applied Catalysis B: Environmental, 2023, 321, 122031.	10.8	20
163	Atomicâ€level insight of sulfidationâ€engineered Aurivilliusâ€related Bi ₂ O ₂ SiO ₃ nanosheets enabling visible light lowâ€concentration CO ₂ conversion. , 2023, 5, .		38
164	Progress and perspectives on 1D nanostructured catalysts applied in photo(electro)catalytic reduction of CO ₂ . Nanoscale, 2022, 14, 16033-16064.	2.8	15
165	Identification of the Active Sites on Metallic MoO2â€xÂNano‣eaâ€Urchin for Atmospheric CO2ÂPhotoreduction Under UV, Visible and Nearâ€Infrared Light Illumination. Angewandte Chemie, 0, , .	1.6	3

#	Article	IF	CITATIONS
166	Identification of the Active Sites on Metallic MoO _{2â~'<i>x</i>} Nanoâ€Seaâ€Urchin for Atmospheric CO ₂ Photoreduction Under UV, Visible, and Nearâ€Infrared Light Illumination. Angewandte Chemie - International Edition, 2023, 62, .	7.2	22
167	Novel Cd0.5Zn0.5S/Bi2MoO6 S-scheme heterojunction for boosting the photodegradation of antibiotic enrofloxacin: Degradation pathway, mechanism and toxicity assessment. Separation and Purification Technology, 2023, 304, 122401.	3.9	187
168	Pit-embellished low-valent metal active sites customize CO ₂ photoreduction to methanol. , 2023, 1, 36-44.		7
169	Three-dimensional palm frondlike Co3O4@NiO/graphitic carbon composite for photocatalytic CO2 reduction. Journal of Alloys and Compounds, 2023, 934, 168053.	2.8	8
170	Photocatalytic conversion of CO2 to acetic acid by CuPt/WO3: Chloride enhanced C-C coupling mechanism. Applied Catalysis B: Environmental, 2023, 323, 122177.	10.8	17
171	Low-concentration CO2 conversion on AgxNa1â^'xTaO3-AgCl heterojunction photocatalyst. Applied Catalysis B: Environmental, 2023, 324, 122253.	10.8	6
172	Dye-Anchoring Strategy with a Metal–Organic Framework for a Highly Efficient Visible-Light-Driven Photocatalytic CO ₂ Reduction through the Solid–Gas Mode. ACS Applied Energy Materials, 2023, 6, 334-341.	2.5	47
173	Recent advances in direct gas–solid-phase photocatalytic conversion of CO2 for porous photocatalysts under different CO2 atmospheres. Chemical Engineering Journal, 2023, 455, 140654.	6.6	17
174	Selective Hydrogenation of CO ₂ to CH ₃ OH on a Dynamically Magic Single-Cluster Catalyst: Cu ₃ /MoS ₂ /Ag(111). ACS Catalysis, 2023, 13, 714-724.	5.5	9
175	Near-infrared-featured broadband CO2 reduction with water to hydrocarbons by surface plasmon. Nature Communications, 2023, 14, .	5.8	34
176	Construction of Bi2O3 quantum Dots/SrBi4Ti4O15 S-scheme heterojunction with enhanced photocatalytic CO2 reduction: Role of Bi2O3 quantum dots and mechanism study. Separation and Purification Technology, 2023, 309, 123064.	3.9	20
177	Plasmonic Zn0.5Cd0.5S/NaxMoO3 composites with excellent full-spectrum driven photocatalytic hydrogen activity. Applied Surface Science, 2023, 617, 156460.	3.1	4
178	Defective materials for CO2 photoreduction: From C1 to C2+ products. Coordination Chemistry Reviews, 2023, 482, 215057.	9.5	9
179	Surface selenation engineering on metal cocatalysts for highly efficient photoreduction of carbon dioxide to methanol. Chemical Engineering Journal, 2023, 464, 142612.	6.6	3
180	Application of ionic liquids in CO2 capture and electrochemical reduction: A review. Carbon Resources Conversion, 2023, 6, 85-97.	3.2	10
181	Converting CO ₂ into Valueâ€Added Products by Cu ₂ Oâ€Based Catalysts: From Photocatalysis, Electrocatalysis to Photoelectrocatalysis. Small, 2023, 19, .	5.2	33
182	Selective CO ₂ Photoreduction to Acetate at Asymmetric Ternary Bridging Sites. ACS Nano, 2023, 17, 4922-4932.	7.3	16
183	Synthesis and optimization strategies of nanostructured metal oxides for chemiresistive methanol sensors. Ceramics International, 2023, 49, 21113-21132.	2.3	6

		CITATION REPORT		
#	Article	IF	CITATIONS	
184	Use of A-Site Metal Exsolution from a Hydrated Perovskite Titanate for Combined Steam and CO ₂ Reforming of Methane. Inorganic Chemistry, 2023, 62, 5831-5835.	1.9	1	
185	Unravelling the role of reactive oxygen species in ultrathin Z-scheme heterojunction with surface zinc vacancies for photocatalytic H2O2 generation and CTC degradation. Chemical Engineering Journal, 2023, 465, 143007.	6.6	22	