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**CO<sub>2</sub> photo-reduction: insights into CO<sub>2</sub> activation and reaction on surfaces of photocatalysts**

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#	Paper	IF	Citations
1259	Semi-artificial Photosynthetic CO <sub>2</sub> Reduction through Purple Membrane Re-engineering with Semiconductor.		
1258	Synthesis of Aliphatic Acids from CO <sub>2</sub> and Water at Efficiencies Close to the Photosynthesis Limit Using Mixed Copper and Iron Oxide Films.		
1257	Electro- and Photoreduction of Carbon Dioxide: The Twain Shall Meet at Copper Oxide/Copper Interfaces. <b>2016</b> , 1, 332-338		74
1256	Graphitic Carbon Nitride (g-C <sub>3</sub> N <sub>4</sub> )-Based Photocatalysts for Artificial Photosynthesis and Environmental Remediation: Are We a Step Closer To Achieving Sustainability?. <b>2016</b> , 116, 7159-329		4018
1255	Bifunctional CoP and CoN porous nanocatalysts derived from ZIF-67 in situ grown on nanowire photoelectrodes for efficient photoelectrochemical water splitting and CO <sub>2</sub> reduction. <b>2016</b> , 4, 15353-15360		75
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1253	Recent Advances in Heterogeneous Photocatalytic CO <sub>2</sub> Conversion to Solar Fuels. <b>2016</b> , 6, 7485-7527		744
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1152	Novel photocatalytic water splitting solar-to-hydrogen energy conversion: CdLaS and CdLaSe ternary semiconductor compounds. <b>2018</b> , 20, 8848-8858	10
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1109	Applications of Phosphorene and Black Phosphorus in Energy Conversion and Storage Devices. <b>2018</b> , 8, 1702093	272
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1104	Semiconductor Photocatalysis of Bicarbonate to Solar Fuels: Formate Production from Copper(I) Oxide. <b>2018</b> , 6, 1872-1880	13
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1082	Surface Strategies for Particulate Photocatalysts toward Artificial Photosynthesis. <b>2018</b> , 2, 2260-2288	89
1081	Synergy between Defects, Photoexcited Electrons, and Supported Single Atom Catalysts for CO <sub>2</sub> Reduction. <b>2018</b> , 8, 10464-10478	60

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1079	Insight into the enhanced CO <sub>2</sub> photocatalytic reduction performance over hollow-structured Bi-decorated g-C <sub>3</sub> N <sub>4</sub> nanohybrid under visible-light irradiation. <b>2018</b> , 28, 126-136	49
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1077	Flexible lithium-CO <sub>2</sub> battery with ultrahigh capacity and stable cycling. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 3231-3237	35.4 74
1076	Photoiodocarboxylation of Activated C=C Double Bonds with CO and Lithium Iodide. <b>2018</b> , 83, 13381-13394	7
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1054	Photocatalytic Conversion of Carbon Dioxide over A <sub>2</sub> BTa <sub>5</sub> O <sub>15</sub> (A = Sr, Ba; B = K, Na) Using Ammonia as an Efficient Sacrificial Reagent. <b>2018</b> , 6, 8247-8255	7
1053	Mechanisms of catalytic reduction of CO with heme and nonheme metal complexes. <b>2018</b> , 9, 6017-6034	71
1052	Visible Light-Responsive Photocatalysts From TiO <sub>2</sub> to Carbon Nitrides and Boron Carbon Nitride. <b>2018</b> , 72, 49-92	7
1051	Photocatalytic CO Transformation to CH <sub>4</sub> by Ag/Pd Bimetals Supported on N-Doped TiO Nanosheet. <b>2018</b> , 10, 24516-24522	67
1050	Synthetic Mechanism Discovery of Monophase Cuprous Oxide for Record High Photoelectrochemical Conversion of CO to Methanol in Water. <b>2018</b> , 12, 8187-8196	24
1049	Surface Defect Engineering in 2D Nanomaterials for Photocatalysis. <b>2018</b> , 28, 1801983	260
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1037	Insights into Carbon Dioxide Electroreduction in Ionic Liquids: Carbon Dioxide Activation and Selectivity Tailored by Ionic Microhabitat. <b>2018</b> , 11, 3191-3197		23
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1029	A Review of Metal- and Metal-Oxide-Based Heterogeneous Catalysts for Electroreduction of Carbon Dioxide. <b>2018</b> , 2, 1800028		29
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980	Nanoscale LaDySn <sub>2</sub> O <sub>7</sub> /SnSe Composite for Visible-light Driven Photoreduction of CO <sub>2</sub> to Methane and for Monoazo Dyes Photodegradation. <b>2019</b> , 4, 11511-11517	4
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973	Defect Engineering in Photocatalytic Nitrogen Fixation. <b>2019</b> , 9, 9739-9750	163

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968	Adenine Components in Biomimetic Metal-Organic Frameworks for Efficient CO <sub>2</sub> Photoconversion. <b>2019</b> , 131, 5280-5285	35
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934	Installing earth-abundant metal active centers to covalent organic frameworks for efficient heterogeneous photocatalytic CO <sub>2</sub> reduction. <b>2019</b> , 254, 624-633	106
933	Critical Aspects and Recent Advances in Structural Engineering of Photocatalysts for Sunlight-Driven Photocatalytic Reduction of CO <sub>2</sub> into Fuels. <b>2019</b> , 29, 1901825	173
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659	The influence of metallic Bi in BiVO <sub>4</sub> semiconductor for artificial photosynthesis. <b>2021</b> , 851, 156912	12
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463	Constructing oxide/sulfide in-plane heterojunctions with enlarged internal electric field for efficient CO <sub>2</sub> photoreduction. <b>2021</b> , 297, 120394	10
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385	A defect-rich layered double hydroxide nanofiber filter with solar-driven regeneration for wastewater treatment. <b>2022</b> , 430, 132842	1
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377	Photocatalytic CO <sub>2</sub> reduction with water vapor to CO and CH <sub>4</sub> in a recirculation reactor by Ag-Cu <sub>2</sub> O/TiO <sub>2</sub> Z-scheme heterostructures. <b>2022</b> , 896, 163030	6
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355	High-index facets exposed on metal-organic framework for boosting photocatalytic carbon dioxide reduction. <b>2022</b> , 431, 134125		0
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337	Photo- and Electrocatalytic Reduction of CO over Metal-Organic Frameworks and Their Derived Oxides: A Correlation of the Reaction Mechanism with the Electronic Structure.. <b>2022</b> ,	5
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330	Green Synthesis of Semiconductors and Environmental Applications. <b>2022</b> , 27-50	1
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325	Chromatic Fullerypyrrolidine as Long-Lived Metal-Free Catalyst for CO <sub>2</sub> Photoreduction Reaction.. <b>2022</b> ,	1

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317	Bandgap engineered g-C <sub>3</sub> N <sub>4</sub> and its graphene composites for stable photoreduction of CO <sub>2</sub> to methanol. <b>2022</b> ,	1
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314	Visible Light Driven Photocatalytic CO <sub>2</sub> Reduction to CO/CH <sub>4</sub> using Metal-Organic 'Soft' Coordination Polymer Gel.	1
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310	Plasma-Assisted Cu/Uio-66-Nh <sub>2</sub> for Reforming of CH <sub>4</sub> and CO <sub>2</sub> into C <sub>2</sub> + Liquid Chemicals.	
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141	Oxygen Vacancy and Metallic Silver Site Coinjection Associates Photocatalytic CO <sub>2</sub> Reduction upon Mesoporous NH <sub>2</sub> -TiO <sub>2</sub> Nanoparticles Assembly. 2200657	0
140	Efficient Visible-Light Activities of TiO <sub>2</sub> decorated and Cr <sup>3+</sup> -incorporated-porous SmFeO <sub>3</sub> for CO <sub>2</sub> conversion and 4-chlorophenol degradation. <b>2022</b> , 34, 102358	0
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138	Underlying physics and chemistry of ferroic-photocatalysis: a critical review.	0
137	A dual S-scheme TiO <sub>2</sub> @In <sub>2</sub> Se <sub>3</sub> @Ag <sub>3</sub> PO <sub>4</sub> heterojunction for efficient photocatalytic CO <sub>2</sub> reduction.	0
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133	Understanding Aerobic Nitrogen Photooxidation on Titania through In Situ Time-Resolved Spectroscopy.	0
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128	One-pot Synthesis of Metal-coordinated Covalent Organic Frameworks for Enhanced CO <sub>2</sub> Photoreduction.	0
127	The Advance and Critical Functions of Energetic Carbon Dots in Carbon Dioxide Photo/Electroreduction Reactions. 2200914	1



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