

# Surface Local Polarization Induced by Bismuthâ€™Oxygen Interaction for CO<sub>2</sub> Photoreduction

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Ammonia-dependent synthesis of (BiO) <sub>2</sub> O·HCl@Bi <sub>24</sub> O <sub>31</sub> Cl <sub>10</sub> heterostructures with enhanced visible-light induced photocatalytic activities on levofloxacin removal. <i>Journal of Alloys and Compounds</i> , 2022, 901, 163647.	2.8	10
2	Boosting water decomposition by sulfur vacancies for efficient CO <sub>2</sub> photoreduction. <i>Energy and Environmental Science</i> , 2022, 15, 1556-1562.	15.6	104
3	Tuning surface sites to boost photocatalytic degradation of phenol and ciprofloxacin. <i>Chinese Chemical Letters</i> , 2023, 34, 107204.	4.8	8
4	Photoswitchable Chlorine Vacancies in Ultrathin Bi <sub>4</sub> O <sub>5</sub> Cl <sub>2</sub> for Selective CO <sub>2</sub> Photoreduction. <i>ACS Catalysis</i> , 2022, 12, 3965-3973.	5.5	69
5	Selective photocatalytic CO <sub>2</sub> reduction in aerobic environment by microporous Pd-porphyrin-based polymers coated hollow TiO <sub>2</sub> . <i>Nature Communications</i> , 2022, 13, 1400.	5.8	131
6	A Review on Bismuth Oxyhalide (BiOX, X=Cl, Br, I) Based Photocatalysts for Wastewater Remediation. <i>Frontiers in Catalysis</i> , 2022, 2, .	1.8	15
7	Boosted CO <sub>2</sub> photoreduction performance on Ru-Ti <sub>3</sub> CN MXene-TiO <sub>2</sub> photocatalyst synthesized by non-HF Lewis acidic etching method. <i>Journal of Colloid and Interface Science</i> , 2022, 619, 179-187.	5.0	26
8	Enhancing the intrinsic properties of flower-like BiOI by S-doping toward excellent photocatalytic performances. <i>Journal of Materials Science and Technology</i> , 2022, 118, 181-189.	5.6	49
9	Defect engineering of BiOX (X=Cl, Br, I) based photocatalysts for energy and environmental applications: Current progress and future perspectives. <i>Coordination Chemistry Reviews</i> , 2022, 464, 214541.	9.5	77
10	Electronic state tuning over Mo-doped W <sub>18</sub> O <sub>49</sub> ultrathin nanowires with enhanced molecular oxygen activation for desulfurization. <i>Separation and Purification Technology</i> , 2022, 294, 121167.	3.9	15
11	Engineering Nonprecious Metal Oxides Electrocatalysts for Two-Electron Water Oxidation to H <sub>2</sub> O <sub>2</sub> . <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	39
12	Black phosphorus/Bi <sub>19</sub> Br <sub>3</sub> S <sub>27</sub> van der Waals heterojunctions ensure the supply of activated hydrogen for effective CO <sub>2</sub> photoreduction. <i>Applied Catalysis B: Environmental</i> , 2022, 317, 121727.	10.8	42
13	Dual vacancies induced local polarization electric field for high-performance photocatalytic H <sub>2</sub> production. <i>Applied Catalysis B: Environmental</i> , 2022, 316, 121680.	10.8	37
14	Universal strategy engineering grain boundaries for catalytic oxidative desulfurization. <i>Applied Catalysis B: Environmental</i> , 2022, 317, 121714.	10.8	27
15	Polarized Cu-Bi Site Pairs for Non-Covalent to Covalent Interaction Tuning toward N <sub>2</sub> Photoreduction. <i>Advanced Materials</i> , 2022, 34, .	11.1	36
16	Highly Strained Bi-MOF on Bismuth Oxyhalide Support with Tailored Intermediate Adsorption/Desorption Capability for Robust CO <sub>2</sub> Photoreduction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	40
17	Highly Strained Bi-MOF on Bismuth Oxyhalide Support with Tailored Intermediate Adsorption/Desorption Capability for Robust CO <sub>2</sub> Photoreduction. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	4
18	Bromo- and iodo-bridged building units in metal-organic frameworks for enhanced carrier transport and CO <sub>2</sub> photoreduction by water vapor. <i>Nature Communications</i> , 2022, 13, .	5.8	42

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19	Hollow porous Co <sup>2+</sup> /Ni spinel nanosheet arrays with rich oxygen defects on carbon cloth toward highly efficient and selective CO <sub>2</sub> photofixation. <i>Carbon</i> , 2022, 200, 149-155.	5.4	12
20	Oxygen vacancy and Van der Waals heterojunction modulated interfacial chemical bond over Mo <sub>2</sub> C/Bi <sub>4</sub> O <sub>5</sub> Br <sub>2</sub> for boosting photocatalytic CO <sub>2</sub> reduction. <i>Applied Catalysis B: Environmental</i> , 2022, 318, 121866.	10.8	35
21	Oxygen-vacancy-induced charge localization and atomic site activation in ultrathin Bi <sub>4</sub> O <sub>5</sub> Br <sub>2</sub> nanotubes for boosted CO <sub>2</sub> photoreduction. <i>Chemical Engineering Journal</i> , 2023, 452, 139304.	6.6	8
22	Recent progress of indium-based photocatalysts: Classification, regulation and diversified applications. <i>Coordination Chemistry Reviews</i> , 2022, 473, 214819.	9.5	8
23	Tuning oxygen vacancy in Bi <sub>2</sub> WO <sub>6</sub> by heteroatom doping for enhanced photooxidation-reduction properties. <i>Journal of Colloid and Interface Science</i> , 2023, 629, 133-146.	5.0	14
24	A mesh-like BiOBr/Bi <sub>2</sub> S <sub>3</sub> nanoarray heterojunction with hierarchical pores and oxygen vacancies for broadband CO <sub>2</sub> photoreduction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 20934-20945.	5.2	43
25	State-of-the-art advancements of atomically thin two-dimensional photocatalysts for energy conversion. <i>Chemical Communications</i> , 2022, 58, 9594-9613.	2.2	10
26	Bimetallic In <sub>2</sub> O <sub>3</sub> /Bi <sub>2</sub> O <sub>3</sub> Catalysts Enable Highly Selective CO <sub>2</sub> Electroreduction to Formate within Ultra-Broad Potential Windows. <i>Energy and Environmental Materials</i> , 2024, 7, .	7.3	6
27	Lower oxygen vacancy concentration in BiPO <sub>4</sub> with unexpected higher photocatalytic activity. <i>Chinese Chemical Letters</i> , 2023, 34, 107844.	4.8	10
28	Symmetry breaking for semiconductor photocatalysis. <i>Trends in Chemistry</i> , 2022, 4, 1045-1055.	4.4	17
29	Bismuth-based materials for CO <sub>2</sub> photoreduction. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2023, 39, 100718.	3.2	3
30	Facet-specific Active Surface Regulation of Bi <sub>x</sub> MO <sub>y</sub> (M=Mo, V, W) Nanosheets for Boosted Photocatalytic CO <sub>2</sub> reduction. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	2
31	Uncovering mechanism of photocatalytic performance enhancement induced by multivariate defects on SnS <sub>2</sub> . <i>Nano Research</i> , 2023, 16, 2102-2110.	5.8	4
32	Facet-specific Active Surface Regulation of Bi <sub>x</sub> MO <sub>y</sub> (M=Mo, V, W) Nanosheets for Boosted Photocatalytic CO <sub>2</sub> reduction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	46
33	Identification of the Active Sites on Metallic MoO <sub>2</sub> Nano-Sea Urchin for Atmospheric CO <sub>2</sub> Photoreduction Under UV, Visible and Near-Infrared Light Illumination. <i>Angewandte Chemie</i> , 0, , .	1.6	3
34	Identification of the Active Sites on Metallic MoO <sub>2</sub> Nano-Sea Urchin for Atmospheric CO <sub>2</sub> Photoreduction Under UV, Visible, and Near-Infrared Light Illumination. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	22
35	Role of oxygen vacancy in metal oxides for photocatalytic CO <sub>2</sub> reduction. <i>Applied Catalysis B: Environmental</i> , 2023, 321, 122079.	10.8	80
36	Chemical bonding interface in Bi <sub>2</sub> Sn <sub>2</sub> O <sub>7</sub> /BiOBr S-scheme heterojunction triggering efficient N <sub>2</sub> photofixation. <i>Applied Catalysis B: Environmental</i> , 2023, 323, 122148.	10.8	69

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37	Layer-Contacted Graphene-Like BN/Ultrathin Bi <sub>3</sub> O <sub>4</sub> Br Stacking for Boosting Photocatalytic Molecular Oxygen Activation. Transactions of Tianjin University, 2023, 29, 235-245.	3.3	2
38	Boosting visible light driven gas-liquid solid phase photocatalytic reduction of CO <sub>2</sub> on BiOCl microspheres by enhanced carrier transportation through lattice structure modification. Separation and Purification Technology, 2023, 306, 122654.	3.9	2
39	Research progress on the formation, detection methods and application in photocatalytic reduction of CO <sub>2</sub> of oxygen vacancy. Journal of CO <sub>2</sub> Utilization, 2023, 67, 102344.	3.3	12
40	Vacancy Pair-Induced Charge Rebalancing with Surface and Interfacial Dual Polarization for CO <sub>2</sub> Photoreduction. ACS Catalysis, 2022, 12, 15728-15736.	5.5	15
41	Oxygen Vacancy-Mediated Exciton Effect in Hierarchical BiOBr Enables Dichotomy of Energy Transfer and Electron Transfer in Photocatalysis. Advanced Functional Materials, 2023, 33, .	7.8	19
42	Synergism of oxygen-iodine binary vacancies with the interfacial electric field: enhancing CO <sub>2</sub> photoreduction over V <sub>O</sub> -BiOCl/BiOI atomic-thin nanosheets. Journal of Materials Chemistry A, 2023, 11, 4057-4066.	5.2	5
43	Recent progress of membrane technology for chiral separation: A comprehensive review. Separation and Purification Technology, 2023, 309, 123077.	3.9	19
44	Advances in the understanding of the structure-performance relationships of 2D material catalysts based on electron microscopy. Materials Chemistry Frontiers, 2023, 7, 2764-2778.	3.2	6
45	Structurally designable Bi <sub>2</sub> S <sub>3</sub> /P-doped ZnO S-scheme photothermal metamaterial enhanced CO <sub>2</sub> reduction. Separation and Purification Technology, 2023, 312, 123365.	3.9	4
46	Defective materials for CO <sub>2</sub> photoreduction: From C <sub>1</sub> to C <sub>2+</sub> products. Coordination Chemistry Reviews, 2023, 482, 215057.	9.5	9
47	Recent progress of low-dimensional metal sulfides photocatalysts for energy and environmental applications. , 2023, 1, 100001.		4
48	Implanting nitrogen-doped graphene quantum dots on porous ultrathin carbon nitride for efficient metal-free photocatalytic hydrogen evolution. Journal of Environmental Chemical Engineering, 2023, 11, 109801.	3.3	4
49	Efficient photoreduction of carbon dioxide into carbon-based fuels: a review. Environmental Chemistry Letters, 2023, 21, 1499-1513.	8.3	3
50	Atomic-Level Regulated 2D ReSe <sub>2</sub> : A Universal Platform Boostin Photocatalysis. Advanced Materials, 2023, 35, .	11.1	25
51	Constructing atomic surface concaves on Bi <sub>5</sub> O <sub>7</sub> Br nanotube for efficient photocatalytic CO <sub>2</sub> reduction. Nano Energy, 2023, 109, 108305.	8.2	22
52	Tunable Interfacial Charge Transfer in a 2D-2D Composite for Efficient Visible-Light-Driven CO <sub>2</sub> Conversion. Advanced Materials, 2023, 35, .	11.1	51
53	Precisely modulate interfacial Bi-O bridge bond in Co-TCPP/Bi <sub>3</sub> O <sub>4</sub> Br to trigger long-lasting charge separation for boosting CO <sub>2</sub> photoreduction. Chemical Engineering Journal, 2023, 465, 142663.	6.6	4
54	Fabrication and characterization of Z-scheme BiOCl/Cu <sub>2</sub> O heterojunction nanocomposites as efficient catalysts for the photocatalytic reduction of CO <sub>2</sub> . Dalton Transactions, 2023, 52, 6375-6387.	1.6	2

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55	Design of grain boundaries enriched nickel molybdate for enhanced catalytic oxidative desulfurization. Applied Catalysis B: Environmental, 2023, 333, 122779.	10.8	16
77	Investigating the role of oxygen vacancies in metal oxide for enhanced electrochemical reduction of NO <sub>3</sub> <sup>-</sup> to NH <sub>3</sub> : mechanistic insights. Inorganic Chemistry Frontiers, 0, , .	3.0	0