

# Muhammad Tahir

## List of Publications by Year in descending order

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168  
papers

12,283  
citations

13865

67  
h-index

30922

102  
g-index

168  
all docs

168  
docs citations

168  
times ranked

8758  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hollow Cobalt-Based Bimetallic Sulfide Polyhedra for Efficient All-pH-Value Electrochemical and Photocatalytic Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2016, 138, 1359-1365.	13.7	656
2	A critical review in strategies to improve photocatalytic water splitting towards hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 540-577.	7.1	573
3	A critical review on TiO <sub>2</sub> based photocatalytic CO <sub>2</sub> reduction system: Strategies to improve efficiency. <i>Journal of CO<sub>2</sub> Utilization</i> , 2018, 26, 98-122.	6.8	313
4	Advances in visible light responsive titanium oxide-based photocatalysts for CO <sub>2</sub> conversion to hydrocarbon fuels. <i>Energy Conversion and Management</i> , 2013, 76, 194-214.	9.2	291
5	Indium-doped TiO <sub>2</sub> nanoparticles for photocatalytic CO <sub>2</sub> reduction with H <sub>2</sub> O vapors to CH <sub>4</sub> . <i>Applied Catalysis B: Environmental</i> , 2015, 162, 98-109.	20.2	280
6	Synergistic effect in plasmonic Au/Ag alloy NPs co-coated TiO <sub>2</sub> NWs toward visible-light enhanced CO <sub>2</sub> photoreduction to fuels. <i>Applied Catalysis B: Environmental</i> , 2017, 204, 548-560.	20.2	231
7	Popcorn-Derived Porous Carbon Flakes with an Ultrahigh Specific Surface Area for Superior Performance Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 30626-30634.	8.0	227
8	Bimetallic metal-organic frameworks and MOF-derived composites: Recent progress on electro- and photoelectrocatalytic applications. <i>Coordination Chemistry Reviews</i> , 2022, 451, 214264.	18.8	203
9	A review on current trends in potential use of metal-organic framework for hydrogen storage. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 11782-11803.	7.1	200
10	Direct Z-scheme composite of CdS and oxygen-defected CdWO <sub>4</sub> : An efficient visible-light-driven photocatalyst for hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2016, 198, 154-161.	20.2	196
11	Recent advancements in engineering approach towards design of photo-reactors for selective photocatalytic CO <sub>2</sub> reduction to renewable fuels. <i>Journal of CO<sub>2</sub> Utilization</i> , 2019, 29, 205-239.	6.8	189
12	Recent development in band engineering of binary semiconductor materials for solar driven photocatalytic hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 15985-16038.	7.1	187
13	Photocatalytic reduction of carbon dioxide with water vapors over montmorillonite modified TiO <sub>2</sub> nanocomposites. <i>Applied Catalysis B: Environmental</i> , 2013, 142-143, 512-522.	20.2	163
14	Well-designed ZnV <sub>2</sub> O <sub>4</sub> /g-C <sub>3</sub> N <sub>4</sub> 2D/2D nanosheets heterojunction with faster charges separation via pCN as mediator towards enhanced photocatalytic reduction of CO <sub>2</sub> to fuels. <i>Applied Catalysis B: Environmental</i> , 2019, 242, 312-326.	20.2	162
15	g-C <sub>3</sub> N <sub>4</sub> /(Cu/TiO <sub>2</sub> ) nanocomposite for enhanced photoreduction of CO <sub>2</sub> to CH <sub>3</sub> OH and HCOOH under UV/visible light. <i>Journal of CO<sub>2</sub> Utilization</i> , 2017, 18, 261-274.	6.8	152
16	Recycling of carbon dioxide to renewable fuels by photocatalysis: Prospects and challenges. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 25, 560-579.	16.4	151
17	Synthesis of Novel ZnV <sub>2</sub> O <sub>4</sub> Hierarchical Nanospheres and Their Applications as Electrochemical Supercapacitor and Hydrogen Storage Material. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 13635-13641.	8.0	150
18	Recent developments in non-thermal catalytic DBD plasma reactor for dry reforming of methane. <i>Energy Conversion and Management</i> , 2019, 183, 529-560.	9.2	147

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19	Gold-nanoparticle-modified TiO <sub>2</sub> nanowires for plasmon-enhanced photocatalytic CO <sub>2</sub> reduction with H <sub>2</sub> under visible light irradiation. <i>Applied Surface Science</i> , 2015, 356, 1289-1299.	6.1	142
20	Photo-induced CO <sub>2</sub> reduction by CH <sub>4</sub> /H <sub>2</sub> O to fuels over Cu-modified g-C <sub>3</sub> N <sub>4</sub> nanorods under simulated solar energy. <i>Applied Surface Science</i> , 2017, 419, 875-885.	6.1	140
21	A critical review in recent developments of metal-organic-frameworks (MOFs) with band engineering alteration for photocatalytic CO <sub>2</sub> reduction to solar fuels. <i>Journal of CO<sub>2</sub> Utilization</i> , 2021, 43, 101381.	6.8	135
22	Well-designed 2D/2D Ti <sub>3</sub> C <sub>2</sub> T <sub>A</sub> /R MXene coupled g-C <sub>3</sub> N <sub>4</sub> heterojunction with in-situ growth of anatase/rutile TiO <sub>2</sub> nucleates to boost photocatalytic dry-reforming of methane (DRM) for syngas production under visible light. <i>Applied Catalysis B: Environmental</i> , 2021, 285, 119777.	20.2	132
23	2D/2D/2D O-C <sub>3</sub> N <sub>4</sub> /Bt/Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> heterojunction with novel MXene/clay multi-electron mediator for stimulating photo-induced CO <sub>2</sub> reforming to CO and CH <sub>4</sub> . <i>Chemical Engineering Journal</i> , 2020, 400, 125868.	12.7	131
24	Selective photocatalytic reduction of CO <sub>2</sub> by H <sub>2</sub> O/H <sub>2</sub> to CH <sub>4</sub> and CH <sub>3</sub> OH over Cu-promoted In <sub>2</sub> O <sub>3</sub> /TiO <sub>2</sub> nanocatalyst. <i>Applied Surface Science</i> , 2016, 389, 46-55.	6.1	129
25	Photocatalytic CO <sub>2</sub> reduction and kinetic study over In/TiO <sub>2</sub> nanoparticles supported microchannel monolith photoreactor. <i>Applied Catalysis A: General</i> , 2013, 467, 483-496.	4.3	128
26	Dry reforming of methane using different dielectric materials and DBD plasma reactor configurations. <i>Energy Conversion and Management</i> , 2017, 144, 262-274.	9.2	104
27	Recent trends in developments of active metals and heterogenous materials for catalytic CO <sub>2</sub> hydrogenation to renewable methane: A review. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105460.	6.7	102
28	Metal-organic frameworks and derived materials as photocatalysts for water splitting and carbon dioxide reduction. <i>Coordination Chemistry Reviews</i> , 2022, 469, 214664.	18.8	100
29	Well-designed ZnFe <sub>2</sub> O <sub>4</sub> /Ag/TiO <sub>2</sub> nanorods heterojunction with Ag as electron mediator for photocatalytic CO <sub>2</sub> reduction to fuels under UV/visible light. <i>Journal of CO<sub>2</sub> Utilization</i> , 2020, 37, 134-146.	6.8	97
30	Trimetallic metal-organic frameworks and derived materials for environmental remediation and electrochemical energy storage and conversion. <i>Coordination Chemistry Reviews</i> , 2022, 461, 214505.	18.8	95
31	Enhanced photocatalytic carbon dioxide reforming of methane to fuels over nickel and montmorillonite supported TiO <sub>2</sub> nanocomposite under UV-light using monolith photoreactor. <i>Journal of Cleaner Production</i> , 2019, 213, 451-461.	9.3	93
32	Photocatalytic CO <sub>2</sub> methanation over NiO/In <sub>2</sub> O <sub>3</sub> promoted TiO <sub>2</sub> nanocatalysts using H <sub>2</sub> O and/or H <sub>2</sub> reductants. <i>Energy Conversion and Management</i> , 2016, 119, 368-378.	9.2	90
33	Tailoring performance of La-modified TiO <sub>2</sub> nanocatalyst for continuous photocatalytic CO <sub>2</sub> reforming of CH <sub>4</sub> to fuels in the presence of H <sub>2</sub> O. <i>Energy Conversion and Management</i> , 2018, 159, 284-298.	9.2	90
34	Dynamic photocatalytic reduction of CO <sub>2</sub> to CO in a honeycomb monolith reactor loaded with Cu and N doped TiO <sub>2</sub> nanocatalysts. <i>Applied Surface Science</i> , 2016, 377, 244-252.	6.1	87
35	Photocatalytic CO <sub>2</sub> reduction with H <sub>2</sub> O vapors using montmorillonite/TiO <sub>2</sub> supported microchannel monolith photoreactor. <i>Chemical Engineering Journal</i> , 2013, 230, 314-327.	12.7	86
36	Gold-indium modified TiO <sub>2</sub> nanocatalysts for photocatalytic CO <sub>2</sub> reduction with H <sub>2</sub> as reductant in a monolith photoreactor. <i>Applied Surface Science</i> , 2015, 338, 1-14.	6.1	86

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37	Performance analysis of nanostructured NiO-In <sub>2</sub> O <sub>3</sub> /TiO <sub>2</sub> catalyst for CO <sub>2</sub> photoreduction with H <sub>2</sub> in a monolith photoreactor. <i>Chemical Engineering Journal</i> , 2016, 285, 635-649.	12.7	86
38	MMT-supported Ni/TiO <sub>2</sub> nanocomposite for low temperature ethanol steam reforming toward hydrogen production. <i>Chemical Engineering Journal</i> , 2017, 326, 956-969.	12.7	85
39	Current trends in structural development and modification strategies for metal-organic frameworks (MOFs) towards photocatalytic H <sub>2</sub> production: A review. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 14148-14189.	7.1	85
40	Indirect Z-Scheme Assembly of 2D ZnV <sub>2</sub> O <sub>6</sub> /RGO/g-C <sub>3</sub> N <sub>4</sub> Nanosheets with RGO/pCN as Solid-State Electron Mediators toward Visible-Light-Enhanced CO <sub>2</sub> Reduction. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 8612-8624.	3.7	84
41	Constructing a Stable 2D Layered Ti <sub>3</sub> C <sub>2</sub> MXene Cocatalyst-Assisted TiO <sub>2</sub> /g-C <sub>3</sub> N <sub>4</sub> /Ti <sub>3</sub> C <sub>2</sub> Heterojunction for Tailoring Photocatalytic Bireforming of Methane under Visible Light. <i>Energy &amp; Fuels</i> , 2020, 34, 9810-9828.	5.1	84
42	Template free synthesis of graphitic carbon nitride nanotubes mediated by lanthanum (La/g-CNT) for selective photocatalytic CO <sub>2</sub> reduction via dry reforming of methane (DRM) to fuels. <i>Applied Surface Science</i> , 2020, 504, 144177.	6.1	83
43	Fabricating structured 2D Ti <sub>3</sub> AlC <sub>2</sub> MAX dispersed TiO <sub>2</sub> heterostructure with Ni <sub>2</sub> P as a cocatalyst for efficient photocatalytic H <sub>2</sub> production. <i>Journal of Alloys and Compounds</i> , 2020, 842, 155752.	5.5	82
44	Indirect Z-scheme heterojunction of NH <sub>2</sub> -MIL-125(Ti) MOF/g-C <sub>3</sub> N <sub>4</sub> nanocomposite with RGO solid electron mediator for efficient photocatalytic CO <sub>2</sub> reduction to CO and CH <sub>4</sub> . <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105600.	6.7	82
45	Constructing S-scheme 2D/0D g-C <sub>3</sub> N <sub>4</sub> /TiO <sub>2</sub> NPs/MPs heterojunction with 2D-Ti <sub>3</sub> AlC <sub>2</sub> MAX cocatalyst for photocatalytic CO <sub>2</sub> reduction to CO/CH <sub>4</sub> in fixed-bed and monolith photoreactors. <i>Journal of Materials Science and Technology</i> , 2022, 106, 195-210.	10.7	82
46	Narrowing the Band Gap of BiOCl for the Hydroxyl Radical Generation of Photocatalysis under Visible Light. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 16569-16576.	6.7	81
47	Au-NPs embedded Z-scheme WO <sub>3</sub> /TiO <sub>2</sub> nanocomposite for plasmon-assisted photocatalytic glycerol-water reforming towards enhanced H <sub>2</sub> evolution. <i>Applied Surface Science</i> , 2020, 503, 144344.	6.1	81
48	Fabrication of highly efficient and stable indirect Z-scheme assembly of AgBr/TiO <sub>2</sub> via graphene as a solid-state electron mediator for visible light induced enhanced photocatalytic H <sub>2</sub> production. <i>Applied Surface Science</i> , 2019, 463, 445-455.	6.1	80
49	Titanium Carbide (Ti <sub>3</sub> C <sub>2</sub> ) MXene as a Promising Co-catalyst for Photocatalytic CO <sub>2</sub> Conversion to Energy-Efficient Fuels: A Review. <i>Energy &amp; Fuels</i> , 2021, 35, 10374-10404.	5.1	80
50	Photocatalytic carbon dioxide reduction to fuels in continuous flow monolith photoreactor using montmorillonite dispersed Fe/TiO <sub>2</sub> nanocatalyst. <i>Journal of Cleaner Production</i> , 2018, 170, 242-250.	9.3	79
51	Ag-La loaded protonated carbon nitrides nanotubes (pCNNT) with improved charge separation in a monolithic honeycomb photoreactor for enhanced bireforming of methane (BRM) to fuels. <i>Applied Catalysis B: Environmental</i> , 2019, 248, 167-183.	20.2	79
52	Recent developments in photothermal reactors with understanding on the role of light/heat for CO <sub>2</sub> hydrogenation to fuels: A review. <i>Chemical Engineering Journal</i> , 2022, 427, 131617.	12.7	79
53	Synergistic effect in MMT-dispersed Au/TiO <sub>2</sub> monolithic nanocatalyst for plasmon-absorption and metallic interband transitions dynamic CO <sub>2</sub> photo-reduction to CO. <i>Applied Catalysis B: Environmental</i> , 2017, 219, 329-343.	20.2	78
54	Cold plasma dielectric barrier discharge reactor for dry reforming of methane over Ni/Al <sub>2</sub> O <sub>3</sub> -MgO nanocomposite. <i>Fuel Processing Technology</i> , 2018, 178, 166-179.	7.2	77

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55	Cu-NPs embedded 1D/2D CNTs/pCN heterojunction composite towards enhanced and continuous photocatalytic CO <sub>2</sub> reduction to fuels. <i>Applied Surface Science</i> , 2019, 485, 450-461.	6.1	77
56	Construction of a Stable Two-Dimensional MAX Supported Protonated Graphitic Carbon Nitride (pg-C <sub>3</sub> N <sub>4</sub> )/Ti <sub>3</sub> AlC <sub>2</sub> /TiO <sub>2</sub> Z-Scheme Multiheterojunction System for Efficient Photocatalytic CO <sub>2</sub> Reduction through Dry Reforming of Methanol. <i>Energy &amp; Fuels</i> , 2020, 34, 3540-3556.	5.1	77
57	Photo-induced reduction of CO <sub>2</sub> to CO with hydrogen over plasmonic Ag-NPs/TiO <sub>2</sub> NWs core/shell hetero-junction under UV and visible light. <i>Journal of CO<sub>2</sub> Utilization</i> , 2017, 18, 250-260.	6.8	76
58	Synergistic effects of 2D/2D ZnV <sub>2</sub> O <sub>6</sub> /RGO nanosheets heterojunction for stable and high performance photo-induced CO <sub>2</sub> reduction to solar fuels. <i>Chemical Engineering Journal</i> , 2018, 334, 2142-2153.	12.7	76
59	Recent trends in photocatalytic materials for reduction of carbon dioxide to methanol. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 116, 109389.	16.4	76
60	La-modified TiO <sub>2</sub> /carbon nanotubes assembly nanocomposite for efficient photocatalytic hydrogen evolution from glycerol-water mixture. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 3711-3725.	7.1	76
61	Recent progress in structural development and band engineering of perovskites materials for photocatalytic solar hydrogen production: A review. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 19078-19111.	7.1	76
62	Evaluating the Performance of a Ni Catalyst Supported on La <sub>2</sub> O <sub>3</sub> -MgAl <sub>2</sub> O <sub>4</sub> for Dry Reforming of Methane in a Packed Bed Dielectric Barrier Discharge Plasma Reactor. <i>Energy &amp; Fuels</i> , 2019, 33, 11630-11647.	5.1	75
63	Metals free MWCNTs@TiO <sub>2</sub> @MMT heterojunction composite with MMT as a mediator for fast charges separation towards visible light driven photocatalytic hydrogen evolution. <i>Applied Surface Science</i> , 2019, 463, 747-757.	6.1	75
64	Photocatalytic CO <sub>2</sub> reduction with H <sub>2</sub> as reductant over copper and indium co-doped TiO <sub>2</sub> nanocatalysts in a monolith photoreactor. <i>Applied Catalysis A: General</i> , 2015, 493, 90-102.	4.3	74
65	Photo-induced CO <sub>2</sub> reduction by hydrogen for selective CO evolution in a dynamic monolith photoreactor loaded with Ag-modified TiO <sub>2</sub> nanocatalyst. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 15507-15522.	7.1	74
66	Effect of nonmetals (B, O, P, and S) doped with porous g-C <sub>3</sub> N <sub>4</sub> for improved electron transfer towards photocatalytic CO <sub>2</sub> reduction with water into CH <sub>4</sub> . <i>Chemosphere</i> , 2022, 286, 131765.	8.2	74
67	2D-montmorillonite-dispersed g-C <sub>3</sub> N <sub>4</sub> /TiO <sub>2</sub> 2D/0Dnanocomposite for enhanced photo-induced H <sub>2</sub> evolution from glycerol-water mixture. <i>Applied Surface Science</i> , 2019, 471, 1053-1064.	6.1	72
68	Photocatalytic CO <sub>2</sub> reduction by CH <sub>4</sub> over montmorillonite modified TiO <sub>2</sub> nanocomposites in a continuous monolith photoreactor. <i>Materials Research Bulletin</i> , 2015, 63, 13-23.	5.2	71
69	In-situ growth of TiO <sub>2</sub> imbedded Ti <sub>3</sub> C <sub>2</sub> TA nanosheets to construct PCN/Ti <sub>3</sub> C <sub>2</sub> TA MXenes 2D/3D heterojunction for efficient solar driven photocatalytic CO <sub>2</sub> reduction towards CO and CH <sub>4</sub> production. <i>Journal of Colloid and Interface Science</i> , 2021, 591, 20-37.	9.4	71
70	Silver loaded protonated graphitic carbon nitride (Ag/pg-C <sub>3</sub> N <sub>4</sub> ) nanosheets for stimulating CO <sub>2</sub> reduction to fuels via photocatalytic bi-reforming of methane. <i>Applied Surface Science</i> , 2019, 493, 18-31.	6.1	70
71	Engineering approach in stimulating photocatalytic H <sub>2</sub> production in a slurry and monolithic photoreactor systems using Ag-bridged Z-scheme pCN/TiO <sub>2</sub> nanocomposite. <i>Chemical Engineering Journal</i> , 2019, 374, 1076-1095.	12.7	69
72	Hierarchical 3D VO <sub>2</sub> /ZnV <sub>2</sub> O <sub>4</sub> microspheres as an excellent visible light photocatalyst for CO <sub>2</sub> reduction to solar fuels. <i>Applied Surface Science</i> , 2019, 467-468, 1170-1180.	6.1	69

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73	Current trends in strategies to improve photocatalytic performance of perovskites materials for solar to hydrogen production. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 132, 110073.	16.4	69
74	Ni/MMT-promoted TiO <sub>2</sub> nanocatalyst for dynamic photocatalytic H <sub>2</sub> and hydrocarbons production from ethanol-water mixture under UV-light. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 28309-28326.	7.1	66
75	Recent advances on cobalt metal organic frameworks (MOFs) for photocatalytic CO <sub>2</sub> reduction to renewable energy and fuels: A review on current progress and future directions. <i>Energy Conversion and Management</i> , 2022, 253, 115180.	9.2	64
76	Recent Developments in Natural Gas Flaring Reduction and Reformation to Energy-Efficient Fuels: A Review. <i>Energy &amp; Fuels</i> , 2021, 35, 3675-3714.	5.1	63
77	Morphological effect of 1D/1D In <sub>2</sub> O <sub>3</sub> /TiO <sub>2</sub> NRs/NWs heterojunction photo-embedded with Cu-NPs for enhanced photocatalytic H <sub>2</sub> evolution under visible light. <i>Applied Surface Science</i> , 2020, 506, 145034.	6.1	59
78	Performance analysis of monolith photoreactor for CO <sub>2</sub> reduction with H <sub>2</sub> . <i>Energy Conversion and Management</i> , 2015, 90, 272-281.	9.2	58
79	Role of Ti <sub>3</sub> C <sub>2</sub> MXene as Prominent Schottky Barriers in Driving Hydrogen Production through Photoinduced Water Splitting: A Comprehensive Review. <i>ACS Applied Energy Materials</i> , 2021, 4, 11982-12006.	5.1	57
80	Engineering approach to enhance photocatalytic water splitting for dynamic H <sub>2</sub> production using La <sub>2</sub> O <sub>3</sub> /TiO <sub>2</sub> nanocatalyst in a monolith photoreactor. <i>Applied Surface Science</i> , 2019, 484, 1089-1101.	6.1	56
81	Highly stable 3D/2D WO <sub>3</sub> /g-C <sub>3</sub> N <sub>4</sub> Z-scheme heterojunction for stimulating photocatalytic CO <sub>2</sub> reduction by H <sub>2</sub> O/H <sub>2</sub> to CO and CH <sub>4</sub> under visible light. <i>Journal of CO<sub>2</sub> Utilization</i> , 2020, 41, 101270.	6.8	56
82	Advances in structural modification of perovskite semiconductors for visible light assisted photocatalytic CO <sub>2</sub> reduction to renewable solar fuels: A review. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106264.	6.7	56
83	Synthesis, evolution and hydrogen storage properties of ZnV <sub>2</sub> O <sub>4</sub> glomerulus nano/microspheres: A prospective material for energy storage. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 7842-7851.	7.1	55
84	Monolithic Ag-Mt dispersed Z-scheme pCN-TiO <sub>2</sub> heterojunction for dynamic photocatalytic H <sub>2</sub> evolution using liquid and gas phase photoreactors. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 4355-4375.	7.1	52
85	Parametric study on the steam reforming of phenol-PET solution to hydrogen production over Ni promoted on Al <sub>2</sub> O <sub>3</sub> -La <sub>2</sub> O <sub>3</sub> catalyst. <i>Energy Conversion and Management</i> , 2017, 142, 127-142.	9.2	51
86	Synthesis of hierarchical ZnV <sub>2</sub> O <sub>6</sub> nanosheets with enhanced activity and stability for visible light driven CO <sub>2</sub> reduction to solar fuels. <i>Applied Surface Science</i> , 2018, 435, 953-962.	6.1	51
87	Thermodynamic investigation and experimental analysis on phenol steam reforming towards enhanced H <sub>2</sub> production over structured Ni/ZnTiO <sub>3</sub> nanocatalyst. <i>Energy Conversion and Management</i> , 2019, 180, 796-810.	9.2	51
88	Facile synthesis of GO and g-C <sub>3</sub> N <sub>4</sub> nanosheets encapsulated magnetite ternary nanocomposite for superior photocatalytic degradation of phenol. <i>Environmental Pollution</i> , 2019, 253, 1066-1078.	7.5	50
89	The effect of crystal facets and induced porosity on the performance of monoclinic BiVO <sub>4</sub> for the enhanced visible-light driven photocatalytic abatement of methylene blue. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 103265.	6.7	49
90	Constructing a Stable 2D/2D Heterojunction of Oxygen-Cluster-Modified Ti <sub>3</sub> AlC <sub>2</sub> MAX Cocatalyst with Proton-Rich C <sub>3</sub> N <sub>4</sub> for Highly Efficient Photocatalytic CO <sub>2</sub> Methanation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 9841-9857.	3.7	49

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91	Controlled synthesis of reduced graphene oxide supported magnetically separable Fe <sub>3</sub> O <sub>4</sub> @rGO@AgI ternary nanocomposite for enhanced photocatalytic degradation of phenol. Powder Technology, 2019, 356, 547-558.	4.2	47
92	Process optimization of DBD plasma dry reforming of methane over Ni/La <sub>2</sub> O <sub>3</sub> MgAl <sub>2</sub> O <sub>4</sub> using multiple response surface methodology. International Journal of Hydrogen Energy, 2019, 44, 11774-11787.	7.1	47
93	Enhanced photocatalytic CO <sub>2</sub> reduction to fuels through bireforming of methane over structured 3D MAX Ti <sub>3</sub> AlC <sub>2</sub> /TiO <sub>2</sub> heterojunction in a monolith photoreactor. Journal of CO <sub>2</sub> Utilization, 2020, 38, 99-112.	6.8	47
94	Metal-organic framework-based photocatalysts for carbon dioxide reduction to methanol: A review on progress and application. Journal of CO <sub>2</sub> Utilization, 2021, 43, 101374.	6.8	47
95	Synthesis of novel ZnV <sub>2</sub> O <sub>4</sub> spinel oxide nanosheets and their hydrogen storage properties. CrystEngComm, 2014, 16, 894-899.	2.6	46
96	Improved interfacial bonding of graphene-TiO <sub>2</sub> with enhanced photocatalytic reduction of CO <sub>2</sub> into solar fuel. Journal of Environmental Chemical Engineering, 2018, 6, 6947-6957.	6.7	46
97	Role of surface morphology and terminating groups in titanium carbide MXenes (Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> ) cocatalysts with engineering aspects for modulating solar hydrogen production: A critical review. Chemical Engineering Journal, 2022, 433, 134573.	12.7	46
98	Enhanced Metal-Support Interaction in Ni/Co <sub>3</sub> O <sub>4</sub> /TiO <sub>2</sub> Nanorods toward Stable and Dynamic Hydrogen Production from Phenol Steam Reforming. Industrial & Engineering Chemistry Research, 2019, 58, 517-530.	3.7	45
99	Facile fabrication of well-designed 2D/2D porous g-C <sub>3</sub> N <sub>4</sub> @GO nanocomposite for photocatalytic methane reforming (DRM) with CO <sub>2</sub> towards enhanced syngas production under visible light. Fuel, 2021, 305, 121558.	6.4	44
100	Kinetic study of dry reforming of methane using hybrid DBD plasma reactor over La <sub>2</sub> O <sub>3</sub> co-supported Ni/MgAl <sub>2</sub> O <sub>4</sub> catalyst. International Journal of Hydrogen Energy, 2020, 45, 12256-12271.	7.1	42
101	A review on recent developments in solar photoreactors for carbon dioxide conversion to fuels. Journal of CO <sub>2</sub> Utilization, 2021, 47, 101515.	6.8	42
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#	ARTICLE	IF	CITATIONS
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