

Muhammad Tahir

List of Publications by Year in descending order

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Version: 2024-02-01

168
papers

12,283
citations

15880

67
h-index

35168

102
g-index

168
all docs

168
docs citations

168
times ranked

9907
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent advances in BiOX-based photocatalysts to enhanced efficiency for energy and environment applications. <i>Catalysis Reviews - Science and Engineering</i> , 2024, 66, 119-173.	5.7	27
2	Nipah (<i>Musa Acuminata Balbisiana</i>) banana peel as a lignocellulosic precursor for activated carbon: characterization study after carbonization process with phosphoric acid impregnated activated carbon. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 11085-11098.	2.9	13
3	Investigating influential effect of methanol–phenol–steam mixture on hydrogen production through thermodynamic analysis with experimental evaluation. <i>International Journal of Energy Research</i> , 2022, 46, 964-979.	2.2	9
4	Synergistic effect of photo-reduced Ni–Ag loaded g-C3N4 nanosheets for efficient visible Light–Driven photocatalytic hydrogen evolution. <i>Materials Science in Semiconductor Processing</i> , 2022, 137, 106187.	1.9	24
5	Effect of nonmetals (B, O, P, and S) doped with porous g-C3N4 for improved electron transfer towards photocatalytic CO2 reduction with water into CH4. <i>Chemosphere</i> , 2022, 286, 131765.	4.2	74
6	Recent developments in photothermal reactors with understanding on the role of light/heat for CO2 hydrogenation to fuels: A review. <i>Chemical Engineering Journal</i> , 2022, 427, 131617.	6.6	79
7	Recent developments in layered double hydroxide structures with their role in promoting photocatalytic hydrogen production: A comprehensive review. <i>International Journal of Energy Research</i> , 2022, 46, 2093-2140.	2.2	16
8	Bimetallic metal–organic frameworks and MOF-derived composites: Recent progress on electro- and photoelectrocatalytic applications. <i>Coordination Chemistry Reviews</i> , 2022, 451, 214264.	9.5	203
9	Constructing S-scheme 2D/0D g-C3N4/TiO2 NPs/MPs heterojunction with 2D-Ti3AlC2 MAX cocatalyst for photocatalytic CO2 reduction to CO/CH4 in fixed-bed and monolith photoreactors. <i>Journal of Materials Science and Technology</i> , 2022, 106, 195-210.	5.6	82
10	Recent advancements of layered double hydroxide heterojunction composites with engineering approach towards photocatalytic hydrogen production: A review. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 862-901.	3.8	39
11	Constructing S-scheme heterojunction of carbon nitride nanorods (g-CNR) assisted trimetallic CoAlLa LDH nanosheets with electron and holes moderation for boosting photocatalytic CO2 reduction under solar energy. <i>Chemical Engineering Journal</i> , 2022, 433, 133693.	6.6	34
12	Role of surface morphology and terminating groups in titanium carbide MXenes (Ti3C2Tx) cocatalysts with engineering aspects for modulating solar hydrogen production: A critical review. <i>Chemical Engineering Journal</i> , 2022, 433, 134573.	6.6	46
13	Single-step fabrication of highly stable amorphous TiO2 nanotubes arrays (am-TNTA) for stimulating gas-phase photoreduction of CO2 to methane. <i>Chemosphere</i> , 2022, 289, 133170.	4.2	18
14	Recent advances on cobalt metal organic frameworks (MOFs) for photocatalytic CO2 reduction to renewable energy and fuels: A review on current progress and future directions. <i>Energy Conversion and Management</i> , 2022, 253, 115180.	4.4	64
15	Titanium Carbide MXene Nanostructures as Catalysts and Cocatalysts for Photocatalytic Fuel Production: A Review. <i>ACS Applied Nano Materials</i> , 2022, 5, 18-54.	2.4	41
16	Fabricating V ₂ AlC / g–C ₃ N ₄ nanocomposite with MAX as electron moderator for promoting photocatalytic CO ₂ to CH ₄ refo. <i>International Journal of Energy Research</i> , 2022, 46, 7666-7685.	2.2	5
17	Investigating the product distribution behaviour of CO2 methanation through thermodynamic optimized experimental approach using micro/nano structured titania catalyst. <i>Energy Conversion and Management</i> , 2022, 254, 115240.	4.4	17
18	Highly stable LaCoO3 perovskite supported g-C3N4 nanotextures with proficient charges migration for visible light CO2 photoreduction to CO and CH4. <i>Materials Science in Semiconductor Processing</i> , 2022, 142, 106517.	1.9	21

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19	Effect of Rutile Phase Titanium Oxide Nanofiller on the Dielectric Properties of Polypropylene Nanocomposites. , 2022, , .		0
20	Trimetallic metal-organic frameworks and derived materials for environmental remediation and electrochemical energy storage and conversion. Coordination Chemistry Reviews, 2022, 461, 214505.	9.5	95
21	Constructing S-Scheme Heterojunction of CoAlLa-LDH/g-C ₃ N ₄ through Monolayer Ti ₃ C ₂ -MXene to Promote Photocatalytic CO ₂ Re-forming of Methane to Solar Fuels. ACS Applied Energy Materials, 2022, 5, 784-806.	2.5	38
22	Recent advances in constructing heterojunctions of binary semiconductor photocatalysts for visible light responsive CO ₂ reduction to energy efficient fuels: A review. International Journal of Energy Research, 2022, 46, 5523-5584.	2.2	32
23	Synergistic effect of cobalt in hierarchical carbon nitride nanorods (HCNNR) with promising charge transfer rate by hole scavenger for stimulating solar H ₂ production. Journal of Alloys and Compounds, 2022, 916, 165332.	2.8	9
24	Fabricating Ti ₃ C ₂ MXene cocatalyst supported NiAl-LDH/g-C ₃ N ₄ ternary nanocomposite for stimulating solar photocatalytic H ₂ production. Journal of Environmental Chemical Engineering, 2022, 10, 108010.	3.3	17
25	Layered double hydroxide (LDH) nanomaterials with engineering aspects for photocatalytic CO ₂ conversion to energy efficient fuels: Fundamentals, recent advances, and challenges. Journal of Environmental Chemical Engineering, 2022, 10, 108151.	3.3	20
26	Z-scheme Ag-NPs-embedded LaCoO ₃ dispersed pCN heterojunction with higher kinetic rate for stimulating photocatalytic solar H ₂ production. Energy Conversion and Management, 2022, 266, 115787.	4.4	16
27	Metal-organic frameworks and derived materials as photocatalysts for water splitting and carbon dioxide reduction. Coordination Chemistry Reviews, 2022, 469, 214664.	9.5	100
28	Structured clay minerals-based nanomaterials for sustainable photo/thermal carbon dioxide conversion to cleaner fuels: A critical review. Science of the Total Environment, 2022, 845, 157206.	3.9	20
29	A critical review in recent developments of metal-organic-frameworks (MOFs) with band engineering alteration for photocatalytic CO ₂ reduction to solar fuels. Journal of CO ₂ Utilization, 2021, 43, 101381.	3.3	135
30	Metal-organic framework-based photocatalysts for carbon dioxide reduction to methanol: A review on progress and application. Journal of CO ₂ Utilization, 2021, 43, 101374.	3.3	47
31	Well-designed 2D/2D Ti ₃ C ₂ A/R MXene coupled g-C ₃ N ₄ heterojunction with in-situ growth of anatase/rutile TiO ₂ nucleates to boost photocatalytic dry-reforming of methane (DRM) for syngas production under visible light. Applied Catalysis B: Environmental, 2021, 285, 119777.	10.8	132
32	Recent Developments in Natural Gas Flaring Reduction and Reformation to Energy-Efficient Fuels: A Review. Energy & Fuels, 2021, 35, 3675-3714.	2.5	63
33	Tri-metallic Ni-Co modified reducible TiO ₂ nanocomposite for boosting H ₂ production through steam reforming of phenol. International Journal of Hydrogen Energy, 2021, 46, 8932-8949.	3.8	21
34	Fabricating 2D/2D/2D heterojunction of graphene oxide mediated g-C ₃ N ₄ and ZnV ₂ O ₆ composite with kinetic modelling for photocatalytic CO ₂ reduction to fuels under UV and visible light. Journal of Materials Science, 2021, 56, 9985-10007.	1.7	18
35	A review on current trends in potential use of metal-organic framework for hydrogen storage. International Journal of Hydrogen Energy, 2021, 46, 11782-11803.	3.8	200
36	Investigating the Influential Effect of Etchant Time in Constructing 2D/2D HCN/MXene Heterojunction with Controlled Growth of TiO ₂ NPs for Stimulating Photocatalytic H ₂ Production. Energy & Fuels, 2021, 35, 6807-6822.	2.5	31

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37	Current trends in structural development and modification strategies for metal-organic frameworks (MOFs) towards photocatalytic H ₂ production: A review. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 14148-14189.	3.8	85
38	Synergistic Effect of Co/La in Oxygen Vacancy Rich Ternary CoAlLa Layered Double Hydroxide with Enhanced Reductive Sites for Selective Photoreduction of CO ₂ to CH ₄ . <i>Energy & Fuels</i> , 2021, 35, 8922-8943.	2.5	30
39	Constructing La _x Co _y O ₃ Perovskite Anchored 3D g-C ₃ N ₄ Hollow Tube Heterojunction with Proficient Interface Charge Separation for Stimulating Photocatalytic H ₂ Production. <i>Energy & Fuels</i> , 2021, 35, 9727-9746.	2.5	40
40	An insight review of lignocellulosic materials as activated carbon precursor for textile wastewater treatment. <i>Environmental Technology and Innovation</i> , 2021, 22, 101445.	3.0	39
41	A review on recent developments in solar photoreactors for carbon dioxide conversion to fuels. <i>Journal of CO₂ Utilization</i> , 2021, 47, 101515.	3.3	42
42	Advanced Nanoscale Surface Characterization of CuO Nanoflowers for Significant Enhancement of Catalytic Properties. <i>Molecules</i> , 2021, 26, 2700.	1.7	6
43	In-situ growth of TiO ₂ imbedded Ti ₃ C ₂ TA nanosheets to construct PCN/Ti ₃ C ₂ TA MXenes 2D/3D heterojunction for efficient solar driven photocatalytic CO ₂ reduction towards CO and CH ₄ production. <i>Journal of Colloid and Interface Science</i> , 2021, 591, 20-37.	5.0	71
44	Titanium Carbide (Ti ₃ C ₂) MXene as a Promising Co-catalyst for Photocatalytic CO ₂ Conversion to Energy-Efficient Fuels: A Review. <i>Energy & Fuels</i> , 2021, 35, 10374-10404.	2.5	80
45	Synergistic effect of anatase/rutile TiO ₂ with exfoliated Ti ₃ C ₂ TR MXene multilayers composite for enhanced CO ₂ photoreduction via dry and bi-reforming of methane under UV-visible light. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105244.	3.3	29
46	Synergistically improved charge separation in bimetallic Co-La modified 3D g-C ₃ N ₄ for enhanced photocatalytic H ₂ production under UV-visible light. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 20995-21012.	3.8	42
47	Enhancing the photodegradation of phenol using Fe ₃ O ₄ /SiO ₂ binary nanocomposite mediated by silane agent. <i>Journal of Physics and Chemistry of Solids</i> , 2021, 153, 110022.	1.9	15
48	Interface study of hybrid CuO nanoparticles embedded ZnO nanowires heterojunction synthesized by controlled vapor deposition approach for optoelectronic devices. <i>Optical Materials</i> , 2021, 117, 111132.	1.7	14
49	Influence of various operational parameters in enhancing photocatalytic reduction efficiency of carbon dioxide in a photoreactor: A review. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 99, 19-47.	2.9	31
50	Current Trends and Approaches to Boost the Performance of Metal Organic Frameworks for Carbon Dioxide Methanation through Photo/Thermal Hydrogenation: A Review. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 13149-13179.	1.8	34
51	Steam reforming of phenol toward cleaner hydrogen production over bimetallic Ni/Ti modified zinc titanate perovskite in tandem with a kinetic model development. <i>Journal of Cleaner Production</i> , 2021, 311, 127519.	4.6	22
52	Binary Ni ₂ P/Ti ₃ C ₂ Multilayer Cocatalyst Anchored TiO ₂ Nanocomposite with Etchant/Oxidation Grown TiO ₂ NPs for Enhancing Photocatalytic H ₂ Production. <i>Energy & Fuels</i> , 2021, 35, 14197-14211.	2.5	39
53	Recent trends in developments of active metals and heterogenous materials for catalytic CO ₂ hydrogenation to renewable methane: A review. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105460.	3.3	102
54	Ru-embedded 3D g-C ₃ N ₄ hollow nanosheets (3D CNHNS) with proficient charge transfer for stimulating photocatalytic H ₂ production. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 27997-28010.	3.8	28

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55	Indirect Z-scheme heterojunction of NH ₂ -MIL-125(Ti) MOF/g-C ₃ N ₄ nanocomposite with RGO solid electron mediator for efficient photocatalytic CO ₂ reduction to CO and CH ₄ . Journal of Environmental Chemical Engineering, 2021, 9, 105600.	3.3	82
56	Investigating the performance of liquid and gas phase photoreactors for dynamic H ₂ production over bimetallic TiO ₂ and Ni ₂ P dispersed MAX Ti ₃ AlC ₂ monolithic nanocomposite under UV and visible light. Journal of Environmental Chemical Engineering, 2021, 9, 105351.	3.3	18
57	Recent advancements in strategies to improve performance of tungsten-based semiconductors for photocatalytic hydrogen production: a review. Journal Physics D: Applied Physics, 2021, 54, 503001.	1.3	15
58	Photocatalytic CO ₂ reduction to CO and CH ₄ using g-C ₃ N ₄ /RGO on titania nanotube arrays (TNTAs). Journal of Materials Science, 2021, 56, 18989-19014.	1.7	14
59	Advances in structural modification of perovskite semiconductors for visible light assisted photocatalytic CO ₂ reduction to renewable solar fuels: A review. Journal of Environmental Chemical Engineering, 2021, 9, 106264.	3.3	56
60	Methane decomposition for hydrogen production over biomass fly ash-based CeO ₂ nanowires promoted cobalt catalyst. Journal of Environmental Chemical Engineering, 2021, 9, 105816.	3.3	24
61	Synergistic effect of Ru embedded 2D Ti ₃ AlC ₂ binary cocatalyst with porous g-C ₃ N ₄ to construct 2D/2D Ru-MAX/PCN heterojunction for enhanced photocatalytic H ₂ production. Materials Research Bulletin, 2021, 144, 111493.	2.7	8
62	Facile fabrication of well-designed 2D/2D porous g-C ₃ N ₄ @GO nanocomposite for photocatalytic methane reforming (DRM) with CO ₂ towards enhanced syngas production under visible light. Fuel, 2021, 305, 121558.	3.4	44
63	Microalgae biomass conversion into biofuel using modified HZSM-5 zeolite catalyst: A review. Materials Today: Proceedings, 2021, 42, 2308-2313.	0.9	15
64	CO ₂ to green fuel: Photocatalytic process optimization study. Sustainable Chemistry and Pharmacy, 2021, 24, 100533.	1.6	3
65	Construction of an S-Scheme Heterojunction with Oxygen-Vacancy-Rich Trimetallic CoAlLa-LDH Anchored on Titania-Sandwiched Ti ₃ C ₂ Multilayers for Boosting Photocatalytic CO ₂ Reduction under Visible Light. Industrial & Engineering Chemistry Research, 2021, 60, 16201-16223.	1.8	33
66	Role of Ti ₃ C ₂ MXene as Prominent Schottky Barriers in Driving Hydrogen Production through Photoinduced Water Splitting: A Comprehensive Review. ACS Applied Energy Materials, 2021, 4, 11982-12006.	2.5	57
67	Template free synthesis of graphitic carbon nitride nanotubes mediated by lanthanum (La/g-CNT) for selective photocatalytic CO ₂ reduction via dry reforming of methane (DRM) to fuels. Applied Surface Science, 2020, 504, 144177.	3.1	83
68	Au-NPs embedded Z-scheme WO ₃ /TiO ₂ nanocomposite for plasmon-assisted photocatalytic glycerol-water reforming towards enhanced H ₂ evolution. Applied Surface Science, 2020, 503, 144344.	3.1	81
69	Monolithic Ag-Mt dispersed Z-scheme pCN-TiO ₂ heterojunction for dynamic photocatalytic H ₂ evolution using liquid and gas phase photoreactors. International Journal of Hydrogen Energy, 2020, 45, 4355-4375.	3.8	52
70	Well-designed ZnFe ₂ O ₄ /Ag/TiO ₂ nanorods heterojunction with Ag as electron mediator for photocatalytic CO ₂ reduction to fuels under UV/visible light. Journal of CO ₂ Utilization, 2020, 37, 134-146.	3.3	97
71	Effect of support size for stimulating hydrogen production in phenol steam reforming using Ni-embedded TiO ₂ nanocatalyst. Journal of Environmental Chemical Engineering, 2020, 8, 103604.	3.3	34
72	Morphological effect of 1D/1D In ₂ O ₃ /TiO ₂ NRs/NWs heterojunction photo-embedded with Cu-NPs for enhanced photocatalytic H ₂ evolution under visible light. Applied Surface Science, 2020, 506, 145034.	3.1	59

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73	Highly stable 3D/2D WO ₃ /g-C ₃ N ₄ Z-scheme heterojunction for stimulating photocatalytic CO ₂ reduction by H ₂ O/H ₂ to CO and CH ₄ under visible light. Journal of CO ₂ Utilization, 2020, 41, 101270.	3.3	56
74	ZnO nanowires based schottky contacts of Rh/ZnO interfaces for the enhanced performance of electronic devices. Surfaces and Interfaces, 2020, 21, 100649.	1.5	10
75	Tailoring metal/support interaction in 0D TiO ₂ NPs/MPs embedded 2D MAX composite with boosted interfacial charge carrier separation for stimulating photocatalytic H ₂ production. Journal of Environmental Chemical Engineering, 2020, 8, 104529.	3.3	10
76	Constructing a Stable 2D Layered Ti ₃ C ₂ MXene Cocatalyst-Assisted TiO ₂ /g-C ₃ N ₄ /Ti ₃ C ₂ Heterojunction for Tailoring Photocatalytic Bireforming of Methane under Visible Light. Energy & Fuels, 2020, 34, 9810-9828.	2.5	84
77	Well-Designed 3D/2D/2D WO ₃ /Bt/g-C ₃ N ₄ Z-Scheme Heterojunction for Tailoring Photocatalytic CO ₂ Methanation with 2D-Layered Bentonite-Clay as the Electron Moderator under Visible Light. Energy & Fuels, 2020, 34, 14400-14418.	2.5	40
78	Current trends in strategies to improve photocatalytic performance of perovskites materials for solar to hydrogen production. Renewable and Sustainable Energy Reviews, 2020, 132, 110073.	8.2	69
79	Photoinduced Dry and Bireforming of Methane to Fuels over La-Modified TiO ₂ in Fixed-Bed and Monolith Reactors. Energy Technology, 2020, 8, 2000106.	1.8	11
80	Recent development in band engineering of binary semiconductor materials for solar driven photocatalytic hydrogen production. International Journal of Hydrogen Energy, 2020, 45, 15985-16038.	3.8	187
81	Fabricating structured 2D Ti ₃ AlC ₂ MAX dispersed TiO ₂ heterostructure with Ni ₂ P as a cocatalyst for efficient photocatalytic H ₂ production. Journal of Alloys and Compounds, 2020, 842, 155752.	2.8	82
82	2D/2D/2D O-C ₃ N ₄ /Bt/Ti ₃ C ₂ Tx heterojunction with novel MXene/clay multi-electron mediator for stimulating photo-induced CO ₂ reforming to CO and CH ₄ . Chemical Engineering Journal, 2020, 400, 125868.	6.6	131
83	Recent progress in structural development and band engineering of perovskites materials for photocatalytic solar hydrogen production: A review. International Journal of Hydrogen Energy, 2020, 45, 19078-19111.	3.8	76
84	Construction of a Stable Two-Dimensional MAX Supported Protonated Graphitic Carbon Nitride (pg-C ₃ N ₄)/Ti ₃ AlC ₂ /TiO ₂ Z-Scheme Multiheterojunction System for Efficient Photocatalytic CO ₂ Reduction through Dry Reforming of Methanol. Energy & Fuels, 2020, 34, 3540-3556.	2.5	77
85	Enhanced photocatalytic CO ₂ reduction to fuels through bireforming of methane over structured 3D MAX Ti ₃ AlC ₂ /TiO ₂ heterojunction in a monolith photoreactor. Journal of CO ₂ Utilization, 2020, 38, 99-112.	3.3	47
86	Constructing a Stable 2D/2D Heterojunction of Oxygen-Cluster-Modified Ti ₃ AlC ₂ MAX Cocatalyst with Proton-Rich C ₃ N ₄ for Highly Efficient Photocatalytic CO ₂ Methanation. Industrial & Engineering Chemistry Research, 2020, 59, 9841-9857.	1.8	49
87	Kinetic study of dry reforming of methane using hybrid DBD plasma reactor over La ₂ O ₃ co-supported Ni/MgAl ₂ O ₄ catalyst. International Journal of Hydrogen Energy, 2020, 45, 12256-12271.	3.8	42
88	2D/2D Mt/m-CN composite with enriched interface charge transfer for boosting photocatalytic CO ₂ hydrogenation by H ₂ to CH ₄ under visible light. Applied Surface Science, 2020, 520, 146296.	3.1	31
89	Exploration of reaction mechanisms on the plastic waste polyethylene terephthalate (PET) dissolved in phenol steam reforming reaction to produce hydrogen and valuable liquid fuels. Journal of Analytical and Applied Pyrolysis, 2020, 150, 104860.	2.6	12
90	Synergistic effects of single/multi-walls carbon nanotubes in TiO ₂ and process optimization using response surface methodology for photo-catalytic H ₂ evolution. Journal of Environmental Chemical Engineering, 2019, 7, 103361.	3.3	32

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91	In-situ synthesis of TiO ₂ /La ₂ O ₃ /CO ₃ /rGO composite under acidic/basic treatment with La ³⁺ /Ti ³⁺ as mediators for boosting photocatalytic H ₂ evolution. International Journal of Hydrogen Energy, 2019, 44, 23669-23688.	3.8	20
92	Facile synthesis of GO and g-C ₃ N ₄ nanosheets encapsulated magnetite ternary nanocomposite for superior photocatalytic degradation of phenol. Environmental Pollution, 2019, 253, 1066-1078.	3.7	50
93	Silver loaded protonated graphitic carbon nitride (Ag/pg-C ₃ N ₄) nanosheets for stimulating CO ₂ reduction to fuels via photocatalytic bi-reforming of methane. Applied Surface Science, 2019, 493, 18-31.	3.1	70
94	The effect of crystal facets and induced porosity on the performance of monoclinic BiVO ₄ for the enhanced visible-light driven photocatalytic abatement of methylene blue. Journal of Environmental Chemical Engineering, 2019, 7, 103265.	3.3	49
95	Evaluating the Performance of a Ni Catalyst Supported on La ₂ O ₃ -MgAl ₂ O ₄ for Dry Reforming of Methane in a Packed Bed Dielectric Barrier Discharge Plasma Reactor. Energy & Fuels, 2019, 33, 11630-11647.	2.5	75
96	Narrowing the Band Gap of BiOCl for the Hydroxyl Radical Generation of Photocatalysis under Visible Light. ACS Sustainable Chemistry and Engineering, 2019, 7, 16569-16576.	3.2	81
97	Controlled synthesis of reduced graphene oxide supported magnetically separable Fe ₃ O ₄ @rGO@AgI ternary nanocomposite for enhanced photocatalytic degradation of phenol. Powder Technology, 2019, 356, 547-558.	2.1	47
98	Recent trends in photocatalytic materials for reduction of carbon dioxide to methanol. Renewable and Sustainable Energy Reviews, 2019, 116, 109389.	8.2	76
99	Ni-embedded TiO ₂ -ZnTiO ₃ reducible perovskite composite with synergistic effect of metal/support towards enhanced H ₂ production via phenol steam reforming. Energy Conversion and Management, 2019, 200, 112064.	4.4	39
100	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. Applied Catalysis B: Environmental, 2019, 248, 167-183.	10.8	79
101	Recent developments in non-thermal catalytic DBD plasma reactor for dry reforming of methane. Energy Conversion and Management, 2019, 183, 529-560.	4.4	147
102	The chemical precipitation synthesis of nanorose-shaped Bi ₄ O ₅ I ₂ with highly visible light photocatalytic performance. Materials Letters, 2019, 252, 106-109.	1.3	13
103	Engineering approach in stimulating photocatalytic H ₂ production in a slurry and monolithic photoreactor systems using Ag-bridged Z-scheme pCN/TiO ₂ nanocomposite. Chemical Engineering Journal, 2019, 374, 1076-1095.	6.6	69
104	Engineering approach to enhance photocatalytic water splitting for dynamic H ₂ production using La ₂ O ₃ /TiO ₂ nanocatalyst in a monolith photoreactor. Applied Surface Science, 2019, 484, 1089-1101.	3.1	56
105	Cu-NPs embedded 1D/2D CNTs/pCN heterojunction composite towards enhanced and continuous photocatalytic CO ₂ reduction to fuels. Applied Surface Science, 2019, 485, 450-461.	3.1	77
106	Self-doped Ti ³⁺ mediated TiO ₂ /In ₂ O ₃ /SWCNTs heterojunction composite under acidic/basic heat medium for boosting visible light induced H ₂ evolution. International Journal of Hydrogen Energy, 2019, 44, 13466-13479.	3.8	18
107	Montmorillonite dispersed single wall carbon nanotubes (SWCNTs)/TiO ₂ heterojunction composite for enhanced dynamic photocatalytic H ₂ production under visible light. Applied Clay Science, 2019, 174, 110-119.	2.6	40
108	Indirect Z-Scheme Assembly of 2D ZnV ₂ O ₆ /RGO/g-C ₃ N ₄ Nanosheets with RGO/pCN as Solid-State Electron Mediators toward Visible-Light-Enhanced CO ₂ Reduction. Industrial & Engineering Chemistry Research, 2019, 58, 8612-8624.	1.8	84

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109	Process optimization of DBD plasma dry reforming of methane over Ni/La ₂ O ₃ MgAl ₂ O ₄ using multiple response surface methodology. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 11774-11787.	3.8	47
110	Carbon Nanotubes Incorporated Z-Scheme Assembly of AgBr/TiO ₂ for Photocatalytic Hydrogen Production under Visible Light Irradiations. <i>Nanomaterials</i> , 2019, 9, 1767.	1.9	14
111	Fabrication of highly efficient and stable indirect Z-scheme assembly of AgBr/TiO ₂ via graphene as a solid-state electron mediator for visible light induced enhanced photocatalytic H ₂ production. <i>Applied Surface Science</i> , 2019, 463, 445-455.	3.1	80
112	Metals free MWCNTs@TiO ₂ @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.	3.1	75
113	Recent advancements in engineering approach towards design of photo-reactors for selective photocatalytic CO ₂ reduction to renewable fuels. <i>Journal of CO₂ Utilization</i> , 2019, 29, 205-239.	3.3	189
114	2D-montmorillonite-dispersed g-C ₃ N ₄ /TiO ₂ 2D/0Dnanocomposite for enhanced photo-induced H ₂ evolution from glycerol-water mixture. <i>Applied Surface Science</i> , 2019, 471, 1053-1064.	3.1	72
115	Enhanced photocatalytic carbon dioxide reforming of methane to fuels over nickel and montmorillonite supported TiO ₂ nanocomposite under UV-light using monolith photoreactor. <i>Journal of Cleaner Production</i> , 2019, 213, 451-461.	4.6	93
116	Hierarchical 3D VO ₂ /ZnV ₂ O ₄ microspheres as an excellent visible light photocatalyst for CO ₂ reduction to solar fuels. <i>Applied Surface Science</i> , 2019, 467-468, 1170-1180.	3.1	69
117	Thermodynamic investigation and experimental analysis on phenol steam reforming towards enhanced H ₂ production over structured Ni/ZnTiO ₃ nanocatalyst. <i>Energy Conversion and Management</i> , 2019, 180, 796-810.	4.4	51
118	A critical review in strategies to improve photocatalytic water splitting towards hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 540-577.	3.8	573
119	La-modified TiO ₂ /carbon nanotubes assembly nanocomposite for efficient photocatalytic hydrogen evolution from glycerol-water mixture. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 3711-3725.	3.8	76
120	Enhanced Metal-Support Interaction in Ni/Co ₃ O ₄ /TiO ₂ Nanorods toward Stable and Dynamic Hydrogen Production from Phenol Steam Reforming. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 517-530.	1.8	45
121	Well-designed ZnV ₂ O ₆ /g-C ₃ N ₄ 2D/2D nanosheets heterojunction with faster charges separation via pCN as mediator towards enhanced photocatalytic reduction of CO ₂ to fuels. <i>Applied Catalysis B: Environmental</i> , 2019, 242, 312-326.	10.8	162
122	Tailoring performance of La-modified TiO ₂ nanocatalyst for continuous photocatalytic CO ₂ reforming of CH ₄ to fuels in the presence of H ₂ O. <i>Energy Conversion and Management</i> , 2018, 159, 284-298.	4.4	90
123	Lantern-like bismuth oxyiodide embedded typha-based carbon <i>in situ</i> self-template and ion exchange-recrystallization for high-performance photocatalysis. <i>Dalton Transactions</i> , 2018, 47, 6692-6701.	1.6	40
124	Photocatalytic carbon dioxide reduction to fuels in continuous flow monolith photoreactor using montmorillonite dispersed Fe/TiO ₂ nanocatalyst. <i>Journal of Cleaner Production</i> , 2018, 170, 242-250.	4.6	79
125	Synthesis of hierarchical ZnV ₂ O ₆ nanosheets with enhanced activity and stability for visible light driven CO ₂ reduction to solar fuels. <i>Applied Surface Science</i> , 2018, 435, 953-962.	3.1	51
126	Synergistic effects of 2D/2D ZnV ₂ O ₆ /RGO nanosheets heterojunction for stable and high performance photo-induced CO ₂ reduction to solar fuels. <i>Chemical Engineering Journal</i> , 2018, 334, 2142-2153.	6.6	76

#	ARTICLE	IF	CITATIONS
127	Improved interfacial bonding of graphene-TiO ₂ with enhanced photocatalytic reduction of CO ₂ into solar fuel. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 6947-6957.	3.3	46
128	Cold plasma dielectric barrier discharge reactor for dry reforming of methane over Ni/Al ₂ O ₃ -MgO nanocomposite. <i>Fuel Processing Technology</i> , 2018, 178, 166-179.	3.7	77
129	A critical review on TiO ₂ based photocatalytic CO ₂ reduction system: Strategies to improve efficiency. <i>Journal of CO₂ Utilization</i> , 2018, 26, 98-122.	3.3	313
130	Catalyst-free fabrication of novel ZnO/CuO core-shell nanowires heterojunction: Controlled growth, structural and optoelectronic properties. <i>Applied Surface Science</i> , 2018, 435, 718-732.	3.1	41
131	g-C ₃ N ₄ /(Cu/TiO ₂) nanocomposite for enhanced photoreduction of CO ₂ to CH ₃ OH and HCOOH under UV/visible light. <i>Journal of CO₂ Utilization</i> , 2017, 18, 261-274.	3.3	152
132	Photo-induced reduction of CO ₂ to CO with hydrogen over plasmonic Ag-NPs/TiO ₂ NWs core/shell hetero-junction under UV and visible light. <i>Journal of CO₂ Utilization</i> , 2017, 18, 250-260.	3.3	76
133	Ni/Pd-promoted Al ₂ O ₃ -La ₂ O ₃ catalyst for hydrogen production from polyethylene terephthalate waste via steam reforming. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 10708-10721.	3.8	37
134	Evaluation of theoretical and experimental mass transfer limitation in steam reforming of phenol-PET waste to hydrogen production over Ni/La-promoted Al ₂ O ₃ catalyst. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 2752-2760.	3.3	13
135	Dry reforming of methane using different dielectric materials and DBD plasma reactor configurations. <i>Energy Conversion and Management</i> , 2017, 144, 262-274.	4.4	104
136	Photo-induced CO ₂ reduction by CH ₄ /H ₂ O to fuels over Cu-modified g-C ₃ N ₄ nanorods under simulated solar energy. <i>Applied Surface Science</i> , 2017, 419, 875-885.	3.1	140
137	Photo-induced CO ₂ reduction by hydrogen for selective CO evolution in a dynamic monolith photoreactor loaded with Ag-modified TiO ₂ nanocatalyst. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 15507-15522.	3.8	74
138	Parametric study on the steam reforming of phenol-PET solution to hydrogen production over Ni promoted on Al ₂ O ₃ -La ₂ O ₃ catalyst. <i>Energy Conversion and Management</i> , 2017, 142, 127-142.	4.4	51
139	Synergistic effect in plasmonic Au/Ag alloy NPs co-coated TiO ₂ NWs toward visible-light enhanced CO ₂ photoreduction to fuels. <i>Applied Catalysis B: Environmental</i> , 2017, 204, 548-560.	10.8	231
140	Barriers to empowerment: Assessment of community-led local development organizations in Pakistan. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 74, 1361-1370.	8.2	19
141	Ni/MMT-promoted TiO ₂ nanocatalyst for dynamic photocatalytic H ₂ and hydrocarbons production from ethanol-water mixture under UV-light. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 28309-28326.	3.8	66
142	Synergistic effect in MMT-dispersed Au/TiO ₂ monolithic nanocatalyst for plasmon-absorption and metallic interband transitions dynamic CO ₂ photo-reduction to CO. <i>Applied Catalysis B: Environmental</i> , 2017, 219, 329-343.	10.8	78
143	Pellet size dependent steam reforming of polyethylene terephthalate waste for hydrogen production over Ni/La promoted Al ₂ O ₃ catalyst. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 21571-21585.	3.8	19
144	Popcorn-Derived Porous Carbon Flakes with an Ultrahigh Specific Surface Area for Superior Performance Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 30626-30634.	4.0	227

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145	Thermodynamic and experimental analysis on ethanol steam reforming for hydrogen production over Ni-modified TiO ₂ /MMT nanoclay catalyst. <i>Energy Conversion and Management</i> , 2017, 154, 25-37.	4.4	36
146	MMT-supported Ni/TiO ₂ nanocomposite for low temperature ethanol steam reforming toward hydrogen production. <i>Chemical Engineering Journal</i> , 2017, 326, 956-969.	6.6	85
147	Selective photocatalytic reduction of CO ₂ by H ₂ O/H ₂ to CH ₄ and CH ₃ OH over Cu-promoted In ₂ O ₃ /TiO ₂ nanocatalyst. <i>Applied Surface Science</i> , 2016, 389, 46-55.	3.1	129
148	Direct Z-scheme composite of CdS and oxygen-defected CdWO ₄ : An efficient visible-light-driven photocatalyst for hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2016, 198, 154-161.	10.8	196
149	Photocatalytic CO ₂ conversion over Au/TiO ₂ nanostructures for dynamic production of clean fuels in a monolith photoreactor. <i>Clean Technologies and Environmental Policy</i> , 2016, 18, 2147-2160.	2.1	21
150	Photocatalytic CO ₂ methanation over NiO/In ₂ O ₃ promoted TiO ₂ nanocatalysts using H ₂ O and/or H ₂ reductants. <i>Energy Conversion and Management</i> , 2016, 119, 368-378.	4.4	90
151	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.	6.6	656
152	Dynamic photocatalytic reduction of CO ₂ to CO in a honeycomb monolith reactor loaded with Cu and N doped TiO ₂ nanocatalysts. <i>Applied Surface Science</i> , 2016, 377, 244-252.	3.1	87
153	Performance analysis of nanostructured NiO-In ₂ O ₃ /TiO ₂ catalyst for CO ₂ photoreduction with H ₂ in a monolith photoreactor. <i>Chemical Engineering Journal</i> , 2016, 285, 635-649.	6.6	86
154	Photocatalytic CO ₂ reduction with H ₂ as reductant over copper and indium co-doped TiO ₂ nanocatalysts in a monolith photoreactor. <i>Applied Catalysis A: General</i> , 2015, 493, 90-102.	2.2	74
155	Performance analysis of monolith photoreactor for CO ₂ reduction with H ₂ . <i>Energy Conversion and Management</i> , 2015, 90, 272-281.	4.4	58
156	Gold-indium modified TiO ₂ nanocatalysts for photocatalytic CO ₂ reduction with H ₂ as reductant in a monolith photoreactor. <i>Applied Surface Science</i> , 2015, 338, 1-14.	3.1	86
157	Gold-nanoparticle-modified TiO ₂ nanowires for plasmon-enhanced photocatalytic CO ₂ reduction with H ₂ under visible light irradiation. <i>Applied Surface Science</i> , 2015, 356, 1289-1299.	3.1	142
158	Photocatalytic CO ₂ reduction by CH ₄ over montmorillonite modified TiO ₂ nanocomposites in a continuous monolith photoreactor. <i>Materials Research Bulletin</i> , 2015, 63, 13-23.	2.7	71
159	Indium-doped TiO ₂ nanoparticles for photocatalytic CO ₂ reduction with H ₂ O vapors to CH ₄ . <i>Applied Catalysis B: Environmental</i> , 2015, 162, 98-109.	10.8	280
160	Synthesis, evolution and hydrogen storage properties of ZnV ₂ O ₄ glomerulus nano/microspheres: A prospective material for energy storage. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 7842-7851.	3.8	55
161	Synthesis of novel ZnV ₂ O ₄ spinel oxide nanosheets and their hydrogen storage properties. <i>CrystEngComm</i> , 2014, 16, 894-899.	1.3	46
162	Synthesis of Novel ZnV ₂ O ₄ Hierarchical Nanospheres and Their Applications as Electrochemical Supercapacitor and Hydrogen Storage Material. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 13635-13641.	4.0	150

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163	Photocatalytic CO ₂ reduction and kinetic study over In/TiO ₂ nanoparticles supported microchannel monolith photoreactor. <i>Applied Catalysis A: General</i> , 2013, 467, 483-496.	2.2	128
164	Advances in visible light responsive titanium oxide-based photocatalysts for CO ₂ conversion to hydrocarbon fuels. <i>Energy Conversion and Management</i> , 2013, 76, 194-214.	4.4	291
165	Photocatalytic CO ₂ reduction with H ₂ O vapors using montmorillonite/TiO ₂ supported microchannel monolith photoreactor. <i>Chemical Engineering Journal</i> , 2013, 230, 314-327.	6.6	86
166	Photocatalytic reduction of carbon dioxide with water vapors over montmorillonite modified TiO ₂ nanocomposites. <i>Applied Catalysis B: Environmental</i> , 2013, 142-143, 512-522.	10.8	163
167	Recycling of carbon dioxide to renewable fuels by photocatalysis: Prospects and challenges. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 25, 560-579.	8.2	151
168	MOF-Based Catalysts for Production of Value-Added Fine Chemicals from Carbon Dioxide. <i>ACS Symposium Series</i> , 0, , 155-171.	0.5	4