Arshid M Ali

List of Publications by Year
in descending order

98 papers	4,242 citations	94433 37 h-index	128289 60 g-index
100 all docs	100 docs citations	100 times ranked	3735 citing authors

#	Article	IF	Citations
1	Synergistic effect in plasmonic Au/Ag alloy NPs co-coated TiO2 NWs toward visible-light enhanced CO2 photoreduction to fuels. Applied Catalysis B: Environmental, 2017, 204, 548-560.	20.2	231
2	Recent advancements in engineering approach towards design of photo-reactors for selective photocatalytic CO2 reduction to renewable fuels. Journal of CO2 Utilization, 2019, 29, 205-239.	6.8	189
3	Recent development in band engineering of binary semiconductor materials for solar driven photocatalytic hydrogen production. International Journal of Hydrogen Energy, 2020, 45, 15985-16038.	7.1	187
4	Well-designed ZnV2O6/g-C3N4 2D/2D nanosheets heterojunction with faster charges separation via pCN as mediator towards enhanced photocatalytic reduction of CO2 to fuels. Applied Catalysis B: Environmental, 2019, 242, 312-326.	20.2	162
5	Photo-induced CO2 reduction by CH4/H2O to fuels over Cu-modified g-C3N4 nanorods under simulated solar energy. Applied Surface Science, 2017, 419, 875-885.	6.1	140
6	Well-designed 2D/2D Ti3C2TA/R MXene coupled g-C3N4 heterojunction with in-situ growth of anatase/rutile TiO2 nucleates to boost photocatalytic dry-reforming of methane (DRM) for syngas production under visible light. Applied Catalysis B: Environmental, 2021, 285, 119777.	20.2	132
7	Selective photocatalytic reduction of CO2 by H2O/H2 to CH4 and CH3OH over Cu-promoted In2O3/TiO2 nanocatalyst. Applied Surface Science, 2016, 389, 46-55.	6.1	129
8	Photocatalysis with nanostructured zinc oxide thin films: The relationship between morphology and photocatalytic activity under oxygen limited and oxygen rich conditions and evidence for a Mars Van Krevelen mechanism. Applied Catalysis B: Environmental, 2010, 97, 168-181.	20.2	116
9	Enhanced photocatalytic carbon dioxide reforming of methane to fuels over nickel and montmorillonite supported TiO2 nanocomposite under UV-light using monolith photoreactor. Journal of Cleaner Production, 2019, 213, 451-461.	9.3	93
10	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. Energy Conversion and Management, 2018, 159, 284-298.	9.2	90
11	Goldâ€“indium modified TiO2 nanocatalysts for photocatalytic CO2 reduction with H2 as reductant in a monolith photoreactor. Applied Surface Science, 2015, 338, 1-14.	6.1	86
12	Indirect Z-Scheme Assembly of 2D ZnV₂O₆/RGO/g-C₃N₄ Nanosheets with RGO/pCN as Solid-State Electron Mediators toward Visible-Light-Enhanced CO₂ Reduction. Industrial & Engineering Chemistry Research, 2019, 58, 8612-8624.	3.7	84
13	Constructing a Stable 2D Layered Ti₃C₂ MXene Cocatalyst-Assisted TiO₂/g-C₃N₄/Ti₃C₂ Heterojunction for Tailoring Photocatalytic Bireforming of Methane under Visible Light. Energy & Fuels, 2020, 34, 9810-9828.	5.1	84
14	Template free synthesis of graphitic carbon nitride nanotubes mediated by lanthanum (La/g-CNT) for selective photocatalytic CO2 reduction via dry reforming of methane (DRM) to fuels. Applied Surface Science, 2020, 504, 144177.	6.1	83
15	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.	20.2	79
16	Cold plasma dielectric barrier discharge reactor for dry reforming of methane over Ni/É-Al2O3-MgO nanocomposite. Fuel Processing Technology, 2018, 178, 166-179.	7.2	77
17	Cu-NPs embedded 1D/2D CNTs/pCN heterojunction composite towards enhanced and continuous photocatalytic CO2 reduction to fuels. Applied Surface Science, 2019, 485, 450-461.	6.1	77
18	Construction of a Stable Two-Dimensional MAX Supported Protonated Graphitic Carbon Nitride (pg-C₃N₄)/Ti₃AlC₂/TiO₂ Z-Scheme Multiheterojunction System for Efficient Photocatalytic CO₂ Reduction through Dry Reforming of Methanol. Energy & Fuels, 2020, 34, 3540-3556.	5.1	77

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19	La-modified TiO2/carbon nanotubes assembly nanocomposite for efficient photocatalytic hydrogen evolution from glycerol-water mixture. International Journal of Hydrogen Energy, 2019, 44, 3711-3725.	7.1	76
20	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. Chemosphere, 2022, 286, 131765.	8.2	74
21	In-situ growth of TiO2 imbedded Ti3C2TA nanosheets to construct PCN/Ti3C2TA MXenes 2D/3D heterojunction for efficient solar driven photocatalytic CO2 reduction towards CO and CH4 production. Journal of Colloid and Interface Science, 2021, 591, 20-37.	9.4	71
22	Hierarchical 3D VO2/ZnV2O4 microspheres as an excellent visible light photocatalyst for CO2 reduction to solar fuels. Applied Surface Science, 2019, 467-468, 1170-1180.	6.1	69
23	Recent Developments in Natural Gas Flaring Reduction and Reformation to Energy-Efficient Fuels: A Review. Energy & Fuels, 2021, 35, 3675-3714.	5.1	63
24	Biodiesel production from novel non-edible caper (Capparis spinosa L.) seeds oil employing Cuâ€“Ni doped ZrO2 catalyst. Renewable and Sustainable Energy Reviews, 2021, 138, 110558.	16.4	57
25	Role of Ti₃C₂ MXene as Prominent Schottky Barriers in Driving Hydrogen Production through Photoinduced Water Splitting: A Comprehensive Review. ACS Applied Energy Materials, 2021, 4, 11982-12006.	5.1	57
26	Engineering approach to enhance photocatalytic water splitting for dynamic H2 production using La2O3/TiO2 nanocatalyst in a monolith photoreactor. Applied Surface Science, 2019, 484, 1089-1101.	6.1	56
27	Advances in structural modification of perovskite semiconductors for visible light assisted photocatalytic CO2 reduction to renewable solar fuels: A review. Journal of Environmental Chemical Engineering, 2021, 9, 106264.	6.7	56
28	Facile synthesis of GO and g-C3N4 nanosheets encapsulated magnetite ternary nanocomposite for superior photocatalytic degradation of phenol. Environmental Pollution, 2019, 253, 1066-1078.	7.5	50
29	Enhanced photocatalytic CO2 reduction to fuels through bireforming of methane over structured 3D MAX Ti3AlC2/TiO2 heterojunction in a monolith photoreactor. Journal of CO2 Utilization, 2020, 38, 99-112.	6.8	47
30	Implication of iron nitride species to enhance the catalytic activity and stability of carbon nanotubes supported Fe catalysts for carbon-free hydrogen production via low-temperature ammonia decomposition. Catalysis Science and Technology, 2018, 8, 907-915.	4.1	46
31	Facile fabrication of well-designed 2D/2D porous g-C3N4â€“GO nanocomposite for photocatalytic methane reforming (DRM) with CO2 towards enhanced syngas production under visible light. Fuel, 2021, 305, 121558.	6.4	44
32	Kinetics of hydrogen adsorption on MgH2/CNT composite. Materials Research Bulletin, 2016, 77, 23-28.	5.2	41
33	Titanium Carbide MXene Nanostructures as Catalysts and Cocatalysts for Photocatalytic Fuel Production: A Review. ACS Applied Nano Materials, 2022, 5, 18-54.	5.0	41
34	Montmorillonite dispersed single wall carbon nanotubes (SWCNTs)/TiO2 heterojunction composite for enhanced dynamic photocatalytic H2 production under visible light. Applied Clay Science, 2019, 174, 110-119.	5.2	40
35	Well-Designed 3D/2D/2D WO₃/Bt/g-C₃N₄ Z-Scheme Heterojunction for Tailoring Photocatalytic CO₂ Methanation with 2D-Layered Bentonite-Clay as the Electron Moderator under Visible Light. Energy & Fuels, 2020, 34, 14400-14418.	5.1	40
36	Constructing La_xCo_yO₃ Perovskite Anchored 3D g-C₃N₄ Hollow Tube Heterojunction with Proficient Interface Charge Separation for Stimulating Photocatalytic H₂ Production. Energy & Fuels, 2021, 35, 9727-9746.	5.1	40

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37	Binary Ni₂P/Ti₃C₂ Multilayer Cocatalyst Anchored TiO₂ Nanocomposite with Etchant/Oxidation Grown TiO₂ NPs for Enhancing Photocatalytic H₂ Production. Energy & Fuels, 2021, 35, 14197-14211.	5.1	39
38	Constructing S-Scheme Heterojunction of CoAlLa-LDH/g-C₃N₄ through Monolayer Ti₃C₂-MXene to Promote Photocatalytic CO₂ Re-forming of Methane to Solar Fuels. ACS Applied Energy Materials, 2022, 5, 784-806.	5.1	38
39	Size structureâ€“catalytic performance correlation of supported Ni/MCF-17 catalysts for CO_x-free hydrogen production. Chemical Communications, 2018, 54, 6364-6367.	4.1	36
40	Conventional versus lattice photocatalysed reactions: Implications of the lattice oxygen participation in the liquid phase photocatalytic oxidation with nanostructured ZnO thin films on reaction products and mechanism at both 254nm and 340nm. Applied Catalysis B: Environmental, 2011, 106, 323-336.	20.2	34
41	Current Trends and Approaches to Boost the Performance of Metal Organic Frameworks for Carbon Dioxide Methanation through Photo/Thermal Hydrogenation: A Review. Industrial & Engineering Chemistry Research, 2021, 60, 13149-13179.	3.7	34
42	Construction of an S-Scheme Heterojunction with Oxygen-Vacancy-Rich Trimetallic CoAlLa-LDH Anchored on Titania-Sandwiched Ti₃C₂ Multilayers for Boosting Photocatalytic CO₂ Reduction under Visible Light. Industrial & Engineering Chemistry Research, 2021, 60, 16201-16223.	3.7	33
43	Sub-3 nm Rh nanoclusters confined within a metalâ€“organic framework for enhanced hydrogen generation. Chemical Communications, 2019, 55, 4699-4702.	4.1	32
44	Recent advances in constructing heterojunctions of binary semiconductor photocatalysts for visible light responsive <scp> CO ₂ </scp> reduction to energy efficient fuels: A review. International Journal of Energy Research, 2022, 46, 5523-5584.	4.5	32
45	Investigating the Influential Effect of Etchant Time in Constructing 2D/2D HCN/MXene Heterojunction with Controlled Growth of TiO₂ NPs for Stimulating Photocatalytic H₂ Production. Energy & Fuels, 2021, 35, 6807-6822.	5.1	31
46	Ammonia removal from raw water by using adsorptive membrane filtration process. Separation and Purification Technology, 2021, 270, 118757.	7.9	31
47	Structural, electronics and optical properties of sodium based fluoroperovskites NaXF3 (Xâ€¯=â€¯Ca, Mg, Sr) Tj ETQq1 1 0.784314 rgBT Physics, 2021, 412, 127574.	2.1	31
48	Effect of preparation methods on the catalyst performance of Co/Mg La mixed oxide catalyst for COx-free hydrogen production by ammonia decomposition. International Journal of Hydrogen Energy, 2017, 42, 24213-24221.	7.1	30
49	Synergistic Effect of Co/La in Oxygen Vacancy Rich Ternary CoAlLa Layered Double Hydroxide with Enhanced Reductive Sites for Selective Photoreduction of CO₂ to CH₄. Energy & Fuels, 2021, 35, 8922-8943.	5.1	30
50	MgFe and Mgâ€“Coâ€“Fe mixed oxides derived from hydrotalcites: Highly efficient catalysts for COx free hydrogen production from NH3. International Journal of Hydrogen Energy, 2020, 45, 873-890.	7.1	28
51	Bimetallic Ruâ€Fe Nanoparticles Supported on Carbon Nanotubes for Ammonia Decomposition and Synthesis. Chemical Engineering and Technology, 2020, 43, 719-730.	1.5	26
52	Photocatalytic CO2 conversion over Au/TiO2 nanostructures for dynamic production of clean fuels in a monolith photoreactor. Clean Technologies and Environmental Policy, 2016, 18, 2147-2160.	4.1	21
53	In-situ synthesis of TiO2/La2O2CO3/rGO composite under acidic/basic treatment with La3+/Ti3+ as mediators for boosting photocatalytic H2 evolution. International Journal of Hydrogen Energy, 2019, 44, 23669-23688.	7.1	20
54	Fabricating 2D/2D/2D heterojunction of graphene oxide mediated g-C3N4 and ZnV2O6 composite with kinetic modelling for photocatalytic CO2 reduction to fuels under UV and visible light. Journal of Materials Science, 2021, 56, 9985-10007.	3.7	18

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55	Single-step fabrication of highly stable amorphous TiO2 nanotubes arrays (am-TNTA) for stimulating gas-phase photoreduction of CO2 to methane. Chemosphere, 2022, 289, 133170.	8.2	18
56	Polypropyleneâ€based nanocomposites for HVDC cable insulation. IET Nanodielectrics, 2021, 4, 84-97.	4.1	16
57	Recent developments in layered double hydroxide structures with their role in promoting photocatalytic hydrogen production: A comprehensive review. International Journal of Energy Research, 2022, 46, 2093-2140.	4.5	16
58	Carbon Nanotubes Incorporated Z-Scheme Assembly of AgBr/TiO2 for Photocatalytic Hydrogen Production under Visible Light Irradiations. Nanomaterials, 2019, 9, 1767.	4.1	14
59	Influence of van der waals heterostructures of 2D materials on catalytic performance of ZnO and its applications in energy: A review. International Journal of Hydrogen Energy, 2021, 46, 25413-25423.	7.1	14
60	Photocatalytic CO2 reduction to CO and CH4 using g-C3N4/RGO on titania nanotube arrays (TNTAs). Journal of Materials Science, 2021, 56, 18989-19014.	3.7	14
61	Novel, facile and first time synthesis of zinc oxide nanoparticles using leaves extract of Citrus reticulata for photocatalytic and antibacterial activity. Optik, 2021, 243, 167495.	2.9	14
62	H2-rich syngas production from air gasification of date palm waste: an experimental and modeling investigation. Biomass Conversion and Biorefinery, 0, , 1.	4.6	14
63	Strong synergism between gold and manganese in an Auâ€“Mn/triple-oxide-support (TOS) oxidation catalyst. Applied Catalysis A: General, 2015, 489, 24-31.	4.3	13
64	Nipah (Musa Acuminata Balbisiana) banana peel as a lignocellulosic precursor for activated carbon: characterization study after carbonization process with phosphoric acid impregnated activated carbon. Biomass Conversion and Biorefinery, 2023, 13, 11085-11098.	4.6	13
65	First-principles calculations to investigate structural, electronic and optical properties of Na based fluoroperovskites NaXF3 (X= Sr, Zn). Solid State Communications, 2021, 334-335, 114396.	1.9	12
66	Influence of Ce substitution in LaMO3 (MÂ=ÂCo/Ni) perovskites for COx-free hydrogen production from ammonia decomposition. Arabian Journal of Chemistry, 2022, 15, 103547.	4.9	12
67	Photoinduced Dry and Bireforming of Methane to Fuels over Laâ€Modified TiO₂ in Fixedâ€Bed and Monolith Reactors. Energy Technology, 2020, 8, 2000106.	3.8	11
68	The economic and environmental analysis of energy production from slaughterhouse waste in Saudi Arabia. Environment, Development and Sustainability, 2021, 23, 4252-4269.	5.0	11
69	Tailoring metal/support interaction in 0D TiO2 NPs/MPs embedded 2D MAX composite with boosted interfacial charge carrier separation for stimulating photocatalytic H2 production. Journal of Environmental Chemical Engineering, 2020, 8, 104529.	6.7	10
70	Cellulose triacetate fiber-reinforced polystyrene composite. Journal of Thermoplastic Composite Materials, 2021, 34, 707-721.	4.2	9
71	Hydrothermal synthesis of an efficient and visible light responsive pure and strontium doped zinc oxide nano-hexagonal photocatalysts for photodegradation of Rhodamine B dye. Applied Nanoscience (Switzerland), 2021, 11, 1045-1056.	3.1	9
72	Role of Microalgae as a Source for Biofuel Production in the Future: A Short Review. Bulletin of Chemical Reaction Engineering and Catalysis, 2021, 16, 396-412.	1.1	9

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73	Investigating influential effect of methanolâ€phenolâ€steam mixture on hydrogen production through thermodynamic analysis with experimental evaluation. International Journal of Energy Research, 2022, 46, 964-979.	4.5	9
74	Functionalized role of highly porous activated carbon in bismuth vanadate nanomaterials for boosted photocatalytic hydrogen evolution and synchronous activity in water. International Journal of Hydrogen Energy, 2021, 46, 39778-39785.	7.1	8
75	Torrefaction and Thermochemical Properties of Agriculture Residues. Energies, 2021, 14, 4218.	3.1	7
76	Synthesis of BiVO4/NiFe2O4 composite for photocatalytic degradation of methylene blue. Applied Nanoscience (Switzerland), 2021, 11, 2793.	3.1	7
77	A review on sensitivity of operating parameters on biogas catalysts for selective oxidation of Hydrogen Sulfide to elemental sulfur. Chemosphere, 2022, 301, 134579.	8.2	7
78	Ethyl benzene oxidative dehydrogenation to styrene on Al-B and Al-B-Sb catalysts. Applied Catalysis A: General, 2018, 552, 49-57.	4.3	6
79	Characterization of an amorphous indium tin oxide (ITO) film on a polylactic acid (PLA) substrate. Bulletin of Materials Science, 2019, 42, 1.	1.7	6
80	Methanol Synthesis Using CO₂ and H₂ on Nano Silver-Ceria Zirconia Catalysts: Influence of Preparation Method. Journal of Nanoscience and Nanotechnology, 2019, 19, 3197-3204.	0.9	6
81	Carbon Dioxide (CO₂) Capture in Alkanolamines Impregnated Activated Carbon Developed from Date Stones. Science of Advanced Materials, 2021, 13, 98-104.	0.7	6
82	Capacitive properties of novel Sb-doped Co3O4 electrode material synthesized by hydrothermal method. Ceramics International, 2021, 47, 32210-32217.	4.8	6
83	Fabricating <scp> V ₂ AlC </scp> / <scp> gâ€€ ₃ N ₄ </scp> nanocomposite with <scp>MAX</scp> as electron moderator for promoting photocatalytic <scp> CO ₂ â€€H ₄ </scp> refo. International Journal of Energy Research, 2022, 46, 7666-7685.	4.5	5
84	Doped Nanostructured Manganese Ferrites: Synthesis, Characterization, and Magnetic Properties. Journal of Nanomaterials, 2021, 2021, 1-12.	2.7	5
85	Daily variation of radon gas and its short-lived progeny concentration near ground level and estimation of aerosol residence time. Chinese Physics B, 2016, 25, 050701.	1.4	4
86	Comprehensive dynamic modeling, simulation, and validation for an industrial boiler incident investigation. Process Safety Progress, 2019, 38, e12040.	1.0	4
87	MOF-Based Catalysts for Production of Value-Added Fine Chemicals from Carbon Dioxide. ACS Symposium Series, 0, , 155-171.	0.5	4
88	Effect of Au Precursor and Support on the Catalytic Activity of the Nano-Au-Catalysts for Propane Complete Oxidation. Journal of Nanomaterials, 2015, 2015, 1-10.	2.7	3
89	Correlation Between Tunable Oxygen Defects in TiO₂ Nanoflower and Its Photocatalytic Performance for the Degradation of Organic Waste. Nano, 2020, 15, 2050018.	1.0	3
90	Insighting role of activated carbon based nanostructures for complete photocatalytic degradation of hazardous pharmaceutical compound. Applied Nanoscience (Switzerland), 2021, 11, 1117-1126.	3.1	3

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91	Insight role of TiO₂ to improve the photocatalytic performance of WO₃ nanostructures for the efficient degradation of ciprofloxacin. Zeitschrift Fur Physikalische Chemie, 2022, 236, 169-180.	2.8	3
92	Synthesis and Characterization of Pentaerythritol Phthalic Anhydride Resin from Soybean Oil. Asian Journal of Chemistry, 2018, 30, 572-574.	0.3	2
93	Highly efficient hydrotalcite supported palladium catalyst for hydrodechlorination of 1, 2, 4-tri chlorobenzene: Influence of Pd loading. Journal of Chemical Sciences, 2020, 132, 1.	1.5	2
94	Sequential and/or Simultaneous Wet-Impregnation Impact on the Mesoporous Pt/Sn/Zn/Î³-Al2O3 Catalysts for the Direct Ethane Dehydrogenation. Journal of Nanomaterials, 2022, 2022, 1-17.	2.7	2
95	Impact of cobalt as dopant on surface morphologies of undoped <scp>ZnO</scp> nanostructured thin films. Asia-Pacific Journal of Chemical Engineering, 2018, 13, e2183.	1.5	1
96	Structural, Thermal, Morphological and Magnetic Properties of Al3+-Doped Nanostructured Spinel Nickel Ferrites. Science of Advanced Materials, 2021, 13, 794-802.	0.7	1
97	Effect of Titanium oxide Nanofiller on the Electrical Properties of Polypropylene Nanocomposites for HVDC Insulation. , 2021, , .		1
98	Mechanistic investigation of Mg2+-ion-induced ZnO nanorods for enhanced photocatalytic performance. Applied Nanoscience (Switzerland), 2021, 11, 1917-1927.	3.1	0