# Abdul Rahman Mohamed

List of Publications by Year
in descending order



| 415 | 35,727 | 2975 | 4432 |
|---|---|---|---|
| papers | citations | 93 h-index | 172 g-index |

| 418 | 418 | 418 | 33863 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Graphitic Carbon Nitride (g-C<sub>3</sub>N<sub>4</sub>)-Based Photocatalysts for Artificial Photosynthesis and Environmental Remediation: Are We a Step Closer To Achieving Sustainability?. Chemical Reviews, 2016, 116, 7159-7329. | 47.7 | 5,505 |
| 2 | Homogeneous, heterogeneous and enzymatic catalysis for transesterification of high free fatty acid oil (waste cooking oil) to biodiesel: A review. Biotechnology Advances, 2010, 28, 500-518. | 11.7 | 1,054 |
| 3 | Surface charge modification via protonation of graphitic carbon nitride (g-C3N4) for electrostatic self-assembly construction of 2D/2D reduced graphene oxide (rGO)/g-C3N4 nanostructures toward enhanced photocatalytic reduction of carbon dioxide to methane. Nano Energy, 2015, 13, 757-770. | 16.0 | 718 |
| 4 | Photocatalytic fixation of nitrogen to ammonia: state-of-the-art advancements and future prospects. Materials Horizons, 2018, 5, 9-27. | 12.2 | 586 |
| 5 | Zâ€Scheme Photocatalytic Systems for Carbon Dioxide Reduction: Where Are We Now?. Angewandte Chemie - International Edition, 2020, 59, 22894-22915. | 13.8 | 435 |
| 6 | Highly reactive {001} facets of TiO2-based composites: synthesis, formation mechanism and characterization. Nanoscale, 2014, 6, 1946. | 5.6 | 412 |
| 7 | Graphene oxide as a structure-directing agent for the two-dimensional interface engineering of sandwich-like grapheneâ€“g-C<sub>3</sub>N<sub>4</sub> hybrid nanostructures with enhanced visible-light photoreduction of CO<sub>2</sub> to methane. Chemical Communications, 2015, 51, 858-861. | 4.1 | 393 |
| 8 | Roles of titanium dioxide and ion-doped titanium dioxide on photocatalytic degradation of organic pollutants (phenolic compounds and dyes) in aqueous solutions: A review. Journal of Alloys and Compounds, 2011, 509, 1648-1660. | 5.5 | 391 |
| 9 | Recent progress on innovative and potential technologies for glycerol transformation into fuel additives: A critical review. Renewable and Sustainable Energy Reviews, 2010, 14, 987-1000. | 16.4 | 385 |
| 10 | High surface area activated carbon from rice husk as a high performance supercapacitor electrode. Electrochimica Acta, 2016, 192, 110-119. | 5.2 | 384 |
| 11 | Degradation of wastewaters containing organic dyes photocatalysed by zinc oxide: a review. Desalination and Water Treatment, 2012, 41, 131-169. | 1.0 | 359 |
| 12 | Understanding of Electrochemical Mechanisms for CO<sub>2</sub> Capture and Conversion into Hydrocarbon Fuels in Transition-Metal Carbides (MXenes). ACS Nano, 2017, 11, 10825-10833. | 14.6 | 359 |
| 13 | Gasification of lignocellulosic biomass in fluidized beds for renewable energy development: A review. Renewable and Sustainable Energy Reviews, 2010, 14, 2852-2862. | 16.4 | 354 |
| 14 | Reduced graphene oxide-TiO2 nanocomposite as a promising visible-light-active photocatalyst for the conversion of carbon dioxide. Nanoscale Research Letters, 2013, 8, 465. | 5.7 | 323 |
| 15 | Synthesis of activated carbon from lignocellulosic biomass and its applications in air pollution controlâ€”a review. Journal of Environmental Chemical Engineering, 2013, 1, 658-666. | 6.7 | 310 |
| 16 | Synthesis and characterization of graphene and carbon nanotubes: A review on the past and recent developments. Journal of Industrial and Engineering Chemistry, 2014, 20, 1171-1185. | 5.8 | 307 |
| 17 | Facetâ€Dependent Photocatalytic Properties of TiO<sub>2</sub>â€Based Composites for Energy Conversion and Environmental Remediation. ChemSusChem, 2014, 7, 690-719. | 6.8 | 307 |
| 18 | Heterojunction engineering of graphitic carbon nitride (g-C<sub>3</sub>N<sub>4</sub>) via Pt loading with improved daylight-induced photocatalytic reduction of carbon dioxide to methane. Dalton Transactions, 2015, 44, 1249-1257. | 3.3 | 307 |

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| 19 | Conversion of the greenhouse gas CO2 to the fuel gas CO via the Boudouard reaction: A review. Renewable and Sustainable Energy Reviews, 2015, 41, 615-632. | 16.4 | 295 |
| 20 | Current status and challenges on microalgae-based carbon capture. International Journal of Greenhouse Gas Control, 2012, 10, 456-469. | 4.6 | 293 |
| 21 | Mechanisms of graphene growth by chemical vapour deposition on transition metals. Carbon, 2014, 70, 1-21. | 10.3 | 284 |
| 22 | Heterostructured AgX/g-C3N4 (X = Cl and Br) nanocomposites via a sonication-assisted deposition-precipitation approach: Emerging role of halide ions in the synergistic photocatalytic reduction of carbon dioxide. Applied Catalysis B: Environmental, 2016, 180, 530-543. | 20.2 | 277 |
| 23 | The synthesis and characterization of high purity mixed microporous/mesoporous activated carbon from rice husk using chemical activation with NaOH and KOH. Microporous and Mesoporous Materials, 2014, 197, 316-323. | 4.4 | 267 |
| 24 | Review of the synthesis, transfer, characterization and growth mechanisms of single and multilayer graphene. RSC Advances, 2017, 7, 15644-15693. | 3.6 | 263 |
| 25 | Oxygen vacancy induced Bi<sub>2</sub>WO<sub>6</sub> for the realization of photocatalytic CO<sub>2</sub> reduction over the full solar spectrum: from the UV to the NIR region. Chemical Communications, 2016, 52, 14242-14245. | 4.1 | 248 |
| 26 | Potential of hydrogen from oil palm biomass as a source of renewable energy worldwide. Energy Policy, 2007, 35, 5692-5701. | 8.8 | 243 |
| 27 | Self-assembly of nitrogen-doped TiO2 with exposed {001} facets on a graphene scaffold as photo-active hybrid nanostructures for reduction of carbon dioxide to methane. Nano Research, 2014, 7, 1528-1547. | 10.4 | 236 |
| 28 | Synthesis and Applications of Grapheneâ€Based TiO<sub>2</sub> Photocatalysts. ChemSusChem, 2012, 5, 1868-1882. | 6.8 | 226 |
| 29 | Preparation of carbon molecular sieve from lignocellulosic biomass: A review. Renewable and Sustainable Energy Reviews, 2010, 14, 1591-1599. | 16.4 | 221 |
| 30 | Lithiumâ€“Sulfur Battery Cathode Design: Tailoring Metalâ€Based Nanostructures for Robust Polysulfide Adsorption and Catalytic Conversion. Advanced Materials, 2021, 33, e2008654. | 21.0 | 217 |
| 31 | Bioconversion of synthesis gas to second generation biofuels: A review. Renewable and Sustainable Energy Reviews, 2011, 15, 4255-4273. | 16.4 | 215 |
| 32 | CO2 gasification reactivity of biomass char: Catalytic influence of alkali, alkaline earth and transition metal salts. Bioresource Technology, 2013, 144, 288-295. | 9.6 | 213 |
| 33 | Effective steering of charge flow through synergistic inducing oxygen vacancy defects and p-n heterojunctions in 2D/2D surface-engineered Bi2WO6/BiOI cascade: Towards superior photocatalytic CO2 reduction activity. Chemical Engineering Journal, 2019, 372, 1183-1193. | 12.7 | 210 |
| 34 | Malaysian palm oil: Surviving the food versus fuel dispute for a sustainable future. Renewable and Sustainable Energy Reviews, 2009, 13, 1456-1464. | 16.4 | 208 |
| 35 | Sub-5 nm Ultra-Fine FeP Nanodots as Efficient Co-Catalysts Modified Porous g-C<sub>3</sub>N<sub>4</sub> for Precious-Metal-Free Photocatalytic Hydrogen Evolution under Visible Light. ACS Applied Materials & Interfaces, 2019, 11, 5651-5660. | 8.0 | 208 |
| 36 | Ethanol and acetate production from synthesis gas via fermentation processes using anaerobic bacterium, Clostridium ljungdahlii. Biochemical Engineering Journal, 2005, 27, 110-119. | 3.6 | 199 |

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| 37 | Noble metal modified reduced graphene oxide/TiO2 ternary nanostructures for efficient visible-light-driven photoreduction of carbon dioxide into methane. Applied Catalysis B: Environmental, 2015, 166-167, 251-259. | 20.2 | 196 |
| 38 | Ni<sub>12</sub>P<sub>5</sub> nanoparticles embedded into porous g-C<sub>3</sub>N<sub>4</sub> nanosheets as a noble-metal-free hetero-structure photocatalyst for efficient H<sub>2</sub> production under visible light. Journal of Materials Chemistry A, 2017, 5, 16171-16178. | 10.3 | 183 |
| 39 | A review on photocatalytic application of g-C3N4/semiconductor (CNS) nanocomposites towards the erasure of dyeing wastewater. Materials Science in Semiconductor Processing, 2016, 47, 62-84. | 4.0 | 178 |
| 40 | Energy for sustainable development in Malaysia: Energy policy and alternative energy. Energy Policy, 2006, 34, 2388-2397. | 8.8 | 177 |
| 41 | Recent development in catalytic technologies for methanol synthesis from renewable sources: A critical review. Renewable and Sustainable Energy Reviews, 2015, 44, 508-518. | 16.4 | 175 |
| 42 | Global warming mitigation and renewable energy policy development from the Kyoto Protocol to the Copenhagen Accordâ€"A comment. Renewable and Sustainable Energy Reviews, 2012, 16, 5280-5284. | 16.4 | 174 |
| 43 | Performance of photocatalytic reactors using immobilized TiO2 film for the degradation of phenol and methylene blue dye present in water stream. Chemosphere, 2004, 57, 547-554. | 8.2 | 168 |
| 44 | Sulfated tin oxide as solid superacid catalyst for transesterification of waste cooking oil: An optimization study. Applied Catalysis B: Environmental, 2009, 93, 134-139. | 20.2 | 168 |
| 45 | Life cycle evaluation of microalgae biofuels production: Effect of cultivation system on energy, carbon emission and cost balance analysis. Science of the Total Environment, 2019, 688, 112-128. | 8.0 | 162 |
| 46 | A review on the formation of titania nanotube photocatalysts by hydrothermal treatment. Journal of Environmental Management, 2011, 92, 1669-1680. | 7.8 | 161 |
| 47 | Unravelling the electrochemical mechanisms for nitrogen fixation on single transition metal atoms embedded in defective graphitic carbon nitride. Journal of Materials Chemistry A, 2018, 6, 21941-21948. | 10.3 | 161 |
| 48 | High photoluminescence quantum yield of 18.7% by using nitrogen-doped Ti<sub>3</sub>C<sub>2</sub> MXene quantum dots. Journal of Materials Chemistry C, 2018, 6, 6360-6369. | 5.5 | 159 |
| 49 | Direct growth of carbon nanotubes on Ni/TiO2 as next generation catalysts for photoreduction of CO2 to methane by water under visible light irradiation. RSC Advances, 2013, 3, 4505. | 3.6 | 157 |
| 50 | Deoxygenation of fatty acid to produce diesel-like hydrocarbons: A review of process conditions, reaction kinetics and mechanism. Renewable and Sustainable Energy Reviews, 2015, 42, 1223-1233. | 16.4 | 154 |
| 51 | A newly emerging visible light-responsive BiFeO 3 perovskite for photocatalytic applications: A mini review. Materials Research Bulletin, 2017, 90, 15-30. | 5.2 | 151 |
| 52 | Conventional processes and membrane technology for carbon dioxide removal from natural gas: A review. Journal of Natural Gas Chemistry, 2012, 21, 282-298. | 1.8 | 150 |
| 53 | Sunlight photocatalytic activity enhancement and mechanism of novel europium-doped ZnO hierarchical micro/nanospheres for degradation of phenol. Applied Catalysis B: Environmental, 2014, 148-149, 258-268. | 20.2 | 150 |
| 54 | Visible-light-active oxygen-rich TiO2 decorated 2D graphene oxide with enhanced photocatalytic activity toward carbon dioxide reduction. Applied Catalysis B: Environmental, 2015, 179, 160-170. | 20.2 | 149 |

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| 55 | Liquid hydrocarbon fuels from palm oil by catalytic cracking over aluminosilicate mesoporous catalysts with various Si/Al ratios. Microporous and Mesoporous Materials, 2003, 64, 95-107. | 4.4 | 144 |
| 56 | Preparation and photocatalytic properties of visible light-driven samarium-doped ZnO nanorods. Ceramics International, 2013, 39, 5833-5843. | 4.8 | 144 |
| 57 | Removal of Rhodamine B from Aqueous Solution Using Palm Shell-Based Activated Carbon: Adsorption and Kinetic Studies. Journal of Chemical & Engineering Data, 2010, 55, 5777-5785. | 1.9 | 143 |
| 58 | Engineering nanoscale pâ€“n junction via the synergetic dual-doping of p-type boron-doped graphene hybridized with n-type oxygen-doped carbon nitride for enhanced photocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2018, 6, 3181-3194. | 10.3 | 143 |
| 59 | Photocatalytic reduction of CO 2 with H 2 O over graphene oxide-supported oxygen-rich TiO 2 hybrid photocatalyst under visible light irradiation: Process and kinetic studies. Chemical Engineering Journal, 2017, 308, 248-255. | 12.7 | 141 |
| 60 | Hierarchical ZnIn<sub>2</sub>S<sub>4</sub>/MoSe<sub>2</sub> Nanoarchitectures for Efficient Nobleâ€Metalâ€Free Photocatalytic Hydrogen Evolution under Visible Light. ChemSusChem, 2017, 10, 4624-4631. | 6.8 | 140 |
| 61 | A glycerol-free process to produce biodiesel by supercritical methyl acetate technology: An optimization study via Response Surface Methodology. Bioresource Technology, 2010, 101, 965-969. | 9.6 | 139 |
| 62 | Pointâ€Defect Engineering: Leveraging Imperfections in Graphitic Carbon Nitride (gâ€C<sub>3</sub>N<sub>4</sub>) Photocatalysts toward Artificial Photosynthesis. Small, 2021, 17, e2006851. | 10.0 | 139 |
| 63 | Algae biorefinery: Review on a broad spectrum of downstream processes and products. Bioresource Technology, 2019, 292, 121964. | 9.6 | 138 |
| 64 | Heterogeneous catalysts for production of chemicals using carbon dioxide as raw material: A review. Renewable and Sustainable Energy Reviews, 2012, 16, 4951-4964. | 16.4 | 137 |
| 65 | Post-combustion carbon dioxide capture: Evolution towards utilization of nanomaterials. Renewable and Sustainable Energy Reviews, 2012, 16, 2599-2609. | 16.4 | 137 |
| 66 | All-solid-state direct Z-scheme NiTiO<sub>3</sub>/Cd<sub>0.5</sub>Zn<sub>0.5</sub>S heterostructures for photocatalytic hydrogen evolution with visible light. Journal of Materials Chemistry A, 2021, 9, 10270-10276. | 10.3 | 136 |
| 67 | Harnessing Visâ€NIR broad spectrum for photocatalytic CO2 reduction over carbon quantum dots-decorated ultrathin Bi2WO6 nanosheets. Nano Research, 2017, 10, 1720-1731. | 10.4 | 135 |
| 68 | Synthesis of aligned carbon nanotubes. Carbon, 2011, 49, 4613-4635. | 10.3 | 133 |
| 69 | Sub-2 nm Pt-decorated Zn0.5Cd0.5S nanocrystals with twin-induced homojunctions for efficient visible-light-driven photocatalytic H2 evolution. Applied Catalysis B: Environmental, 2018, 224, 360-367. | 20.2 | 133 |
| 70 | Single atom-supported MXene: how single-atomic-site catalysts tune the high activity and selectivity of electrochemical nitrogen fixation. Journal of Materials Chemistry A, 2019, 7, 27620-27631. | 10.3 | 133 |
| 71 | Role of energy policy in renewable energy accomplishment: The case of second-generation bioethanol. Energy Policy, 2008, 36, 3360-3365. | 8.8 | 132 |
| 72 | Heteroatom Nitrogen- and Boron-Doping as a Facile Strategy to Improve Photocatalytic Activity of Standalone Reduced Graphene Oxide in Hydrogen Evolution. ACS Applied Materials & Interfaces, 2017, 9, 4558-4569. | 8.0 | 128 |

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| 73 | Energy and environmental applications of carbon nanotubes. Environmental Chemistry Letters, 2012, 10, 265-273. | 16.2 | 125 |
| 74 | Rational Design of Carbonâ€Based 2D Nanostructures for Enhanced Photocatalytic CO<sub>2</sub>Reduction: A Dimensionality Perspective. Chemistry - A European Journal, 2020, 26, 9710-9748. | 3.3 | 125 |
| 75 | Pretreatment of lignocellulosic palm biomass using a solvent-ionic liquid [BMIM]Cl for glucose recovery: An optimisation study using response surface methodology. Carbohydrate Polymers, 2011, 83, 1862-1868. | 10.2 | 124 |
| 76 | Effects of free fatty acids, water content and co-solvent on biodiesel production by supercritical methanol reaction. Journal of Supercritical Fluids, 2010, 53, 88-91. | 3.2 | 122 |
| 77 | Current status of ceramic-based membranes for oxygen separation from air. Advances in Colloid and Interface Science, 2010, 160, 88-100. | 14.7 | 122 |
| 78 | Sub/supercritical liquefaction of oil palm fruit press fiber for the production of bio-oil: Effect of solvents. Bioresource Technology, 2010, 101, 7641-7647. | 9.6 | 120 |
| 79 | Oxygenâ€Deficient BiOBr as a Highly Stable Photocatalyst for Efficient CO<sub>2</sub> Reduction into Renewable Carbonâ€Neutral Fuels. ChemCatChem, 2016, 8, 3074-3081. | 3.7 | 120 |
| 80 | Synthesis of composite material MCM-41/Beta and its catalytic performance in waste used palm oil cracking. Applied Catalysis A: General, 2004, 274, 15-23. | 4.3 | 116 |
| 81 | Algae biopolymer towards sustainable circular economy. Bioresource Technology, 2021, 325, 124702. | 9.6 | 112 |
| 82 | Oxidative coupling of methane (OCM) in a catalytic membrane reactor and comparison of its performance with other catalytic reactors. Chemical Engineering Journal, 2009, 148, 525-532. | 12.7 | 111 |
| 83 | Sustainable ethanol fermentation from synthesis gas by Clostridium ljungdahlii in a continuous stirred tank bioreactor. Journal of Chemical Technology and Biotechnology, 2012, 87, 837-843. | 3.2 | 110 |
| 84 | Degrading Endocrine Disrupting Chemicals from Wastewater by Photocatalysis: A Review. International Journal of Photoenergy, 2012, 2012, 1-23. | 2.5 | 109 |
| 85 | Preparation of rare earth-doped ZnO hierarchical micro/nanospheres and their enhanced photocatalytic activity under visible light irradiation. Ceramics International, 2014, 40, 5431-5440. | 4.8 | 109 |
| 86 | Enhanced sunlight photocatalytic performance over Nb2O5/ZnO nanorod composites and the mechanism study. Applied Catalysis A: General, 2014, 471, 126-135. | 4.3 | 108 |
| 87 | Study of adsorbent prepared from oil palm ash (OPA) for flue gas desulfurization. Separation and Purification Technology, 2005, 45, 50-60. | 7.9 | 106 |
| 88 | A comparative study on the energy policies in Japan and Malaysia in fulfilling their nationsâ€™ obligations towards the Kyoto Protocol. Energy Policy, 2009, 37, 4771-4778. | 8.8 | 105 |
| 89 | Photocatalytic performance of novel samarium-doped spherical-like ZnO hierarchical nanostructures under visible light irradiation for 2,4-dichlorophenol degradation. Journal of Colloid and Interface Science, 2013, 401, 40-49. | 9.4 | 104 |
| 90 | Catalytic conversion of palm oil-based fatty acid mixture to liquid fuel. Biomass and Bioenergy, 2004, 27, 477-484. | 5.7 | 100 |

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| 91 | Life cycle assessment for the production of biodiesel: A case study in Malaysia for palm oil versus jatropha oil. Biofuels, Bioproducts and Biorefining, 2009, 3, 601-612. | 3.7 | 97 |
| 92 | Enhanced visible light responsive MWCNT/TiO2 coreâ€“shell nanocomposites as the potential photocatalyst for reduction of CO2 into methane. Solar Energy Materials and Solar Cells, 2014, 122, 183-189. | 6.2 | 97 |
| 93 | Catalytic conversion of palm oil over mesoporous aluminosilicate MCM-41 for the production of liquid hydrocarbon fuels. Fuel Processing Technology, 2003, 84, 105-120. | 7.2 | 96 |
| 94 | Sunlight responsive WO 3 /ZnO nanorods for photocatalytic degradation and mineralization of chlorinated phenoxyacetic acid herbicides in water. Journal of Colloid and Interface Science, 2015, 450, 34-44. | 9.4 | 94 |
| 95 | 2D/2D Heterostructured Photocatalysts: An Emerging Platform for Artificial Photosynthesis. Solar Rrl, 2020, 4, 2000132. | 5.8 | 94 |
| 96 | An Overview on the Photocatalytic Activity of Nano-Doped-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>TiO</mml:mtext><mml:mn mathvariant="bold">2</mml:mn></mml:msub></mml:math> in the Degradation of Organic Pollutants. ISRN Materials Science, 2011, 2011, 1-18. | 1.0 | 94 |
| 97 | Biohydrogen production in a continuous stirred tank bioreactor from synthesis gas by anaerobic photosynthetic bacterium: Rhodopirillum rubrum. Bioresource Technology, 2008, 99, 2612-2619. | 9.6 | 93 |
| 98 | Tailorâ€Engineered 2D Cocatalysts: Harnessing Electronâ€“Hole Redox Center of 2D gâ€C<sub>3</sub>N<sub>4</sub> Photocatalysts toward Solarâ€toâ€Chemical Conversion and Environmental Purification. Advanced Functional Materials, 2022, 32, . | 14.9 | 93 |
| 99 | Z-scheme heterojunction nanocomposite fabricated by decorating magnetic MnFe2O4 nanoparticles on BiOBr nanosheets for enhanced visible light photocatalytic degradation of 2,4-dichlorophenoxyacetic acid and Rhodamine B. Separation and Purification Technology, 2020, 250, 117186. | 7.9 | 92 |
| 100 | Multi-walled carbon nanotubes modified with (3-aminopropyl)triethoxysilane for effective carbon dioxide adsorption. International Journal of Greenhouse Gas Control, 2013, 14, 65-73. | 4.6 | 91 |
| 101 | Characteristics of supported nano-TiO2/ZSM-5/silica gel (SNTZS): Photocatalytic degradation of phenol. Journal of Hazardous Materials, 2010, 174, 299-306. | 12.4 | 90 |
| 102 | An overview on global warming in Southeast Asia: CO 2 emission status, efforts done, and barriers. Renewable and Sustainable Energy Reviews, 2013, 28, 71-81. | 16.4 | 90 |
| 103 | Band gap engineered, oxygen-rich TiO2 for visible light induced photocatalytic reduction of CO2. Chemical Communications, 2014, 50, 6923. | 4.1 | 90 |
| 104 | An optimized study of methanol and ethanol in supercritical alcohol technology for biodiesel production. Journal of Supercritical Fluids, 2010, 53, 82-87. | 3.2 | 89 |
| 105 | Production of FAME by palm oil transesterification via supercritical methanol technology. Biomass and Bioenergy, 2009, 33, 1096-1099. | 5.7 | 88 |
| 106 | Insights into the Electrocatalytic Hydrogen Evolution Reaction Mechanism on Twoâ€Dimensional Transitionâ€Metal Carbonitrides (MXene). Chemistry - A European Journal, 2018, 24, 18479-18486. | 3.3 | 87 |
| 107 | Simultaneous generation of oxygen vacancies on ultrathin BiOBr nanosheets during visible-light-driven CO2 photoreduction evoked superior activity and long-term stability. Catalysis Today, 2018, 314, 20-27. | 4.4 | 86 |
| 108 | CoS2 engulfed ultra-thin S-doped g-C3N4 and its enhanced electrochemical performance in hybrid asymmetric supercapacitor. Journal of Colloid and Interface Science, 2021, 584, 204-215. | 9.4 | 84 |

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| 109 | Green synthesis of Fe-ZnO nanoparticles with improved sunlight photocatalytic performance for polyethylene film deterioration and bacterial inactivation. Materials Science in Semiconductor Processing, 2021, 123, 105574. | 4.0 | 84 |
| 110 | Midgap-state-mediated two-step photoexcitation in nitrogen defect-modified g-C<sub>3</sub>N<sub>4</sub> atomic layers for superior photocatalytic CO<sub>2</sub> reduction. Catalysis Science and Technology, 2019, 9, 2335-2343. | 4.1 | 83 |
| 111 | Microalgae Cultivation in Palm Oil Mill Effluent (POME) Treatment and Biofuel Production. Sustainability, 2021, 13, 3247. | 3.2 | 83 |
| 112 | Co-gasification of tire and biomass for enhancement of tire-char reactivity in CO2 gasification process. Bioresource Technology, 2013, 138, 124-130. | 9.6 | 82 |
| 113 | Magnetic NiFe2O4 nanoparticles decorated on N-doped BiOBr nanosheets for expeditious visible light photocatalytic phenol degradation and hexavalent chromium reduction via a Z-scheme heterojunction mechanism. Applied Surface Science, 2021, 559, 149966. | 6.1 | 82 |
| 114 | Catalytic Conversion of Fatty Acids Mixture to Liquid Fuel and Chemicals over Composite Microporous/Mesoporous Catalysts. Energy & Fuels, 2005, 19, 736-743. | 5.1 | 81 |
| 115 | Investigation on visible-light photocatalytic degradation of 2,4-dichlorophenoxyacetic acid in the presence of MoO3/ZnO nanorod composites. Journal of Molecular Catalysis A, 2013, 370, 123-131. | 4.8 | 80 |
| 116 | Enhanced Daylight-Induced Photocatalytic Activity of Solvent Exfoliated Graphene (SEG)/ZnO Hybrid Nanocomposites toward Degradation of Reactive Black 5. Industrial & Engineering Chemistry Research, 2014, 53, 17333-17344. | 3.7 | 79 |
| 117 | Microwave-enhanced CO2 gasification of oil palm shell char. Bioresource Technology, 2014, 158, 193-200. | 9.6 | 79 |
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| 120 | Parameter effect on photocatalytic degradation of phenol using TiO2-P25/activated carbon (AC). Korean Journal of Chemical Engineering, 2010, 27, 1109-1116. | 2.7 | 77 |
| 121 | Preparation of cerium-doped ZnO hierarchical micro/nanospheres with enhanced photocatalytic performance for phenol degradation under visible light. Journal of Molecular Catalysis A, 2015, 409, 1-10. | 4.8 | 77 |
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| 123 | Transition metal oxide loaded ZnO nanorods: Preparation, characterization and their UVâ€“vis photocatalytic activities. Separation and Purification Technology, 2014, 132, 378-387. | 7.9 | 76 |
| 124 | Kinetic Studies on Catalytic Decomposition of Methane to Hydrogen and Carbon over Ni/TiO2Catalyst. Industrial & Engineering Chemistry Research, 2004, 43, 4864-4870. | 3.7 | 75 |
| 125 | Visible light responsive TiO 2 nanoparticles modified using Ce and La for photocatalytic reduction of CO 2 : Effect of Ce dopant content. Applied Catalysis A: General, 2017, 537, 111-120. | 4.3 | 75 |
| 126 | Overview on catalytic deoxygenation for biofuel synthesis using metal oxide supported catalysts. Renewable and Sustainable Energy Reviews, 2019, 112, 834-852. | 16.4 | 75 |

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| 128 | An overview on conversion technologies to produce value added products from CH4 and CO2 as major biogas constituents. Renewable and Sustainable Energy Reviews, 2018, 98, 56-63. | 16.4 | 74 |
| 129 | Catalytic conversion of palm oil to fuels and chemicals. Canadian Journal of Chemical Engineering, 1999, 77, 156-162. | 1.7 | 73 |
| 130 | Subcritical water liquefaction of oil palm fruit press fiber for the production of bio-oil: Effect of catalysts. Bioresource Technology, 2010, 101, 745-751. | 9.6 | 73 |
| 131 | Synthesis of monoglyceride through glycerol esterification with lauric acid over propyl sulfonic acid post-synthesis functionalized SBA-15 mesoporous catalyst. Chemical Engineering Journal, 2011, 174, 668-676. | 12.7 | 73 |
| 132 | One-pot synthesis of Ag-MWCNT@TiO2 coreâ€“shell nanocomposites for photocatalytic reduction of CO2 with water under visible light irradiation. Chemical Engineering Journal, 2015, 278, 272-278. | 12.7 | 72 |
| 133 | Surface decorated coral-like magnetic BiFeO3 with Au nanoparticles for effective sunlight photodegradation of 2,4-D and E. coli inactivation. Journal of Molecular Liquids, 2021, 326, 115372. | 4.9 | 71 |
| 134 | Recent development and economic analysis of glycerol-free processes via supercritical fluid transesterification for biodiesel production. Renewable and Sustainable Energy Reviews, 2014, 31, 61-70. | 16.4 | 69 |
| 135 | Co‹sub›2‹/sub›P Nanorods as an Efficient Cocatalyst Decorated Porous gâ€‹‹sub›3‹/sub›N‹sub›4‹/sub› Nanosheets for Photocatalytic Hydrogen Production under Visible Light Irradiation. Particle and Particle Systems Characterization, 2018, 35, 1700251. | 2.3 | 69 |
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