

Siang-Piao Chai

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

177
papers

13,688
citations

52
h-index

115
g-index

185
ext. papers

16,043
ext. citations

7.3
avg, IF

7.14
L-index

| # | Paper | IF | Citations |
|-----|--|------|-----------|
| 177 | Synergistic effects of the hybridization between boron-doped carbon quantum dots and n/n-type g-CN homojunction for boosted visible-light photocatalytic activity.. <i>Environmental Science and Pollution Research</i> , 2022 , 1 | 5.1 | 1 |
| 176 | Insights from density functional theory calculations on heteroatom P-doped ZnInS bilayer nanosheets with atomic-level charge steering for photocatalytic water splitting.. <i>Scientific Reports</i> , 2022 , 12, 1927 | 4.9 | 1 |
| 175 | MXene-A New Paradigm Toward Artificial Nitrogen Fixation for Sustainable Ammonia Generation: Synthesis, Properties, and Future Outlook 2022 , 4, 212-245 | | 3 |
| 174 | Recent Advances in Nanoscale Engineering of Ternary Metal Sulfide-Based Heterostructures for Photocatalytic Water Splitting Applications. <i>Energy & Fuels</i> , 2022 , 36, 4250-4267 | 4.1 | 2 |
| 173 | Allotropes selection apropos of photocatalytic CO2 reduction from first principles studies. <i>Materials Today Physics</i> , 2022 , 100751 | 8 | 0 |
| 172 | Photo-Driven Reduction of Carbon Dioxide: A Sustainable Approach Towards Achieving Carbon Neutrality Goal. <i>Frontiers in Chemical Engineering</i> , 2021 , 3, | 1 | 1 |
| 171 | Atomistic Insights into the Reformation of CH4 with CO2 on Metal-Free gC3N4: Unraveling the Reaction Mechanisms Using First-Principles DFT Calculations. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 23021-23028 | 3.8 | 1 |
| 170 | Reactors, Fundamentals, and Engineering Aspects for Photocatalytic and Photoelectrochemical Systems 2021 , 419-447 | | |
| 169 | Metal-Organic Framework Decorated Cuprous Oxide Nanowires for Long-lived Charges Applied in Selective Photocatalytic CO Reduction to CH. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 8455-8459 | 16.4 | 57 |
| 168 | A Synergistic Combination of P-doped Zn0.5Cd0.5S and CoP for Dual-Stage Electron Trapping and Its Application in Seawater Splitting. <i>Solar Rrl</i> , 2021 , 5, 2100016 | 7.1 | 2 |
| 167 | Metal-free n/n-junctioned graphitic carbon nitride (g-CN): a study to elucidate its charge transfer mechanism and application for environmental remediation. <i>Environmental Science and Pollution Research</i> , 2021 , 28, 4388-4403 | 5.1 | 8 |
| 166 | Z-scheme photocatalyst sheets with P-doped twinned Zn0.5Cd0.5S1-x and Bi4NbO8Cl connected by carbon electron mediator for overall water splitting under ambient condition. <i>Chemical Engineering Journal</i> , 2021 , 404, 127030 | 14.7 | 15 |
| 165 | Proton-Functionalized Graphitic Carbon Nitride for Efficient Metal-Free Destruction of Escherichia coli under Low-Power Light Irradiation. <i>Chemistry - A European Journal</i> , 2021 , 27, 3085-3090 | 4.8 | 4 |
| 164 | Broadening cognizance on atomically thin photocatalysts. <i>Materials Today</i> , 2021 , 43, 198-212 | 21.8 | 7 |
| 163 | Metal-Organic Framework Decorated Cuprous Oxide Nanowires for Long-lived Charges Applied in Selective Photocatalytic CO2 Reduction to CH4. <i>Angewandte Chemie</i> , 2021 , 133, 8536-8540 | 3.6 | 3 |
| 162 | Heterojunction photocatalysts for artificial nitrogen fixation: fundamentals, latest advances and future perspectives. <i>Nanoscale</i> , 2021 , 13, 7011-7033 | 7.7 | 18 |
| 161 | Red Phosphorus: An Up-and-Coming Photocatalyst on the Horizon for Sustainable Energy Development and Environmental Remediation.. <i>Chemical Reviews</i> , 2021 , | 68.1 | 9 |

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| 160 | Topotactic Transformation of Bismuth Oxybromide into Bismuth Tungstate: Bandgap Modulation of Single-Crystalline {001}-Faceted Nanosheets for Enhanced Photocatalytic CO Reduction. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 26991-27000 | 9.5 | 29 |
| 159 | Tuning the electronic band structure of graphitic carbon nitride by breaking intramolecular bonds: A simple and effective approach for enhanced photocatalytic hydrogen production. <i>Applied Surface Science</i> , 2020 , 529, 146600 | 6.7 | 3 |
| 158 | Recent advances in homojunction-based photocatalysis for sustainable environmental remediation and clean energy generation. <i>Applied Materials Today</i> , 2020 , 20, 100741 | 6.6 | 10 |
| 157 | Z-Scheme Photocatalytic Systems for Solar Water Splitting. <i>Advanced Science</i> , 2020 , 7, 1903171 | 13.6 | 140 |
| 156 | Highly-efficient photocatalytic disinfection of Escherichia coli by copper-doped molybdenum disulfide/bismuth sulfide under low-powered visible light irradiation. <i>Catalysis Communications</i> , 2020 , 140, 106003 | 3.2 | 9 |
| 155 | Insights on the impact of doping levels in oxygen-doped gC3N4 and its effects on photocatalytic activity. <i>Applied Surface Science</i> , 2020 , 504, 144427 | 6.7 | 35 |
| 154 | Interfacial engineering of a zinc blende/wurtzite homojunction photocatalyst through hybridization with a cobalt phosphide co-catalyst for enhanced visible-light-driven photocatalytic H2 evolution. <i>Sustainable Energy and Fuels</i> , 2020 , 4, 1822-1827 | 5.8 | 3 |
| 153 | An insight into perovskite-based photocatalysts for artificial photosynthesis. <i>Sustainable Energy and Fuels</i> , 2020 , 4, 973-984 | 5.8 | 25 |
| 152 | Energy level tuning of CdSe colloidal quantum dots in ternary 0D-2D-2D CdSe QD/B-rGO/O-gC3N4 as photocatalysts for enhanced hydrogen generation. <i>Applied Catalysis B: Environmental</i> , 2020 , 265, 118592 | 21.8 | 25 |
| 151 | Nitrogen-doped carbon quantum dots-decorated 2D graphitic carbon nitride as a promising photocatalyst for environmental remediation: A study on the importance of hybridization approach. <i>Journal of Environmental Management</i> , 2020 , 255, 109936 | 7.9 | 23 |
| 150 | Overall pure water splitting using one-dimensional P-doped twinned Zn0.5Cd0.5S1-x nanorods via synergetic combination of long-range ordered homojunctions and interstitial S vacancies with prolonged carrier lifetime. <i>Applied Catalysis B: Environmental</i> , 2020 , 262, 118309 | 21.8 | 23 |
| 149 | Recent progress in two-dimensional nanomaterials for photocatalytic carbon dioxide transformation into solar fuels. <i>Materials Today Sustainability</i> , 2020 , 9, 100037 | 5 | 21 |
| 148 | Electrospun chitosan/polyethylene-oxide (PEO)/halloysites (HAL) membranes for bone regeneration applications. <i>Applied Clay Science</i> , 2020 , 190, 105601 | 5.2 | 31 |
| 147 | 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. <i>Chemical Engineering Journal</i> , 2019 , 372, 1183-1193 | 14.7 | 120 |
| 146 | Engineering surface oxygen defects on tungsten oxide to boost photocatalytic oxygen evolution from water splitting. <i>Chemical Communications</i> , 2019 , 55, 6265-6268 | 5.8 | 22 |
| 145 | Midgap-state-mediated two-step photoexcitation in nitrogen defect-modified g-C3N4 atomic layers for superior photocatalytic CO2 reduction. <i>Catalysis Science and Technology</i> , 2019 , 9, 2335-2343 | 5.5 | 42 |
| 144 | Fabrication of Bi2WO6/Cu/WO3 All-Solid-State Z-Scheme Composite Photocatalyst to Improve CO2 Photoreduction under Visible Light Irradiation. <i>ChemCatChem</i> , 2019 , 11, 6431-6438 | 5.2 | 38 |
| 143 | 2020 Roadmap on two-dimensional nanomaterials for environmental catalysis. <i>Chinese Chemical Letters</i> , 2019 , 30, 2065-2088 | 8.1 | 72 |

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| 142 | Energy Band Gap Modulation in Nd-Doped BiFeO/SrRuO Heteroepitaxy for Visible Light Photoelectrochemical Activity. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 1655-1664 | 9.5 | 12 |
| 141 | Molybdenum disulfide quantum dots decorated bismuth sulfide as a superior noble-metal-free photocatalyst for hydrogen evolution through harnessing a broad solar spectrum. <i>Applied Catalysis B: Environmental</i> , 2018 , 232, 117-123 | 21.8 | 22 |
| 140 | Simultaneous generation of oxygen vacancies on ultrathin BiOBr nanosheets during visible-light-driven CO ₂ photoreduction evoked superior activity and long-term stability. <i>Catalysis Today</i> , 2018 , 314, 20-27 | 5.3 | 57 |
| 139 | Tailoring the properties of oxygenated graphene with different oxidation degrees for noble-metal-free photocatalytic hydrogen evolution. <i>Catalysis Today</i> , 2018 , 315, 93-102 | 5.3 | 13 |
| 138 | Tunable Spectrum Selectivity for Multiphoton Absorption with Enhanced Visible Light Trapping in ZnO Nanorods. <i>Small</i> , 2018 , 14, e1704053 | 11 | 13 |
| 137 | A novel repeated self-healing epoxy composite with alginate multicore microcapsules. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 8470-8478 | 13 | 60 |
| 136 | Engineering nanoscale p-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. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 3181-3194 | 13 | 95 |
| 135 | Carbon dioxide hydrogenation to methanol over multi-functional catalyst: Effects of reactants adsorption and metal-oxide(s) interfacial area. <i>Journal of Industrial and Engineering Chemistry</i> , 2018 , 62, 156-165 | 6.3 | 29 |
| 134 | The morphological impact of siliceous porous carriers on copper-catalysts for selective direct CO ₂ hydrogenation to methanol. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 9334-9342 | 6.7 | 23 |
| 133 | Sub-2 nm Pt-decorated Zn _{0.5} Cd _{0.5} S nanocrystals with twin-induced homojunctions for efficient visible-light-driven photocatalytic H ₂ evolution. <i>Applied Catalysis B: Environmental</i> , 2018 , 224, 360-367 | 21.8 | 90 |
| 132 | Copper-doped flower-like molybdenum disulfide/bismuth sulfide photocatalysts for enhanced solar water splitting. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 748-756 | 6.7 | 37 |
| 131 | A study of water permeation using glycerol as the draw solution with thin film composite membranes in forward osmosis and pressure retarded osmosis configurations 2018 , | | 3 |
| 130 | Surface modified alginate multicore microcapsules and their application in self-healing epoxy coatings for metallic protection. <i>Materials Chemistry and Physics</i> , 2018 , 215, 69-80 | 4.4 | 23 |
| 129 | Transfer of wafer-scale graphene onto arbitrary substrates: steps towards the reuse and recycling of the catalyst. <i>2D Materials</i> , 2018 , 5, 042001 | 5.9 | 6 |
| 128 | Heteroatom Nitrogen- and Boron-Doping as a Facile Strategy to Improve Photocatalytic Activity of Standalone Reduced Graphene Oxide in Hydrogen Evolution. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 4558-4569 | 9.5 | 101 |
| 127 | All-solid-state Z-scheme photocatalyst with carbon nanotubes as an electron mediator for hydrogen evolution under simulated solar light. <i>Chemical Engineering Journal</i> , 2017 , 316, 41-49 | 14.7 | 67 |
| 126 | Harnessing Vis-NIR broad spectrum for photocatalytic CO ₂ reduction over carbon quantum dots-decorated ultrathin Bi ₂ WO ₆ nanosheets. <i>Nano Research</i> , 2017 , 10, 1720-1731 | 10 | 107 |
| 125 | Review of the synthesis, transfer, characterization and growth mechanisms of single and multilayer graphene. <i>RSC Advances</i> , 2017 , 7, 15644-15693 | 3.7 | 193 |

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| 124 | Unravelling charge carrier dynamics in protonated g-C ₃ N ₄ interfaced with carbon nanodots as co-catalysts toward enhanced photocatalytic CO ₂ reduction: A combined experimental and first-principles DFT study. <i>Nano Research</i> , 2017 , 10, 1673-1696 | 10 | 290 |
| 123 | Bismuth sulphide-modified molybdenum disulphide as an efficient photocatalyst for hydrogen production under simulated solar light. <i>Catalysis Communications</i> , 2017 , 98, 66-70 | 3.2 | 16 |
| 122 | Self-Assembled Heteroepitaxial AuNPs/SrTiO ₃ : Influence of AuNPs Size on SrTiO ₃ Band Gap Tuning for Visible Light-Driven Photocatalyst. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 13487-13495 | 3.8 | 13 |
| 121 | Two-dimensional bismuth oxybromide coupled with molybdenum disulphide for enhanced dye degradation using low power energy-saving light bulb. <i>Journal of Environmental Management</i> , 2017 , 197, 63-69 | 7.9 | 18 |
| 120 | Photocatalytic degradation of industrial pulp and paper mill effluent using synthesized magnetic FeO-TiO ₂ : Treatment efficiency and characterizations of reused photocatalyst. <i>Journal of Environmental Management</i> , 2017 , 187, 298-310 | 7.9 | 86 |
| 119 | The Impact of Reaction Parameters on Graphene-like Material Synthesized Using Chemical Vapour Deposition. <i>Procedia Engineering</i> , 2017 , 184, 460-468 | | 2 |
| 118 | Using one-step facile and solvent-free mechanochemical process to synthesize photoactive Fe ₂ O ₃ -TiO ₂ for treating industrial wastewater. <i>Journal of Alloys and Compounds</i> , 2017 , 695, 496-507 | 5.7 | 27 |
| 117 | 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. <i>Chemical Engineering Journal</i> , 2017 , 308, 248-255 | 14.7 | 109 |
| 116 | Sequential synthesis of free-standing high quality bilayer graphene from recycled nickel foil. <i>Carbon</i> , 2016 , 96, 268-275 | 10.4 | 25 |
| 115 | Enhancement in the photocatalytic activity of carbon nitride through hybridization with light-sensitive AgCl for carbon dioxide reduction to methane. <i>Catalysis Science and Technology</i> , 2016 , 6, 744-754 | 5.5 | 45 |
| 114 | Visible-light-activated oxygen-rich TiO ₂ as next generation photocatalyst: Importance of annealing temperature on the photoactivity toward reduction of carbon dioxide. <i>Chemical Engineering Journal</i> , 2016 , 283, 1254-1263 | 14.7 | 57 |
| 113 | Heterostructured AgX/g-C ₃ N ₄ (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. <i>Applied Catalysis B: Environmental</i> , 2016 , 180, 530-543 | 21.8 | 232 |
| 112 | Oxygen vacancy induced BiWO ₄ for the realization of photocatalytic CO reduction over the full solar spectrum: from the UV to the NIR region. <i>Chemical Communications</i> , 2016 , 52, 14242-14245 | 5.8 | 157 |
| 111 | Electrosprayed Multi-Core Alginate Microcapsules as Novel Self-Healing Containers. <i>Scientific Reports</i> , 2016 , 6, 34674 | 4.9 | 30 |
| 110 | Mechanisms of graphene fabrication through plasma-induced layer-by-layer thinning. <i>Carbon</i> , 2016 , 105, 496-509 | 10.4 | 20 |
| 109 | Influence of the processing methods on the properties of poly(lactic acid)/halloysite nanocomposites. <i>Polymer Composites</i> , 2016 , 37, 861-869 | 3 | 31 |
| 108 | Synthesis of Single-layer Graphene: A Review of Recent Development. <i>Procedia Chemistry</i> , 2016 , 19, 916-921 | | 72 |
| 107 | Graphitic Carbon Nitride (g-C ₃ N ₄)-Based Photocatalysts for Artificial Photosynthesis and Environmental Remediation: Are We a Step Closer To Achieving Sustainability?. <i>Chemical Reviews</i> , 2016 , 116, 7159-329 | 68.1 | 4018 |

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| 106 | Simultaneous growth of monolayer graphene on NiCu bimetallic catalyst by atmospheric pressure CVD process. <i>RSC Advances</i> , 2016 , 6, 41447-41452 | 3.7 | 2 |
| 105 | Graphene oxide: Exploiting its unique properties toward visible-light-driven photocatalysis. <i>Applied Materials Today</i> , 2016 , 4, 9-16 | 6.6 | 90 |
| 104 | Oxygen-Deficient BiOBr as a Highly Stable Photocatalyst for Efficient CO ₂ Reduction into Renewable Carbon-Neutral Fuels. <i>ChemCatChem</i> , 2016 , 8, 3074-3081 | 5.2 | 91 |
| 103 | Enhanced Evaporation Strength through Fast Water Permeation in Graphene-Oxide Deposition. <i>Scientific Reports</i> , 2015 , 5, 11896 | 4.9 | 28 |
| 102 | The effects of process parameters on carbon dioxide reforming of methane over CoMoMgO/MWCNTs nanocomposite catalysts. <i>Fuel</i> , 2015 , 158, 129-138 | 7.1 | 27 |
| 101 | A facile method for preparation of self-healing epoxy composites: using electrospun nanofibers as microchannels. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 16005-16012 | 13 | 31 |
| 100 | Preparation of self-supported crystalline merlinoite-type zeolite W membranes through vacuum filtration and crystallization for CO ₂ /CH ₄ separations. <i>New Journal of Chemistry</i> , 2015 , 39, 4135-4140 | 3.6 | 6 |
| 99 | Surface charge modification via protonation of graphitic carbon nitride (g-C ₃ N ₄) for electrostatic self-assembly construction of 2D/2D reduced graphene oxide (rGO)/g-C ₃ N ₄ nanostructures toward enhanced photocatalytic reduction of carbon dioxide to methane. <i>Nano Energy</i> , 2015 , 13, 757-770 | 17.1 | 577 |
| 98 | Heteroatom doped graphene in photocatalysis: A review. <i>Applied Surface Science</i> , 2015 , 358, 2-14 | 6.7 | 239 |
| 97 | Noble metal modified reduced graphene oxide/TiO ₂ ternary nanostructures for efficient visible-light-driven photoreduction of carbon dioxide into methane. <i>Applied Catalysis B: Environmental</i> , 2015 , 166-167, 251-259 | 21.8 | 178 |
| 96 | Graphene oxide as a structure-directing agent for the two-dimensional interface engineering of sandwich-like graphene-g-C ₃ N ₄ hybrid nanostructures with enhanced visible-light photoreduction of CO ₂ to methane. <i>Chemical Communications</i> , 2015 , 51, 858-61 | 5.8 | 328 |
| 95 | Heterojunction engineering of graphitic carbon nitride (g-C ₃ N ₄) via Pt loading with improved daylight-induced photocatalytic reduction of carbon dioxide to methane. <i>Dalton Transactions</i> , 2015 , 44, 1249-57 | 4.3 | 262 |
| 94 | Synthesis of Fe ₃ O ₄ Nanoparticles to Synthesize Bundles of Single-Walled Carbon Nanotubes. <i>Advanced Materials Research</i> , 2015 , 1109, 108-112 | 0.5 | 0 |
| 93 | Visible-light-active oxygen-rich TiO ₂ decorated 2D graphene oxide with enhanced photocatalytic activity toward carbon dioxide reduction. <i>Applied Catalysis B: Environmental</i> , 2015 , 179, 160-170 | 21.8 | 127 |
| 92 | An application of response surface methodology for optimizing coagulation process of raw industrial effluent using <i>Cassia obtusifolia</i> seed gum together with alum. <i>Industrial Crops and Products</i> , 2015 , 70, 107-115 | 5.9 | 54 |
| 91 | Effects of sodium precursors and gelling agents on CO ₂ sorption performance of sodium zirconate. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2015 , 10, n/a-n/a | 1.3 | 2 |
| 90 | Toward high performance epoxy/halloysite nanocomposites: New insights based on rheological, curing, and impact properties. <i>Materials & Design</i> , 2015 , 68, 42-53 | | 46 |
| 89 | One-pot synthesis of Ag-MWCNT@TiO ₂ core-shell nanocomposites for photocatalytic reduction of CO ₂ with water under visible light irradiation. <i>Chemical Engineering Journal</i> , 2015 , 278, 272-278 | 14.7 | 58 |

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| 88 | CO ₂ Photocatalytic Reduction: Photocatalyst Choice and Product Selectivity. <i>Environmental Chemistry for A Sustainable World</i> , 2015 , 71-104 | 0.8 | 4 |
| 87 | Mechanisms of graphene growth by chemical vapour deposition on transition metals. <i>Carbon</i> , 2014 , 70, 1-21 | 10.4 | 243 |
| 86 | Dehydration of glycerin solution using pervaporation: HybSi and polydimethylsiloxane membranes. <i>Journal of Membrane Science</i> , 2014 , 450, 440-446 | 9.6 | 13 |
| 85 | Facet-dependent photocatalytic properties of TiO ₂ (2) -based composites for energy conversion and environmental remediation. <i>ChemSusChem</i> , 2014 , 7, 690-719 | 8.3 | 269 |
| 84 | Phosphorus removal by NF90 membrane: Optimisation using central composite design. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2014 , 45, 1260-1269 | 5.3 | 14 |
| 83 | Synthesis and characterisation of poly (lactic acid)/halloysite bionanocomposite films. <i>Journal of Composite Materials</i> , 2014 , 48, 3705-3717 | 2.7 | 90 |
| 82 | Highly reactive {001} facets of TiO ₂ -based composites: synthesis, formation mechanism and characterization. <i>Nanoscale</i> , 2014 , 6, 1946-2008 | 7.7 | 364 |
| 81 | An overview: synthesis of thin films/membranes of metal organic frameworks and its gas separation performances. <i>RSC Advances</i> , 2014 , 4, 54322-54334 | 3.7 | 52 |
| 80 | Continuous polycrystalline ZIF-8 membrane supported on CO ₂ -selective mixed matrix supports for CO ₂ /CH ₄ separation. <i>RSC Advances</i> , 2014 , 4, 52461-52466 | 3.7 | 13 |
| 79 | Enhanced Daylight-Induced Photocatalytic Activity of Solvent Exfoliated Graphene (SEG)/ZnO Hybrid Nanocomposites toward Degradation of Reactive Black 5. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 17333-17344 | 3.9 | 74 |
| 78 | Band gap engineered, oxygen-rich TiO ₂ for visible light induced photocatalytic reduction of CO ₂ . <i>Chemical Communications</i> , 2014 , 50, 6923-6 | 5.8 | 78 |
| 77 | Visible-light-driven MWCNT@TiO ₂ core-shell nanocomposites and the roles of MWCNTs on the surface chemistry, optical properties and reactivity in CO ₂ photoreduction. <i>RSC Advances</i> , 2014 , 4, 24007-24013 ⁵ | 2.7 | 24013 ⁵ |
| 76 | Modification of MWCNT@TiO ₂ core-shell nanocomposites with transition metal oxide dopants for photoreduction of carbon dioxide into methane. <i>Applied Surface Science</i> , 2014 , 319, 37-43 | 6.7 | 29 |
| 75 | Self-assembly of nitrogen-doped TiO ₂ with exposed {001} facets on a graphene scaffold as photo-active hybrid nanostructures for reduction of carbon dioxide to methane. <i>Nano Research</i> , 2014 , 7, 1528-1547 | 10 | 206 |
| 74 | A comprehensive study on coagulant performance and floc characterization of natural Cassia obtusifolia seed gum in treatment of raw pulp and paper mill effluent. <i>Industrial Crops and Products</i> , 2014 , 61, 317-324 | 5.9 | 79 |
| 73 | An enhanced hybrid membrane of ZIF-8 and zeolite T for CO ₂ /CH ₄ separation. <i>CrystEngComm</i> , 2014 , 16, 3072-3075 | 3.3 | 10 |
| 72 | Development of a hybrid membrane through coupling of high selectivity zeolite T on ZIF-8 intermediate layer and its performance in carbon dioxide and methane gas separation. <i>Microporous and Mesoporous Materials</i> , 2014 , 196, 79-88 | 5.3 | 15 |
| 71 | Direct use of as-synthesized multi-walled carbon nanotubes for carbon dioxide reforming of methane for producing synthesis gas. <i>Chemical Engineering Journal</i> , 2014 , 257, 200-208 | 14.7 | 35 |

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| 70 | Enhanced visible light responsive MWCNT/TiO ₂ core-shell nanocomposites as the potential photocatalyst for reduction of CO ₂ into methane. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 122, 183-189 | 6.4 | 87 |
| 69 | A well inter-grown ZIF-8 membrane synthesized via two-step hydrothermal synthesis on coarse Al ₂ O ₃ support. <i>Materials Letters</i> , 2014 , 129, 162-165 | 3.3 | 9 |
| 68 | Performance studies of phosphorus removal using cross-flow nanofiltration. <i>Desalination and Water Treatment</i> , 2014 , 52, 5974-5982 | | 9 |
| 67 | Combustion-synthesized Nickel-based Catalysts for the Production of Hydrogen from Steam Reforming of Methane. <i>Energy Procedia</i> , 2014 , 61, 910-913 | 2.3 | 2 |
| 66 | The study of reverse osmosis on glycerin solution filtration: Dead-end and crossflow filtrations, transport mechanism, rejection and permeability investigations. <i>Desalination</i> , 2014 , 352, 66-81 | 10.3 | 12 |
| 65 | Synergistic effect of graphene as a co-catalyst for enhanced daylight-induced photocatalytic activity of Zn _{0.5} Cd _{0.5} S synthesized via an improved one-pot co-precipitation-hydrothermal strategy. <i>RSC Advances</i> , 2014 , 4, 59676-59685 | 3.7 | 57 |
| 64 | Pyrolysis of Palm Waste for the Application of Direct Carbon Fuel Cell. <i>Energy Procedia</i> , 2014 , 61, 878-881 | 1.3 | 6 |
| 63 | Synthesis and characterization of graphene and carbon nanotubes: A review on the past and recent developments. <i>Journal of Industrial and Engineering Chemistry</i> , 2014 , 20, 1171-1185 | 6.3 | 248 |
| 62 | Synthesis and performance of microporous inorganic membranes for CO ₂ separation: a review. <i>Journal of Porous Materials</i> , 2013 , 20, 1457-1475 | 2.4 | 28 |
| 61 | Parametric Study of Methane Catalytic CVD into Single-walled Carbon Nanotubes Using Spin-coated Iron Nanoparticles. <i>Chemical Vapor Deposition</i> , 2013 , 19, 53-60 | | 4 |
| 60 | Review of methanol reforming-Cu-based catalysts, surface reaction mechanisms, and reaction schemes. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 9541-9552 | 6.7 | 165 |
| 59 | Effective synthesis of carbon nanotubes via catalytic decomposition of methane: Influence of calcination temperature on metal-support interaction of CoMo/MgO catalyst. <i>Journal of Physics and Chemistry of Solids</i> , 2013 , 74, 1553-1559 | 3.9 | 31 |
| 58 | EVALUATION OF THE EFFECT OF CATALYST TEXTURAL PROPERTIES ON EFFECTIVE SYNTHESIS OF CARBON NANOTUBES. <i>International Journal of Nanoscience</i> , 2013 , 12, 1350030 | 0.6 | |
| 57 | Reduced graphene oxide-TiO ₂ nanocomposite as a promising visible-light-active photocatalyst for the conversion of carbon dioxide. <i>Nanoscale Research Letters</i> , 2013 , 8, 465 | 5 | 268 |
| 56 | Physico-chemical characterisation of chitosan/halloysite composite membranes. <i>Polymer Testing</i> , 2013 , 32, 265-271 | 4.5 | 106 |
| 55 | Effects of Growth Parameters on the Morphology of Aligned Carbon Nanotubes Synthesized by Floating Catalyst and the Growth Model. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2013 , 21, 765-777 | 1.8 | 8 |
| 54 | Identification of the Effect of Cobalt Contents on Effective Synthesis of Carbon Nanotubes from Methane Decomposition. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2013 , 21, 75-87 | 1.8 | 7 |
| 53 | Catalytic Decomposition of Methane to Carbon Nanotubes and Hydrogen: The Effect of Metal Loading on the Activity of CoO-MoO/Al ₂ O ₃ Catalyst. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2013 , 21, 158-170 | 1.8 | 11 |

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| 52 | Growth of uniform thin-walled carbon nanotubes with spin-coated Fe catalyst and the correlation between the pre-growth catalyst size and the nanotube diameter. <i>Journal of Nanoparticle Research</i> , 2013 , 15, 1 | 2.3 | 10 |
| 51 | Growth of carbon nanotubes over non-metallic based catalysts: A review on the recent developments. <i>Catalysis Today</i> , 2013 , 217, 1-12 | 5.3 | 30 |
| 50 | Control of iron nanoparticle size by manipulating PEG-ethanol colloidal solutions and spin-coating parameters for the growth of single-walled carbon nanotubes. <i>Particuology</i> , 2013 , 11, 394-400 | 2.8 | 11 |
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