

Siang-Piao Chai

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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	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
176	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
175	Utilization of oil palm as a source of renewable energy in Malaysia. <i>Renewable and Sustainable Energy Reviews</i> , 2008 , 12, 2404-2421	16.2	379
174	Highly reactive {001} facets of TiO ₂ -based composites: synthesis, formation mechanism and characterization. <i>Nanoscale</i> , 2014 , 6, 1946-2008	7.7	364
173	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
172	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
171	Facet-dependent photocatalytic properties of TiO ₂ -based composites for energy conversion and environmental remediation. <i>ChemSusChem</i> , 2014 , 7, 690-719	8.3	269
170	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
169	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
168	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
167	Mechanisms of graphene growth by chemical vapour deposition on transition metals. <i>Carbon</i> , 2014 , 70, 1-21	10.4	243
166	Heteroatom doped graphene in photocatalysis: A review. <i>Applied Surface Science</i> , 2015 , 358, 2-14	6.7	239
165	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
164	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
163	Synthesis and applications of graphene-based TiO ₂ photocatalysts. <i>ChemSusChem</i> , 2012 , 5, 1868-82	8.3	200
162	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
161	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

160	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
159	Oxygen vacancy induced BiWO 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
158	Direct growth of carbon nanotubes on Ni/TiO ₂ as next generation catalysts for photoreduction of CO ₂ to methane by water under visible light irradiation. <i>RSC Advances</i> , 2013 , 3, 4505	3.7	145
157	Z-Scheme Photocatalytic Systems for Solar Water Splitting. <i>Advanced Science</i> , 2020 , 7, 1903171	13.6	140
156	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
155	Synthesis of aligned carbon nanotubes. <i>Carbon</i> , 2011 , 49, 4613-4635	10.4	126
154	Effective steering of charge flow through synergistic inducing oxygen vacancy defects and p-n heterojunctions in 2D/2D surface-engineered Bi ₂ WO ₆ /BiOI cascade: Towards superior photocatalytic CO ₂ reduction activity. <i>Chemical Engineering Journal</i> , 2019 , 372, 1183-1193	14.7	120
153	Conventional processes and membrane technology for carbon dioxide removal from natural gas: A review. <i>Journal of Natural Gas Chemistry</i> , 2012 , 21, 282-298		120
152	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
151	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
150	Physico-chemical characterisation of chitosan/halloysite composite membranes. <i>Polymer Testing</i> , 2013 , 32, 265-271	4.5	106
149	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
148	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
147	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
146	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
145	Synthesis and characterisation of poly (lactic acid)/halloysite bionanocomposite films. <i>Journal of Composite Materials</i> , 2014 , 48, 3705-3717	2.7	90
144	Graphene oxide: Exploiting its unique properties toward visible-light-driven photocatalysis. <i>Applied Materials Today</i> , 2016 , 4, 9-16	6.6	90
143	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

142	Photocatalytic degradation of industrial pulp and paper mill effluent using synthesized magnetic FeO-TiO: Treatment efficiency and characterizations of reused photocatalyst. <i>Journal of Environmental Management</i> , 2017 , 187, 298-310	7.9	86
141	A comprehensive study on coagulant performance and floc characterization of natural <i>Cassia obtusifolia</i> seed gum in treatment of raw pulp and paper mill effluent. <i>Industrial Crops and Products</i> , 2014 , 61, 317-324	5.9	79
140	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
139	Multi-walled carbon nanotubes modified with (3-aminopropyl)triethoxysilane for effective carbon dioxide adsorption. <i>International Journal of Greenhouse Gas Control</i> , 2013 , 14, 65-73	4.2	75
138	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
137	Synthesis of Single-layer Graphene: A Review of Recent Development. <i>Procedia Chemistry</i> , 2016 , 19, 916-921		72
136	2020 Roadmap on two-dimensional nanomaterials for environmental catalysis. <i>Chinese Chemical Letters</i> , 2019 , 30, 2065-2088	8.1	72
135	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
134	A novel repeated self-healing epoxy composite with alginate multicore microcapsules. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 8470-8478	13	60
133	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
132	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
131	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
130	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
129	Metal-Organic Framework Decorated Cuprous Oxide Nanowires for Long-lived Charges Applied in Selective Photocatalytic CO Reduction to CH ₄ . <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 8455-8459	16.4	57
128	Preparation of carbon nanotubes over cobalt-containing catalysts via catalytic decomposition of methane. <i>Chemical Physics Letters</i> , 2006 , 426, 345-350	2.5	55
127	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
126	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
125	Synthesis of high purity multi-walled carbon nanotubes over Co-Mo/MgO catalyst by the catalytic chemical vapor deposition of methane. <i>New Carbon Materials</i> , 2009 , 24, 119-123	4.4	47

124	The effect of catalyst calcination temperature on the diameter of carbon nanotubes synthesized by the decomposition of methane. <i>Carbon</i> , 2007 , 45, 1535-1541	10.4	47
123	The effect of reduction temperature on Co-Mo/Al ₂ O ₃ catalysts for carbon nanotubes formation. <i>Applied Catalysis A: General</i> , 2007 , 326, 173-179	5.1	47
122	Toward high performance epoxy/halloysite nanocomposites: New insights based on rheological, curing, and impact properties. <i>Materials & Design</i> , 2015 , 68, 42-53		46
121	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
120	Midgap-state-mediated two-step photoexcitation in nitrogen defect-modified g-C ₃ N ₄ atomic layers for superior photocatalytic CO ₂ reduction. <i>Catalysis Science and Technology</i> , 2019 , 9, 2335-2343	5.5	42
119	Synthesizing carbon nanotubes and carbon nanofibers over supported-nickel oxide catalysts via catalytic decomposition of methane. <i>Diamond and Related Materials</i> , 2007 , 16, 1656-1664	3.5	40
118	Fabrication of Bi ₂ WO ₆ /Cu/WO ₃ All-Solid-State Z-Scheme Composite Photocatalyst to Improve CO ₂ Photoreduction under Visible Light Irradiation. <i>ChemCatChem</i> , 2019 , 11, 6431-6438	5.2	38
117	Phosphorus removal using nanofiltration membranes. <i>Water Science and Technology</i> , 2011 , 64, 199-205	2.2	37
116	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
115	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	2.7	35
114	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
113	A feasibility investigation on ultrafiltration of palm oil and oleic acid removal from glycerin solutions: Flux decline, fouling pattern, rejection and membrane characterizations. <i>Journal of Membrane Science</i> , 2012 , 389, 245-256	9.6	35
112	Insights on the impact of doping levels in oxygen-doped gC ₃ N ₄ and its effects on photocatalytic activity. <i>Applied Surface Science</i> , 2020 , 504, 144427	6.7	35
111	Synthesis of carbon nanotubes by methane decomposition over Co-Mo/Al ₂ O ₃ : Process study and optimization using response surface methodology. <i>Applied Catalysis A: General</i> , 2011 , 396, 52-58	5.1	32
110	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
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	Effective synthesis of carbon nanotubes via catalytic decomposition of methane: Influence of calcination temperature on metal-support interaction of Co-Mo/MgO catalyst. <i>Journal of Physics and Chemistry of Solids</i> , 2013 , 74, 1553-1559	3.9	31
107	Electrospun chitosan/polyethylene-oxide (PEO)/halloysites (HAL) membranes for bone regeneration applications. <i>Applied Clay Science</i> , 2020 , 190, 105601	5.2	31

106	Electrosprayed Multi-Core Alginate Microcapsules as Novel Self-Healing Containers. <i>Scientific Reports</i> , 2016 , 6, 34674	4.9	30
105	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
104	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
103	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
102	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
101	Enhanced Evaporation Strength through Fast Water Permeation in Graphene-Oxide Deposition. <i>Scientific Reports</i> , 2015 , 5, 11896	4.9	28
100	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
99	Elasticity, thermal stability and bioactivity of polyhedral oligomeric silsesquioxanes reinforced chitosan-based microfibrils. <i>Journal of Materials Science: Materials in Medicine</i> , 2011 , 22, 1365-74	4.5	28
98	The effects of process parameters on carbon dioxide reforming of methane over Co-Mo-MgO/MWCNTs nanocomposite catalysts. <i>Fuel</i> , 2015 , 158, 129-138	7.1	27
97	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
96	Ultrafiltration of palm oil/oleic acid/glycerin solutions: Fouling mechanism identification, fouling mechanism analysis and membrane characterizations. <i>Separation and Purification Technology</i> , 2012 , 98, 419-431	8.3	27
95	The role of molybdenum in Co-Mo/MgO for large-scale production of high quality carbon nanotubes. <i>Journal of Alloys and Compounds</i> , 2010 , 493, 539-543	5.7	26
94	Sequential synthesis of free-standing high quality bilayer graphene from recycled nickel foil. <i>Carbon</i> , 2016 , 96, 268-275	10.4	25
93	An insight into perovskite-based photocatalysts for artificial photosynthesis. <i>Sustainable Energy and Fuels</i> , 2020 , 4, 973-984	5.8	25
92	Energy level tuning of CdSe colloidal quantum dots in ternary 0D-2D-2D CdSe QD/B-rGO/O-gC ₃ N ₄ as photocatalysts for enhanced hydrogen generation. <i>Applied Catalysis B: Environmental</i> , 2020 , 265, 118592	21.8	25
91	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
90	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
89	Overall pure water splitting using one-dimensional P-doped twinned Zn _{0.5} Cd _{0.5} S _{1-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

88	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
87	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
86	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
85	CO _x -Free Hydrogen and Carbon Nanofibers Produced from Direct Decomposition of Methane on Nickel-Based Catalysts. <i>Journal of Natural Gas Chemistry</i> , 2006 , 15, 253-258		21
84	Recent progress in two-dimensional nanomaterials for photocatalytic carbon dioxide transformation into solar fuels. <i>Materials Today Sustainability</i> , 2020 , 9, 100037	5	21
83	Mechanisms of graphene fabrication through plasma-induced layer-by-layer thinning. <i>Carbon</i> , 2016 , 105, 496-509	10.4	20
82	Carbon dioxide conversion over carbon-based nanocatalysts. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 4825-37	1.3	19
81	Preparation of iron oxide nanoparticles supported on magnesium oxide for producing high-quality single-walled carbon nanotubes. <i>New Carbon Materials</i> , 2011 , 26, 255-261	4.4	19
80	A parametric study of methane decomposition into carbon nanotubes over 8Co-2Mo/Al ₂ O ₃ catalyst. <i>Journal of Natural Gas Chemistry</i> , 2011 , 20, 84-89		19
79	Effects of FeO _x , CoO _x , and NiO catalysts and calcination temperatures on the synthesis of single-walled carbon nanotubes through chemical vapor deposition of methane. <i>Journal of Alloys and Compounds</i> , 2009 , 477, 785-788	5.7	19
78	Synthesis of manganese oxide/carbon nanotube nanocomposites using wet chemical method. <i>Journal of Materials Processing Technology</i> , 2007 , 190, 402-405	5.3	19
77	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
76	Synthesis of single-walled carbon nanotubes over a spin-coated Fe catalyst in an ethanol/PEG colloidal solution. <i>Carbon</i> , 2012 , 50, 960-967	10.4	18
75	Heterojunction photocatalysts for artificial nitrogen fixation: fundamentals, latest advances and future perspectives. <i>Nanoscale</i> , 2021 , 13, 7011-7033	7.7	18
74	The effect of carbon precursors (methane, benzene and camphor) on the quality of carbon nanotubes synthesised by the chemical vapour decomposition. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2011 , 43, 1535-1542	3	17
73	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
72	Synthesis of Single-Walled Carbon Nanotubes: Effects of Active Metals, Catalyst Supports, and Metal Loading Percentage. <i>Journal of Nanomaterials</i> , 2013 , 2013, 1-8	3.2	16
71	Optimization of Carbon Nanotubes Synthesis via Methane Decomposition over Alumina-Based Catalyst. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2010 , 18, 273-284	1.8	16

70	Moderate temperature synthesis of single-walled carbon nanotubes on alumina supported nickel oxide catalyst. <i>Materials Letters</i> , 2007 , 61, 3519-3521	3.3	16
69	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
68	Z-scheme photocatalyst sheets with P-doped twinned Zn _{0.5} Cd _{0.5} S _{1-x} and Bi ₄ NbO ₈ Cl connected by carbon electron mediator for overall water splitting under ambient condition. <i>Chemical Engineering Journal</i> , 2021 , 404, 127030	14.7	15
67	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
66	Optimisation of reaction conditions for the synthesis of single-walled carbon nanotubes using response surface methodology. <i>Canadian Journal of Chemical Engineering</i> , 2012 , 90, 489-505	2.3	14
65	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
64	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
63	Tunable Spectrum Selectivity for Multiphoton Absorption with Enhanced Visible Light Trapping in ZnO Nanorods. <i>Small</i> , 2018 , 14, e1704053	11	13
62	Dehydration of glycerin solution using pervaporation: HybSi and polydimethylsiloxane membranes. <i>Journal of Membrane Science</i> , 2014 , 450, 440-446	9.6	13
61	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
60	Fabrication and characterization of superhydrophobic surface by using water vapor impingement method. <i>Applied Surface Science</i> , 2012 , 258, 6739-6744	6.7	13
59	The role of water vapor in carbon nanotube formation via water-assisted chemical vapor deposition of methane. <i>Journal of Industrial and Engineering Chemistry</i> , 2012 , 18, 1504-1511	6.3	13
58	Formation of Y-junction carbon nanotubes by catalytic CVD of methane. <i>Solid State Communications</i> , 2006 , 140, 248-250	1.6	13
57	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
56	Energy Band Gap Modulation in Nd-Doped BiFeO ₃ /SrRuO ₃ Heteroepitaxy for Visible Light Photoelectrochemical Activity. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 1655-1664	9.5	12
55	Catalytic Decomposition of Methane to Carbon Nanotubes and Hydrogen: The Effect of Metal Loading on the Activity of CoO-MoO ₃ /Al ₂ O ₃ Catalyst. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2013 , 21, 158-170	1.8	11
54	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
53	PRODUCTION OF CARBON NANOTUBES FROM CHEMICAL VAPOR DEPOSITION OF METHANE IN A CONTINUOUS ROTARY REACTOR SYSTEM. <i>Chemical Engineering Communications</i> , 2012 , 199, 600-607	2.2	11

52	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
51	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
50	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
49	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
48	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
47	Performance studies of phosphorus removal using cross-flow nanofiltration. <i>Desalination and Water Treatment</i> , 2014 , 52, 5974-5982		9
46	Investigations on the effects of CoOx to MoOx ratio and CoOx/MoOx loading on methane decomposition into carbon nanotubes. <i>Journal of Alloys and Compounds</i> , 2009 , 488, 294-299	5.7	9
45	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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43	Effect of FeOx loaded on CoOx/Al ₂ O ₃ catalyst for the formation of thin-walled carbon nanotubes. <i>Materials Letters</i> , 2009 , 63, 1428-1430	3.3	8
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