Siang-Piao Chai

List of Publications by Year
in descending order

181	18,166	26567	12558
papers	citations	56 h-index	132 g-index

185	185	185	19536
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Graphitic Carbon Nitride (g-C₃N₄)-Based Photocatalysts for Artificial Photosynthesis and Environmental Remediation: Are We a Step Closer To Achieving Sustainability?. Chemical Reviews, 2016, 116, 7159-7329.	23.0	5,505
2	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.	8.2	718
3	Utilization of oil palm as a source of renewable energy in Malaysia. Renewable and Sustainable Energy Reviews, 2008, 12, 2404-2421.	8.2	456
4	Highly reactive {001} facets of TiO2-based composites: synthesis, formation mechanism and characterization. Nanoscale, 2014, 6, 1946.	2.8	412
5	Graphene oxide as a structure-directing agent for the two-dimensional interface engineering of sandwich-like grapheneâ€“g-C₃N₄ hybrid nanostructures with enhanced visible-light photoreduction of CO₂ to methane. Chemical Communications, 2015, 51, 858-861.	2.2	393
6	Unravelling charge carrier dynamics in protonated g-C3N4 interfaced with carbon nanodots as co-catalysts toward enhanced photocatalytic CO2 reduction: A combined experimental and first-principles DFT study. Nano Research, 2017, 10, 1673-1696.	5.8	376
7	Reduced graphene oxide-TiO2 nanocomposite as a promising visible-light-active photocatalyst for the conversion of carbon dioxide. Nanoscale Research Letters, 2013, 8, 465.	3.1	323
8	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.	2.9	307
9	Facetâ€Dependent Photocatalytic Properties of TiO₂â€Based Composites for Energy Conversion and Environmental Remediation. ChemSusChem, 2014, 7, 690-719.	3.6	307
10	Heterojunction engineering of graphitic carbon nitride (g-C₃N₄) via Pt loading with improved daylight-induced photocatalytic reduction of carbon dioxide to methane. Dalton Transactions, 2015, 44, 1249-1257.	1.6	307
11	Heteroatom doped graphene in photocatalysis: A review. Applied Surface Science, 2015, 358, 2-14.	3.1	298
12	Zâ€Scheme Photocatalytic Systems for Solar Water Splitting. Advanced Science, 2020, 7, 1903171.	5.6	295
13	Mechanisms of graphene growth by chemical vapour deposition on transition metals. Carbon, 2014, 70, 1-21.	5.4	284
14	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.	10.8	277
15	Review of the synthesis, transfer, characterization and growth mechanisms of single and multilayer graphene. RSC Advances, 2017, 7, 15644-15693.	1.7	263
16	Oxygen vacancy induced Bi₂WO₆ for the realization of photocatalytic CO₂ reduction over the full solar spectrum: from the UV to the NIR region. Chemical Communications, 2016, 52, 14242-14245.	2.2	248
17	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.	5.8	236
18	Synthesis and Applications of Grapheneâ€Based TiO₂ Photocatalysts. ChemSusChem, 2012, 5, 1868-1882.	3.6	226

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19	Review of methanol reforming-Cu-based catalysts, surface reaction mechanisms, and reaction schemes. International Journal of Hydrogen Energy, 2013, 38, 9541-9552.	3.8	223
20	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.	6.6	210
21	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.	10.8	196
22	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.	1.7	157
23	Metalâ€“Organic Framework Decorated Cuprous Oxide Nanowires for Longâ€lived Charges Applied in Selective Photocatalytic CO₂ Reduction to CH₄. Angewandte Chemie - International Edition, 2021, 60, 8455-8459.	7.2	152
24	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
25	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.	10.8	149
26	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.	5.2	143
27	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.	6.6	141
28	Harnessing Visâ€“NIR broad spectrum for photocatalytic CO2 reduction over carbon quantum dots-decorated ultrathin Bi2WO6 nanosheets. Nano Research, 2017, 10, 1720-1731.	5.8	135
29	Synthesis of aligned carbon nanotubes. Carbon, 2011, 49, 4613-4635.	5.4	133
30	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.	10.8	133
31	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.	4.0	128
32	Physico-chemical characterisation of chitosan/halloysite composite membranes. Polymer Testing, 2013, 32, 265-271.	2.3	120
33	Oxygenâ€Deficient BiOBr as a Highly Stable Photocatalyst for Efficient CO₂ Reduction into Renewable Carbonâ€Neutral Fuels. ChemCatChem, 2016, 8, 3074-3081.	1.8	120
34	Graphene oxide: Exploiting its unique properties toward visible-light-driven photocatalysis. Applied Materials Today, 2016, 4, 9-16.	2.3	110
35	Photocatalytic degradation of industrial pulp and paper mill effluent using synthesized magnetic Fe 2 O 3 -TiO 2 : Treatment efficiency and characterizations of reused photocatalyst. Journal of Environmental Management, 2017, 187, 298-310.	3.8	109
36	A comprehensive study on coagulant performance and floc characterization of natural Cassia obtusifolia seed gum in treatment of raw pulp and paper mill effluent. Industrial Crops and Products, 2014, 61, 317-324.	2.5	108

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37	Synthesis and characterisation of poly (lactic acid)/halloysite bionanocomposite films. Journal of Composite Materials, 2014, 48, 3705-3717.	1.2	107
38	Synthesis of Single-layer Graphene: A Review of Recent Development. Procedia Chemistry, 2016, 19, 916-921.	0.7	100
39	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.	3.0	97
40	Multi-walled carbon nanotubes modified with (3-aminopropyl)triethoxysilane for effective carbon dioxide adsorption. International Journal of Greenhouse Gas Control, 2013, 14, 65-73.	2.3	91
41	Band gap engineered, oxygen-rich TiO2 for visible light induced photocatalytic reduction of CO2. Chemical Communications, 2014, 50, 6923.	2.2	90
42	2020 Roadmap on two-dimensional nanomaterials for environmental catalysis. Chinese Chemical Letters, 2019, 30, 2065-2088.	4.8	90
43	All-solid-state Z-scheme photocatalyst with carbon nanotubes as an electron mediator for hydrogen evolution under simulated solar light. Chemical Engineering Journal, 2017, 316, 41-49.	6.6	87
44	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.	2.2	86
45	A novel repeated self-healing epoxy composite with alginate multicore microcapsules. Journal of Materials Chemistry A, 2018, 6, 8470-8478.	5.2	85
46	Midgap-state-mediated two-step photoexcitation in nitrogen defect-modified g-C₃N₄ atomic layers for superior photocatalytic CO₂ reduction. Catalysis Science and Technology, 2019, 9, 2335-2343.	2.1	83
47	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.	1.8	79
48	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.	6.6	72
49	Insights on the impact of doping levels in oxygen-doped gC3N4 and its effects on photocatalytic activity. Applied Surface Science, 2020, 504, 144427.	3.1	69
50	An application of response surface methodology for optimizing coagulation process of raw industrial effluent using Cassia obtusifolia seed gum together with alum. Industrial Crops and Products, 2015, 70, 107-115.	2.5	67
51	Visible-light-activated oxygen-rich TiO2 as next generation photocatalyst: Importance of annealing temperature on the photoactivity toward reduction of carbon dioxide. Chemical Engineering Journal, 2016, 283, 1254-1263.	6.6	66
52	An overview: synthesis of thin films/membranes of metal organic frameworks and its gas separation performances. RSC Advances, 2014, 4, 54322-54334.	1.7	65
53	Preparation of carbon nanotubes over cobalt-containing catalysts via catalytic decomposition of methane. Chemical Physics Letters, 2006, 426, 345-350.	1.2	64
54	Heterojunction photocatalysts for artificial nitrogen fixation: fundamentals, latest advances and future perspectives. Nanoscale, 2021, 13, 7011-7033.	2.8	62

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55	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. RSC Advances, 2014, 4, 59676-59685.	1.7	61
56	Electrospun chitosan/polyethylene-oxide (PEO)/halloysites (HAL) membranes for bone regeneration applications. Applied Clay Science, 2020, 190, 105601.	2.6	59
57	Fabrication of Bi₂WO₆/Cu/WO₃ Allâ€Solidâ€State Zâ€Scheme Composite Photocatalyst to Improve CO₂ Photoreduction under Visible Light Irradiation. ChemCatChem, 2019, 11, 6431-6438.	1.8	58
58	Red Phosphorus: An Up-and-Coming Photocatalyst on the Horizon for Sustainable Energy Development and Environmental Remediation. Chemical Reviews, 2022, 122, 3879-3965.	23.0	58
59	The effect of catalyst calcination temperature on the diameter of carbon nanotubes synthesized by the decomposition of methane. Carbon, 2007, 45, 1535-1541.	5.4	56
60	The effect of reduction temperature on Co-Mo/Al2O3 catalysts for carbon nanotubes formation. Applied Catalysis A: General, 2007, 326, 173-179.	2.2	55
61	Synthesis of high purity multi-walled carbon nanotubes over Co-Mo/MgO catalyst by the catalytic chemical vapor deposition of methane. New Carbon Materials, 2009, 24, 119-123.	2.9	55
62	Toward high performance epoxy/halloysite nanocomposites: New insights based on rheological, curing, and impact properties. Materials & Design, 2015, 68, 42-53.	5.1	55
63	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. Applied Catalysis B: Environmental, 2020, 262, 118309.	10.8	54
64	Topotactic Transformation of Bismuth Oxybromide into Bismuth Tungstate: Bandgap Modulation of Single-Crystalline {001}-Faceted Nanosheets for Enhanced Photocatalytic CO₂ Reduction. ACS Applied Materials & Interfaces, 2020, 12, 26991-27000.	4.0	53
65	Phosphorus removal using nanofiltration membranes. Water Science and Technology, 2011, 64, 199-205.	1.2	52
66	Enhancement in the photocatalytic activity of carbon nitride through hybridization with light-sensitive AgCl for carbon dioxide reduction to methane. Catalysis Science and Technology, 2016, 6, 744-754.	2.1	50
67	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. Journal of Environmental Management, 2020, 255, 109936.	3.8	50
68	Copper-doped flower-like molybdenum disulfide/bismuth sulfide photocatalysts for enhanced solar water splitting. International Journal of Hydrogen Energy, 2018, 43, 748-756.	3.8	48
69	Carbon dioxide hydrogenation to methanol over multi-functional catalyst: Effects of reactants adsorption and metal-oxide(s) interfacial area. Journal of Industrial and Engineering Chemistry, 2018, 62, 156-165.	2.9	47
70	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. Applied Catalysis B: Environmental, 2020, 265, 118592.	10.8	45
71	Synthesizing carbon nanotubes and carbon nanofibers over supported-nickel oxide catalysts via catalytic decomposition of methane. Diamond and Related Materials, 2007, 16, 1656-1664.	1.8	44
72	Visible-light-driven MWCNT@TiO₂ coreâ€“shell nanocomposites and the roles of MWCNTs on the surface chemistry, optical properties and reactivity in CO₂ photoreduction. RSC Advances, 2014, 4, 24007-24013.	1.7	43

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73	Synthesis of carbon nanotubes by methane decomposition over Coâ€“Mo/Al2O3: Process study and optimization using response surface methodology. Applied Catalysis A: General, 2011, 396, 52-58.	2.2	42
74	An insight into perovskite-based photocatalysts for artificial photosynthesis. Sustainable Energy and Fuels, 2020, 4, 973-984.	2.5	41
75	A feasibility investigation on ultrafiltration of palm oil and oleic acid removal from glycerin solutions: Flux decline, fouling pattern, rejection and membrane characterizations. Journal of Membrane Science, 2012, 389, 245-256.	4.1	40
76	Direct use of as-synthesized multi-walled carbon nanotubes for carbon dioxide reforming of methane for producing synthesis gas. Chemical Engineering Journal, 2014, 257, 200-208.	6.6	40
77	A facile method for preparation of self-healing epoxy composites: using electrospun nanofibers as microchannels. Journal of Materials Chemistry A, 2015, 3, 16005-16012.	5.2	38
78	Effective synthesis of carbon nanotubes via catalytic decomposition of methane: Influence of calcination temperature on metalâ€“support interaction of Coâ€“Mo/MgO catalyst. Journal of Physics and Chemistry of Solids, 2013, 74, 1553-1559.	1.9	37
79	Growth of carbon nanotubes over non-metallic based catalysts: A review on the recent developments. Catalysis Today, 2013, 217, 1-12.	2.2	37
80	Influence of the processing methods on the properties of poly(lactic acid)/halloysite nanocomposites. Polymer Composites, 2016, 37, 861-869.	2.3	37
81	Ultrafiltration of palm oilâ€“oleic acidâ€“glycerin solutions: Fouling mechanism identification, fouling mechanism analysis and membrane characterizations. Separation and Purification Technology, 2012, 98, 419-431.	3.9	36
82	Enhanced Evaporation Strength through Fast Water Permeation in Graphene-Oxide Deposition. Scientific Reports, 2015, 5, 11896.	1.6	36
83	The effects of process parameters on carbon dioxide reforming of methane over Coâ€“Moâ€“MgO/MWCNTs nanocomposite catalysts. Fuel, 2015, 158, 129-138.	3.4	36
84	Molybdenum disulfide quantum dots decorated bismuth sulfide as a superior noble-metal-free photocatalyst for hydrogen evolution through harnessing a broad solar spectrum. Applied Catalysis B: Environmental, 2018, 232, 117-123.	10.8	36
85	The morphological impact of siliceous porous carriers on copper-catalysts for selective direct CO2 hydrogenation to methanol. International Journal of Hydrogen Energy, 2018, 43, 9334-9342.	3.8	36
86	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. Chemical Engineering Journal, 2021, 404, 127030.	6.6	36
87	Recent Advances in Nanoscale Engineering of Ternary Metal Sulfide-Based Heterostructures for Photocatalytic Water Splitting Applications. Energy & Fuels, 2022, 36, 4250-4267.	2.5	36
88	Elasticity, thermal stability and bioactivity of polyhedral oligomeric silsesquioxanes reinforced chitosan-based microfibres. Journal of Materials Science: Materials in Medicine, 2011, 22, 1365-1374.	1.7	35
89	Electrosprayed Multi-Core Alginate Microcapsules as Novel Self-Healing Containers. Scientific Reports, 2016, 6, 34674.	1.6	35
90	Synthesis and performance of microporous inorganic membranes for CO2 separation: a review. Journal of Porous Materials, 2013, 20, 1457-1475.	1.3	34

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91	Using one-step facile and solvent-free mechanochemical process to synthesize photoactive Fe2O3-TiO2 for treating industrial wastewater. Journal of Alloys and Compounds, 2017, 695, 496-507.	2.8	34
92	Modification of MWCNT@TiO2 coreâ€“shell nanocomposites with transition metal oxide dopants for photoreduction of carbon dioxide into methane. Applied Surface Science, 2014, 319, 37-43.	3.1	33
93	Sequential synthesis of free-standing high quality bilayer graphene from recycled nickel foil. Carbon, 2016, 96, 268-275.	5.4	32
94	The role of molybdenum in Co-Mo/MgO for large-scale production of high quality carbon nanotubes. Journal of Alloys and Compounds, 2010, 493, 539-543.	2.8	31
95	Surface modified alginate multicore microcapsules and their application in self-healing epoxy coatings for metallic protection. Materials Chemistry and Physics, 2018, 215, 69-80.	2.0	29
96	Engineering surface oxygen defects on tungsten oxide to boost photocatalytic oxygen evolution from water splitting. Chemical Communications, 2019, 55, 6265-6268.	2.2	29
97	Recent progress in two-dimensional nanomaterials for photocatalytic carbon dioxide transformation into solar fuels. Materials Today Sustainability, 2020, 9, 100037.	1.9	29
98	Recent advances in homojunction-based photocatalysis for sustainable environmental remediation and clean energy generation. Applied Materials Today, 2020, 20, 100741.	2.3	28
99	Mechanisms of graphene fabrication through plasma-induced layer-by-layer thinning. Carbon, 2016, 105, 496-509.	5.4	27
100	Synthesis of Single-Walled Carbon Nanotubes: Effects of Active Metals, Catalyst Supports, and Metal Loading Percentage. Journal of Nanomaterials, 2013, 2013, 1-8.	1.5	26
101	COx-Free Hydrogen and Carbon Nanofibers Produced from Direct Decomposition of Methane on Nickel-Based Catalysts. Journal of Natural Gas Chemistry, 2006, 15, 253-258.	1.8	25
102	Bismuth sulphide-modified molybdenum disulphide as an efficient photocatalyst for hydrogen production under simulated solar light. Catalysis Communications, 2017, 98, 66-70.	1.6	25
103	Two-dimensional bismuth oxybromide coupled with molybdenum disulphide for enhanced dye degradation using low power energy-saving light bulb. Journal of Environmental Management, 2017, 197, 63-69.	3.8	25
104	Energy Band Gap Modulation in Nd-Doped BiFeO₃/SrRuO₃ Heteroepitaxy for Visible Light Photoelectrochemical Activity. ACS Applied Materials & Interfaces, 2019, 11, 1655-1664.	4.0	25
105	Synthesis of manganese oxide/carbon nanotube nanocomposites using wet chemical method. Journal of Materials Processing Technology, 2007, 190, 402-405.	3.1	24
106	Effects of FeOx, CoOx, and NiO catalysts and calcination temperatures on the synthesis of single-walled carbon nanotubes through chemical vapor deposition of methane. Journal of Alloys and Compounds, 2009, 477, 785-788.	2.8	24
107	A parametric study of methane decomposition into carbon nanotubes over 8Co-2Mo/Al2O3 catalyst. Journal of Natural Gas Chemistry, 2011, 20, 84-89.	1.8	23
108	The effect of carbon precursors (methane, benzene and camphor) on the quality of carbon nanotubes synthesised by the chemical vapour decomposition. Physica E: Low-Dimensional Systems and Nanostructures, 2011, 43, 1535-1542.	1.3	23

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109	Carbon Dioxide Conversion Over Carbon-Based Nanocatalysts. Journal of Nanoscience and Nanotechnology, 2013, 13, 4825-4837.	0.9	22
110	Metal-free n/nâ€“junctioned graphitic carbon nitride (g-C3N4): a study to elucidate its charge transfer mechanism and application for environmental remediation. Environmental Science and Pollution Research, 2021, 28, 4388-4403.	2.7	22
111	A Synergistic Combination of Pâ€doped Zn_{0.5}Cd_{0.5}S and CoP for Dualâ€Stage Electron Trapping and Its Application in Seawater Splitting. Solar Rrl, 2021, 5, 2100016.	3.1	22
112	Synthesis of single-walled carbon nanotubes over a spin-coated Fe catalyst in an ethanolâ€“PEG colloidal solution. Carbon, 2012, 50, 960-967.	5.4	21
113	Preparation of iron oxide nanoparticles supported on magnesium oxide for producing high-quality single-walled carbon nanotubes. New Carbon Materials, 2011, 26, 255-261.	2.9	20
114	Self-Assembled Heteroepitaxial AuNPs/SrTiO₃: Influence of AuNPs Size on SrTiO₃ Band Gap Tuning for Visible Light-Driven Photocatalyst. Journal of Physical Chemistry C, 2017, 121, 13487-13495.	1.5	20
115	Insights from density functional theory calculations on heteroatom P-doped ZnIn2S4 bilayer nanosheets with atomic-level charge steering for photocatalytic water splitting. Scientific Reports, 2022, 12, 1927.	1.6	20
116	MXeneâ€A New Paradigm Toward Artificial Nitrogen Fixation for Sustainable Ammonia Generation: Synthesis, Properties, and Future Outlook. , 2022, 4, 212-245.		20
117	Broadening cognizance on atomically thin photocatalysts. Materials Today, 2021, 43, 198-212.	8.3	19
118	Optimisation of reaction conditions for the synthesis of singleâ€walled carbon nanotubes using response surface methodology. Canadian Journal of Chemical Engineering, 2012, 90, 489-505.	0.9	18
119	Charge Modulation at Atomicâ€Level through Substitutional Sulfur Doping into Atomically Thin Bi₂WO₆ toward Promoting Photocatalytic CO₂ Reduction. ChemSusChem, 2022, 15, .	3.6	18
120	Moderate temperature synthesis of single-walled carbon nanotubes on alumina supported nickel oxide catalyst. Materials Letters, 2007, 61, 3519-3521.	1.3	17
121	Phosphorus removal by NF90 membrane: Optimisation using central composite design. Journal of the Taiwan Institute of Chemical Engineers, 2014, 45, 1260-1269.	2.7	17
122	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. Microporous and Mesoporous Materials, 2014, 196, 79-88.	2.2	17
123	Optimization of Carbon Nanotubes Synthesis via Methane Decomposition over Alumina-Based Catalyst. Fullerenes Nanotubes and Carbon Nanostructures, 2010, 18, 273-284.	1.0	16
124	The study of reverse osmosis on glycerin solution filtration: Dead-end and crossflow filtrations, transport mechanism, rejection and permeability investigations. Desalination, 2014, 352, 66-81.	4.0	16
125	Dehydration of glycerin solution using pervaporation: HybSi and polydimethylsiloxane membranes. Journal of Membrane Science, 2014, 450, 440-446.	4.1	16
126	Tailoring the properties of oxygenated graphene with different oxidation degrees for noble-metal-free photocatalytic hydrogen evolution. Catalysis Today, 2018, 315, 93-102.	2.2	16

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127	Tunable Spectrum Selectivity for Multiphoton Absorption with Enhanced Visible Light Trapping in ZnO Nanorods. Small, 2018, 14, e1704053.	5.2	16
128	PRODUCTION OF CARBON NANOTUBES FROM CHEMICAL VAPOR DEPOSITION OF METHANE IN A CONTINUOUS ROTARY REACTOR SYSTEM. Chemical Engineering Communications, 2012, 199, 600-607.	1.5	15
129	The role of water vapor in carbon nanotube formation via water-assisted chemical vapor deposition of methane. Journal of Industrial and Engineering Chemistry, 2012, 18, 1504-1511.	2.9	15
130	Control of iron nanoparticle size by manipulating PEGâ€“ethanol colloidal solutions and spin-coating parameters for the growth of single-walled carbon nanotubes. Particuology, 2013, 11, 394-400.	2.0	15
131	Formation of Y-junction carbon nanotubes by catalytic CVD of methane. Solid State Communications, 2006, 140, 248-250.	0.9	14
132	Fabrication and characterization of superhydrophobic surface by using water vapor impingement method. Applied Surface Science, 2012, 258, 6739-6744.	3.1	14
133	Continuous polycrystalline ZIF-8 membrane supported on CO₂-selective mixed matrix supports for CO₂/CH₄ separation. RSC Advances, 2014, 4, 52461-52466.	1.7	14
134	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. Sustainable Energy and Fuels, 2020, 4, 1822-1827.	2.5	14
135	Role of Reaction and Factors of Carbon Nanotubes Growth in Chemical Vapour Decomposition Process Using Methaneâ€”A Highlight. Journal of Nanomaterials, 2010, 2010, 1-11.	1.5	13
136	Catalytic Decomposition of Methane to Carbon Nanotubes and Hydrogen: The Effect of Metal Loading on the Activity of CoO-MoO/Al₂O₃Catalyst. Fullerenes Nanotubes and Carbon Nanostructures, 2013, 21, 158-170.	1.0	13
137	Nanostructural dimension and oxygen vacancy synergistically induced photoactivity across high surface area monodispersed AuNPs/ZnO nanorods heterojunction. Journal of Alloys and Compounds, 2022, 920, 165836.	2.8	13
138	An enhanced hybrid membrane of ZIF-8 and zeolite T for CO2/CH4 separation. CrystEngComm, 2014, 16, 3072-3075.	1.3	12
139	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. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	11
140	Performance studies of phosphorus removal using cross-flow nanofiltration. Desalination and Water Treatment, 2014, 52, 5974-5982.	1.0	11
141	Metalâ€“Organic Framework Decorated Cuprous Oxide Nanowires for Longâ€lived Charges Applied in Selective Photocatalytic CO₂ Reduction to CH₄. Angewandte Chemie, 2021, 133, 8536-8540.	1.6	11
142	Synergistic effects of the hybridization between boron-doped carbon quantum dots and n/n-type g-C3N4 homojunction for boosted visible-light photocatalytic activity. Environmental Science and Pollution Research, 2022, 29, 41272-41292.	2.7	11
143	A well inter-grown ZIF-8 membrane synthesized via two-step hydrothermal synthesis on coarse Î±-Al2O3 support. Materials Letters, 2014, 129, 162-165.	1.3	10
144	Highly-efficient photocatalytic disinfection of Escherichia coli by copper-doped molybdenum disulfide/bismuth sulfide under low-powered visible light irradiation. Catalysis Communications, 2020, 140, 106003.	1.6	10

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145	Investigations on the effects of CoOx to MoOx ratio and CoOxâ€“MoOx loading on methane decomposition into carbon nanotubes. Journal of Alloys and Compounds, 2009, 488, 294-299.	2.8	9
146	Effects of Growth Parameters on the Morphology of Aligned Carbon Nanotubes Synthesized by Floating Catalyst and the Growth Model. Fullerenes Nanotubes and Carbon Nanostructures, 2013, 21, 765-777.	1.0	9
147	Preparation of self-supported crystalline merlinoite-type zeolite W membranes through vacuum filtration and crystallization for CO₂/CH₄ separations. New Journal of Chemistry, 2015, 39, 4135-4140.	1.4	9
148	Tuning the electronic band structure of graphitic carbon nitride by breaking intramolecular bonds: A simple and effective approach for enhanced photocatalytic hydrogen production. Applied Surface Science, 2020, 529, 146600.	3.1	9
149	Effect of FeOx loaded on CoOx/Al2O3 catalyst for the formation of thin-walled carbon nanotubes. Materials Letters, 2009, 63, 1428-1430.	1.3	8
150	FLOATING CATALYST CVD SYNTHESIS OF CARBON NANOTUBES USING IRON (III) CHLORIDE: INFLUENCES OF THE GROWTH PARAMETERS. Nano, 2009, 04, 359-366.	0.5	8
151	Identification of the Effect of Cobalt Contents on Effective Synthesis of Carbon Nanotubes from Methane Decomposition. Fullerenes Nanotubes and Carbon Nanostructures, 2013, 21, 75-87.	1.0	7
152	Pyrolysis of Palm Waste for the Application of Direct Carbon Fuel Cell. Energy Procedia, 2014, 61, 878-881.	1.8	7
153	Effects of sodium precursors and gelling agents on CO₂ sorption performance of sodium zirconate. Asia-Pacific Journal of Chemical Engineering, 2015, 10, 565-579.	0.8	7
154	Transfer of wafer-scale graphene onto arbitrary substrates: steps towards the reuse and recycling of the catalyst. 2D Materials, 2018, 5, 042001.	2.0	7
155	Protonâ€Functionalized Graphitic Carbon Nitride for Efficient Metalâ€Free Destruction of Escherichia coli under Lowâ€Power Light Irradiation. Chemistry - A European Journal, 2021, 27, 3085-3090.	1.7	7
156	Atomistic Insights into the Reformation of CH₄ with CO₂ on Metal-Free gC₃N₄: Unraveling the Reaction Mechanisms Using First-Principles DFT Calculations. Journal of Physical Chemistry C, 2021, 125, 23021-23028.	1.5	7
157	Screening of metal oxide catalysts for carbon nanotubes and hydrogen production via catalytic decomposition of methane. Studies in Surface Science and Catalysis, 2006, 159, 725-728.	1.5	6
158	BROAD BUNDLES OF SINGLE-WALLED CARBON NANOTUBE SYNTHESIZED OVER Fe2O3/MgO VIA CHEMICAL VAPOR DEPOSITION OF METHANE. Nano, 2009, 04, 77-81.	0.5	6
159	Effects of Temperature on the Synthesis of Carbon Nanotubes by FeCl₃as a Floating Catalyst Precursor. Fullerenes Nanotubes and Carbon Nanostructures, 2011, 19, 575-583.	1.0	6
160	Synthesis of single-walled carbon nanotubes by chemical vapor deposition using sodium chloride support. Physica E: Low-Dimensional Systems and Nanostructures, 2011, 43, 1011-1014.	1.3	6
161	Utilization of compressed natural gas for the production of carbon nanotubes. Journal of Natural Gas Chemistry, 2012, 21, 620-624.	1.8	6
162	Influence of a Fe/activated carbon catalyst and reaction parameters on methane decomposition during the synthesis of carbon nanotubes. Chemical Papers, 2010, 64, .	1.0	5

#	Article	IF	Citations
163	Amineâ€functionalization of multiâ€walled carbon nanotubes for adsorption of carbon dioxide. Asia-Pacific Journal of Chemical Engineering, 2013, 8, 262-270.	0.8	5
164	A Study on the Effect of Calcination Temperature on the Graphitization of Carbon Nanotubes Synthesized by the Decomposition of Methane. Advanced Materials Research, 0, 832, 56-61.	0.3	5
165	IRON (III) CHLORIDE AS FLOATING CATALYST PRECURSOR TO PRODUCE MULTI-WALLED CARBON NANOTUBES FROM METHANE. Nano, 2010, 05, 167-173.	0.5	4
166	Parametric Study of Methane Catalytic CVD into Singleâ€walled Carbon Nanotubes Using Spinâ€coated Iron Nanoparticles. Chemical Vapor Deposition, 2013, 19, 53-60.	1.4	4
167	Formation of Carbon Nanotubes from Methane Decomposition: Effect of Concentration of Fe₃O₄on the Diameters Distributions. Advanced Materials Research, 0, 832, 62-67.	0.3	4
168	The Impact of Reaction Parameters on Graphene-like Material Synthesized Using Chemical Vapour Deposition. Procedia Engineering, 2017, 184, 460-468.	1.2	4
169	A study of water permeation using glycerol as the draw solution with thin film composite membranes in forward osmosis and pressure retarded osmosis configurations. AIP Conference Proceedings, 2018, , .	0.3	4
170	CO2 Photocatalytic Reduction: Photocatalyst Choice and Product Selectivity. Environmental Chemistry for A Sustainable World, 2015, , 71-104.	0.3	4
171	Photo-Driven Reduction of Carbon Dioxide: A Sustainable Approach Towards Achieving Carbon Neutrality Goal. Frontiers in Chemical Engineering, 2021, 3, .	1.3	4
172	Uncovering the multifaceted roles of nitrogen defects in graphitic carbon nitride for selective photocatalytic carbon dioxide reduction: a density functional theory study. Physical Chemistry Chemical Physics, 2022, 24, 11124-11130.	1.3	4
173	Growth of carbon nanotubes on Si/SiO2 wafer etched by hydrofluoric acid under different etching durations. Applied Surface Science, 2012, 258, 5774-5777.	3.1	3
174	Allotropes selection apropos of photocatalytic CO2 reduction from first principles studies. Materials Today Physics, 2022, , 100751.	2.9	3
175	Combustion-synthesized Nickel-based Catalysts for the Production of Hydrogen from Steam Reforming of Methane. Energy Procedia, 2014, 61, 910-913.	1.8	2
176	Simultaneous growth of monolayer graphene on Niâ€“Cu bimetallic catalyst by atmospheric pressure CVD process. RSC Advances, 2016, 6, 41447-41452.	1.7	2
177	Photocatalytic Hydrogen Evolution from Artificial Seawater Splitting over Amorphous Carbon Nitride: Optimization and Process Parameters Study via Response Surface Modeling. Materials, 2022, 15, 4894.	1.3	2
178	Catalyzed Decomposition of Methane into COx-free Hydrogen and Filamentous Carbons over NiO-CuO/SiO2: Effect of NiO-CuO Loadings. International Journal of Chemical Reactor Engineering, 2010, 8, .	0.6	1
179	Synthesis of Fe₃O₄ Nanoparticles to Synthesize Bundles of Single-Walled Carbon Nanotubes. Advanced Materials Research, 0, 1109, 108-112.	0.3	1
180	EVALUATION OF THE EFFECT OF CATALYST TEXTURAL PROPERTIES ON EFFECTIVE SYNTHESIS OF CARBON NANOTUBES. International Journal of Nanoscience, 2013, 12, 1350030.	0.4	0

#	Article	IF	Citations
181	CHAPTER 4. Functionalization of Chemically Derived Graphene for Solar Energy Conversion. RSC Nanoscience and Nanotechnology, 2018, , 102-127.	0.2	0