Jun Cheng

List of Publications by Year
in descending order

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304	16,321	13854	22147
papers	citations	67 h-index	113 g-index

312	312	312	15203
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electrocatalytic reduction of CO2 to ethylene and ethanol through hydrogen-assisted Câ€“C coupling over fluorine-modified copper. Nature Catalysis, 2020, 3, 478-487.	16.1	788
2	Origin of additional capacities in metal oxide lithium-ion battery electrodes. Nature Materials, 2013, 12, 1130-1136.	13.3	635
3	Filling metalâ€“organic framework mesopores with TiO2 for CO2 photoreduction. Nature, 2020, 586, 549-554.	13.7	554
4	Coupling N2 and CO2 in H2O to synthesize urea under ambient conditions. Nature Chemistry, 2020, 12, 717-724.	6.6	485
5	Solar energy-driven lignin-first approach to full utilization of lignocellulosic biomass under mild conditions. Nature Catalysis, 2018, 1, 772-780.	16.1	442
6	In situ probing electrified interfacial water structures at atomically flat surfaces. Nature Materials, 2019, 18, 697-701.	13.3	352
7	Boosting biomethane yield and production rate with graphene: The potential of direct interspecies electron transfer in anaerobic digestion. Bioresource Technology, 2017, 239, 345-352.	4.8	272
8	Alignment of electronic energy levels at electrochemical interfaces. Physical Chemistry Chemical Physics, 2012, 14, 11245.	1.3	233
9	Subnanometer Bimetallic Platinumâ€“Zinc Clusters in Zeolites for Propane Dehydrogenation. Angewandte Chemie - International Edition, 2020, 59, 19450-19459.	7.2	221
10	BrÃ¸nstedâ€“Evansâ€“Polanyi Relation of Multistep Reactions and Volcano Curve in Heterogeneous Catalysis. Journal of Physical Chemistry C, 2008, 112, 1308-1311.	1.5	201
11	Visible light-driven Câ€“H activation and Câ€“C coupling of methanol into ethylene glycol. Nature Communications, 2018, 9, 1181.	5.8	188
12	Redox Potentials and Acidity Constants from Density Functional Theory Based Molecular Dynamics. Accounts of Chemical Research, 2014, 47, 3522-3529.	7.6	181
13	Acidity of edge surface sites of montmorillonite and kaolinite. Geochimica Et Cosmochimica Acta, 2013, 117, 180-190.	1.6	180
14	Acidity of the Aqueous Rutile TiO₂(110) Surface from Density Functional Theory Based Molecular Dynamics. Journal of Chemical Theory and Computation, 2010, 6, 880-889.	2.3	179
15	Innovation in biological production and upgrading of methane and hydrogen for use as gaseous transport biofuel. Biotechnology Advances, 2016, 34, 451-472.	6.0	178
16	A quantitative determination of reaction mechanisms from density functional theory calculations: Fischerâ€“Tropsch synthesis on flat and stepped cobalt surfaces. Journal of Catalysis, 2008, 254, 285-295.	3.1	168
17	Density Functional Theory Study of Iron and Cobalt Carbides for Fischerâ€“Tropsch Synthesis. Journal of Physical Chemistry C, 2010, 114, 1085-1093.	1.5	163
18	Enhanced dark hydrogen fermentation by addition of ferric oxide nanoparticles using Enterobacter aerogenes. Bioresource Technology, 2016, 207, 213-219.	4.8	162

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19	Electric fieldâ€“induced selective catalysis of single-molecule reaction. Science Advances, 2019, 5, eaaw3072.	4.7	161
20	Redox potentials and pKa for benzoquinone from density functional theory based molecular dynamics. Journal of Chemical Physics, 2009, 131, 154504.	1.2	158
21	Determining Potentials of Zero Charge of Metal Electrodes versus the Standard Hydrogen Electrode from Density-Functional-Theory-Based Molecular Dynamics. Physical Review Letters, 2017, 119, 016801.	2.9	149
22	Investigating hydrothermal pretreatment of food waste for two-stage fermentative hydrogen and methane co-production. Bioresource Technology, 2017, 241, 491-499.	4.8	144
23	Oxygen Vacancy-Mediated Selective Câ€“N Coupling toward Electrocatalytic Urea Synthesis. Journal of the American Chemical Society, 2022, 144, 11530-11535.	6.6	142
24	Photoelectrocatalytic Reduction of CO₂ into Chemicals Using Pt-Modified Reduced Graphene Oxide Combined with Pt-Modified TiO₂ Nanotubes. Environmental Science & Technology, 2014, 48, 7076-7084.	4.6	141
25	Mutate Chlorella sp. by nuclear irradiation to fix high concentrations of CO2. Bioresource Technology, 2013, 136, 496-501.	4.8	140
26	Molecular Iridium Complexes in Metalâ€“Organic Frameworks Catalyze CO₂ Hydrogenation via Concerted Proton and Hydride Transfer. Journal of the American Chemical Society, 2017, 139, 17747-17750.	6.6	135
27	Early Stages of Electrochemical Oxidation of Cu(111) and Polycrystalline Cu Surfaces Revealed by in Situ Raman Spectroscopy. Journal of the American Chemical Society, 2019, 141, 12192-12196.	6.6	135
28	Inâ€…situ Spectroscopic Insight into the Origin of the Enhanced Performance of Bimetallic Nanocatalysts towards the Oxygen Reduction Reaction (ORR). Angewandte Chemie - International Edition, 2019, 58, 16062-16066.	7.2	135
29	Cyclic Penta-Twinned Rhodium Nanobranches as Superior Catalysts for Ethanol Electro-oxidation. Journal of the American Chemical Society, 2018, 140, 11232-11240.	6.6	133
30	Improving CO2 fixation efficiency by optimizing Chlorella PY-ZU1 culture conditions in sequential bioreactors. Bioresource Technology, 2013, 144, 321-327.	4.8	125
31	Chain Growth Mechanism in Fischerâ€“Tropsch Synthesis:â€‰ A DFT Study of Câ€“C Coupling over Ru, Fe, Rh, and Re Surfaces. Journal of Physical Chemistry C, 2008, 112, 6082-6086.	1.5	123
32	Utilization of the Three-Dimensional Volcano Surface To Understand the Chemistry of Multiphase Systems in Heterogeneous Catalysis. Journal of the American Chemical Society, 2008, 130, 10868-10869.	6.6	118
33	Molecular origin of negative component of Helmholtz capacitance at electrified Pt(111)/water interface. Science Advances, 2020, 6, .	4.7	118
34	Modeling the Oxygen Evolution Reaction on Metal Oxides: The Influence of Unrestricted DFT Calculations. Journal of Physical Chemistry C, 2014, 118, 4095-4102.	1.5	117
35	Aligning electronic energy levels at the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>TiO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu Physical Review B, 2010, 82, .	1.1	115
36	Growth optimisation of microalga mutant at high CO2 concentration to purify undiluted anaerobic digestion effluent of swine manure. Bioresource Technology, 2015, 177, 240-246.	4.8	115

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37	Selectivity Control in Photocatalytic Valorization of Biomass-Derived Platform Compounds by Surface Engineering of Titanium Oxide. CheM, 2020, 6, 3038-3053.	5.8	112
38	Enhancing the growth rate and astaxanthin yield of Haematococcus pluvialis by nuclear irradiation and high concentration of carbon dioxide stress. Bioresource Technology, 2016, 204, 49-54.	4.8	109
39	Characterisation of water hyacinth with microwave-heated alkali pretreatment for enhanced enzymatic digestibility and hydrogen/methane fermentation. Bioresource Technology, 2015, 182, 1-7.	4.8	103
40	Modification and improvement of microalgae strains for strengthening CO2 fixation from coal-fired flue gas in power plants. Bioresource Technology, 2019, 291, 121850.	4.8	102
41	Synthesis and antiviral activity against Coxsackie virus B3 of some novel benzimidazole derivatives. Bioorganic and Medicinal Chemistry Letters, 2005, 15, 267-269.	1.0	101
42	Using wet microalgae for direct biodiesel production via microwave irradiation. Bioresource Technology, 2013, 131, 531-535.	4.8	98
43	Conversion of waste cooking oil to jet biofuel with nickel-based mesoporous zeolite Y catalyst. Bioresource Technology, 2015, 197, 289-294.	4.8	97
44	Biodiesel production from lipids in wet microalgae with microwave irradiation and bio-crude production from algal residue through hydrothermal liquefaction. Bioresource Technology, 2014, 151, 415-418.	4.8	96
45	Biodiesel production from wet microalgae by using graphene oxide as solid acid catalyst. Bioresource Technology, 2016, 221, 344-349.	4.8	96
46	Oxidative Dehydrogenation of Propane to Propylene in the Presence of HCl Catalyzed by CeO₂ and NiO-Modified CeO₂ Nanocrystals. ACS Catalysis, 2018, 8, 4902-4916.	5.5	95
47	Substrate strain tunes operando geometric distortion and oxygen reduction activity of CuN2C2 single-atom sites. Nature Communications, 2021, 12, 6335.	5.8	95
48	Biodiesel from wet microalgae: Extraction with hexane after the microwave-assisted transesterification of lipids. Bioresource Technology, 2014, 170, 69-75.	4.8	91
49	Inhibitory effects of furan derivatives and phenolic compounds on dark hydrogen fermentation. Bioresource Technology, 2015, 196, 250-255.	4.8	89
50	A DFT study of the chain growth probability in Fischerâ€“Tropsch synthesis. Journal of Catalysis, 2008, 257, 221-228.	3.1	88
51	Co-generation of biohydrogen and biomethane through two-stage batch co-fermentation of macro- and micro-algal biomass. Bioresource Technology, 2016, 218, 224-231.	4.8	88
52	Some Understanding of Fischerâ€“Tropsch Synthesis from Density Functional Theory Calculations. Topics in Catalysis, 2010, 53, 326-337.	1.3	86
53	Identifying Trapped Electronic Holes at the Aqueous TiO₂ Interface. Journal of Physical Chemistry C, 2014, 118, 5437-5444.	1.5	85
54	Dynamic microstructures and fractal characterization of cell wall disruption for microwave irradiation-assisted lipid extraction from wet microalgae. Bioresource Technology, 2013, 150, 67-72.	4.8	83

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55	Dipoleâ€Induced Bandâ€Gap Reduction in an Inorganic Cage. Angewandte Chemie - International Edition, 2014, 53, 1934-1938.	7.2	82
56	Enhancing growth rate and lipid yield of Chlorella with nuclear irradiation under high salt and CO2 stress. Bioresource Technology, 2016, 203, 220-227.	4.8	80
57	Tuning the Electronic Structure of NiO via Li Doping for the Fast Oxygen Evolution Reaction. Chemistry of Materials, 2019, 31, 419-428.	3.2	78
58	Increased activity in the oxygen evolution reaction by Fe⁴⁺-induced hole states in perovskite La_{1â^'x}Sr_xFeO₃. Journal of Materials Chemistry A, 2020, 8, 4407-4415.	5.2	78
59	Examining the redox and formate mechanisms for waterâ€“gas shift reaction on Au/CeO2 using density functional theory. Surface Science, 2008, 602, 2828-2834.	0.8	76
60	A First-Principles Study of Oxygenates on Co Surfaces in Fischerâ^'Tropsch Synthesis. Journal of Physical Chemistry C, 2008, 112, 9464-9473.	1.5	76
61	Aqueous Redox Chemistry and the Electronic Band Structure of Liquid Water. Journal of Physical Chemistry Letters, 2012, 3, 3411-3415.	2.1	76
62	Improving growth rate of microalgae in a 1191m2 raceway pond to fix CO2 from flue gas in a coal-fired power plant. Bioresource Technology, 2015, 190, 235-241.	4.8	75
63	Aligning Electronic and Protonic Energy Levels of Protonâ€Coupled Electron Transfer in Water Oxidation on Aqueous TiO₂. Angewandte Chemie - International Edition, 2014, 53, 12046-12050.	7.2	74
64	Improvement of the energy conversion efficiency of Chlorella pyrenoidosa biomass by a three-stage process comprising dark fermentation, photofermentation, and methanogenesis. Bioresource Technology, 2013, 146, 436-443.	4.8	73
65	A density functional theory study of the Î±-olefin selectivity in Fischerâ€“Tropsch synthesis. Journal of Catalysis, 2008, 255, 20-28.	3.1	72
66	An Energy Descriptor To Quantify Methane Selectivity in Fischerâ^'Tropsch Synthesis: A Density Functional Theory Study. Journal of Physical Chemistry C, 2009, 113, 8858-8863.	1.5	72
67	Surface acidity of 2:1-type dioctahedral clay minerals from first principles molecular dynamics simulations. Geochimica Et Cosmochimica Acta, 2014, 140, 410-417.	1.6	72
68	In Situ Raman Monitoring and Manipulating of Interfacial Hydrogen Spillover by Precise Fabrication of Au/TiO₂/Pt Sandwich Structures. Angewandte Chemie - International Edition, 2020, 59, 10343-10347.	7.2	70
69	Theory of the Kinetics of Chemical Potentials in Heterogeneous Catalysis. Angewandte Chemie - International Edition, 2011, 50, 7650-7654.	7.2	69
70	Covalent Organic Framework for Efficient Two-Photon Absorption. Matter, 2020, 2, 1049-1063.	5.0	69
71	Molecular Ordering at the Interface Between Liquid Water and Rutile TiO₂(110). Advanced Materials Interfaces, 2015, 2, 1500246.	1.9	68
72	Conversion of lipids from wet microalgae into biodiesel using sulfonated graphene oxide catalysts. Bioresource Technology, 2017, 244, 569-574.	4.8	68

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73	First-principles study of alkali-metal intercalation in disordered carbon anode materials. Journal of Materials Chemistry A, 2019, 7, 19070-19080.	5.2	68
74	Hole Localization and Thermochemistry of Oxidative Dehydrogenation of Aqueous Rutile TiO₂(110). ChemCatChem, 2012, 4, 636-640.	1.8	65
75	A Cu foam cathode used as a Ptâ€“RGO catalyst matrix to improve CO₂ reduction in a photoelectrocatalytic cell with a TiO₂ photoanode. Journal of Materials Chemistry A, 2015, 3, 12947-12957.	5.2	65
76	The electric double layer at a rutile TiO₂water interface modelled using density functional theory based molecular dynamics simulation. Journal of Physics Condensed Matter, 2014, 26, 244108.	0.7	64
77	Understanding surface acidity of gibbsite with first principles molecular dynamics simulations. Geochimica Et Cosmochimica Acta, 2013, 120, 487-495.	1.6	61
78	Optimizing catalysis conditions to decrease aromatic hydrocarbons and increase alkanes for improving jet biofuel quality. Bioresource Technology, 2014, 158, 378-382.	4.8	61
79	Site-selective electrooxidation of methylarenes to aromatic acetals. Nature Communications, 2020, 11, 2706.	5.8	61
80	Co-production of biohydrogen and biomethane from food waste and paper waste via recirculated two-phase anaerobic digestion process: Bioenergy yields and metabolic distribution. Bioresource Technology, 2019, 276, 325-334.	4.8	60
81	Hydrogen production using amino acids obtained by protein degradation in waste biomass by combined dark- and photo-fermentation. Bioresource Technology, 2015, 179, 13-19.	4.8	59
82	Graphene Facilitates Biomethane Production from Protein-Derived Glycine in Anaerobic Digestion. IScience, 2018, 10, 158-170.	1.9	59
83	Câ€“H activations of methanol and ethanol and Câ€“C couplings into diols by zincâ€“indiumâ€“sulfide under visible light. Chemical Communications, 2020, 56, 1776-1779.	2.2	59
84	Improving pollutants removal by microalgae Chlorella PY-ZU1 with 15% CO 2 from undiluted anaerobic digestion effluent of food wastes with ozonation pretreatment. Bioresource Technology, 2016, 216, 273-279.	4.8	58
85	Transcriptome and key genes expression related to carbon fixation pathways in Chlorella PY-ZU1 cells and their growth under high concentrations of CO2. Biotechnology for Biofuels, 2017, 10, 181.	6.2	58
86	Fermentative hydrogen and methane cogeneration from cassava residues: Effect of pretreatment on structural characterization and fermentation performance. Bioresource Technology, 2015, 179, 407-413.	4.8	57
87	Enhanced flashing light effect with up-down chute baffles to improve microalgal growth in a raceway pond. Bioresource Technology, 2015, 190, 29-35.	4.8	57
88	Hierarchically porous carbon derived from potassium-citrate-loaded poplar catkin for high performance supercapacitors. Journal of Colloid and Interface Science, 2021, 582, 940-949.	5.0	57
89	Mutation of Spirulina sp . by nuclear irradiation to improve growth rate under 15% carbon dioxide in flue gas. Bioresource Technology, 2017, 238, 650-656.	4.8	56
90	Modeling Electrified Pt(111)-H_{ad}/Water Interfaces from Ab Initio Molecular Dynamics. Jacs Au, 2021, 1, 569-577.	3.6	56

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91	Transcriptome and Gene Expression Analysis of an Oleaginous Diatom Under Different Salinity Conditions. Bioenergy Research, 2014, 7, 192-205.	2.2	55
92	Binary Pd/amorphous-SrRuO3 hybrid film for high stability and fast activity recovery ethanol oxidation electrocatalysis. Nano Energy, 2020, 67, 104247.	8.2	55
93	Sieving carbons promise practical anodes with extensible low-potential plateaus for sodium batteries. National Science Review, 2022, 9, .	4.6	55
94	Microstructures and functional groups of Nannochloropsis sp. cells with arsenic adsorption and lipid accumulation. Bioresource Technology, 2015, 194, 305-311.	4.8	54
95	Microstructure and antioxidative capacity of the microalgae mutant Chlorella PY-ZU1 during tilmicosin removal from wastewater under 15% CO2. Journal of Hazardous Materials, 2017, 324, 414-419.	6.5	53
96	Surface acidity of quartz: understanding the crystallographic control. Physical Chemistry Chemical Physics, 2014, 16, 26909-26916.	1.3	52
97	Subcritical water hydrolysis of rice straw for reducing sugar production with focus on degradation by-products and kinetic analysis. Bioresource Technology, 2015, 186, 8-14.	4.8	52
98	Boosting Defective Carbon by Anchoring Well-Defined Atomically Dispersed Niâ€“N₄ Sites for Electrocatalytic CO₂ Reduction. ACS Sustainable Chemistry and Engineering, 2020, 8, 10536-10543.	3.2	52
99	Molecular bilayer graphene. Nature Communications, 2019, 10, 3057.	5.8	51
100	Role of Adsorption Orientation in Surface Plasmon-Driven Coupling Reactions Studied by Tip-Enhanced Raman Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 2306-2312.	2.1	51
101	The structure of metal-water interface at the potential of zero charge from density functional theory-based molecular dynamics. Journal of Electroanalytical Chemistry, 2018, 819, 87-94.	1.9	50
102	Deep potential generation scheme and simulation protocol for the Li10GeP2S12-type superionic conductors. Journal of Chemical Physics, 2021, 154, 094703.	1.2	49
103	In Situ Raman Study of CO Electrooxidation on Pt(hkl) Singleâ€Crystal Surfaces in Acidic Solution. Angewandte Chemie - International Edition, 2020, 59, 23554-23558.	7.2	47
104	Subnanometer Bimetallic Platinumâ€“Zinc Clusters in Zeolites for Propane Dehydrogenation. Angewandte Chemie, 2020, 132, 19618-19627.	1.6	47
105	Gradient domestication of Haematococcus pluvialis mutant with 15% CO 2 to promote biomass growth and astaxanthin yield. Bioresource Technology, 2016, 216, 340-344.	4.8	46
106	Transcriptome-based analysis on carbon metabolism of Haematococcus pluvialis mutant under 15% CO 2. Bioresource Technology, 2017, 233, 313-321.	4.8	44
107	How cations determine the interfacial potential profile: Relevance for the CO2 reduction reaction. Electrochimica Acta, 2019, 327, 135055.	2.6	44
108	Nanoscale zero-valent iron improved lactic acid degradation to produce methane through anaerobic digestion. Bioresource Technology, 2020, 317, 124013.	4.8	44

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109	In Situ Raman Monitoring and Manipulating of Interfacial Hydrogen Spillover by Precise Fabrication of Au/TiO 2 /Pt Sandwich Structures. Angewandte Chemie, 2020, 132, 10429-10433.	1.6	44
110	Removing ethinylestradiol from wastewater by microalgae mutant Chlorella PY-ZU1 with CO2 fixation. Bioresource Technology, 2018, 249, 284-289.	4.8	43
111	Biocrude Oil Production through the Maillard Reaction between Leucine and Glucose during Hydrothermal Liquefaction. Energy & Fuels, 2019, 33, 8758-8765.	2.5	42
112	Biomimetic micro cell cathode for high performance lithiumâ€“sulfur batteries. Nano Energy, 2020, 72, 104680.	8.2	42
113	Theoretical insight into the vibrational spectra of metalâ€“water interfaces from density functional theory based molecular dynamics. Physical Chemistry Chemical Physics, 2018, 20, 11554-11558.	1.3	41
114	Facilitating the Deprotonation of OH to O through Fe⁴⁺â€induced States in Perovskite LaNiO₃ Enables a Fast Oxygen Evolution Reaction. Small, 2021, 17, e2006930.	5.2	40
115	Solution Structures and Acidity Constants of Molybdic Acid. Journal of Physical Chemistry Letters, 2013, 4, 2926-2930.	2.1	39
116	Enhanced energy recovery from cassava ethanol wastewater through sequential dark hydrogen, photo hydrogen and methane fermentation combined with ammonium removal. Bioresource Technology, 2016, 214, 686-691.	4.8	39
117	Transcriptome sequencing and metabolic pathways of astaxanthin accumulated in Haematococcus pluvialis mutant under 15% CO 2. Bioresource Technology, 2017, 228, 99-105.	4.8	39
118	Alternatively permutated conic baffles generate vortex flow field to improve microalgal productivity in a raceway pond. Bioresource Technology, 2018, 249, 212-218.	4.8	39
119	Improving biohydrogen production through dark fermentation of steam-heated acid pretreated Alternanthera philoxeroides by mutant Enterobacter aerogenes ZJU1. Science of the Total Environment, 2020, 716, 134695.	3.9	39
120	Correlating the electronic structure of perovskite La1â^'Sr CoO3 with activity for the oxygen evolution reaction: The critical role of Co 3d hole state. Journal of Energy Chemistry, 2022, 65, 637-645.	7.1	39
121	Calculation of Electrochemical Energy Levels in Water Using the Random Phase Approximation and a Double Hybrid Functional. Physical Review Letters, 2016, 116, 086402.	2.9	38
122	In vivo kinetics of lipids and astaxanthin evolution in Haematococcus pluvialis mutant under 15% CO2 using Raman microspectroscopy. Bioresource Technology, 2017, 244, 1439-1444.	4.8	37
123	A novel jet-aerated tangential swirling-flow plate photobioreactor generates microbubbles that enhance mass transfer and improve microalgal growth. Bioresource Technology, 2019, 288, 121531.	4.8	37
124	Decrease in light/dark cycle of microalgal cells with computational fluid dynamics simulation to improve microalgal growth in a raceway pond. Bioresource Technology, 2016, 220, 352-359.	4.8	35
125	Serial lantern-shaped draft tube enhanced flashing light effect for improving CO2 fixation with microalgae in a gas-lift circumflux column photobioreactor. Bioresource Technology, 2018, 255, 156-162.	4.8	35
126	Interfacial structures and acidity of edge surfaces of ferruginous smectites. Geochimica Et Cosmochimica Acta, 2015, 168, 293-301.	1.6	34

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127	Strengthening mass transfer of carbon dioxide microbubbles dissolver in a horizontal tubular photo-bioreactor for improving microalgae growth. Bioresource Technology, 2019, 277, 11-17.	4.8	34
128	Engineering of anatase/rutile TiO2 heterophase junction via in-situ phase transformation for enhanced photocatalytic hydrogen evolution. Journal of Colloid and Interface Science, 2021, 599, 795-804.	5.0	34
129	A study of the optical properties of metal-doped polyoxotitanium cages and the relationship to metal-doped titania. Dalton Transactions, 2014, 43, 8679.	1.6	33
130	Enhanced solution velocity between dark and light areas with horizontal tubes and triangular prism baffles to improve microalgal growth in a flat-panel photo-bioreactor. Bioresource Technology, 2016, 211, 519-526.	4.8	33
131	Improving CO2 fixation with microalgae by bubble breakage in raceway ponds with upâ€“down chute baffles. Bioresource Technology, 2016, 201, 174-181.	4.8	33
132	Promoting helix pitch and trichome length to improve biomass harvesting efficiency and carbon dioxide fixation rate by Spirulina sp. in 660â€¯m2 raceway ponds under purified carbon dioxide from a coal chemical flue gas. Bioresource Technology, 2018, 261, 76-85.	4.8	33
133	Modeling electrochemical interfaces from ab initio molecular dynamics: water adsorption on metal surfaces at potential of zero charge. Current Opinion in Electrochemistry, 2020, 19, 129-136.	2.5	33
134	CO₂ Adsorption Performance of Ionic Liquid [P₆₆₆₁₄][2-Op] Loaded onto Molecular Sieve MCM-41 Compared to Pure Ionic Liquid in Biohythane/Pure CO₂ Atmospheres. Energy & Fuels, 2016, 30, 3251-3256.	2.5	32
135	Developing microporous fibrous-diaphragm aerator to decrease bubble generation diameter for improving microalgal growth with CO2 fixation in a raceway pond. Bioresource Technology, 2019, 276, 28-34.	4.8	32
136	Single Ni atoms with higher positive charges induced by hydroxyls for electrocatalytic CO₂ reduction. Nanoscale, 2020, 12, 18437-18445.	2.8	32
137	Improving microalgal growth with reduced diameters of aeration bubbles and enhanced mass transfer of solution in an oscillating flow field. Bioresource Technology, 2016, 211, 429-434.	4.8	31
138	Ionic-liquid pretreatment of cassava residues for the cogeneration of fermentative hydrogen and methane. Bioresource Technology, 2017, 228, 348-354.	4.8	31
139	Photocatalytic coupling of formaldehyde to ethylene glycol and glycolaldehyde over bismuth vanadate with controllable facets and cocatalysts. Catalysis Science and Technology, 2017, 7, 923-933.	2.1	30
140	Recent Progress toward Ab Initio Modeling of Electrocatalysis. Journal of Physical Chemistry Letters, 2021, 12, 8924-8931.	2.1	30
141	Simultaneous promotion of photosynthesis and astaxanthin accumulation during two stages of Haematococcus pluvialis with ammonium ferric citrate. Science of the Total Environment, 2021, 750, 141689.	3.9	29
142	Fractal microstructure characterization of wet microalgal cells disrupted with ultrasonic cavitation for lipid extraction. Bioresource Technology, 2014, 170, 138-143.	4.8	27
143	Physicochemical characterization of wet microalgal cells disrupted with instant catapult steam explosion for lipid extraction. Bioresource Technology, 2015, 191, 66-72.	4.8	27
144	Enhanced Lipid Accumulation through a Regulated Metabolic Pathway of Phosphorus Luxury Uptake in the Microalga Chlorella vulgaris under Nitrogen Starvation and Phosphorus Repletion. ACS Sustainable Chemistry and Engineering, 2020, 8, 8137-8147.	3.2	27

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145	Slurrying Property and Mechanism of Coalâ€“Coal Gasification Wastewaterâ€“Slurry. Energy & Fuels, 2018, 32, 4833-4840.	2.5	26
146	Inâ€…situ Spectroscopic Insight into the Origin of the Enhanced Performance of Bimetallic Nanocatalysts towards the Oxygen Reduction Reaction (ORR). Angewandte Chemie, 2019, 131, 16208-16212.	1.6	26
147	Inhibition of N-Vanillylnonanamide in anaerobic digestion of lipids in food waste: Microorganisms damage and blocked electron transfer. Journal of Hazardous Materials, 2020, 399, 123098.	6.5	26
148	Improving light distribution and light/dark cycle of 900ÂL tangential spiralâ˜flow column photobioreactors to promote CO2 fixation with Arthrospira sp. cells. Science of the Total Environment, 2020, 720, 137611.	3.9	26
149	Atomically thin photoanode of InSe/graphene heterostructure. Nature Communications, 2021, 12, 91.	5.8	26
150	Iridium boosts the selectivity and stability of cobalt catalysts for syngas to liquid fuels. CheM, 2022, 8, 1050-1066.	5.8	26
151	Solid-to-liquid phase transitions of sub-nanometer clusters enhance chemical transformation. Nature Communications, 2019, 10, 5400.	5.8	25
152	Simultaneous enhancement of microalgae biomass growth and lipid accumulation under continuous aeration with 15% CO₂. RSC Advances, 2015, 5, 50851-50858.	1.7	24
153	Aqueous Transition-Metal Cations as Impurities in a Wide Gap Oxide: The Cu²⁺/Cu⁺ and Ag²⁺/Ag⁺ Redox Couples Revisited. Journal of Physical Chemistry B, 2015, 119, 1152-1163.	1.2	24
154	In-situ grafting to improve polarity of polyacrylonitrile hollow fiber-supported polydimethylsiloxane membranes for CO2 separation. Journal of Colloid and Interface Science, 2018, 510, 12-19.	5.0	24
155	Reduced generation time and size of carbon dioxide bubbles in a volute aerator for improving Spirulina sp. growth. Bioresource Technology, 2018, 270, 352-358.	4.8	24
156	Promoting Photochemical Efficiency of Chlorella PY-ZU1 with Enhanced Velocity Field and Turbulent Kinetics in a Novel Tangential Spiral-Flow Column Photobioreactor. ACS Sustainable Chemistry and Engineering, 2019, 7, 384-393.	3.2	24
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158	Pebaxâ€based mixed matrix membranes loaded with graphene oxide/core shell <scp>ZIF</scp>â€8@<scp>ZIF</scp>â€67 nanocomposites improved <scp>CO₂</scp> permeability and selectivity. Journal of Applied Polymer Science, 2021, 138, 50553.	1.3	24
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