

Jun Cheng

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289
papers

10,137
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h-index

89
g-index

312
ext. papers

13,066
ext. citations

9.3
avg, IF

6.79
L-index

#	Paper	IF	Citations
289	Origin of additional capacities in metal oxide lithium-ion battery electrodes. <i>Nature Materials</i> , 2013 , 12, 1130-6	27	559
288	Electrocatalytic reduction of CO ₂ to ethylene and ethanol through hydrogen-assisted C ₁ coupling over fluorine-modified copper. <i>Nature Catalysis</i> , 2020 , 3, 478-487	36.5	286
287	Solar energy-driven lignin-first approach to full utilization of lignocellulosic biomass under mild conditions. <i>Nature Catalysis</i> , 2018 , 1, 772-780	36.5	232
286	Boosting biomethane yield and production rate with graphene: The potential of direct interspecies electron transfer in anaerobic digestion. <i>Bioresource Technology</i> , 2017 , 239, 345-352	11	188
285	Alignment of electronic energy levels at electrochemical interfaces. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 11245-67	3.6	185
284	In situ probing electrified interfacial water structures at atomically flat surfaces. <i>Nature Materials</i> , 2019 , 18, 697-701	27	172
283	Filling metal-organic framework mesopores with TiO for CO photoreduction. <i>Nature</i> , 2020 , 586, 549-554	50.4	165
282	Acidity of the Aqueous Rutile TiO ₂ (110) Surface from Density Functional Theory Based Molecular Dynamics. <i>Journal of Chemical Theory and Computation</i> , 2010 , 6, 880-9	6.4	159
281	A quantitative determination of reaction mechanisms from density functional theory calculations: Fischer-Tropsch synthesis on flat and stepped cobalt surfaces. <i>Journal of Catalysis</i> , 2008 , 254, 285-295	7.3	153
280	Innovation in biological production and upgrading of methane and hydrogen for use as gaseous transport biofuel. <i>Biotechnology Advances</i> , 2016 , 34, 451-472	17.8	148
279	Coupling N and CO in HO to synthesize urea under ambient conditions. <i>Nature Chemistry</i> , 2020 , 12, 717-724	17.4	146
278	Acidity of edge surface sites of montmorillonite and kaolinite. <i>Geochimica Et Cosmochimica Acta</i> , 2013 , 117, 180-190	5.5	146
277	Brüsted-Evans-Polanyi Relation of Multistep Reactions and Volcano Curve in Heterogeneous Catalysis. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 1308-1311	3.8	146
276	Redox potentials and pKa for benzoquinone from density functional theory based molecular dynamics. <i>Journal of Chemical Physics</i> , 2009 , 131, 154504	3.9	138
275	Density Functional Theory Study of Iron and Cobalt Carbides for Fischer-Tropsch Synthesis. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 1085-1093	3.8	137
274	Redox potentials and acidity constants from density functional theory based molecular dynamics. <i>Accounts of Chemical Research</i> , 2014 , 47, 3522-9	24.3	134
273	Mutate <i>Chlorella</i> sp. by nuclear irradiation to fix high concentrations of CO ₂ . <i>Bioresource Technology</i> , 2013 , 136, 496-501	11	124

272	Photoelectrocatalytic reduction of CO ₂ into chemicals using Pt-modified reduced graphene oxide combined with Pt-modified TiO ₂ nanotubes. <i>Environmental Science & Technology</i> , 2014 , 48, 7076-84	10.3	117
271	Enhanced dark hydrogen fermentation by addition of ferric oxide nanoparticles using <i>Enterobacter aerogenes</i> . <i>Bioresource Technology</i> , 2016 , 207, 213-9	11	109
270	Investigating hydrothermal pretreatment of food waste for two-stage fermentative hydrogen and methane co-production. <i>Bioresource Technology</i> , 2017 , 241, 491-499	11	108
269	Aligning electronic energy levels at the TiO ₂ /H ₂ O interface. <i>Physical Review B</i> , 2010 , 82,	3.3	108
268	Determining Potentials of Zero Charge of Metal Electrodes versus the Standard Hydrogen Electrode from Density-Functional-Theory-Based Molecular Dynamics. <i>Physical Review Letters</i> , 2017 , 119, 016801	7.4	106
267	Improving CO ₂ fixation efficiency by optimizing <i>Chlorella</i> PY-ZU1 culture conditions in sequential bioreactors. <i>Bioresource Technology</i> , 2013 , 144, 321-7	11	106
266	Visible light-driven C-H activation and C-C coupling of methanol into ethylene glycol. <i>Nature Communications</i> , 2018 , 9, 1181	17.4	105
265	Chain Growth Mechanism in Fischer-Tropsch Synthesis: A DFT Study of C-C Coupling over Ru, Fe, Rh, and Re Surfaces. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 6082-6086	3.8	101
264	Utilization of the three-dimensional volcano surface to understand the chemistry of multiphase systems in heterogeneous catalysis. <i>Journal of the American Chemical Society</i> , 2008 , 130, 10868-9	16.4	98
263	Molecular Iridium Complexes in Metal-Organic Frameworks Catalyze CO Hydrogenation via Concerted Proton and Hydride Transfer. <i>Journal of the American Chemical Society</i> , 2017 , 139, 17747-17750	16.4	95
262	Synthesis and antiviral activity against Coxsackie virus B3 of some novel benzimidazole derivatives. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2005 , 15, 267-9	2.9	92
261	Growth optimisation of microalga mutant at high CO ₂ concentration to purify undiluted anaerobic digestion effluent of swine manure. <i>Bioresource Technology</i> , 2015 , 177, 240-6	11	88
260	Subnanometer Bimetallic Platinum-Zinc Clusters in Zeolites for Propane Dehydrogenation. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 19450-19459	16.4	85
259	Using wet microalgae for direct biodiesel production via microwave irradiation. <i>Bioresource Technology</i> , 2013 , 131, 531-5	11	83
258	Modeling the Oxygen Evolution Reaction on Metal Oxides: The Influence of Unrestricted DFT Calculations. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 4095-4102	3.8	81
257	Biodiesel production from lipids in wet microalgae with microwave irradiation and bio-crude production from algal residue through hydrothermal liquefaction. <i>Bioresource Technology</i> , 2014 , 151, 415-8	11	81
256	Some Understanding of Fischer-Tropsch Synthesis from Density Functional Theory Calculations. <i>Topics in Catalysis</i> , 2010 , 53, 326-337	2.3	81
255	Cyclic Penta-Twinned Rhodium Nanobranches as Superior Catalysts for Ethanol Electro-oxidation. <i>Journal of the American Chemical Society</i> , 2018 , 140, 11232-11240	16.4	80

254	Biodiesel from wet microalgae: extraction with hexane after the microwave-assisted transesterification of lipids. <i>Bioresource Technology</i> , 2014 , 170, 69-75	11	80
253	Characterisation of water hyacinth with microwave-heated alkali pretreatment for enhanced enzymatic digestibility and hydrogen/methane fermentation. <i>Bioresource Technology</i> , 2015 , 182, 1-7	11	80
252	A DFT study of the chain growth probability in Fischer-Tropsch synthesis. <i>Journal of Catalysis</i> , 2008 , 257, 221-228	7.3	79
251	Conversion of waste cooking oil to jet biofuel with nickel-based mesoporous zeolite Y catalyst. <i>Bioresource Technology</i> , 2015 , 197, 289-94	11	78
250	In situ Spectroscopic Insight into the Origin of the Enhanced Performance of Bimetallic Nanocatalysts towards the Oxygen Reduction Reaction (ORR). <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 16062-16066	16.4	77
249	Biodiesel production from wet microalgae by using graphene oxide as solid acid catalyst. <i>Bioresource Technology</i> , 2016 , 221, 344-349	11	73
248	Electric field-induced selective catalysis of single-molecule reaction. <i>Science Advances</i> , 2019 , 5, eaaw3072	24.3	72
247	Identifying Trapped Electronic Holes at the Aqueous TiO ₂ Interface. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 5437-5444	3.8	72
246	Co-generation of biohydrogen and biomethane through two-stage batch co-fermentation of macro- and micro-algal biomass. <i>Bioresource Technology</i> , 2016 , 218, 224-31	11	69
245	Enhancing the growth rate and astaxanthin yield of <i>Haematococcus pluvialis</i> by nuclear irradiation and high concentration of carbon dioxide stress. <i>Bioresource Technology</i> , 2016 , 204, 49-54	11	69
244	Inhibitory effects of furan derivatives and phenolic compounds on dark hydrogen fermentation. <i>Bioresource Technology</i> , 2015 , 196, 250-5	11	68
243	Oxidative Dehydrogenation of Propane to Propylene in the Presence of HCl Catalyzed by CeO ₂ and NiO-Modified CeO ₂ Nanocrystals. <i>ACS Catalysis</i> , 2018 , 8, 4902-4916	13.1	68
242	Dipole-induced band-gap reduction in an inorganic cage. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 1934-8	16.4	68
241	Aqueous Redox Chemistry and the Electronic Band Structure of Liquid Water. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 3411-5	6.4	67
240	A First-Principles Study of Oxygenates on Co Surfaces in Fischer-Tropsch Synthesis. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 9464-9473	3.8	67
239	Dynamic microstructures and fractal characterization of cell wall disruption for microwave irradiation-assisted lipid extraction from wet microalgae. <i>Bioresource Technology</i> , 2013 , 150, 67-72	11	65
238	Early Stages of Electrochemical Oxidation of Cu(111) and Polycrystalline Cu Surfaces Revealed by Raman Spectroscopy. <i>Journal of the American Chemical Society</i> , 2019 , 141, 12192-12196	16.4	64
237	Aligning electronic and protonic energy levels of proton-coupled electron transfer in water oxidation on aqueous TiO ₂ . <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 12046-50	16.4	64

236	Examining the redox and formate mechanisms for water-gas shift reaction on Au/CeO ₂ using density functional theory. <i>Surface Science</i> , 2008 , 602, 2828-2834	1.8	64
235	Surface acidity of 2:1-type dioctahedral clay minerals from first principles molecular dynamics simulations. <i>Geochimica Et Cosmochimica Acta</i> , 2014 , 140, 410-417	5.5	63
234	A density functional theory study of the ethylene selectivity in Fischer-Tropsch synthesis. <i>Journal of Catalysis</i> , 2008 , 255, 20-28	7.3	63
233	Molecular Ordering at the Interface Between Liquid Water and Rutile TiO ₂ (110). <i>Advanced Materials Interfaces</i> , 2015 , 2, 1500246	4.6	61
232	Improving growth rate of microalgae in a 1191m ² raceway pond to fix CO ₂ from flue gas in a coal-fired power plant. <i>Bioresource Technology</i> , 2015 , 190, 235-41	11	60
231	An Energy Descriptor To Quantify Methane Selectivity in Fischer-Tropsch Synthesis: A Density Functional Theory Study. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 8858-8863	3.8	60
230	The electric double layer at a rutile TiO ₂ /water interface modelled using density functional theory based molecular dynamics simulation. <i>Journal of Physics Condensed Matter</i> , 2014 , 26, 244108	1.8	59
229	Enhancing growth rate and lipid yield of <i>Chlorella</i> with nuclear irradiation under high salt and CO ₂ stress. <i>Bioresource Technology</i> , 2016 , 203, 220-7	11	58
228	Improvement of the energy conversion efficiency of <i>Chlorella pyrenoidosa</i> biomass by a three-stage process comprising dark fermentation, photofermentation, and methanogenesis. <i>Bioresource Technology</i> , 2013 , 146, 436-443	11	56
227	Hole Localization and Thermochemistry of Oxidative Dehydrogenation of Aqueous Rutile TiO ₂ (110). <i>ChemCatChem</i> , 2012 , 4, 636-640	5.2	56
226	Tuning the Electronic Structure of NiO via Li Doping for the Fast Oxygen Evolution Reaction. <i>Chemistry of Materials</i> , 2019 , 31, 419-428	9.6	56
225	Modification and improvement of microalgae strains for strengthening CO fixation from coal-fired flue gas in power plants. <i>Bioresource Technology</i> , 2019 , 291, 121850	11	55
224	A Cu foam cathode used as a Pt/RGO catalyst matrix to improve CO ₂ reduction in a photoelectrocatalytic cell with a TiO ₂ photoanode. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 12947-12957	13	53
223	Molecular origin of negative component of Helmholtz capacitance at electrified Pt(111)/water interface. <i>Science Advances</i> , 2020 , 6,	14.3	53
222	Theory of the kinetics of chemical potentials in heterogeneous catalysis. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 7650-4	16.4	52
221	Optimizing catalysis conditions to decrease aromatic hydrocarbons and increase alkanes for improving jet biofuel quality. <i>Bioresource Technology</i> , 2014 , 158, 378-82	11	50
220	Subcritical water hydrolysis of rice straw for reducing sugar production with focus on degradation by-products and kinetic analysis. <i>Bioresource Technology</i> , 2015 , 186, 8-14	11	47
219	Hydrogen production using amino acids obtained by protein degradation in waste biomass by combined dark- and photo-fermentation. <i>Bioresource Technology</i> , 2015 , 179, 13-19	11	46

218	Understanding surface acidity of gibbsite with first principles molecular dynamics simulations. <i>Geochimica Et Cosmochimica Acta</i> , 2013 , 120, 487-495	5.5	46
217	Transcriptome and Gene Expression Analysis of an Oleaginous Diatom Under Different Salinity Conditions. <i>Bioenergy Research</i> , 2014 , 7, 192-205	3.1	46
216	Graphene Facilitates Biomethane Production from Protein-Derived Glycine in Anaerobic Digestion. <i>IScience</i> , 2018 , 10, 158-170	6.1	42
215	Improving pollutants removal by microalgae Chlorella PY-ZU1 with 15% CO ₂ from undiluted anaerobic digestion effluent of food wastes with ozonation pretreatment. <i>Bioresource Technology</i> , 2016 , 216, 273-9	11	41
214	Conversion of lipids from wet microalgae into biodiesel using sulfonated graphene oxide catalysts. <i>Bioresource Technology</i> , 2017 , 244, 569-574	11	41
213	Fermentative hydrogen and methane cogeneration from cassava residues: effect of pretreatment on structural characterization and fermentation performance. <i>Bioresource Technology</i> , 2015 , 179, 407-413	11	40
212	Co-production of biohydrogen and biomethane from food waste and paper waste via recirculated two-phase anaerobic digestion process: Bioenergy yields and metabolic distribution. <i>Bioresource Technology</i> , 2019 , 276, 325-334	11	40
211	Microstructures and functional groups of Nannochloropsis sp. cells with arsenic adsorption and lipid accumulation. <i>Bioresource Technology</i> , 2015 , 194, 305-11	11	39
210	Enhanced flashing light effect with up-down chute baffles to improve microalgal growth in a raceway pond. <i>Bioresource Technology</i> , 2015 , 190, 29-35	11	39
209	Mutation of Spirulina sp. by nuclear irradiation to improve growth rate under 15% carbon dioxide in flue gas. <i>Bioresource Technology</i> , 2017 , 238, 650-656	11	37
208	Microstructure and antioxidative capacity of the microalgae mutant Chlorella PY-ZU1 during tilmicosin removal from wastewater under 15% CO ₂ . <i>Journal of Hazardous Materials</i> , 2017 , 324, 414-419	12.8	37
207	Transcriptome and key genes expression related to carbon fixation pathways in PY-ZU1 cells and their growth under high concentrations of CO ₂ . <i>Biotechnology for Biofuels</i> , 2017 , 10, 181	7.8	37
206	The structure of metal-water interface at the potential of zero charge from density functional theory-based molecular dynamics. <i>Journal of Electroanalytical Chemistry</i> , 2018 , 819, 87-94	4.1	37
205	Binary Pd/amorphous-SrRuO ₃ hybrid film for high stability and fast activity recovery ethanol oxidation electrocatalysis. <i>Nano Energy</i> , 2020 , 67, 104247	17.1	37
204	Selectivity Control in Photocatalytic Valorization of Biomass-Derived Platform Compounds by Surface Engineering of Titanium Oxide. <i>Chem</i> , 2020 , 6, 3038-3053	16.2	37
203	Covalent Organic Framework for Efficient Two-Photon Absorption. <i>Matter</i> , 2020 , 2, 1049-1063	12.7	36
202	Increased activity in the oxygen evolution reaction by Fe ⁴⁺ -induced hole states in perovskite La _{1-x} Sr _x FeO ₃ . <i>Journal of Materials Chemistry A</i> , 2020 , 8, 4407-4415	13	36
201	First-principles study of alkali-metal intercalation in disordered carbon anode materials. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 19070-19080	13	35

200	Surface acidity of quartz: understanding the crystallographic control. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 26909-16	3.6	35
199	Transcriptome sequencing and metabolic pathways of astaxanthin accumulated in <i>Haematococcus pluvialis</i> mutant under 15% CO ₂ . <i>Bioresource Technology</i> , 2017 , 228, 99-105	11	34
198	Role of Adsorption Orientation in Surface Plasmon-Driven Coupling Reactions Studied by Tip-Enhanced Raman Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 2306-2312	6.4	34
197	Solution Structures and Acidity Constants of Molybdic Acid. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 2926-2930	6.4	33
196	Gradient domestication of <i>Haematococcus pluvialis</i> mutant with 15% CO ₂ to promote biomass growth and astaxanthin yield. <i>Bioresource Technology</i> , 2016 , 216, 340-4	11	32
195	Enhanced energy recovery from cassava ethanol wastewater through sequential dark hydrogen, photo hydrogen and methane fermentation combined with ammonium removal. <i>Bioresource Technology</i> , 2016 , 214, 686-691	11	31
194	In Situ Raman Monitoring and Manipulating of Interfacial Hydrogen Spillover by Precise Fabrication of Au/TiO ₂ /Pt Sandwich Structures. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 10343-10347	16.4	30
193	Calculation of Electrochemical Energy Levels in Water Using the Random Phase Approximation and a Double Hybrid Functional. <i>Physical Review Letters</i> , 2016 , 116, 086402	7.4	30
192	A study of the optical properties of metal-doped polyoxotitanium cages and the relationship to metal-doped titania. <i>Dalton Transactions</i> , 2014 , 43, 8679-89	4.3	30
191	In vivo kinetics of lipids and astaxanthin evolution in <i>Haematococcus pluvialis</i> mutant under 15% CO ₂ using Raman microspectroscopy. <i>Bioresource Technology</i> , 2017 , 244, 1439-1444	11	29
190	C-H activations of methanol and ethanol and C-C couplings into diols by zinc-indium-sulfide under visible light. <i>Chemical Communications</i> , 2020 , 56, 1776-1779	5.8	29
189	Site-selective electrooxidation of methylarenes to aromatic acetals. <i>Nature Communications</i> , 2020 , 11, 2706	17.4	28
188	Decrease in light/dark cycle of microalgal cells with computational fluid dynamics simulation to improve microalgal growth in a raceway pond. <i>Bioresource Technology</i> , 2016 , 220, 352-359	11	28
187	Transcriptome-based analysis on carbon metabolism of <i>Haematococcus pluvialis</i> mutant under 15% CO ₂ . <i>Bioresource Technology</i> , 2017 , 233, 313-321	11	27
186	Alternatively permutated conic baffles generate vortex flow field to improve microalgal productivity in a raceway pond. <i>Bioresource Technology</i> , 2018 , 249, 212-218	11	27
185	Improving CO ₂ fixation with microalgae by bubble breakage in raceway ponds with up-down chute baffles. <i>Bioresource Technology</i> , 2016 , 201, 174-81	11	26
184	CO ₂ Adsorption Performance of Ionic Liquid [P66614][2-Op] Loaded onto Molecular Sieve MCM-41 Compared to Pure Ionic Liquid in Biohythane/Pure CO ₂ Atmospheres. <i>Energy & Fuels</i> , 2016 , 30, 3251-3256	4.1	26
183	Photocatalytic coupling of formaldehyde to ethylene glycol and glycolaldehyde over bismuth vanadate with controllable facets and cocatalysts. <i>Catalysis Science and Technology</i> , 2017 , 7, 923-933	5.5	25

182	Interfacial structures and acidity of edge surfaces of ferruginous smectites. <i>Geochimica Et Cosmochimica Acta</i> , 2015 , 168, 293-301	5.5	25
181	Biomimetic micro cell cathode for high performance lithium-sulfur batteries. <i>Nano Energy</i> , 2020 , 72, 104680	17.1	25
180	Hierarchically porous carbon derived from potassium-citrate-loaded poplar catkin for high performance supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2021 , 582, 940-949	9.3	25
179	Ionic-liquid pretreatment of cassava residues for the cogeneration of fermentative hydrogen and methane. <i>Bioresource Technology</i> , 2017 , 228, 348-354	11	24
178	Subnanometer Bimetallic Platinum-Zinc Clusters in Zeolites for Propane Dehydrogenation. <i>Angewandte Chemie</i> , 2020 , 132, 19618-19627	3.6	24
177	Promoting helix pitch and trichome length to improve biomass harvesting efficiency and carbon dioxide fixation rate by <i>Spirulina</i> sp. in 660 m raceway ponds under purified carbon dioxide from a coal chemical flue gas. <i>Bioresource Technology</i> , 2018 , 261, 76-85	11	24
176	Removing ethinylestradiol from wastewater by microalgae mutant <i>Chlorella</i> PY-ZU1 with CO fixation. <i>Bioresource Technology</i> , 2018 , 249, 284-289	11	24
175	Modeling electrochemical interfaces from ab initio molecular dynamics: water adsorption on metal surfaces at potential of zero charge. <i>Current Opinion in Electrochemistry</i> , 2020 , 19, 129-136	7.2	24
174	Theoretical insight into the vibrational spectra of metal-water interfaces from density functional theory based molecular dynamics. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 11554-11558	3.6	23
173	Improving microalgal growth with reduced diameters of aeration bubbles and enhanced mass transfer of solution in an oscillating flow field. <i>Bioresource Technology</i> , 2016 , 211, 429-34	11	23
172	Molecular bilayer graphene. <i>Nature Communications</i> , 2019 , 10, 3057	17.4	23
171	Fractal microstructure characterization of wet microalgal cells disrupted with ultrasonic cavitation for lipid extraction. <i>Bioresource Technology</i> , 2014 , 170, 138-143	11	23
170	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. <i>Bioresource Technology</i> , 2016 , 211, 519-26	11	23
169	Aqueous transition-metal cations as impurities in a wide gap oxide: the Cu(2+)/Cu(+) and Ag(2+)/Ag(+) redox couples revisited. <i>Journal of Physical Chemistry B</i> , 2015 , 119, 1152-63	3.4	22
168	Biocrude Oil Production through the Maillard Reaction between Leucine and Glucose during Hydrothermal Liquefaction. <i>Energy & Fuels</i> , 2019 , 33, 8758-8765	4.1	21
167	Physicochemical characterization of wet microalgal cells disrupted with instant catapult steam explosion for lipid extraction. <i>Bioresource Technology</i> , 2015 , 191, 66-72	11	21
166	Boosting Defective Carbon by Anchoring Well-Defined Atomically Dispersed Ni ₄ Sites for Electrocatalytic CO ₂ Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 10536-10543	8.3	21
165	Modeling Electrified Pt(111)-H/Water Interfaces from Ab Initio Molecular Dynamics. <i>Jacs Au</i> , 2021 , 1, 569-577		21

164	Temperature dependence of interfacial structures and acidity of clay edge surfaces. <i>Geochimica Et Cosmochimica Acta</i> , 2015 , 160, 91-99	5.5	20
163	Serial lantern-shaped draft tube enhanced flashing light effect for improving CO fixation with microalgae in a gas-lift circumflux column photobioreactor. <i>Bioresource Technology</i> , 2018 , 255, 156-162	11	20
162	Slurrying Property and Mechanism of Coal Gasification Wastewater Slurry. <i>Energy & Fuels</i> , 2018 , 32, 4833-4840	4.1	20
161	Substrate strain tunes operando geometric distortion and oxygen reduction activity of CuNC single-atom sites. <i>Nature Communications</i> , 2021 , 12, 6335	17.4	20
160	In Situ Raman Study of CO Electrooxidation on Pt(hkl) Single-Crystal Surfaces in Acidic Solution. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 23554-23558	16.4	20
159	Deep potential generation scheme and simulation protocol for the LiGePS-type superionic conductors. <i>Journal of Chemical Physics</i> , 2021 , 154, 094703	3.9	19
158	A novel jet-aerated tangential swirling-flow plate photobioreactor generates microbubbles that enhance mass transfer and improve microalgal growth. <i>Bioresource Technology</i> , 2019 , 288, 121531	11	18
157	Reductive Hydrogenation of the Aqueous Rutile TiO ₂ (110) Surface. <i>Electrochimica Acta</i> , 2015 , 179, 658-667	6.7	18
156	Improving biohydrogen production through dark fermentation of steam-heated acid pretreated <i>Alternanthera philoxeroides</i> by mutant <i>Enterobacter aerogenes</i> ZJU1. <i>Science of the Total Environment</i> , 2020 , 716, 134695	10.2	18
155	Solid-to-liquid phase transitions of sub-nanometer clusters enhance chemical transformation. <i>Nature Communications</i> , 2019 , 10, 5400	17.4	18
154	Simultaneous enhancement of microalgae biomass growth and lipid accumulation under continuous aeration with 15% CO ₂ . <i>RSC Advances</i> , 2015 , 5, 50851-50858	3.7	17
153	Prediction of the heavy charging current effect on nickel-rich/silicon-graphite power batteries based on adiabatic rate calorimetry measurement. <i>Journal of Power Sources</i> , 2019 , 438, 226971	8.9	17
152	How cations determine the interfacial potential profile: Relevance for the CO ₂ reduction reaction. <i>Electrochimica Acta</i> , 2019 , 327, 135055	6.7	17
151	Dipole-Induced Band-Gap Reduction in an Inorganic Cage. <i>Angewandte Chemie</i> , 2014 , 126, 1965-1969	3.6	17
150	Physicochemical characterizations for improving the slurriability of Philippine lignite upgraded through microwave irradiation. <i>RSC Advances</i> , 2015 , 5, 14690-14696	3.7	17
149	A DFT study of the transition metal promotion effect on ethylene chemisorption on Co(0 0 0 1). <i>Surface Science</i> , 2009 , 603, 2752-2758	1.8	17
148	Heterologous expression of a hydrogenase gene in <i>Enterobacter aerogenes</i> to enhance hydrogen gas production. <i>World Journal of Microbiology and Biotechnology</i> , 2010 , 26, 177-181	4.4	17
147	Sodium borohydride removes aldehyde inhibitors for enhancing biohydrogen fermentation. <i>Bioresource Technology</i> , 2015 , 197, 323-8	11	16

146	In-situ grafting to improve polarity of polyacrylonitrile hollow fiber-supported polydimethylsiloxane membranes for CO separation. <i>Journal of Colloid and Interface Science</i> , 2018 , 510, 12-19	9.3	16
145	Improving CO ₂ permeability of ceramic hollow fibre-supported composite membranes by blending an ionic liquid in the Pebax/PEGDME selective layer. <i>RSC Advances</i> , 2016 , 6, 2055-2064	3.7	16
144	In situ Spectroscopic Insight into the Origin of the Enhanced Performance of Bimetallic Nanocatalysts towards the Oxygen Reduction Reaction (ORR). <i>Angewandte Chemie</i> , 2019 , 131, 16208-16212	3.6	16
143	Nanoscale zero-valent iron improved lactic acid degradation to produce methane through anaerobic digestion. <i>Bioresource Technology</i> , 2020 , 317, 124013	11	16
142	Strengthening mass transfer of carbon dioxide microbubbles dissolver in a horizontal tubular photo-bioreactor for improving microalgae growth. <i>Bioresource Technology</i> , 2019 , 277, 11-17	11	16
141	Reduced generation time and size of carbon dioxide bubbles in a volute aerator for improving <i>Spirulina</i> sp. growth. <i>Bioresource Technology</i> , 2018 , 270, 352-358	11	16
140	Developing a water-circulating column photobioreactor for microalgal growth with low energy consumption. <i>Bioresource Technology</i> , 2016 , 221, 492-497	11	15
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138	Numerical simulation on promoting light/dark cycle frequency to improve microalgae growth in photobioreactor with serial lantern-shaped draft tube. <i>Bioresource Technology</i> , 2018 , 266, 89-96	11	13
137	Enhanced biomass productivity of <i>Arthrospira platensis</i> using zeolitic imidazolate framework-8 as carbon dioxide adsorbents. <i>Bioresource Technology</i> , 2019 , 294, 122118	11	13
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135	Developing microporous fibrous-diaphragm aerator to decrease bubble generation diameter for improving microalgal growth with CO fixation in a raceway pond. <i>Bioresource Technology</i> , 2019 , 276, 28-34	11	13
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133	Atomically thin photoanode of InSe/graphene heterostructure. <i>Nature Communications</i> , 2021 , 12, 91	17.4	13
132	Engineering of anatase/rutile TiO heterophase junction via in-situ phase transformation for enhanced photocatalytic hydrogen evolution. <i>Journal of Colloid and Interface Science</i> , 2021 , 599, 795-804	9.3	13
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128	Electrocatalytic reduction of CO ₂ in neat and water-containing imidazolium-based ionic liquids. <i>Current Opinion in Electrochemistry</i> , 2020 , 23, 80-88	7.2	12
127	Single Ni atoms with higher positive charges induced by hydroxyls for electrocatalytic CO reduction. <i>Nanoscale</i> , 2020 , 12, 18437-18445	7.7	12
126	Enhancing hydrogen production of <i>Enterobacter aerogenes</i> by heterologous expression of hydrogenase genes originated from <i>Synechocystis</i> sp. <i>Bioresource Technology</i> , 2016 , 216, 976-80	11	12
125	Improving light distribution and light/dark cycle of 900L tangential spiral-flow column photobioreactors to promote CO fixation with <i>Arthrospira</i> sp. cells. <i>Science of the Total Environment</i> , 2020 , 720, 137611	10.2	11
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114	Improving microalgal growth with small bubbles in a raceway pond with swing gas aerators. <i>Bioresource Technology</i> , 2016 , 216, 267-72	11	10
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111	Acidity constants and redox potentials of uranyl ions in hydrothermal solutions. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 26040-26048	3.6	10

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108	Porous ceramic hollow fiber-supported Pebax/PEGDME composite membrane for CO ₂ separation from biohythane. <i>RSC Advances</i> , 2015 , 5, 60453-60459	3.7	9
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