## Chin Kui Cheng, CEng

List of Publications by Year in descending order

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203 papers

8,562 citations

50 h-index 71685 76 g-index

208 all docs 208 docs citations

208 times ranked 7022 citing authors

#	Article	IF	CITATIONS
1	Progress on the lignocellulosic biomass pyrolysis for biofuel production toward environmental sustainability. Fuel Processing Technology, 2021, 223, 106997.	7.2	256
2	Schottky barrier and surface plasmonic resonance phenomena towards the photocatalytic reaction: study of their mechanisms to enhance photocatalytic activity. Catalysis Science and Technology, 2015, 5, 2522-2531.	4.1	245
3	Oil palm waste: An abundant and promising feedstock for microwave pyrolysis conversion into good quality biochar with potential multi-applications. Chemical Engineering Research and Design, 2018, 115, 57-69.	5.6	234
4	Microwave pyrolysis with KOH/NaOH mixture activation: A new approach to produce micro-mesoporous activated carbon for textile dye adsorption. Bioresource Technology, 2018, 266, 1-10.	9.6	213
5	Catalytic microwave pyrolysis of waste engine oil using metallic pyrolysis char. Applied Catalysis B: Environmental, 2015, 176-177, 601-617.	20.2	149
6	Vacuum pyrolysis incorporating microwave heating and base mixture modification: An integrated approach to transform biowaste into eco-friendly bioenergy products. Renewable and Sustainable Energy Reviews, 2020, 127, 109871.	16.4	140
7	Pyrolysis production of fruit peel biochar for potential use in treatment of palm oil mill effluent. Journal of Environmental Management, 2018, 213, 400-408.	7.8	135
8	Heavy metal removal by biomass-derived carbon nanotubes as a greener environmental remediation: A comprehensive review. Chemosphere, 2022, 287, 131959.	8.2	130
9	Glycerol Steam Reforming over Bimetallic Coâ°'Ni/Al <sub>2</sub> O <sub>3</sub> . Industrial & Engineering Chemistry Research, 2010, 49, 10804-10817.	3.7	116
10	Production of value-added liquid fuel via microwave co-pyrolysis of used frying oil and plastic waste. Energy, 2018, 162, 309-317.	8.8	116
11	Treatment technologies of palm oil mill effluent (POME) and olive mill wastewater (OMW): A brief review. Environmental Technology and Innovation, 2019, 15, 100377.	6.1	114
12	Recovery of diesel-like fuel from waste palm oil by pyrolysis using a microwave heated bed of activated carbon. Energy, 2016, 115, 791-799.	8.8	111
13	Engineering pyrolysis biochar via single-step microwave steam activation for hazardous landfill leachate treatment. Journal of Hazardous Materials, 2020, 390, 121649.	12.4	110
14	Photocatalytic water splitting for solving energy crisis: Myth, Fact or Busted?. Chemical Engineering Journal, 2021, 417, 128847.	12.7	108
15	Production of activated carbon as catalyst support by microwave pyrolysis of palm kernel shell: a comparative study of chemical versus physical activation. Research on Chemical Intermediates, 2018, 44, 3849-3865.	2.7	101
16	Kinetic study of methane CO2 reforming on Co–Ni/Al2O3 and Ce–Co–Ni/Al2O3 catalysts. Catalysis Today, 2011, 164, 221-226.	4.4	99
17	H2-rich synthesis gas production over Co/Al2O3 catalyst via glycerol steam reforming. Catalysis Communications, 2010, 12, 292-298.	3.3	94
18	Steam reforming of glycerol over Ni/Al2O3 catalyst. Catalysis Today, 2011, 178, 25-33.	4.4	91

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19	Photocatalytic remediation of organic waste over Keggin-based polyoxometalate materials: A review. Chemosphere, 2021, 263, 128244.	8.2	87
20	Microalgae and ammonia: A review on inter-relationship. Fuel, 2021, 303, 121303.	6.4	86
21	Biomass-derived biochar: From production to application in removing heavy metal-contaminated water. Chemical Engineering Research and Design, 2022, 160, 704-733.	5.6	86
22	Syngas production from glycerol-dry(CO2) reforming over La-promoted Ni/Al2O3 catalyst. Renewable Energy, 2015, 74, 441-447.	8.9	83
23	Microalgae Cultivation in Palm Oil Mill Effluent (POME) Treatment and Biofuel Production. Sustainability, 2021, 13, 3247.	3.2	83
24	Impact of various microalgal-bacterial populations on municipal wastewater bioremediation and its energy feasibility for lipid-based biofuel production. Journal of Environmental Management, 2019, 249, 109384.	7.8	82
25	Role of Calcination Temperatures of ZrO <sub>2</sub> Support on Methanol Synthesis from CO <sub>2</sub> Hydrogenation at High Reaction Temperatures over ZnO <sub><i>x</i></sub> /ZrO <sub>2</sub> Catalysts. Industrial & Engineering Chemistry Research, 2020. 59. 5525-5535.	3.7	81
26	Simultaneous removal of toxic ammonia and lettuce cultivation in aquaponic system using microwave pyrolysis biochar. Journal of Hazardous Materials, 2020, 396, 122610.	12.4	81
27	Catalytic performance of ceria-supported cobalt catalyst for CO-rich hydrogen production from dry reforming of methane. International Journal of Hydrogen Energy, 2016, 41, 198-207.	7.1	80
28	A review of organic waste enrichment for inducing palatability of black soldier fly larvae: Wastes to valuable resources. Environmental Pollution, 2020, 267, 115488.	7.5	79
29	Evaluation of lanthanide-group promoters on Co–Ni/Al2O3 catalysts for CH4 dry reforming. Journal of Molecular Catalysis A, 2011, 344, 28-36.	4.8	76
30	Production of CO-rich hydrogen from methane dry reforming over lanthania-supported cobalt catalyst: Kinetic and mechanistic studies. International Journal of Hydrogen Energy, 2016, 41, 4603-4615.	7.1	<b>7</b> 5
31	One-pot furfural production using choline chloride-dicarboxylic acid based deep eutectic solvents under mild conditions. Bioresource Technology, 2019, 278, 486-489.	9.6	75
32	Facile synthesis of CuO/CdS heterostructure photocatalyst for the effective degradation of dye under visible light. Environmental Research, 2020, 188, 109803.	7.5	72
33	Modelling and optimization of syngas production from methane dry reforming over ceria-supported cobalt catalyst using artificial neural networks and Box–Behnken design. Journal of Industrial and Engineering Chemistry, 2015, 32, 246-258.	5.8	70
34	Production of CO-rich hydrogen gas from glycerol dry reforming over La-promoted Ni/Al2O3 catalyst. International Journal of Hydrogen Energy, 2014, 39, 6927-6936.	7.1	66
35	Carbon deposition on bimetallic Co–Ni/Al2O3 catalyst during steam reforming of glycerol. Catalysis Today, 2011, 164, 268-274.	4.4	65
36	Biodiesel Production from Rubber Seed Oil using Activated Cement Clinker as Catalyst. Procedia Engineering, 2013, 53, 13-19.	1.2	64

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37	Potential Protein and Biodiesel Sources from Black Soldier Fly Larvae: Insights of Larval Harvesting Instar and Fermented Feeding Medium. Energies, 2019, 12, 1570.	3.1	64
38	Photocatalytic degradation of recalcitrant POME waste by using silver doped titania: Photokinetics and scavenging studies. Chemical Engineering Journal, 2016, 286, 282-290.	12.7	63
39	Photoelectrocatalytic Reduction of Carbon Dioxide to Methanol Using CuFe <sub>2</sub> O <sub>4</sub> Modified with Graphene Oxide under Visible Light Irradiation. Industrial & Engineering Chemistry Research, 2019, 58, 563-572.	3.7	62
40	Pore size effects on physicochemical properties of Fe-Co/K-Al2O3 catalysts and their catalytic activity in CO2 hydrogenation to light olefins. Applied Surface Science, 2019, 483, 581-592.	6.1	61
41	TiO2 and ZnO photocatalytic treatment of palm oil mill effluent (POME) and feasibility of renewable energy generation: A short review. Journal of Cleaner Production, 2019, 233, 209-225.	9.3	60
42	Optimum interaction of light intensity and CO2 concentration in bioremediating N-rich real wastewater via assimilation into attached microalgal biomass as the feedstock for biodiesel production. Chemical Engineering Research and Design, 2020, 141, 355-365.	5.6	59
43	Effect of reaction conditions on the lifetime of SAPO-34 catalysts in methanol to olefins process – A review. Fuel, 2021, 283, 118851.	6.4	59
44	Modeling to enhance attached microalgal biomass growth onto fluidized beds packed in nutrients-rich wastewater whilst simultaneously biofixing CO2 into lipid for biodiesel production. Energy Conversion and Management, 2019, 185, 1-10.	9.2	58
45	Tuning Interactions of Surfaceâ€adsorbed Species over Feâ^'Co/Kâ^'Al <sub>2</sub> O <sub>3</sub> Catalyst by Different K Contents: Selective CO <sub>2</sub> Hydrogenation to Light Olefins. ChemCatChem, 2020, 12, 3306-3320.	3.7	56
46	Photoelectrochemical reduction of carbon dioxide to methanol on p-type CuFe2O4 under visible light irradiation. International Journal of Hydrogen Energy, 2018, 43, 18185-18193.	7.1	55
47	An Insight of Synergy between <i>Pseudomonas aeruginosa</i> and <i>Klebsiella variicola</i> in a Microbial Fuel Cell. ACS Sustainable Chemistry and Engineering, 2018, 6, 4130-4137.	6.7	54
48	Syngas production via CO2 reforming of CH4 over Ni-based SBA-15: Promotional effect of promoters (Ce, Mg, and Zr). Materials Today Energy, 2019, 12, 408-417.	4.7	54
49	Syngas production from CO 2 reforming of methane over ceria supported cobalt catalyst: Effects of reactants partial pressure. Journal of Natural Gas Science and Engineering, 2015, 27, 1016-1023.	4.4	53
50	Photocatalytic reduction of CO2 into methanol over CuFe2O4/TiO2 under visible light irradiation. Reaction Kinetics, Mechanisms and Catalysis, 2015, 116, 589-604.	1.7	53
51	Enhanced power generation using controlled inoculum from palm oil mill effluent fed microbial fuel cell. Fuel, 2015, 143, 72-79.	6.4	53
52	Tuning interaction of surface-adsorbed species over Fe/K-Al2O3 modified with transition metals (Cu,) Tj ETQqO 0	0 rgBT /O	veggck 10 Tf
53	Remediation of heavy metal polluted waters using activated carbon from lignocellulosic biomass: An update of recent trends. Chemosphere, 2022, 302, 134825.	8.2	53
54	Artificial neural network modeling of hydrogen-rich syngas production from methane dry reforming over novel Ni/CaFe2O4 catalysts. International Journal of Hydrogen Energy, 2016, 41, 11119-11130.	7.1	52

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55	Electrogenic and Antimethanogenic Properties of <i> Bacillus cereus &lt; /i &gt; for Enhanced Power Generation in Anaerobic Sludge-Driven Microbial Fuel Cells. Energy &amp; Dividing 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1988 (1988) 1</i>	5.1	52
56	Hetero-structure CdS–CuFe2O4 as an efficient visible light active photocatalyst for photoelectrochemical reduction of CO2 to methanol. International Journal of Hydrogen Energy, 2019, 44, 26271-26284.	7.1	51
57	CO2 hydrogenation to light olefins over mixed Fe-Co-K-Al oxides catalysts prepared via precipitation and reduction methods. Chemical Engineering Journal, 2022, 428, 131389.	12.7	51
58	Photo-polishing of POME into CH4-lean biogas over the UV-responsive ZnO photocatalyst. Chemical Engineering Journal, 2016, 300, 127-138.	12.7	50
59	Preparation of titania doped argentum photocatalyst and its photoactivity towards palm oil mill effluent degradation. Journal of Cleaner Production, 2016, 112, 1128-1135.	9.3	50
60	Augmentation of air cathode microbial fuel cell performance using wild type Klebsiella variicola. RSC Advances, 2017, 7, 4798-4805.	3.6	50
61	Photocatalytic restoration of liquid effluent from oil palm agroindustry in Malaysia using tungsten oxides catalyst. Journal of Cleaner Production, 2017, 162, 205-219.	9.3	50
62	Dry reforming of methane over Ni/dendritic fibrous SBA-15 (Ni/DFSBA-15): Optimization, mechanism, and regeneration studies. International Journal of Hydrogen Energy, 2020, 45, 8507-8525.	7.1	50
63	A novel photomineralization of POME over UV-responsive TiO <sub>2</sub> photocatalyst: kinetics of POME degradation and gaseous product formations. RSC Advances, 2015, 5, 53100-53110.	3.6	49
64	Evaluation of the photocatalytic degradation of pre-treated palm oil mill effluent (POME) over Pt-loaded titania. Journal of Environmental Chemical Engineering, 2015, 3, 261-270.	6.7	49
65	Modeling the effect of process parameters on the photocatalytic degradation of organic pollutants using artificial neural networks. Chemical Engineering Research and Design, 2021, 145, 120-132.	5.6	49
66	Carbon deposition and gasification kinetics of used lanthanide-promoted Co-Ni/Al2O3 catalysts from CH4 dry reforming. Catalysis Communications, 2012, 26, 183-188.	3.3	48
67	Syngas production from CO 2 reforming of methane over neodymium sesquioxide supported cobalt catalyst. Journal of Natural Gas Science and Engineering, 2016, 34, 873-885.	4.4	48
68	A review over the role of catalysts for selective short-chain polyglycerol production from biodiesel derived waste glycerol. Environmental Technology and Innovation, 2020, 19, 100859.	6.1	48
69	Enhanced Current Generation Using Mutualistic Interaction of Yeast-Bacterial Coculture in Dual Chamber Microbial Fuel Cell. Industrial & Engineering Chemistry Research, 2018, 57, 813-821.	3.7	46
70	Potential application of Allium Cepa seeds as a novel biosorbent for efficient biosorption of heavy metals ions from aqueous solution. Chemosphere, 2021, 279, 130545.	8.2	46
71	Oxidative CO <sub>2</sub> Reforming of Methane on Alumina-Supported Coâ <sup>-</sup> Ni Catalyst. Industrial & amp; Engineering Chemistry Research, 2010, 49, 10450-10458.	3.7	45
72	Characterization of La-promoted Ni/Al2O3 catalysts for hydrogen production from glycerol dry reforming. Journal of Energy Chemistry, 2014, 23, 15-21.	12.9	45

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73	Synthesis and characterisation of cement clinker-supported nickel catalyst for glycerol dry reforming. Chemical Engineering Journal, 2014, 255, 245-256.	12.7	44
74	Ultrasound Driven Biofilm Removal for Stable Power Generation in Microbial Fuel Cell. Energy & Energy & Fuels, 2017, 31, 968-976.	5.1	44
75	Photoelectrocatalytic reduction of CO2 to methanol over CuFe2O4@PANI photocathode. International Journal of Hydrogen Energy, 2021, 46, 24709-24720.	7.1	43
76	Synthesis and characterization of $\text{CuO/C}$ catalyst for the esterification of free fatty acid in rubber seed oil. Fuel, 2014, 120, 195-201.	6.4	42
77	Restoration of liquid effluent from oil palm agroindustry in Malaysia using UV/TiO 2 and UV/ZnO photocatalytic systems: A comparative study. Journal of Environmental Management, 2017, 196, 674-680.	7.8	42
78	Optimization of co-culture inoculated microbial fuel cell performance using response surface methodology. Journal of Environmental Management, 2018, 225, 242-251.	7.8	41
79	A review on advances in green treatment of glycerol waste with a focus on electro-oxidation pathway. Chemosphere, 2021, 276, 130128.	8.2	41
80	Tuning adsorption properties of Gaxln2â^'xO3 catalysts for enhancement of methanol synthesis activity from CO2 hydrogenation at high reaction temperature. Applied Surface Science, 2019, 489, 278-286.	6.1	40
81	Highly active Fe-Co-Zn/K-Al2O3 catalysts for CO2 hydrogenation to light olefins. Chemical Engineering Science, 2021, 233, 116428.	3 <b>.</b> 8	40
82	Kinetic studies of the esterification of pure and dilute acrylic acid with 2-ethyl hexanol catalysed by Amberlyst 15. Chemical Engineering Science, 2015, 129, 116-125.	3.8	39
83	Promising hydrothermal technique for efficient CO2 methanation over Ni/SBA-15. International Journal of Hydrogen Energy, 2019, 44, 20792-20804.	7.1	39
84	Hydrogen-rich syngas production via steam reforming of palm oil mill effluent (POME) – A thermodynamics analysis. International Journal of Hydrogen Energy, 2019, 44, 20711-20724.	7.1	39
85	Harnessing renewable hydrogen-rich syngas from valorization of palm oil mill effluent (POME) using steam reforming technique. Renewable Energy, 2019, 138, 1114-1126.	8.9	39
86	CO2 hydrogenation to methanol at high reaction temperatures over In2O3/ZrO2 catalysts: Influence of calcination temperatures of ZrO2 support. Catalysis Today, 2021, 375, 298-306.	4.4	39
87	Recent advances in light olefins production from catalytic hydrogenation of carbon dioxide. Chemical Engineering Research and Design, 2021, 151, 401-427.	5.6	39
88	Catalytic conversion of methane and carbon dioxide (greenhouse gases) into syngas over samarium-cobalt-trioxides perovskite catalyst. Journal of Cleaner Production, 2017, 148, 202-211.	9.3	37
89	Syngas from catalytic steam reforming of palm oil mill effluent: An optimization study. International Journal of Hydrogen Energy, 2019, 44, 9220-9236.	7.1	37
90	Modelling and optimization of syngas production by methane dry reforming over samarium oxide supported cobalt catalyst: response surface methodology and artificial neural networks approach. Clean Technologies and Environmental Policy, 2017, 19, 1181-1193.	4.1	36

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91	Catalytic ethylene production from ethanol dehydration over non-modified and phosphoric acid modified Zeolite H-Y (80) catalysts. Fuel Processing Technology, 2017, 158, 85-95.	7.2	36
92	Tea dust as a potential low-cost adsorbent for the removal of crystal violet from aqueous solution. Desalination and Water Treatment, 2016, 57, 14728-14738.	1.0	34
93	Syngas production via methane dry reforming: A novel application of SmCoO3 perovskite catalyst. Journal of Natural Gas Science and Engineering, 2017, 37, 435-448.	4.4	33
94	Facile synthesis of CaFe2O4 for visible light driven treatment of polluting palm oil mill effluent: Photokinetic and scavenging study. Science of the Total Environment, 2019, 661, 522-530.	8.0	33
95	Recent development of high-performance photocatalysts for N2 fixation: A review. Journal of Environmental Chemical Engineering, 2021, 9, 104997.	6.7	33
96	A comprehensive review on the techniques for coconut oil extraction and its application. Bioprocess and Biosystems Engineering, 2021, 44, 1807-1818.	3.4	33
97	The application of green solvent in a biorefinery using lignocellulosic biomass as a feedstock. Journal of Environmental Management, 2022, 307, 114385.	7.8	33
98	Biodiesel synthesized from waste cooking oil in a continuous microwave assisted reactor reduced PM and NOx emissions. Environmental Research, 2020, 185, 109452.	7.5	32
99	Identification of microbial inhibitions and mitigation strategies towards cleaner bioconversions of palm oil mill effluent (POME): A review. Journal of Cleaner Production, 2021, 280, 124346.	9.3	32
100	Adsorption behavior of mercury over hydrated lime: Experimental investigation and adsorption process characteristic study. Chemosphere, 2021, 271, 129504.	8.2	32
101	Nonsevere furfural production using ultrasonicated oil palm fronds and aqueous choline chloride-oxalic acid. Industrial Crops and Products, 2021, 166, 113397.	5.2	32
102	Syngas production from CH4 dry reforming over Co–Ni/Al2O3 catalyst: Coupled reaction-deactivation kinetic analysis and the effect of O2 co-feeding on H2:CO ratio. International Journal of Hydrogen Energy, 2012, 37, 17019-17026.	7.1	31
103	Optimization of photocatalytic degradation of palm oil mill effluent in UV/ZnO system based on response surface methodology. Journal of Environmental Management, 2016, 184, 487-493.	7.8	31
104	Photocatalytic degradation of palm oil mill effluent over ultraviolet-responsive titania: Successive assessments of significance factors and process optimization. Journal of Cleaner Production, 2017, 142, 2073-2083.	9.3	31
105	Photocatalytic treatment of palm oil mill effluent by visible light-active calcium ferrite: Effects of catalyst preparation technique. Journal of Environmental Management, 2019, 234, 404-411.	7.8	31
106	CO2 reforming of glycerol over La-Ni/Al2O3 catalyst: A longevity evaluative study. Journal of Energy Chemistry, 2015, 24, 366-373.	12.9	30
107	Optimization of renewable hydrogen-rich syngas production from catalytic reforming of greenhouse gases (CH4 and CO2) over calcium iron oxide supported nickel catalyst. Journal of the Energy Institute, 2019, 92, 177-194.	5.3	30
108	Ethylene production from ethanol dehydration over mesoporous SBA-15 catalyst derived from palm oil clinker waste. Journal of Cleaner Production, 2020, 249, 119323.	9.3	30

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109	Development of nanosilica-based catalyst for syngas production via CO2 reforming of CH4: A review. International Journal of Hydrogen Energy, 2021, 46, 24687-24708.	7.1	29
110	Sustainable utilization of waste glycerol for 1,3-propanediol production over Pt/WOx/Al2O3 catalysts: Effects of catalyst pore sizes and optimization of synthesis conditions. Environmental Pollution, 2021, 272, 116029.	7.5	29
111	Microwave co-torrefaction of waste oil and biomass pellets for simultaneous recovery of waste and co-firing fuel. Renewable and Sustainable Energy Reviews, 2021, 152, 111699.	16.4	29
112	Bio-hydrogen production from steam reforming of liquid biomass wastes and biomass-derived oxygenates: A review. Fuel, 2022, 311, 122623.	6.4	29
113	Catalytic performance of cement clinker supported nickel catalyst in glycerol dry reforming. Journal of Energy Chemistry, 2014, 23, 645-656.	12.9	28
114	Catalytic pyrolysis of glycerol into syngas over ceria-promoted Ni/α-Al2O3 catalyst. Renewable Energy, 2017, 107, 223-234.	8.9	28
115	Methane dry reforming over Ni/fibrous SBA-15 catalysts: Effects of support morphology (rod-liked) Tj ETQq1 1 0.	784314 rş	gBT /Overlock
116	Integrated catalytic insights into methanol production: Sustainable framework for CO2 conversion. Journal of Environmental Management, 2021, 289, 112468.	7.8	28
117	Elucidating the effect of process parameters on the production of hydrogen-rich syngas by biomass and coal Co-gasification techniques: A multi-criteria modeling approach. Chemosphere, 2022, 287, 132052.	8.2	28
118	Synthesis and characterization of a CaFe <sub>2</sub> O <sub>4</sub> catalyst for oleic acid esterification. RSC Advances, 2015, 5, 100362-100368.	3.6	27
119	Holistic process evaluation of non-conventional palm oil mill effluent (POME) treatment technologies: A conceptual and comparative review. Journal of Hazardous Materials, 2021, 409, 124964.	12.4	27
120	Correlation of power generation with time-course biofilm architecture using Klebsiella variicola in dual chamber microbial fuel cell. International Journal of Hydrogen Energy, 2017, 42, 25933-25941.	7.1	26
121	Hydrogen production via CO2 reforming of CH4 over low-cost Ni/SBA-15 from silica-rich palm oil fuel ash (POFA) waste. International Journal of Hydrogen Energy, 2019, 44, 20815-20825.	7.1	26
122	Synthesis and Evaluation of Copper-Supported Titanium Oxide Nanotubes as Electrocatalyst for the Electrochemical Reduction of Carbon Oxide to Organics. Catalysts, 2019, 9, 298.	3.5	26
123	Propane Fuel Cells Using Phosphoric-Acid-Doped Polybenzimidazole Membranes. Journal of Physical Chemistry B, 2005, 109, 13036-13042.	2.6	25
124	Synthesis and characterization of a La Ni/ $\hat{l}$ ±-Al2O3 catalyst and its use in pyrolysis of glycerol to syngas. Renewable Energy, 2019, 132, 1389-1401.	8.9	25
125	Investigation into Lewis and Brønsted acid interactions between metal chloride and aqueous choline chloride-oxalic acid for enhanced furfural production from lignocellulosic biomass. Science of the Total Environment, 2022, 827, 154049.	8.0	25
126	Modeling the prediction of hydrogen production by coâ€gasification of plastic and rubber wastes using machine learning algorithms. International Journal of Energy Research, 2021, 45, 9580-9594.	4.5	24

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127	Syngas from palm oil mill effluent (POME) steam reforming over lanthanum cobaltite: Effects of net-basicity. Renewable Energy, 2020, 148, 349-362.	8.9	23
128	Advances and recent trends in cobalt-based cocatalysts for solar-to-fuel conversion. Applied Materials Today, 2021, 24, 101074.	4.3	23
129	Thermodynamic analysis of glycerol-steam reforming in the presence of CO2 or H2 as carbon gasifying agent. International Journal of Hydrogen Energy, 2012, 37, 10101-10110.	7.1	22
130	SDS modified mesoporous silica MCM-41 for the adsorption of Cu2+, Cd2+, Zn2+ from aqueous systems. Journal of Environmental Chemical Engineering, 2020, 8, 102920.	6.7	22
131	Dendritic fibrous SBA-15 supported nickel (Ni/DFSBA-15): A sustainable catalyst for hydrogen production. International Journal of Hydrogen Energy, 2020, 45, 18533-18548.	7.1	22
132	Catalytic deoxygenation of triolein to green fuel over mesoporous TiO2 aided by in situ hydrogen production. International Journal of Hydrogen Energy, 2020, 45, 11605-11614.	7.1	22
133	Unravelling CO2 capture performance of microalgae cultivation and other technologies via comparative carbon balance analysis. Journal of Environmental Chemical Engineering, 2021, 9, 106519.	6.7	22
134	Non-isothermal kinetics and mechanistic study of thermal decomposition of light rare earth metal nitrate hydrates using thermogravimetric analysis. Journal of Thermal Analysis and Calorimetry, 2016, 125, 423-435.	3.6	21
135	Artificial Intelligence Modelling Approach for the Prediction of CO-Rich Hydrogen Production Rate from Methane Dry Reforming. Catalysts, 2019, 9, 738.	3.5	21
136	Biofilm re-vitalization using hydrodynamic shear stress for stable power generation in microbial fuel cell. Journal of Electroanalytical Chemistry, 2019, 844, 14-22.	3.8	21
137	Enhanced Biohydrogen Production from Citrus Wastewater Using Anaerobic Sludge Pretreated by an Electroporation Technique. Industrial & Electroporation Technique.	3.7	21
138	Glycerol electro-oxidation to dihydroxyacetone on phosphorous-doped Pd/CNT nanoparticles in alkaline medium. Catalysis Communications, 2020, 139, 105964.	3.3	21
139	CO2 Hydrogenation to Light Olefins Over In2O3/SAPO-34 and Fe-Co/K-Al2O3 Composite Catalyst. Topics in Catalysis, 2021, 64, 316-327.	2.8	21
140	Influence of nutrient addition on the bioethanol yield from oil palm trunk sap fermented by Saccharomyces cerevisiae. Journal of Industrial and Engineering Chemistry, 2015, 23, 213-217.	5.8	20
141	Process Modelling, Thermodynamic Analysis and Optimization of Dry Reforming, Partial Oxidation and Auto-Thermal Methane Reforming for Hydrogen and Syngas production. Chemical Product and Process Modeling, 2015, 10, 211-220.	0.9	20
142	Photocatalytic-Fenton Degradation of Glycerol Solution over Visible Light-Responsive CuFe2O4. Water, Air, and Soil Pollution, 2015, 226, 1.	2.4	19
143	Surfactant assisted CaO-based sorbent synthesis and their application to high-temperature CO2 capture. Powder Technology, 2019, 344, 208-221.	4.2	19
144	Greenhouse gases mitigation by CO2 reformingÂof methane to hydrogen-rich syngas using praseodymium oxide supported cobalt catalyst. Clean Technologies and Environmental Policy, 2017, 19, 795-807.	4.1	18

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145	Experimental evaluation and empirical modelling of palm oil mill effluent steam reforming. International Journal of Hydrogen Energy, 2018, 43, 15784-15793.	7.1	18
146	Augmentation of microbial fuel cell and photocatalytic polishing technique for the treatment of hazardous dimethyl phthalate containing wastewater. Journal of Hazardous Materials, 2021, 415, 125587.	12.4	18
147	A study on the kinetics of syngas production from glycerol over alumina-supported samarium–nickel catalyst. International Journal of Hydrogen Energy, 2016, 41, 10568-10577.	7.1	17
148	Integration of machine learning-based prediction for enhanced Model's generalization: Application in photocatalytic polishing of palm oil mill effluent (POME). Environmental Pollution, 2020, 267, 115500.	7.5	17
149	Simulation and Optimisation of Integrated Anaerobic-Aerobic Bioreactor (IAAB) for the Treatment of Palm Oil Mill Effluent. Processes, 2021, 9, 1124.	2.8	17
150	Significant improvement of power generation through effective substrate-inoculum interaction mechanism in microbial fuel cell. Journal of Power Sources, 2021, 484, 229285.	7.8	16
151	Carbon Nanotube-Modified MnO <sub>2</sub> : An Efficient Electrocatalyst for Oxygen Reduction Reaction. ChemistrySelect, 2017, 2, 7637-7644.	1.5	16
152	Production of CO-rich Hydrogen Gas from Methane Dry Reforming over Co/CeO2 Catalyst. Bulletin of Chemical Reaction Engineering and Catalysis, 2016, 11, 210-219.	1.1	16
153	Renewable syngas production from thermal cracking of glycerol over praseodymium-promoted Ni/Al 2 O 3 catalyst. Applied Thermal Engineering, 2017, 112, 871-880.	6.0	15
154	Successive optimisation of waste cooking oil transesterification in a continuous microwave assisted reactor. RSC Advances, 2015, 5, 76743-76751.	3.6	14
155	Facile synthesis of tunable dendritic fibrous SBA-15 (DFSBA-15) with radial wrinkle structure. Microporous and Mesoporous Materials, 2020, 294, 109872.	4.4	14
156	Pd/CNT Catalysts for Glycerol Electroâ€oxidation: Effect of Pd Loading on Production of Valuable Chemical Products. Electroanalysis, 2020, 32, 1139-1147.	2.9	14
157	Enzymatic Conversion of Glycerol to Glyceric Acid with Immobilised Laccase in Na-Alginate Matrix. Procedia Chemistry, 2015, 16, 632-639.	0.7	13
158	An assessment of the longevity of samarium cobalt trioxide perovskite catalyst during the conversion of greenhouse gases into syngas. Journal of Cleaner Production, 2018, 185, 576-587.	9.3	13
159	Degradation Behaviors of Solid Oxide Fuel Cell Stacks in Steady-State and Cycling Conditions. Energy & Lamp; Fuels, 2020, 34, 14864-14873.	5.1	13
160	Emerging photocatalysts for air purification. Materials Letters, 2021, 288, 129355.	2.6	13
161	Fungal Fermented Palm Kernel Expeller as Feed for Black Soldier Fly Larvae in Producing Protein and Biodiesel. Journal of Fungi (Basel, Switzerland), 2022, 8, 332.	3.5	13
162	Kinetics and mechanistic studies of CO-rich hydrogen production by CH4/CO2 reforming over Praseodymia supported cobalt catalysts. International Journal of Hydrogen Energy, 2017, 42, 28408-28424.	7.1	12

#	Article	IF	CITATIONS
163	Hydrogen Production via Glycerol Dry Reforming over La-Ni/Al2O3 Catalyst. Bulletin of Chemical Reaction Engineering and Catalysis, 2013, 8, 160-166.	1.1	11
164	A Sugarcane-Bagasse-Based Adsorbent Employed for Mitigating Eutrophication Threats and Producing Biodiesel Simultaneously. Processes, 2019, 7, 572.	2.8	11
165	Application of statistical modeling for the production of highly pure rhamnolipids using magnetic biocatalysts: Evaluating its efficiency as a bioremediation agent. Journal of Hazardous Materials, 2021, 412, 125323.	12.4	11
166	Light olefins synthesis from CO2 hydrogenation over mixed Fe–Co–K supported on micro-mesoporous carbon catalysts. International Journal of Hydrogen Energy, 2022, 47, 42185-42199.	7.1	11
167	Enhanced activity and stability of SO42â^'/ZrO2 by addition of Cu combined with CuZnOZrO2 for direct synthesis of dimethyl ether from CO2 hydrogenation. International Journal of Hydrogen Energy, 2022, 47, 41374-41385.	7.1	11
168	Performance of Klebsiella oxytocato generate electricity from POME in microbial fuel cell. MATEC Web of Conferences, 2016, 38, 03004.	0.2	10
169	Elimination of energy-consuming mechanical stirring: Development of auto-suspending ZnO-based photocatalyst for organic wastewater treatment. Journal of Hazardous Materials, 2021, 409, 124532.	12.4	10
170	Black Soldier Fly Larval Valorization Benefitting from Ex-Situ Fungal Fermentation in Reducing Coconut Endosperm Waste. Processes, 2021, 9, 275.	2.8	10
171	Syngas Production from Catalytic CO2 Reforming of CH4 over CaFe2O4 Supported Ni and Co Catalysts: Full Factorial Design Screening. Bulletin of Chemical Reaction Engineering and Catalysis, 2018, 13, 57-73.	1.1	10
172	Phototreatment of Palm Oil Mill Effluent (POME) over Cu/TiO2 Photocatalyst. Bulletin of Chemical Reaction Engineering and Catalysis, 2014, 9, 121-127.	1.1	9
173	Kinetic and CFD Modeling of Exhaust Gas Reforming of Natural Gas in a Catalytic Fixedâ€Bed Reactor for Spark Ignition Engines. Chemical Engineering and Technology, 2020, 43, 705-718.	1.5	9
174	Samarium Promoted Ni/Al2O3 Catalysts for Syngas Production from Glycerol Pyrolysis. Bulletin of Chemical Reaction Engineering and Catalysis, 2016, 11, 238-244.	1.1	9
175	Electrochemical Study of Copper Ferrite as a Catalyst for CO2 Photoelectrochemical Reduction. Bulletin of Chemical Reaction Engineering and Catalysis, 2018, 13, 236.	1.1	9
176	Rapid effectual entrapment of arsenic pollutant by Fe2O3 supported on bimodal meso-macroporous silica for cleaning up aquatic system. Chemosphere, 2022, 300, 134613.	<b>8.</b> 2	9
177	Electro-oxidation of waste glycerol to tartronic acid over Pt/CNT nanocatalyst: study of effect of reaction time on product distribution. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2023, 45, 10998-11014.	2.3	8
178	Selective oxidation of glycerol to mesoxalic acid by laccase/2,2,6,6-tetramethylpiperidine-N-oxyl system: Effect of process conditions and the kinetic modeling. Chemical Engineering Communications, 2019, 206, 1645-1660.	2.6	8
179	Biomass-derived carbon-based and silica-based materials for catalytic and adsorptive applications- An update since 2010. Chemosphere, 2022, 287, 132222.	8.2	8
180	Recent Advances in Steam Reforming of Glycerol for Syngas Production., 2020,, 399-425.		8

#	Article	IF	Citations
181	Interaction effect of process parameters and <scp>Pdâ€electrocatalyst</scp> in formic acid <scp>electroâ€oxidation</scp> for fuel cell applications: Implementing supervised machine learning algorithms. International Journal of Energy Research, 2022, 46, 21583-21597.	4.5	8
182	An evaluation of subcritical hydrothermal treatment of end-of-pipe palm oil mill effluent. Heliyon, 2019, 5, e01792.	3.2	7
183	Application of Cement Clinker as Ni-Catalyst Support for Glycerol Dry Reforming. Bulletin of Chemical Reaction Engineering and Catalysis, 2013, 8, .	1.1	6
184	Electricity generation form pretreated palm oil mill effluent using Klebsiella Variicola as an inoculum in Microbial fuel cell. , $2016$ , , .		6
185	Potential of empty fruit bunch clinker as a support for nickel and cobalt catalysts in methane dry reforming: waste to wealth approach. Journal of the Taiwan Institute of Chemical Engineers, 2016, 62, 76-83.	5.3	6
186	Simultaneous Enhancement of Photocatalytic Bactericidal Activity and Strength Properties of Acrylonitrile-Butadiene-Styrene Plastic Via a Facile Preparation with Silane/TiO2. Polymers, 2020, 12, 917.	4.5	6
187	Biodiesel produced using potassium methoxide homogeneous alkaline catalyst: effects of various factors on soap formation. Biomass Conversion and Biorefinery, 2023, 13, 9237-9247.	4.6	6
188	Biorefinery for the Production of Biodiesel, Hydrogen and Synthesis Gas Integrated with CHP from Oil Palm in Malaysia. Chemical Product and Process Modeling, 2016, 11, 305-314.	0.9	5
189	Glycerol Waste Valorization to Mesoxalic Acid Over a Bimetallic Pt-Pd/CNT Catalyst in Alkaline Medium. Journal of Nanoscience and Nanotechnology, 2020, 20, 5916-5927.	0.9	5
190	Modeling of thermally-coupled monolithic membrane reformer for vehicular hydrogen production. International Journal of Hydrogen Energy, 2017, 42, 26308-26319.	7.1	4
191	Photoelectrochemical activity of CuO-CdS heterostructured catalyst for CO <sub>2</sub> reduction. IOP Conference Series: Materials Science and Engineering, 2020, 736, 042023.	0.6	4
192	Effects of operating parameters for dry reforming of methane: A short review. E3S Web of Conferences, 2021, 287, 04015.	0.5	4
193	Characterization of Industrial Pt-Sn/Al2O3 Catalyst and Transient Product Formations during Propane Dehydrogenation. Bulletin of Chemical Reaction Engineering and Catalysis, 2013, 8, .	1.1	3
194	Uniform mesoporous hierarchical nanosized zeolite Y for production of Hydrocarbon-like biofuel under H2-Free deoxygenation. Fuel, 2022, 322, 124208.	6.4	3
195	2018 International Conference of Chemical Engineering and Industrial Biotechnology (ICCEIB) Preface. Industrial & Engineering Chemistry Research, 2019, 58, 507-509.	3.7	2
196	Kinetic modeling and reaction pathways for thermo-catalytic conversion of carbon dioxide and methane to hydrogen-rich syngas over alpha-alumina supported cobalt catalyst. International Journal of Hydrogen Energy, 2021, 46, 30871-30881.	7.1	2
197	Converting solid biomass waste into nanomaterial for the treatment of hazardous waste. Chemosphere, 2021, 285, 131461.	8.2	1
198	Hydrothermal Treatment of Palm Oil Mill Effluent (POME) under Oxidative and Non-oxidative Conditions. IOP Conference Series: Materials Science and Engineering, 0, 965, 012002.	0.6	1

#	Article	IF	CITATIONS
199	Hydrogen Generation from CO2 Reforming of Biomass-Derived Methanol on Ni/SiO2 Catalyst. Topics in Catalysis, 2023, 66, 41-52.	2.8	1
200	Hydrogen Production From catalytic reforming of greenhouse gases (CO <sub>2</sub> and) Tj ETQq0 0 0 rgBT /GENVIRONMENTAL Management, 2017, 21, 1051.	Overlock 1 0.1	10 Tf 50 707 <sup>-</sup> 0
201	Recent Advances in Photocatalytic Treatment of Palm Oil Mill Effluent (POME): A Review. International Journal of Engineering and Technology(UAE), 2018, 7, 389.	0.3	0
202	Preface to "Thermocatalytic Conversion of CO2 into Sustainable Chemical Products― Topics in Catalysis, 2021, 64, 315-315.	2.8	0
203	Microwave Co-Pyrolysis of Waste Cooking Oil and Polystyrene-Based Plastic Waste. , 0, , .		O