Kin Wai Cheah

List of Publications by Year
in descending order

88 papers	4,169 citations	87401 40 h-index	139680 61 g-index
88 all docs	88 docs citations	88 times ranked	4179 citing authors

#	Article	IF	Citations
1	Recent advances in the catalytic deoxygenation of plant oils and prototypical fatty acid models compounds: Catalysis, process, and kinetics. Molecular Catalysis, 2022, 523, 111469.	1.0	14
2	Overview of biomass conversion to biofuels. , 2022, , 1-48.		1
3	Biomass Energy in Malaysia: Current Scenario, Policies, and Implementation Challenges. Bioenergy Research, 2022, 15, 1371-1386.	2.2	35
4	Synergistic effects of catalytic co-pyrolysis Chlorella vulgaris and polyethylene mixtures using artificial neuron network: Thermodynamic and empirical kinetic analyses. Journal of Environmental Chemical Engineering, 2022, 10, 107391.	3.3	27
5	Machine learningâ€“assisted <scp> CO ₂ </scp> utilization in the catalytic dry reforming of hydrocarbons: Reaction pathways and multicriteria optimization analyses. International Journal of Energy Research, 2022, 46, 6277-6291.	2.2	6
6	Upgrading biocrudes derived from agricultural biomass into advanced biofuels: Perspective from Malaysia. Fuel, 2022, 323, 124300.	3.4	7
7	Review on Conversion of Lignin Waste into Value-Added Resources in Tropical Countries. Waste and Biomass Valorization, 2021, 12, 5285-5302.	1.8	29
8	Techno-economic evaluation of sorption enhanced steam gasification of PKS system for syngas using CaO for CO capture. Computer Aided Chemical Engineering, 2021, 50, 129-134.	0.3	2
9	Five-lump kinetic approach on biofuel production from refined rubber seed oil over Cu/ZSM-5 catalyst via catalytic cracking reaction. Renewable Energy, 2021, 171, 1445-1453.	4.3	6
10	Particle swarm optimization and global sensitivity analysis for catalytic co-pyrolysis of Chlorella vulgaris and plastic waste mixtures. Bioresource Technology, 2021, 329, 124874.	4.8	30
11	Recent advances in green solvents for lignocellulosic biomass pretreatment: Potential of choline chloride (ChCl) based solvents. Bioresource Technology, 2021, 333, 125195.	4.8	59
12	Life-cycle assessment of hydrogen production via catalytic gasification of wheat straw in the presence of straw derived biochar catalyst. Bioresource Technology, 2021, 341, 125796.	4.8	43
13	Valorization of Tropical Biomass Waste by Supercritical Fluid Extraction Technology. Sustainability, 2021, 13, 233.	1.6	25
14	The effect of metal loading over Ni/Î³-Al2O3 and Mo/Î³-Al2O3 catalysts on reaction routes of hydrodeoxygenation of rubber seed oil for green diesel production. Catalysis Today, 2020, 355, 51-64.	2.2	50
15	Monometallic and bimetallic catalysts based on Pd, Cu and Ni for hydrogen transfer deoxygenation of a prototypical fatty acid to diesel range hydrocarbons. Catalysis Today, 2020, 355, 882-892.	2.2	35
16	Process optimization of green diesel selectivity and understanding of reaction intermediates. Renewable Energy, 2020, 149, 1092-1106.	4.3	13
17	Kinetic modelling of hydrogen transfer deoxygenation of a prototypical fatty acid over a bimetallic Pd₆₀Cu₄₀catalyst: an investigation of the surface reaction mechanism and rate limiting step. Reaction Chemistry and Engineering, 2020, 5, 1682-1693.	1.9	7
18	Application of a solid electrolyte CO2 sensor to the performance evaluation of CO2 capture materials. Sensors and Actuators B: Chemical, 2020, 315, 128105.	4.0	14

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19	Fractionation and extraction of bio-oil for production of greener fuel and value-added chemicals: Recent advances and future prospects. Chemical Engineering Journal, 2020, 397, 125406.	6.6	88
20	Biogasoline production from linoleic acid via catalytic cracking over nickel and copper-doped ZSM-5 catalysts. Environmental Research, 2020, 186, 109616.	3.7	24
21	Artificial neural network approach for co-pyrolysis of Chlorella vulgaris and peanut shell binary mixtures using microalgae ash catalyst. Energy, 2020, 207, 118289.	4.5	68
22	Parametric Studies on Hydrodeoxygenation of Rubber Seed Oil for Diesel Range Hydrocarbon Production. Energy & Fuels, 2020, 34, 4603-4617.	2.5	17
23	Supercritical fluid extraction and solubilization of Carica papaya linn. leaves in ternary system with CO2 + ethanol solvents. Chemical Engineering Research and Design, 2020, 156, 31-42.	2.7	17
24	Process intensification for the production of canola-based methyl ester via ultrasonic batch reactor: optimization and kinetic study. , 2020, , 27-42.		9
25	Emerging Technologies for Biofuels Production. , 2019, , 45-76.		3
26	Recovery of cellulose fibers from oil palm empty fruit bunch for pulp and paper using green delignification approach. Bioresource Technology, 2019, 290, 121797.	4.8	28
27	An outlook of Malaysian biomass industry commercialisation: Perspectives and challenges. Renewable and Sustainable Energy Reviews, 2019, 113, 109277.	8.2	49
28	Microwave vacuum pyrolysis of waste plastic and used cooking oil for simultaneous waste reduction and sustainable energy conversion: Recovery of cleaner liquid fuel and techno-economic analysis. Renewable and Sustainable Energy Reviews, 2019, 115, 109359.	8.2	191
29	H-Y zeolite as hydrodeoxygenation catalyst for diesel range hydrocarbon production from rubber seed oil. Materials Today: Proceedings, 2019, 16, 1742-1749.	0.9	13
30	Uncertainty estimation approach in catalytic fast pyrolysis of rice husk: Thermal degradation, kinetic and thermodynamic parameters study. Bioresource Technology, 2019, 294, 122089.	4.8	41
31	Catalytic pyrolysis of Chlorella vulgaris: Kinetic and thermodynamic analysis. Bioresource Technology, 2019, 289, 121689.	4.8	63
32	An overview of biomass thermochemical conversion technologies in Malaysia. Science of the Total Environment, 2019, 680, 105-123.	3.9	125
33	Production of gasoline range hydrocarbons from catalytic cracking of linoleic acid over various acidic zeolite catalysts. Environmental Science and Pollution Research, 2019, 26, 34039-34046.	2.7	11
34	Development of high microwave-absorptive bifunctional graphene oxide-based catalyst for biodiesel production. Energy Conversion and Management, 2019, 180, 1013-1025.	4.4	78
35	Catalytic hydrodeoxygenation of rubber seed oil over sonochemically synthesized Ni-Mo/Î³-Al2O3 catalyst for green diesel production. Ultrasonics Sonochemistry, 2019, 51, 90-102.	3.8	74
36	In-situ hydrogen generation from 1,2,3,4-tetrahydronaphthalene for catalytic conversion of oleic acid to diesel fuel hydrocarbons: Parametric studies using Response Surface Methodology approach. International Journal of Hydrogen Energy, 2019, 44, 20678-20689.	3.8	16

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37	Optimisation Study of Catalytic Cracking of Refined Rubber Seed Oil for Biogasoline Production Using Response Surface Methodology. , 2019, , 171-185.		2
38	Modeling of the co-pyrolysis of rubber residual and HDPE waste using the distributed activation energy model (DAEM). Applied Thermal Engineering, 2018, 138, 336-345.	3.0	40
39	Sustainable green pretreatment approach to biomass-to-energy conversion using natural hydro-low-transition-temperature mixtures. Bioresource Technology, 2018, 261, 361-369.	4.8	35
40	Thermogravimetric kinetic modelling of in-situ catalytic pyrolytic conversion of rice husk to bioenergy using rice hull ash catalyst. Bioresource Technology, 2018, 261, 213-222.	4.8	110
41	Thermogravimetric analysis and kinetic modeling of low-transition-temperature mixtures pretreated oil palm empty fruit bunch for possible maximum yield of pyrolysis oil. Bioresource Technology, 2018, 255, 189-197.	4.8	34
42	Optimization and kinetic study of ultrasonic assisted esterification process from rubber seed oil. Bioresource Technology, 2018, 247, 51-57.	4.8	45
43	Comparative study of in-situ catalytic pyrolysis of rice husk for syngas production: Kinetics modelling and product gas analysis. Journal of Cleaner Production, 2018, 197, 1231-1243.	4.6	79
44	Life Cycle Assessment (LCA) of Production and Fractionation of Bio-Oil Derived from Palm Kernel Shell: a Gate-to-Gate Case Study. Process Integration and Optimization for Sustainability, 2018, 2, 343-351.	1.4	13
45	Extraction of palm kernel shell derived pyrolysis oil by supercritical carbon dioxide: Evaluation and modeling of phenol solubility. Biomass and Bioenergy, 2018, 116, 106-112.	2.9	22
46	Kinetics and thermodynamic analysis in one-pot pyrolysis of rice hull using renewable calcium oxide based catalysts. Bioresource Technology, 2018, 265, 180-190.	4.8	63
47	Metal oxide-catalyzed hydrothermal liquefaction of Malaysian oil palm biomass to bio-oil under supercritical condition. Journal of Supercritical Fluids, 2017, 120, 384-394.	1.6	69
48	Pilot scale intensification of rubber seed (Hevea brasiliensis) oil via chemical interesterification using hydrodynamic cavitation technology. Bioresource Technology, 2017, 242, 272-282.	4.8	42
49	Refining of crude rubber seed oil as a feedstock for biofuel production. Journal of Environmental Management, 2017, 203, 1011-1016.	3.8	10
50	Fractionation of pyrolysis oil via supercritical carbon dioxide extraction: Optimization study using response surface methodology (RSM). Biomass and Bioenergy, 2017, 107, 155-163.	2.9	24
51	Catalytic hydrodeoxygenation of triglycerides: An approach to clean diesel fuel production. Renewable and Sustainable Energy Reviews, 2017, 80, 1072-1088.	8.2	138
52	Choline chloride (ChCl) and monosodium glutamate (MSG)-based green solvents from optimized cactus malic acid for biomass delignification. Bioresource Technology, 2017, 244, 941-948.	4.8	27
53	Process simulation and techno economic analysis of renewable diesel production via catalytic decarboxylation of rubber seed oil â€“ A case study in Malaysia. Journal of Environmental Management, 2017, 203, 950-961.	3.8	37
54	Methyl ester synthesis of Pistacia khinjuk seed oil by ultrasonic-assisted cavitation system. Industrial Crops and Products, 2017, 108, 336-347.	2.5	47

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55	Comparative life cycle assessment (LCA) of bio-oil production from fast pyrolysis and hydrothermal liquefaction of oil palm empty fruit bunch (EFB). Clean Technologies and Environmental Policy, 2016, 18, 1759-1768.	2.1	78
56	Cleaner production of rubber seed oil methyl ester using a hydrodynamic cavitation: optimisation and parametric study. Journal of Cleaner Production, 2016, 136, 31-41.	4.6	79
57	Physio-chemical Studies of Locally Sourced Non-Edible Oil: Prospective Feedstock for Renewable Diesel Production in Malaysia. Procedia Engineering, 2016, 148, 451-458.	1.2	33
58	Parametric Study and Optimization of Methane Production in Biomass Gasification in the Presence of Coal Bottom Ash. Procedia Engineering, 2016, 148, 409-416.	1.2	41
59	Physicochemical Properties of Ni-Mo/Î³-Al2O3 Catalysts Synthesized via Sonochemical Method. Procedia Engineering, 2016, 148, 64-71.	1.2	21
60	Bottom Ash Characterization and its Catalytic Potential in Biomass Gasification. Procedia Engineering, 2016, 148, 432-436.	1.2	39
61	Physicochemical Properties of Crude Rubber Seed Oil for Biogasoline Production. Procedia Engineering, 2016, 148, 426-431.	1.2	24
62	Influence of Effective Parameters on Product Gas Ratios in Sorption Enhanced Gasification. Procedia Engineering, 2016, 148, 735-741.	1.2	14
63	Application of response surface methodology to investigate the effect of different variables on conversion of palm kernel shell in steam gasification using coal bottom ash. Applied Energy, 2016, 184, 1306-1315.	5.1	70
64	Overview on the Potential of Coal-Based Bottom Ash as Low-Cost Adsorbents. ACS Sustainable Chemistry and Engineering, 2016, 4, 1870-1884.	3.2	34
65	Optimisation and Kinetic Studies of Acid Esterification of High Free Fatty Acid Rubber Seed Oil. Arabian Journal for Science and Engineering, 2016, 41, 2515-2526.	1.1	39
66	Optimisation on pretreatment of rubber seed (Hevea brasiliensis) oil via esterification reaction in a hydrodynamic cavitation reactor. Bioresource Technology, 2016, 199, 414-422.	4.8	83
67	Effect of process parameters on hydrothermal liquefaction of oil palm biomass for bio-oil production and its life cycle assessment. Energy Conversion and Management, 2015, 104, 180-188.	4.4	110
68	Microwave-assisted methyl esters synthesis of Kapok (Ceiba pentandra) seed oil: parametric and optimization study. Biofuel Research Journal, 2015, 2, 281-287.	7.2	42
69	Comparative studies on catalytic and non-catalytic co-gasification of rubber seed shell and high density polyethylene mixtures. Journal of Cleaner Production, 2014, 70, 303-314.	4.6	61
70	Studies on catalytic pyrolysis of empty fruit bunch (EFB) usingÂTaguchi's L9 Orthogonal Array. Journal of the Energy Institute, 2014, 87, 227-234.	2.7	35
71	Integrated catalytic adsorption (ICA) steam gasification system for enhanced hydrogen production using palm kernel shell. International Journal of Hydrogen Energy, 2014, 39, 3286-3293.	3.8	70
72	Bio-oil production from oil palm biomass via subcritical and supercritical hydrothermal liquefaction. Journal of Supercritical Fluids, 2014, 95, 407-412.	1.6	105

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73	Investigation on syngas production via biomass conversion through the integration of pyrolysis and airâ€“steam gasification processes. Energy Conversion and Management, 2014, 87, 670-675.	4.4	120
74	Kinetic studies of co-pyrolysis of rubber seed shell with high density polyethylene. Energy Conversion and Management, 2014, 87, 746-753.	4.4	102
75	Overview on economics and technology development of rubber seed utilisation in Southeast Asia. Clean Technologies and Environmental Policy, 2014, 16, 439-453.	2.1	16
76	Hydrogen production from palm kernel shell via integrated catalytic adsorption (ICA) steam gasification. Energy Conversion and Management, 2014, 87, 1224-1230.	4.4	73
77	Optimization of hydrogen production in in-situ catalytic adsorption (ICA) steam gasification based on Response Surface Methodology. Biomass and Bioenergy, 2014, 60, 98-107.	2.9	68
78	Syngas production from palm kernel shell and polyethylene waste blend in fluidized bed catalytic steam co-gasification process. Energy, 2014, 75, 40-44.	4.5	112
79	Study of fuel properties of rubber seed oil based biodiesel. Energy Conversion and Management, 2014, 78, 266-275.	4.4	169
80	Supply network synthesis on rubber seed oil utilisation as potential biofuel feedstock. Energy, 2013, 55, 82-88.	4.5	42
81	Syngas production from downdraft gasification of oil palm fronds. Energy, 2013, 61, 491-501.	4.5	104
82	Process modeling for parametric study on oil palm empty fruit bunch steam gasification for hydrogen production. Fuel Processing Technology, 2012, 93, 26-34.	3.7	81
83	Heat Integration Study on Biomass Gasification Plant for Hydrogen Production. Journal of Applied Sciences, 2011, 11, 3600-3606.	0.1	7
84	Basic properties of crude rubber seed oil and crude palm oil blend as a potential feedstock for biodiesel production with enhanced cold flow characteristics. Biomass and Bioenergy, 2010, 34, 1523-1526.	2.9	45
85	Biomass Steam Gasification with In-Situ CO2 Capture for Enriched Hydrogen Gas Production: A Reaction Kinetics Modelling Approach. Energies, 2010, 3, 1472-1484.	1.6	76
86	Solvent extraction and characterisation of rubber seed oil. International Journal of Postharvest Technology and Innovation, 2009, 1, 376.	0.1	5
87	Performance Study of Ni Catalyst with Quicklime (CaO) as CO₂ Adsorbent in Palm Kernel Shell Steam Gasification for Hydrogen Production. Advanced Materials Research, 0, 917, 292-300.	0.3	13
88	Effects of Ultrasound Irradiation on Synthesis of Solid Acid Catalysts. Key Engineering Materials, 0, 701, 67-72.	0.4	3