Hoon Kiat Ng

List of Publications by Year
in descending order

108 papers	4,179 citations	136950 32 h-index	123424 61 g-index
109 all docs	109 docs citations	109 times ranked	4631 citing authors

#	Article	IF	Citations
1	Remediation of soils contaminated with polycyclic aromatic hydrocarbons (PAHs). Journal of Hazardous Materials, 2009, 172, 532-549.	12.4	678
2	Homogeneous Charge Compression Ignition (HCCI) combustion: Implementation and effects on pollutants in direct injection diesel engines. Applied Energy, 2011, 88, 559-567.	10.1	210
3	Fenton based remediation of polycyclic aromatic hydrocarbons-contaminated soils. Chemosphere, 2011, 83, 1414-1430.	8.2	187
4	Artificial neural networks modelling of engine-out responses for a light-duty diesel engine fuelled with biodiesel blends. Applied Energy, 2012, 92, 769-777.	10.1	187
5	Extraction agents for the removal of polycyclic aromatic hydrocarbons (PAHs) from soil in soil washing technologies. Environmental Pollution, 2014, 184, 640-649.	7.5	165
6	Biochar potential evaluation of palm oil wastes through slow pyrolysis: Thermochemical characterization and pyrolytic kinetic studies. Bioresource Technology, 2017, 236, 155-163.	9.6	156
7	Biomass as an energy source in coal co-firing and its feasibility enhancement via pre-treatment techniques. Fuel Processing Technology, 2017, 159, 287-305.	7.2	111
8	Current status and prospects of Fenton oxidation for the decontamination of persistent organic pollutants (POPs) in soils. Chemical Engineering Journal, 2012, 213, 295-317.	12.7	109
9	Characterisation of engine-out responses from a light-duty diesel engine fuelled with palm methyl ester (PME). Applied Energy, 2012, 90, 58-67.	10.1	97
10	Inorganic chelated modified-Fenton treatment of polycyclic aromatic hydrocarbon (PAH)-contaminated soils. Chemical Engineering Journal, 2012, 180, 1-8.	12.7	88
11	Evaluation of palm oil mill fly ash supported calcium oxide as a heterogeneous base catalyst in biodiesel synthesis from crude palm oil. Energy Conversion and Management, 2014, 88, 1167-1178.	9.2	83
12	Ferric sulphate catalysed esterification of free fatty acids in waste cooking oil. Bioresource Technology, 2010, 101, 7338-7343.	9.6	80
13	Advances in biodiesel fuel for application in compression ignition engines. Clean Technologies and Environmental Policy, 2010, 12, 459-493.	4.1	76
14	Recent trends in policies, socioeconomy and future directions of the biodiesel industry. Clean Technologies and Environmental Policy, 2010, 12, 213-238.	4.1	71
15	Application of vegetable oils in the treatment of polycyclic aromatic hydrocarbons-contaminated soils. Journal of Hazardous Materials, 2010, 177, 28-41.	12.4	70
16	Development of a reduced biodiesel combustion kinetics mechanism for CFD modelling of a light-duty diesel engine. Fuel, 2013, 106, 388-400.	6.4	69
17	Advances in ultrasound-assisted transesterification for biodiesel production. Applied Thermal Engineering, 2016, 100, 553-563.	6.0	67
18	Combustion performance and exhaust emissions from the non-pressurised combustion of palm oil biodiesel blends. Applied Thermal Engineering, 2010, 30, 2476-2484.	6.0	60

#	Article	IF	Citations
19	Heterogeneous free fatty acids esterification in waste cooking oil using ion-exchange resins. Fuel Processing Technology, 2012, 102, 67-72.	7.2	58
20	Development and characterisation of novel heterogeneous palm oil mill boiler ash-based catalysts for biodiesel production. Bioresource Technology, 2012, 125, 158-164.	9.6	57
21	Ethyl lactate as a potential green solvent to extract hydrophilic (polar) and lipophilic (non-polar) phytonutrients simultaneously from fruit and vegetable by-products. Sustainable Chemistry and Pharmacy, 2016, 4, 21-31.	3.3	57
22	Evaluation of non-premixed combustion and fuel spray models for in-cylinder diesel engine simulation. Applied Energy, 2012, 90, 271-279.	10.1	53
23	Pyrolysis of Jatropha curcas pressed cake for bio-oil production in a fixed-bed system. Energy Conversion and Management, 2014, 78, 518-526.	9.2	52
24	Modified Fenton oxidation of polycyclic aromatic hydrocarbon (PAH)-contaminated soils and the potential of bioremediation as post-treatment. Science of the Total Environment, 2012, 419, 240-249.	8.0	50
25	Engine-out characterisation using speedâ€“load mapping and reduced test cycle for a light-duty diesel engine fuelled with biodiesel blends. Fuel, 2011, 90, 2700-2709.	6.4	48
26	Effects of antioxidant additives on pollutant formation from the combustion of palm oil methyl ester blends with diesel in a non-pressurised burner. Energy Conversion and Management, 2010, 51, 1536-1546.	9.2	46
27	Development and validation of a reduced combined biodieselâ€“diesel reaction mechanism. Fuel, 2013, 104, 620-634.	6.4	46
28	Multistage optimizations of slow pyrolysis synthesis of biochar from palm oil sludge for adsorption of lead. Bioresource Technology, 2017, 245, 944-953.	9.6	41
29	Development of an integrated reduced fuel oxidation and soot precursor formation mechanism for CFD simulations of diesel combustion. Fuel, 2011, 90, 2902-2914.	6.4	39
30	Evaluation of solubility of polycyclic aromatic hydrocarbons in ethyl lactate/water versus ethanol/water mixtures for contaminated soil remediation applications. Journal of Environmental Sciences, 2012, 24, 1064-1075.	6.1	39
31	Development of Thermophysical and Transport Properties for the CFD Simulations of In-Cylinder Biodiesel Spray Combustion. Energy & Fuels, 2012, 26, 4857-4870.	5.1	39
32	Characterisation of ignition delay period for a compression ignition engine operating on blended mixtures of diesel and gasoline. Applied Thermal Engineering, 2014, 66, 55-64.	6.0	38
33	Effect of oxide catalysts on the properties of bio-oil from in-situ catalytic pyrolysis of palm empty fruit bunch fiber. Journal of Environmental Management, 2019, 247, 38-45.	7.8	35
34	Investigation of fuel injection pattern on soot formation and oxidation processes in a light-duty diesel engine using integrated CFD-reduced chemistry. Fuel, 2012, 96, 404-418.	6.4	34
35	Developments in computational fluid dynamics modelling of gasoline direct injection engine combustion and soot emission with chemical kinetic modelling. Applied Thermal Engineering, 2016, 107, 936-959.	6.0	32
36	Simulation of biodiesel combustion in a light-duty diesel engine using integrated compact biodieselâ€“diesel reaction mechanism. Applied Energy, 2013, 102, 1275-1287.	10.1	31

#	Article	IF	Citations
37	Kinetics and Mechanisms for Copyrolysis of Palm Empty Fruit Bunch Fiber (EFBF) with Palm Oil Mill Effluent (POME) Sludge. Energy & Fuels, 2017, 31, 8217-8227.	5.1	31
38	Outcome-based Education â€“ The Assessment of Programme Educational Objectives for an Engineering Undergraduate Degree. Engineering Education, 2014, 9, 74-85.	0.3	30
39	Investigation of the effects of palm biodiesel dissolved oxygen and conductivity on metal corrosion and elastomer degradation under novel immersion method. Applied Thermal Engineering, 2016, 104, 294-308.	6.0	29
40	Development of multi-component diesel surrogate fuel models â€“ Part II: Validation of the integrated mechanisms in 0-D kinetic and 2-D CFD spray combustion simulations. Fuel, 2016, 181, 120-130.	6.4	29
41	Ethyl lactate-Fenton treatment of soil highly contaminated with polycyclic aromatic hydrocarbons (PAHs). Chemical Engineering Journal, 2012, 200-202, 247-256.	12.7	28
42	Computational study of biodieselâ€“diesel fuel blends on emission characteristics for a light-duty diesel engine using OpenFOAM. Applied Energy, 2013, 111, 827-841.	10.1	27
43	Development and validation of a generic reduced chemical kinetic mechanism for CFD spray combustion modelling of biodiesel fuels. Combustion and Flame, 2015, 162, 2354-2370.	5.2	27
44	Development of multi-component diesel surrogate fuel models â€“ Part I: Validation of reduced mechanisms of diesel fuel constituents in 0-D kinetic simulations. Fuel, 2016, 180, 433-441.	6.4	25
45	Torrefaction of oil palm fronds for co-firing in coal power plants. Energy Procedia, 2018, 144, 75-81.	1.8	25
46	Simulation of temporal and spatial soot evolution in an automotive diesel engine using the Mossâ€“Brookes soot model. Energy Conversion and Management, 2012, 58, 171-184.	9.2	24
47	Evaluation and Development of Chemical Kinetic Mechanism Reduction Scheme for Biodiesel and Diesel Fuel Surrogates. SAE International Journal of Fuels and Lubricants, 0, 6, 729-744.	0.2	24
48	Deterioration of palm biodiesel fuel under common rail diesel engine operation. Energy, 2017, 120, 854-863.	8.8	24
49	Ultrasoundâ€assisted transesterification of refined and crude palm oils using heterogeneous palm oil mill fly ash supported calcium oxide catalyst. Energy Science and Engineering, 2015, 3, 257-269.	4.0	22
50	Development of emissions predictor equations for a light-duty diesel engine using biodiesel fuel properties. Fuel, 2012, 95, 544-552.	6.4	21
51	Advances in Computational Fluid Dynamics (CFD) Modeling of In-Cylinder Biodiesel Combustion. Energy & Fuels, 2013, 27, 4489-4506.	5.1	20
52	Investigation of the impacts of ethyl lactate based Fenton treatment on soil quality for polycyclic aromatic hydrocarbons (PAHs)-contaminated soils. Journal of Hazardous Materials, 2013, 262, 691-700.	12.4	20
53	Insight into Co-pyrolysis of Palm Kernel Shell (PKS) with Palm Oil Sludge (POS): Effect on Bio-oil Yield and Properties. Waste and Biomass Valorization, 2020, 11, 5877-5889.	3.4	20
54	Effects of sonication on co-precipitation synthesis and activity of copper manganese oxide catalyst to remove methane and sulphur dioxide gases. Ultrasonics Sonochemistry, 2018, 40, 57-67.	8.2	18

#	Article	IF	Citations
55	Investigation of ethyl lactate as a green solvent for desorption of total petroleum hydrocarbons (TPH) from contaminated soil. Environmental Science and Pollution Research, 2016, 23, 22008-22018.	5.3	17
56	A validated, rapid, simple and economical high-performance liquid-chromatography method to quantify palm tocopherol and tocotrienols. Journal of Food Composition and Analysis, 2016, 53, 22-29.	3.9	17
57	Thermochemical and structural changes in Jatropha curcas seed cake during torrefaction for its use as coal co-firing feedstock. Energy, 2016, 100, 262-272.	8.8	17
58	Valorisation of oil palm wastes into high yield and energy content biochars via slow pyrolysis: Multivariate process optimisation and combustion kinetic studies. Materials Science for Energy Technologies, 2020, 3, 601-610.	1.8	17
59	Development and Validation of Chemical Kinetic Mechanism Reduction Scheme for Large-Scale Mechanisms. SAE International Journal of Fuels and Lubricants, 0, 7, 653-662.	0.2	16
60	Comparison of conventional and fast pyrolysis for the production of Jatropha curcas bio-oil. Applied Thermal Engineering, 2016, 99, 160-168.	6.0	16
61	In-cylinder diesel spray combustion simulations using parallel computation: A performance benchmarking study. Applied Energy, 2012, 93, 466-478.	10.1	15
62	Optimization of simultaneous carotenes and vitamin E (tocols) extraction from crude palm olein using response surface methodology. Chemical Engineering Communications, 2018, 205, 596-609.	2.6	15
63	Catalytic pyrolysis of cellulose with oxides: effects on physical properties and reaction pathways. Clean Technologies and Environmental Policy, 2019, 21, 1629-1643.	4.1	15
64	Investigation of Biodieselâ€“Diesel Fuel Blends on Combustion Characteristics in a Light-Duty Diesel Engine Using OpenFOAM. Energy & Fuels, 2013, 27, 208-219.	5.1	14
65	Evaluation of a Lagrangian Soot Tracking Method for the prediction of primary soot particle size under engine-like conditions. Journal of Aerosol Science, 2018, 115, 70-95.	3.8	14
66	Distribution and Source Apportionment of Polycyclic Aromatic Hydrocarbons (PAHs) in Surface Soils from Five Different Locations in Klang Valley, Malaysia. Bulletin of Environmental Contamination and Toxicology, 2012, 88, 741-746.	2.7	13
67	Extraction of phenanthrene and fluoranthene from contaminated sand using palm kernel and soybean oils. Journal of Environmental Management, 2012, 107, 124-130.	7.8	13
68	CFD modelling of soot entrainment via thermophoretic deposition and crevice flow in a diesel engine. Journal of Aerosol Science, 2013, 66, 83-95.	3.8	12
69	Soot Formation Modeling of n-dodecane and Diesel Sprays under Engine-Like Conditions. , 0, , .		11
70	Leaching as a Pretreatment Process to Complement Torrefaction in Improving Co-firing Characteristics of Jatropha curcas Seed Cake. Waste and Biomass Valorization, 2016, 7, 559-569.	3.4	11
71	Evaluation of ethyl lactate as solvent in Fenton oxidation for the remediation of total petroleum hydrocarbon (TPH)-contaminated soil. Environmental Science and Pollution Research, 2017, 24, 17779-17789.	5.3	9
72	Insights into the effectiveness of synthetic and natural additives in improving biodiesel oxidation stability. Sustainable Energy Technologies and Assessments, 2022, 52, 102296.	2.7	9

#	Article	IF	Citations
73	Feasibility of treating aged polycyclic aromatic hydrocarbons (PAHs)-contaminated soils using ethyl lactate-based Fenton treatment via parametric and kinetic studies. Environmental Science and Pollution Research, 2015, 22, 329-342.	5.3	8
74	Comparison of Bio-Oil Properties from Non-Catalytic and In-Situ Catalytic Fast Pyrolysis of Palm Empty Fruit Bunch. Materials Today: Proceedings, 2018, 5, 23456-23465.	1.8	8
75	The role of humic acid in Fenton reaction for the removal of aliphatic fraction of total petroleum hydrocarbons (diesel range) in soil. Environmental Science and Ecotechnology, 2021, 7, 100109.	13.5	8
76	Kinetics and mechanisms for catalytic pyrolysis of empty fruit bunch fibre and cellulose with oxides. SN Applied Sciences, 2020, 2, 1.	2.9	7
77	Revealing stroke survivor gait deficits during rehabilitation using ensemble empirical mode decomposition of surface electromyography signals. Biomedical Signal Processing and Control, 2020, 61, 102045.	5.7	7
78	A numerical study on the quasi-steady spray and soot characteristics for soybean methyl ester and its blends with ethanol using CFD-reduced chemical kinetics approach. Energy, 2020, 200, 117540.	8.8	7
79	Computational study of crevice soot entrainment in a diesel engine. Applied Energy, 2013, 102, 898-907.	10.1	6
80	Sensitivity analyses of biodiesel thermo-physical properties under diesel engine conditions. Energy, 2016, 109, 341-352.	8.8	6
81	Simultaneous Recovery of Carotenes and Tocols from Crude Palm Olein Using Ethyl Lactate and Ethanol. Journal of Physics: Conference Series, 2018, 989, 012005.	0.4	6
82	Numerical Analysis of the Effects of Biodiesel Unsaturation Levels on Combustion and Emission Characteristics under Conventional and Diluted Air Conditions. Energy & Fuels, 2018, 32, 8392-8410.	5.1	6
83	Esterification and neutralization of bio-oil from palm empty fruit bunch fibre with calcium oxide. Bioresource Technology Reports, 2020, 12, 100560.	2.7	6
84	Review of the advances in integrated chemical kinetics-computational fluid dynamics combustion modelling studies of gasoline-biodiesel mixtures. Transportation Engineering, 2022, 7, 100102.	4.2	6
85	Evaluation of in situ catalysed hydrogen peroxide propagation (CHP) for phenanthrene and fluoranthene removals from soil and its associated impacts on soil functionality. Environmental Science and Pollution Research, 2014, 21, 2888-2897.	5.3	5
86	A new fractal-based kinetic index to characterize gait deficits with application in stroke survivor functional mobility assessment. Biomedical Signal Processing and Control, 2019, 52, 403-413.	5.7	5
87	Numerical investigation on the ignition and flame characteristics of n-dodecane-n-butanol spray under diesel engine conditions. Fuel, 2022, 325, 124881.	6.4	5
88	Numerical Investigation of Particulate Matter Processes in Gasoline Direct Injection Engines through Integrated Computational Fluid Dynamicsâ€“Chemical Kinetic Modeling. Energy & Fuels, 2020, 34, 4909-4924.	5.1	4
89	Chemical Kinetic Mechanism Reduction Scheme for Diesel Fuel Surrogate. Applied Mechanics and Materials, 0, 541-542, 1006-1010.	0.2	3
90	Comparison of the Yield and Properties of Bio-Oil Produced by Slow and Fast Pyrolysis of Rice Husks and Coconut Shells. Applied Mechanics and Materials, 0, 625, 626-629.	0.2	3

#	Article	IF	Citations
91	An investigation into the use of CFD to model the co-firing ofJatropha curcasseed cake with coal. International Journal of Green Energy, 2018, 15, 605-621.	3.8	3
92	Development of a reduced multi-component chemical kinetic mechanism for the combustion modelling of diesel-biodiesel-gasoline mixtures. Transportation Engineering, 2022, 7, 100101.	4.2	3
93	Student evaluation of engineering modules for improved teaching-learning effectiveness. Engineering Education, 2010, 5, 52-63.	0.3	2
94	Development and validation of a nâ€butanol reduced chemical kinetic mechanism under engine relevant conditions. International Journal of Chemical Kinetics, 2021, 53, 1285.	1.6	2
95	A NOVEL STEADY-STATE TEST CYCLE FOR EMISSIONS CHARACTERISATION OF A LIGHT-DUTY DIESEL ENGINE FUELLED WITH BIODIESEL. , 2009, , .		2
96	Development and validation of a new n-dodecane-n-butanol-PAH reduced mechanism under diesel engine-relevant conditions. Fuel, 2022, 319, 123829.	6.4	2
97	Application of Adaptive Local Mesh Refinement (ALMR) Approach for the Modeling of Reacting Biodiesel Fuel Spray using OpenFOAM. , 2014, , .		1
98	A Compact Low Cost Wearable Sensor System for Quantitative Gait Measurement. Applied Mechanics and Materials, 0, 627, 212-216.	0.2	1
99	Investigation of eggshell as catalyst on the torrefaction of empty fruit bunch. Materials Science for Energy Technologies, 2021, 4, 189-201.	1.8	1
100	Numerical Studies of In-Cylinder Combustion and Soot Emission Characteristics of Biodiesel Fuels from Different Feedstock. Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, 2020, 70, 46-61.	0.6	1
101	Biodiesel Synthesis from Refined Palm Oil Using a Calcium Oxide Impregnated Ash-Based Catalyst: Parametric, Kinetics, and Product Characterization Studies. Catalysts, 2022, 12, 706.	3.5	1
102	Development of Biodiesel Skeletal Mechanisms for Kinetic Combustion Modeling. , 2013, , .		0
103	A motion sensor network for quantitative gait measurement. World Journal of Engineering, 2015, 12, 619-626.	1.6	0
104	Heat transfer analysis of laboratory scale fast pyrolysis fluidised bed reactor. AIP Conference Proceedings, 2017, , .	0.4	0
105	Computational fluid dynamics simulation of laboratory scale reactor of fast pyrolysis fluidised bed. Journal of Physics: Conference Series, 2017, 822, 012028.	0.4	0
106	Semi-Empirical Correlations of Physical and Chemical Delay Period of Diesel-Gasoline Combustion. Lecture Notes in Electrical Engineering, 2013, , 493-502.	0.4	0
107	Vibration suppression of a car engine frame via tuned vibration absorber design. International Journal of Vehicle Noise and Vibration, 2020, 16, 13.	0.1	0
108	Parametric investigation of particulate matter emissions in a gasoline direct injection engine using computational fluid dynamics modelling. Australian Journal of Mechanical Engineering, 0, , 1-18.	2.1	0