Kelly Hawboldt

List of Publications by Year
in descending order

126 papers	4,223 citations	109137 35 h-index	128067 60 g-index
128 all docs	128 docs citations	128 times ranked	4465 citing authors

#	Article	IF	Citations
1	Green chemistry and the ocean-based biorefinery. Green Chemistry, 2013, 15, 860.	4.6	214
2	Dynamic risk assessment using failure assessment and Bayesian theory. Journal of Loss Prevention in the Process Industries, 2009, 22, 600-606.	1.7	195
3	A review on the pyrolysis of woody biomass to bio-oil: Focus on kinetic models. Renewable and Sustainable Energy Reviews, 2015, 52, 1580-1595.	8.2	191
4	Marine transportation risk assessment using Bayesian Network: Application to Arctic waters. Ocean Engineering, 2018, 159, 422-436.	1.9	164
5	A review on common adsorbents for acid gases removal: Focus on biochar. Renewable and Sustainable Energy Reviews, 2018, 81, 1705-1720.	8.2	159
6	A review of bio-oils from waste biomass: Focus on fish processing waste. Renewable and Sustainable Energy Reviews, 2012, 16, 798-821.	8.2	137
7	Modelling of BP Texas City refinery accident using dynamic risk assessment approach. Chemical Engineering Research and Design, 2010, 88, 191-199.	2.7	122
8	Blends of pyrolysis oil, petroleum, and other bio-based fuels: A review. Renewable and Sustainable Energy Reviews, 2016, 59, 406-419.	8.2	107
9	Life Cycle Analysis of wind–fuel cell integrated system. Renewable Energy, 2005, 30, 157-177.	4.3	101
10	A review of lipid extraction from fish processing by-product for use as a biofuel. Biomass and Bioenergy, 2014, 63, 330-340.	2.9	98
11	Offshore produced water management: A review of current practice and challenges in harsh/Arctic environments. Marine Pollution Bulletin, 2016, 104, 7-19.	2.3	98
12	A review on condensing system for biomass pyrolysis process. Fuel Processing Technology, 2018, 180, 1-13.	3.7	87
13	New experimental data and kinetic rate expression for H2S pyrolysis and re-association. Chemical Engineering Science, 2000, 55, 957-966.	1.9	81
14	Modelling an integrated impact of fire, explosion and combustion products during transitional events caused by an accidental release of LNG. Chemical Engineering Research and Design, 2019, 128, 259-272.	2.7	81
15	An integrated approach for fire and explosion consequence modelling. Fire Safety Journal, 2013, 61, 324-337.	1.4	76
16	Dynamic risk analysis of offloading process in floating liquefied natural gas (FLNG) platform using Bayesian Network. Journal of Loss Prevention in the Process Industries, 2016, 41, 259-269.	1.7	76
17	New experimental data and kinetic rate expression for the Claus reaction. Chemical Engineering Science, 2000, 55, 5141-5148.	1.9	73
18	A critical review on life cycle analysis of algae biodiesel: current challenges and future prospects. Renewable and Sustainable Energy Reviews, 2020, 134, 110143.	8.2	71

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19	Comparison of Four Adsorption Isotherm Models for Characterizing Molecular Recognition of Individual Phenolic Compounds in Porous Tailor-Made Molecularly Imprinted Polymer Films. ACS Applied Materials & Interfaces, 2020, 12, 11998-12009.	4.0	69
20	Application of resins with functional groups in the separation of metal ions/species â€" a review. Mineral Processing and Extractive Metallurgy Review, 2018, 39, 395-413.	2.6	68
21	Ammonia Pyrolysis and Oxidation in the Claus Furnace. Industrial & Engineering Chemistry Research, 2001, 40, 144-151.	1.8	67
22	Extraction of lipids and astaxanthin from crustacean by-products: A review on supercritical CO_2 extraction. Trends in Food Science and Technology, 2020, 103, 94-108.	7.8	66
23	Explosion modeling and analysis of BP Deepwater Horizon accident. Safety Science, 2013, 57, 150-160.	2.6	64
24	Biochar for the removal of metals from solution: A review of lignocellulosic and novel marine feedstocks. Journal of Environmental Chemical Engineering, 2020, 8, 103975.	3.3	56
25	An ecological risk assessment model for Arctic oil spills from a subsea pipeline. Marine Pollution Bulletin, 2018, 135, 1117-1127.	2.3	55
26	Uncertainty-based quantitative assessment of sustainability for higher education institutions. Journal of Cleaner Production, 2011, 19, 720-732.	4.6	52
27	Fire impact assessment in FLNG processing facilities using Computational Fluid Dynamics (CFD). Fire Safety Journal, 2017, 92, 42-52.	1.4	48
28	Nitrogen Functionalized Biochar as a Renewable Adsorbent for Efficient CO_2 Removal. Energy & Fuels, 2018, 32, 11742-11748.	2.5	47
29	Supersonic gas separators: Review of latest developments. Journal of Natural Gas Science and Engineering, 2015, 27, 109-121.	2.1	44
30	A hybrid SVR-PSO model to predict a CFD-based optimised bubbling fluidised bed pyrolysis reactor. Energy, 2020, 191, 116414.	4.5	44
31	Separation of elemental sulfur from hydrometallurgical residue: A review. Hydrometallurgy, 2011, 109, 80-89.	1.8	41
32	Model for microbiologically influenced corrosion potential assessment for the oil and gas industry. Corrosion Engineering Science and Technology, 2018, 53, 378-392.	0.7	40
33	Optimization of biosurfactant production by *Bacillus Subtilis* N3-1P using the brewery waste as the carbon source. Environmental Technology (United Kingdom), 2019, 40, 3371-3380.	1.2	39
34	Thermal stability investigation of sulfide minerals in DSC. Journal of Hazardous Materials, 2010, 178, 814-822.	6.5	37
35	Dynamic risk-based maintenance for offshore processing facility. Process Safety Progress, 2016, 35, 399-406.	0.4	37
36	Study of selective condensation for woody biomass pyrolysis oil vapours. Fuel, 2019, 245, 233-239.	3.4	37

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37	A cellular automaton model for microcarrier cultures. Biotechnology and Bioengineering, 1994, 43, 90-100.	1.7	34
38	The Importance of Thiosalts Speciation: Review of Analytical Methods, Kinetics, and Treatment. Critical Reviews in Environmental Science and Technology, 2013, 43, 2013-2070.	6.6	34
39	Effect of production conditions on self-heating propensity of torrefied sawmill residues. Fuel, 2015, 160, 227-237.	3.4	34
40	Corrosion risk assessment using adaptive bow-tie (ABT) analysis. Reliability Engineering and System Safety, 2021, 214, 107731.	5.1	34
41	Pyrolysis: A Theoretical and Experimental Study on the Conversion of Softwood Sawmill Residues to Biooil. Industrial & Engineering Chemistry Research, 2015, 54, 605-611.	1.8	33
42	Upgrading of biomass sourced pyrolysis oil review: focus on co-pyrolysis and vapour upgrading during pyrolysis. Biomass Conversion and Biorefinery, 2018, 8, 775-787.	2.9	32
43	Upgrading and isolation of low molecular weight compounds from bark and softwood bio-oils through vacuum distillation. Separation and Purification Technology, 2018, 194, 123-129.	3.9	31
44	Reservoir souring: sulfur chemistry in offshore oil and gas reservoir fluids. Journal of Petroleum Exploration and Production, 2019, 9, 1105-1118.	1.2	30
45	Combustion products toxicity risk assessment in an offshore installation. Chemical Engineering Research and Design, 2014, 92, 616-624.	2.7	29
46	Accidental release of Liquefied Natural Gas in a processing facility: Effect of equipment congestion level on dispersion behaviour of the flammable vapour. Journal of Loss Prevention in the Process Industries, 2019, 61, 237-248.	1.7	29
47	Review and analysis of microbiologically influenced corrosion: the chemical environment in oil and gas facilities. Corrosion Engineering Science and Technology, 2018, 53, 549-563.	0.7	28
48	Sustainable development of process facilities: State-of-the-art review of pollution prevention frameworks. Journal of Hazardous Materials, 2008, 150, 4-20.	6.5	27
49	Co-pyrolysis of softwood with waste mussel shells: Biochar analysis. Fuel, 2020, 282, 118792.	3.4	27
50	Bibliometric Analysis of Microbiologically Influenced Corrosion (MIC) of Oil and Gas Engineering Systems. Corrosion, 2018, 74, 468-486.	0.5	26
51	Production and Characterization of Pyrolysis Oil from Sawmill Residues in an Auger Reactor. Industrial & Engineering Chemistry Research, 2017, 56, 1920-1925.	1.8	25
52	A network based approach to envisage potential accidents in offshore process facilities. Process Safety Progress, 2017, 36, 178-191.	0.4	23
53	Analysis of the effect of module design on gas absorption in cross flow hollow membrane contactors via computational fluid dynamics (CFD) analysis. Journal of Membrane Science, 2016, 520, 415-424.	4.1	22
54	Parametric analysis of pyrolysis process on the product yields in a bubbling fluidized bed reactor. Fuel, 2018, 234, 616-625.	3.4	22

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55	Comparative study between physicochemical characterization of biochar and metal organic frameworks (MOFs) as gas adsorbents. Canadian Journal of Chemical Engineering, 2016, 94, 2114-2120.	0.9	21
56	Application of biochar for acid gas removal: experimental and statistical analysis using CO2. Environmental Science and Pollution Research, 2019, 26, 10902-10915.	2.7	21
57	A Study of Process Optimization of Extraction of Oil from Fish Waste for Use as A Low‐Grade Fuel. JAOCS, Journal of the American Oil Chemists' Society, 2013, 90, 1903-1915.	0.8	19
58	Study of surface heterogeneity and nitrogen functionalizing of biochars: Molecular modeling approach. Carbon, 2021, 171, 161-170.	5.4	19
59	E-Green â̂ A Robust Risk-Based Environmental Assessment Tool for Process Industries. Industrial & Engineering Chemistry Research, 2007, 46, 8787-8795.	1.8	18
60	Experimental Study of Solubility of Natural Gas Components in Aqueous Solutions of Ethylene Glycol at Low-Temperature and High-Pressure Conditions. Journal of Chemical & Engineering Data, 2007, 52, 1741-1746.	1.0	16
61	Prediction of natural gas behaviour in loading and unloading operations of marine CNG transportation systems. Journal of Natural Gas Science and Engineering, 2009, 1, 31-38.	2.1	16
62	CFD analysis of fast pyrolysis process in a pilot-scale auger reactor. Fuel, 2020, 273, 117782.	3.4	16
63	A review on sources and extraction of phenolic compounds as precursors for bio-based phenolic resins. Biomass Conversion and Biorefinery, 2023, 13, 4463-4475.	2.9	16
64	Prediction of Minerals Producing Acid Mine Drainage Using a Computer-Assisted Thermodynamic Chemical Equilibrium Model. Mine Water and the Environment, 2009, 28, 74-78.	0.9	15
65	Hard to Soft: Biogenic Absorbent Sponge-like Material from Waste Mussel Shells. Matter, 2020, 3, 2029-2041.	5.0	15
66	Contaminant removal from natural gas using dual hollow fiber membrane contactors. Journal of Membrane Science, 2012, 397-398, 9-16.	4.1	14
67	Multi-objective optimization of simultaneous saccharification and fermentation for cellulosic ethanol production. Renewable Energy, 2018, 125, 100-107.	4.3	14
68	Kinetics and safety analysis of sulfide mineral self-heating. Journal of Thermal Analysis and Calorimetry, 2011, 106, 53-61.	2.0	13
69	Sulfate removal using colloid-enhanced ultrafiltration: performance evaluation and adsorption studies. Environmental Science and Pollution Research, 2021, 28, 5609-5624.	2.7	13
70	Probabilistic Risk Assessment of Polycyclic Aromatic Hydrocarbons (PAHs) in Produced Water. Human and Ecological Risk Assessment (HERA), 2009, 15, 1049-1063.	1.7	12
71	SusDesign â€" An approach for a sustainable process system design and its application to a thermal power plant. Applied Thermal Engineering, 2010, 30, 1896-1913.	3.0	12
72	An Integrated Decision-Making Framework for Sustainability Assessment: A Case Study of Memorial University. Higher Education Policy, 2011, 24, 481-498.	1.3	12

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73	Biofuels from fish processing plant effluents â€" waste characterization and oil extraction and quality. Sustainable Energy Technologies and Assessments, 2013, 4, 36-44.	1.7	12
74	Quantitative risk-based ranking of chemicals considering hazardous thermal reactions. Journal of Chemical Health and Safety, 2014, 21, 27-38.	1.1	12
75	Enzymatic processing of mussel shells to produce biorenewable calcium carbonate in seawater. Green Chemistry, 2018, 20, 2913-2920.	4.6	12
76	Methodology to analyse LNG spill on steel structure in congested marine offshore facility. Journal of Loss Prevention in the Process Industries, 2019, 62, 103936.	1.7	12
77	Co-pyrolysis of softwood with waste mussel shells: Liquid analysis. Fuel, 2019, 254, 115584.	3.4	12
78	Improvement of bark pyrolysis oil and value added chemical recovery by pervaporation. Fuel Processing Technology, 2020, 199, 106292.	3.7	12
79	Investigating the Influence of Biochar Amendment on the Physicochemical Properties of Podzolic Soil. Agriculture (Switzerland), 2020, 10, 471.	1.4	12
80	Biosurfactant production by native marine bacteria (<scp><i>Acinetobacter) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 467 Td (calcoaceticu Canadian Journal of Chemical Engineering, 2021, 99, 2386-2397.	0.9	12
81	Developing a novel methodology for ecological risk assessment of thiosalts. Stochastic Environmental Research and Risk Assessment, 2014, 28, 383-391.	1.9	11
82	Comparison of biofuel quality of waste derived oils as a function of oil extraction methods. Fuel, 2015, 158, 183-190.	3.4	11
83	Development, optimization, validation and application of faster gas chromatography â€" flame ionization detector method for the analysis of total petroleum hydrocarbons in contaminated soils. Journal of Chromatography A, 2015, 1425, 240-248.	1.8	11
84	Improving gas absorption efficiency using a novel dual membrane contactor. Journal of Membrane Science, 2016, 510, 249-258.	4.1	11
85	Assessment of cross-reactivity in a tailor-made molecularly imprinted polymer for phenolic compounds using four adsorption isotherm models. Journal of Chromatography A, 2020, 1629, 461463.	1.8	11
86	A Study of the Effect of Quench Design on the Quality of Experimental Kinetic Data. Industrial & Engineering Chemistry Research, 1999, 38, 2260-2263.	1.8	10
87	Emission factor estimation for oil and gas facilities. Chemical Engineering Research and Design, 2011, 89, 295-299.	2.7	10
88	Risk-Based Prioritisation of Indoor Air Pollution Monitoring Using Computational Fluid Dynamics. Indoor and Built Environment, 2012, 21, 663-673.	1.5	10
89	A hybrid input variable selection method for building soft sensor from correlated process variables. Chemometrics and Intelligent Laboratory Systems, 2016, 157, 67-77.	1.8	10
90	Development and Validation of a Process Model To Describe Pyrolysis of Forestry Residues in an Auger Reactor. Energy & Fuels, 2017, 31, 10833-10841.	2.5	10

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91	Wealth from waste: blue mussels (<i>Mylitus edulis</i>) offer up a sustainable source of natural and synthetic nacre. Green Chemistry, 2019, 21, 3920-3929.	4.6	10
92	Thermodynamic model of fast pyrolysis bio-oil advanced distillation curves. Fuel, 2020, 261, 116446.	3.4	10
93	Study on Iron-nickel Separation Using Ion Exchange Resins with Different Functional Groups for Potential Iron Sub-production. Mineral Processing and Extractive Metallurgy Review, 2021, 42, 75-89.	2.6	10
94	Thermal and flow properties of fish oil blends with bunker fuel oil. Fuel, 2015, 158, 641-649.	3.4	9
95	CFD Analysis of Hydrate Formation in Pipelines. Petroleum Science and Technology, 2015, 33, 571-578.	0.7	9
96	Review: Removal of Thiosalt/Sulfate from Mining Effluents by Adsorption and Ion Exchange. Mineral Processing and Extractive Metallurgy Review, 2019, 40, 79-86.	2.6	9
97	Supercritical CO_2 extraction of lipids and astaxanthin from Atlantic shrimp by-products with static co-solvents: Process optimization and mathematical modeling studies. Journal of CO2 Utilization, 2022, 58, 101938.	3.3	9
98	Advanced kinetics for calorimetric techniques and thermal stability screening of sulfide minerals. Thermochimica Acta, 2010, 501, 35-45.	1.2	8
99	Probing Surface Functionality on Amorphous Carbons Using X-ray Photoelectron Spectroscopy of Bound Metal Ions. Journal of Physical Chemistry C, 2017, 121, 26300-26307.	1.5	8
100	Adsorption of thiosulphate, trithionate, tetrathionate using biomass ash/char. Journal of Environmental Chemical Engineering, 2018, 6, 5401-5408.	3.3	8
101	Cell cycle dynamics of microcarrier cultures. Journal of Biotechnology, 1994, 34, 133-147.	1.9	6
102	Prediction of asphaltene precipitation using non-isothermal compositional network model. Journal of Petroleum Science and Engineering, 2009, 64, 11-19.	2.1	6
103	IECP â€" an approach for integrated environmental and cost evaluation of process design alternatives and its application to evaluate different NOx prevention technologies in a 125 MW thermal power plant. Energy for Sustainable Development, 2011, 15, 61-68.	2.0	6
104	Ranking Canadian universities: a quantitative approach for sustainability assessment using uD-SiM. International Journal of Sustainable Engineering, 2012, 5, 357-373.	1.9	6
105	Novel Dual-Membrane Gasâ€"Liquid Contactors:â€‰ Modelling and Concept Analysis. Industrial & Engineering Chemistry Research, 2006, 45, 7882-7891.	1.8	5
106	Modeling of pool fires in cold regions. Fire Safety Journal, 2012, 48, 1-10.	1.4	5
107	Shrimp Oil Extracted from Shrimp Processing By-Product Is a Rich Source of Omega-3 Fatty Acids and Astaxanthin-Esters, and Reveals Potential Anti-Adipogenic Effects in 3T3-L1 Adipocytes. Marine Drugs, 2021, 19, 259.	2.2	5
108	Kinetic modeling of biosurfactant production by <i>Bacillus subtilis</i> N3-1P using brewery waste. Chemical Product and Process Modeling, 2022, 17, 331-339.	0.5	5

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109	Assessment of minerals and iron-bearing phases present in hydrometallurgical residues from a nickel sulfide concentrate and availability of residue associated metals. Hydrometallurgy, 2010, 101, 126-134.	1.8	4
110	Renewable resources from the oceans: Adding value to the by-products of the aquaculture and fishing industries. , 2014, , .		4
111	Sulfur speciation in soured reservoirs: chemical equilibrium and kinetics. Journal of Petroleum Exploration and Production, 2020, 10, 1603-1612.	1.2	4
112	Modeling impacts of combustion products on humans in complex processing facilities. Process Safety Progress, 2020, 39, e12114.	0.4	4
113	ECOLOGICAL RISK-BASED PERFORMANCE EVALUATION OF A WASTE STABILIZATION POND. Environmental Engineering and Management Journal, 2010, 9, 757-764.	0.2	4
114	Evaluation of conventional solvent processes for lipid and astaxanthin extraction from shrimp processing by-products. Chemical Engineering Communications, 0, , 1-14.	1.5	4
115	Risk Assessment and Management Using Accident Precursors Modeling in Offshore Process Operation. , 2009, , .		3
116	Decision making for produced water management: an integrated multi-criteria approach. International Journal of Environmental Technology and Management, 2013, 16, 102.	0.1	3
117	Electrolysis of pyrolysis oil distillates and permeates in a multi-anode proton exchange membrane cell. Applied Catalysis B: Environmental, 2019, 256, 117892.	10.8	3
118	Environmental monitoring of fish plant effluent in coastal Newfoundland. , 2005, , .		2
119	Experimental and mass transfer modelling of oil extraction from salmon processing waste using SC-CO2. Journal of Supercritical Fluids, 2015, 104, 160-170.	1.6	2
120	Numerical Modelling of a Fast Pyrolysis Process in a Bubbling Fluidized Bed Reactor. IOP Conference Series: Earth and Environmental Science, 2017, 73, 012032.	0.2	2
121	Production of biodispersants for oil spill remediation in Harsh environment using glycerol from the conversion of fish oil to biodiesel. , 2014, , .		1
122	Input variable selection for an inferential predictor using the retrospective Taguchi method. Canadian Journal of Chemical Engineering, 2015, 93, 1760-1769.	0.9	1
123	Simulation of sour–oxic–nitrite chemical environment in oil and gas facilities. Canadian Journal of Chemical Engineering, 2021, 99, .	0.9	1
124	Selective Separation of Iron from Simulated Nickel Leach Solutions Using Ion Exchange Technology. Minerals, Metals and Materials Series, 2018, , 2161-2172.	0.3	1
125	A Comparison of PAHs in Produced Water Discharges and Flared gas Emissions to the Ocean. , 0, , .		0
126	Decision support system for risk management of produced water in offshore oil and gas industries. International Journal of Water, 2009, 5, 70.	0.1	0