David M Lewis

List of Publications by Year
in descending order

59 papers	2,880 citations	236612 25 h-index	174990 52 g-index
61 all docs	61 docs citations	61 times ranked	3742 citing authors

#	Article	IF	Citations
1	Numerical simulation of hydrothermal liquefaction of algae in a lab-scale coil reactor. Experimental and Computational Multiphase Flow, 2022, 4, 113-120.	1.9	11
2	A kinetic model for the hydrothermal liquefaction of microalgae, sewage sludge and pine wood with product characterisation of renewable crude. Chemical Engineering Journal, 2022, 428, 131228.	6.6	24
3	A multi-component reaction kinetics model for the hydrothermal liquefaction of carbohydrates and co-liquefaction to produce 5-ethoxymethyl furfural. Fuel, 2022, 311, 122499.	3.4	4
4	Viscosity Variation of Model Compounds during Hydrothermal Liquefaction under Subcritical Conditions of Water. Industrial & Engineering Chemistry Research, 2021, 60, 980-989.	1.8	4
5	The effect of ethanol as a homogeneous catalyst on the reaction kinetics of hydrothermal liquefaction of lipids. Chemical Engineering Journal, 2021, 414, 128832.	6.6	12
6	Investigation of selective release of periplasmic proteins through pore size analysis and single-cell microscopy in Escherichia coli. Biochemical Engineering Journal, 2021, 171, 108009.	1.8	2
7	Elemental nitrogen balance, reaction kinetics and the effect of ethanol on the hydrothermal liquefaction of soy protein. Chemical Engineering Journal, 2021, 425, 130576.	6.6	16
8	Antibacterial action of functional silicon dioxide: an investigation of the attachment and separation of bacteria. Environmental Technology (United Kingdom), 2020, 41, 703-710.	1.2	1
9	Reaction Kinetics and Characterization of Species in Renewable Crude from Hydrothermal Liquefaction of Mixtures of Polymer Compounds To Represent Organic Fractions of Biomass Feedstocks. Energy & Fuels, 2020, 34, 419-429.	2.5	26
10	Reaction kinetics and characterisation of species in renewable crude from hydrothermal liquefaction of monomers to represent organic fractions of biomass feedstocks. Chemical Engineering Journal, 2020, 389, 124397.	6.6	47
11	The elucidation of reaction kinetics for hydrothermal liquefaction of model macromolecules. Chemical Engineering Journal, 2019, 370, 637-645.	6.6	44
12	Study of the impacts of process changes of a pulp and paper mill on aerated stabilization basin (ASB) performance. Chemosphere, 2018, 211, 767-774.	4.2	8
13	Moringa oleifera functionalised sand â€“ reuse with non-ionic surfactant dodecyl glucoside. Journal of Water and Health, 2017, 15, 863-872.	1.1	4
14	Catalytic Hydro-Cracking of Bio-Oil to Bio-Fuel. Environmental Footprints and Eco-design of Products and Processes, 2017, , 205-223.	0.7	0
15	Hydroâ€conversion of oleic acid in bioâ€oil to liquid hydrocarbons: an experimental and modeling investigation. Journal of Chemical Technology and Biotechnology, 2016, 91, 655-663.	1.6	4
16	Technical issues in the large-scale hydrothermal liquefaction of microalgal biomass to biocrude. Current Opinion in Biotechnology, 2016, 38, 85-89.	3.3	50
17	Hydrothermal liquefaction of freshwater and marine algal biomass: A novel approach to produce distillate fuel fractions through blending and co-processing of biocrude with petrocrude. Bioresource Technology, 2016, 203, 228-235.	4.8	56
18	Integrating anaerobic digestion and hydrothermal liquefaction for renewable energy production: An experimental investigation. Environmental Progress and Sustainable Energy, 2015, 34, 1662-1673.	1.3	18

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19	The application of activated carbon for the treatment and reuse of the aqueous phase derived from the hydrothermal liquefaction of a halophytic Tetraselmis sp.. Bioresource Technology, 2015, 182, 378-382.	4.8	20
20	Microalgal cell disruption by hydrodynamic cavitation for the production of biofuels. Journal of Applied Phycology, 2015, 27, 1881-1889.	1.5	44
21	Pre-treatment options for halophytic microalgae and associated methane production. Bioresource Technology, 2015, 177, 410-413.	4.8	14
22	Release of Cl, S, P, K, and Na during Thermal Conversion of Algal Biomass. Energy & Fuels, 2015, 29, 2542-2554.	2.5	58
23	Halophytic microalgae as a feedstock for anaerobic digestion. Algal Research, 2015, 7, 16-23.	2.4	10
24	Ecobiological aspects of algae cultivation in wastewaters for recycling of nutrients and biofuel applications. Biofuels, 2014, 5, 141-158.	1.4	17
25	Hydrothermal liquefaction of microalgae for biocrude production: Improving the biocrude properties with vacuum distillation. Bioresource Technology, 2014, 174, 212-221.	4.8	84
26	The influences of the recycle process on the bacterial community in a pilot scale microalgae raceway pond. Bioresource Technology, 2014, 157, 364-367.	4.8	15
27	Anaerobic digestion of algae biomass: A review. Algal Research, 2014, 5, 204-214.	2.4	463
28	Combustion Behavior of Algal Biomass: Carbon Release, Nitrogen Release, and Char Reactivity. Energy & Fuels, 2014, 28, 41-51.	2.5	43
29	Utilisation of turbidity as an indicator for biochemical and chemical oxygen demand. Journal of Water Process Engineering, 2014, 4, 137-142.	2.6	8
30	The influence of protozoa with a filtered and non-filtered seawater culture of Tetraselmis sp., and effects to the bacterial and algal communities over 10 days. Bioresource Technology, 2014, 173, 361-366.	4.8	8
31	Algal Biomass: Occurrence of the Main Inorganic Elements and Simulation of Ash Interactions with Bed Material. Energy & Fuels, 2014, 28, 4622-4632.	2.5	30
32	Mathematical modelling of a hydrocracking reactor for triglyceride conversion to biofuel: model establishment and validation. International Journal of Energy Research, 2014, 38, 1624-1634.	2.2	22
33	Microalgae digestate effluent as a growth medium for Tetraselmis sp. in the production of biofuels. Bioresource Technology, 2014, 167, 81-86.	4.8	37
34	Harvesting of marine microalgae by electroflocculation: The energetics, plant design, and economics. Applied Energy, 2013, 108, 45-53.	5.1	112
35	A matter of detail: Assessing the true potential of microalgal biofuels. Biotechnology and Bioengineering, 2013, 110, 2317-2322.	1.7	58
36	Synthesising acid mine drainage to maintain and exploit indigenous mining micro-algae and microbial assemblies for biotreatment investigations. Environmental Science and Pollution Research, 2013, 20, 950-956.	2.7	10

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37	Force and energy requirement for microalgal cell disruption: An atomic force microscope evaluation. Bioresource Technology, 2013, 128, 199-206.	4.8	67
38	Harvesting, Thickening and Dewatering Microalgae Biomass. , 2013, , 165-185.		54
39	Biosorption of heavy metals in a photo-rotating biological contactorâ€"a batch process study. Applied Microbiology and Biotechnology, 2013, 97, 5113-5123.	1.7	18
40	Disruption of microalgal cells for the extraction of lipids for biofuels: Processes and specific energy requirements. Biomass and Bioenergy, 2012, 46, 89-101.	2.9	359
41	Biofilm establishment and heavy metal removal capacity of an indigenous mining algal-microbial consortium in a photo-rotating biological contactor. Journal of Industrial Microbiology and Biotechnology, 2012, 39, 1321-1331.	1.4	72
42	Assessment of coagulated and non-coagulated ASB performance used to treat Pinus radiata sulfite pulp and paper mill effluent by resin fractionation and HPSEC techniques. Chemical Engineering Journal, 2012, 213, 109-117.	6.6	11
43	Microalgal biomass for bioethanol fermentation: Implications for hypersaline systems with an industrial focus. Biomass and Bioenergy, 2012, 46, 79-88.	2.9	52
44	Heterotrophic growth and nutritional aspects of the diatom Cyclotella cryptica (Bacillariophyceae): effect of nitrogen source and concentration. Journal of Applied Phycology, 2012, 24, 301-307.	1.5	23
45	Molecular Classification of Commercial Spirulina Strains and Identification of Their Sulfolipid Biosynthesis Genes. Journal of Microbiology and Biotechnology, 2011, 21, 359-365.	0.9	9
46	Heterotrophic growth and nutritional aspects of the diatom Cyclotella cryptica (Bacillariophyceae): Effect of some environmental factors. Journal of Bioscience and Bioengineering, 2010, 109, 235-239.	1.1	42
47	Energy requirements and economic analysis of a full-scale microbial flocculation system for microalgal harvesting. Chemical Engineering Research and Design, 2010, 88, 988-996.	2.7	64
48	Growth dynamics and the proximate biochemical composition and fatty acid profile of the heterotrophically grown diatom Cyclotella cryptica. Journal of Applied Phycology, 2010, 22, 165-171.	1.5	33
49	Biogeochemical expression of buried gold mineralization in semi-arid northern Australia: penetration of transported cover at the Titania Gold Prospect, Tanami Desert, Australia. Geochemistry: Exploration, Environment, Analysis, 2009, 9, 267-273.	0.5	18
50	Microbial flocculation, a potentially low-cost harvesting technique for marine microalgae for the production of biodiesel. Journal of Applied Phycology, 2009, 21, 559-567.	1.5	238
51	Separated adsorption and bacterial degradation of microcystins in GAC filtration. International Journal of Environment and Waste Management, 2009, 3, 236.	0.2	3
52	Estimating the cost of desalination plants using a cost database. Desalination, 2008, 229, 10-20.	4.0	150
53	Spinifex biogeochemical expressions of buried gold mineralisation: The great mineral exploration penetrator of transported regolith. Applied Geochemistry, 2008, 23, 76-84.	1.4	41
54	Discriminating and assessing adsorption and biodegradation removal mechanisms during granular activated carbon filtration of microcystin toxins. Water Research, 2007, 41, 4262-4270.	5.3	150

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55	Interannual variability in rainfall and its impact on nutrient load and phytoplankton in Myponga Reservoir, South Australia. International Journal of River Basin Management, 2004, 2, 169-179.	1.5	12
56	Numerical models for management of Anabaena circinalis. Journal of Applied Phycology, 2004, 16, 457-468.	1.5	14
57	Determination of soluble aluminium concentration in alkaline humic water using atomic absorption spectrophotometry. Water Research, 2004, 38, 4039-4044.	5.3	22
58	Modelling the effects of artificial mixing and copper sulphate dosing on phytoplankton in an Australian reservoir. Lakes and Reservoirs: Research and Management, 2003, 8, 31-40.	0.6	11
59	The simulation of an Australian reservoir using a phytoplankton community model: protech. Ecological Modelling, 2002, 150, 107-116.	1.2	33