

Robert W Lovitt

List of Publications by Year in descending order

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64
papers

3,291
citations

172386

29
h-index

143943

57
g-index

65
all docs

65
docs citations

65
times ranked

3608
citing authors

#	ARTICLE	IF	CITATIONS
1	Fouling strategies and the cleaning system of NF membranes and factors affecting cleaning efficiency. <i>Journal of Membrane Science</i> , 2007, 303, 4-28.	4.1	484
2	Dielectric permittivity of microbial suspensions at radio frequencies: a novel method for the real-time estimation of microbial biomass. <i>Enzyme and Microbial Technology</i> , 1987, 9, 181-186.	1.6	242
3	Using microalgae in the circular economy to valorise anaerobic digestate: challenges and opportunities. <i>Bioresource Technology</i> , 2018, 267, 732-742.	4.8	159
4	Atomic Force Microscopy Study of the Adhesion of <i>Saccharomyces cerevisiae</i> . <i>Journal of Colloid and Interface Science</i> , 2001, 237, 54-61.	5.0	148
5	Complex Effluent Streams as a Potential Source of Volatile Fatty Acids. <i>Waste and Biomass Valorization</i> , 2013, 4, 557-581.	1.8	125
6	Cleaning results of new and fouled nanofiltration membrane characterized by zeta potential and permeability. <i>Separation and Purification Technology</i> , 2007, 54, 234-240.	3.9	119
7	A new technique for membrane characterisation: direct measurement of the force of adhesion of a single particle using an atomic force microscope. <i>Journal of Membrane Science</i> , 1998, 139, 269-274.	4.1	96
8	Direct measurement of the force of adhesion of a single biological cell using an atomic force microscope. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1998, 136, 231-234.	2.3	95
9	The measurement of <i>Bacillus mycoides</i> spore adhesion using atomic force microscopy, simple counting methods, and a spinning disk technique. <i>Biotechnology and Bioengineering</i> , 2002, 79, 170-179.	1.7	92
10	Microbial synthesis gas utilization and ways to resolve kinetic and mass-transfer limitations. <i>Bioresource Technology</i> , 2015, 177, 361-374.	4.8	91
11	Effect of CO partial pressure on cell-recycled continuous CO fermentation by <i>Eubacterium limosum</i> KIST612. <i>Process Biochemistry</i> , 2001, 37, 411-421.	1.8	90
12	Integration of membrane technology in microalgae biorefineries. <i>Journal of Membrane Science</i> , 2014, 464, 86-99.	4.1	89
13	Direct Measurement of Interactions between Adsorbed Protein Layers Using an Atomic Force Microscope. <i>Journal of Colloid and Interface Science</i> , 1998, 197, 348-352.	5.0	86
14	Title is missing!. <i>Biotechnology Letters</i> , 2000, 22, 893-903.	1.1	83
15	An atomic force microscopy study of the adhesion of a silica sphere to a silica surface—effects of surface cleaning. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1999, 157, 117-125.	2.3	81
16	Characterisation of membrane surfaces: direct measurement of biological adhesion using an atomic force microscope. <i>Journal of Membrane Science</i> , 1999, 154, 205-212.	4.1	79
17	Cleaning results of new and fouled nanofiltration membrane characterized by contact angle, updated DSPM, flux and salts rejection. <i>Applied Surface Science</i> , 2008, 254, 3983-3992.	3.1	72
18	Nanofiltration of treated digested agricultural wastewater for recovery of carboxylic acids. <i>Journal of Cleaner Production</i> , 2016, 112, 4749-4761.	4.6	68

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19	Moving towards sustainable resources: Recovery and fractionation of nutrients from dairy manure digestate using membranes. <i>Water Research</i> , 2015, 80, 80-89.	5.3	67
20	Atomic force microscope studies of membranes: force measurement and imaging in electrolyte solutions. <i>Journal of Membrane Science</i> , 1997, 126, 77-89.	4.1	60
21	Utilising light-emitting diodes of specific narrow wavelengths for the optimization and co-production of multiple high-value compounds in <i>Porphyridium purpureum</i> . <i>Bioresource Technology</i> , 2016, 221, 607-615.	4.8	53
22	Atomic Force Microscope Studies of Membranes: Surface Pore Structures of Diaflo Ultrafiltration Membranes. <i>Journal of Colloid and Interface Science</i> , 1996, 180, 350-359.	5.0	52
23	Proline reduction by <i>Clostridium sporogenesis</i> coupled to vectorial proton ejection. <i>FEMS Microbiology Letters</i> , 1986, 36, 269-273.	0.7	49
24	Solvent Production by Microorganisms. <i>Critical Reviews in Biotechnology</i> , 1988, 7, 107-186.	5.1	44
25	Formulation of defined media for carbon monoxide fermentation by <i>Eubacterium limosum</i> KIST612 and the growth characteristics of the bacterium. <i>Journal of Bioscience and Bioengineering</i> , 1999, 88, 682-685.	1.1	43
26	Valorising nutrient-rich digestate: Dilution, settlement and membrane filtration processing for optimisation as a waste-based media for microalgal cultivation. <i>Waste Management</i> , 2020, 118, 197-208.	3.7	43
27	Direct Quantification of <i>Aspergillus niger</i> Spore Adhesion in Liquid Using an Atomic Force Microscope. <i>Journal of Colloid and Interface Science</i> , 2000, 228, 428-433.	5.0	41
28	Selection for fitness at the individual or population levels: Modelling effects of genetic modifications in microalgae on productivity and environmental safety. <i>Journal of Theoretical Biology</i> , 2010, 263, 269-280.	0.8	38
29	Direct quantification of <i>Aspergillus niger</i> spore adhesion to mica in air using an atomic force microscope. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2000, 173, 205-210.	2.3	37
30	Bulk and surface characterization of composite UF membranes Atomic force microscopy, gas adsorption-desorption and liquid displacement techniques. <i>Journal of Membrane Science</i> , 1997, 128, 7-21.	4.1	31
31	The filtration characteristics of anaerobic digester effluents employing cross flow ceramic membrane microfiltration for nutrient recovery. <i>Desalination</i> , 2014, 341, 27-37.	4.0	30
32	Minimizing the Energy Requirement of Dewatering <i>Scenedesmus</i> sp. by Microfiltration: Performance, Costs, and Feasibility. <i>Environmental Science & Technology</i> , 2014, 48, 845-853.	4.6	29
33	The effects of electrostatic interactions on the rejection of colloids by membrane pores—visualisation and quantification. <i>Chemical Engineering Science</i> , 1999, 54, 369-375.	1.9	28
34	Exploring microbial communities and differences of cartridge filters (CFs) and reverse osmosis (RO) membranes for seawater desalination processes. <i>Desalination</i> , 2012, 298, 85-92.	4.0	28
35	Formulation and utilisation of spent anaerobic digestate fluids for the growth and product formation of single cell algal cultures in heterotrophic and autotrophic conditions. <i>Bioresource Technology</i> , 2017, 244, 1445-1455.	4.8	27
36	Use of numerical profiles for studying bacterial diversity. <i>Microbial Ecology</i> , 1980, 6, 35-43.	1.4	26

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37	Strategies for enhanced malolactic fermentation in wine and cider maturation. <i>Journal of Chemical Technology and Biotechnology</i> , 2006, 81, 1130-1140.	1.6	26
38	Conductimetric assessment of the biomass content in suspensions of immobilised (gel-entrapped) microorganisms. <i>Applied Microbiology and Biotechnology</i> , 1986, 23, 168.	1.7	23
39	Modelling and simulation of cell growth dynamics, substrate consumption, and lactic acid production kinetics of <i>Lactococcus lactis</i> . <i>Biotechnology and Bioprocess Engineering</i> , 2013, 18, 52-64.	1.4	23
40	Light Intensity and Nitrogen Concentration Impact on the Biomass and Phycoerythrin Production by <i>Porphyridium purpureum</i> . <i>Marine Drugs</i> , 2019, 17, 460.	2.2	22
41	Separation of lactobacilli bacteriocins from fermented broths using membranes. <i>Process Biochemistry</i> , 2013, 48, 1252-1261.	1.8	20
42	Nutrient recovery and fractionation of anaerobic digester effluents employing pilot scale membrane technology. <i>Journal of Water Process Engineering</i> , 2019, 31, 100846.	2.6	15
43	Performance assessment of malolactic fermenting bacteria <i>Oenococcus oeni</i> and <i>Lactobacillus brevis</i> in continuous culture. <i>Applied Microbiology and Biotechnology</i> , 2006, 69, 658-664.	1.7	14
44	A comparative study of the growth of lactic acid bacteria in a pilot scale membrane bioreactor. <i>Journal of Chemical Technology and Biotechnology</i> , 2010, 85, 1250-1259.	1.6	14
45	Valorization of spent anaerobic digester effluents through production of platform chemicals using <i>Clostridium butyricum</i> . <i>Biomass and Bioenergy</i> , 2015, 81, 294-303.	2.9	14
46	Polymer enhanced membrane filtration of metals: retention of single and mixed species of metal ions based on adsorption isotherms. <i>Desalination and Water Treatment</i> , 2011, 28, 130-136.	1.0	13
47	Use of an industrial grade medium and medium enhancing effects on high cell density CO fermentation by <i>Eubacterium limosum</i> KIST612. <i>Biotechnology Letters</i> , 2007, 29, 1183-1187.	1.1	12
48	Determination of volumetric gas-liquid mass transfer coefficient of carbon monoxide in a batch cultivation system using kinetic simulations. <i>Bioresource Technology</i> , 2017, 239, 387-393.	4.8	10
49	Partially chemically defined liquid medium development for intensive propagation of industrial fermentation lactobacilli strains. <i>Annals of Microbiology</i> , 2013, 63, 1235-1245.	1.1	9
50	The performance of a membrane bioreactor for the malolactic fermentation of media containing ethanol. <i>Desalination</i> , 2006, 199, 435-437.	4.0	7
51	Low molecular weight liquid media development for Lactobacilli producing bacteriocins. <i>Journal of Chemical Technology and Biotechnology</i> , 2013, 88, 72-80.	1.6	7
52	Electrosynthesis and electroanalysis using <i>Clostridium sporogenes</i> . <i>Bioelectrochemistry</i> , 1988, 20, 21-32.	1.0	6
53	Ab Initio Prediction of the Performance of Membrane Separation Processes. <i>Comprehensive Chemical Kinetics</i> , 1999, 37, 523-541.	2.3	5
54	Testing the Waste Based Biorefinery Concept: Pilot Scale Cultivation of Microalgal Species on Spent Anaerobic Digestate Fluids. <i>Waste and Biomass Valorization</i> , 2020, 11, 3883-3896.	1.8	5

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55	Electromicrobial transformations using the pyruvate synthase system of <i>Clostridium sporogenes</i> . <i>Bioelectrochemistry</i> , 1989, 21, 245-259.	1.0	4
56	Fluorescence imaging for biofoulants detection and monitoring of biofouled strength in reverse osmosis membrane. <i>Analytical Methods</i> , 2014, 6, 993-1000.	1.3	4
57	Structural heterogeneity yet high similarity of the microbial community on reverse osmosis membrane-driven biofilms during seawater desalination. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 3066-3079.	1.2	4
58	Deriving Economic Value from Metabolites in Cyanobacteria. <i>Grand Challenges in Biology and Biotechnology</i> , 2019, , 535-576.	2.4	3
59	An investigation of pH mediated extraction and precipitation of phosphorus from sludge using microfiltration: processing and costs. <i>Separation Science and Technology</i> , 2015, , 150527095459001.	1.3	2
60	Intensive Production of Carboxylic Acids Using <i>C. butyricum</i> in a Membrane Bioreactor (MBR). <i>Fermentation</i> , 2018, 4, 81.	1.4	2
61	Electrosynthesis and electroanalysis using <i>Clostridium sporogenes</i> . <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1988, 254, 21-32.	0.3	1
62	Adhesion potential of bacteria retrieved from intake seawater and membrane biofilms on full-scale reverse osmosis desalination process. <i>Desalination and Water Treatment</i> , 2016, 57, 26629-26640.	1.0	1
63	Electromicrobial transformations using the pyruvate synthase system of <i>Clostridium sporogenes</i> . <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1989, 275, 245-259.	0.3	0
64	MICROSCOPY Atomic Force Microscopy. , 1999, , 1418-1425.		0