

Paul A Lant

List of Publications by Year in descending order

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134
papers

9,303
citations

36303

51
h-index

39675

94
g-index

135
all docs

135
docs citations

135
times ranked

8535
citing authors

#	ARTICLE	IF	CITATIONS
1	The Transition to Improved Water-Related Energy Management: Enabling Contexts for Policy Innovation. <i>Water (Switzerland)</i> , 2020, 12, 557.	2.7	3
2	Thermophilic production of poly(3-hydroxybutyrate-co-3-hydrovalerate) by a mixed methane-utilizing culture. <i>New Biotechnology</i> , 2019, 53, 49-56.	4.4	16
3	Public attitudes towards bioplastics “knowledge, perception and end-of-life management. <i>Resources, Conservation and Recycling</i> , 2019, 151, 104479.	10.8	139
4	Learning from experience in the water sector to improve access to energy services. <i>Utilities Policy</i> , 2018, 51, 41-50.	4.0	2
5	Environmental impact of biodegradable food packaging when considering food waste. <i>Journal of Cleaner Production</i> , 2018, 180, 325-334.	9.3	156
6	Polyhydroxyalkanoate coatings restrict moisture uptake and associated loss of barrier properties of thermoplastic starch films. <i>Journal of Applied Polymer Science</i> , 2018, 135, 46379.	2.6	21
7	Energy implications of the millennium drought on urban water cycles in Southeast Australian cities. <i>Water Science and Technology: Water Supply</i> , 2018, 18, 214-221.	2.1	5
8	Is MSW derived DME a viable clean cooking fuel in Kolkata, India?. <i>Renewable Energy</i> , 2018, 124, 50-60.	8.9	5
9	Direct and indirect water use within the Australian economy. <i>Water Policy</i> , 2018, 20, 1227-1239.	1.5	5
10	Can coal-derived DME reduce the dependence on solid cooking fuels in India?. <i>Energy for Sustainable Development</i> , 2017, 37, 51-59.	4.5	5
11	The effect of water demand management in showers on household energy use. <i>Journal of Cleaner Production</i> , 2017, 157, 177-189.	9.3	20
12	City-scale analysis of water-related energy identifies more cost-effective solutions. <i>Water Research</i> , 2017, 109, 287-298.	11.3	17
13	Regional-scale variability of cold water temperature: Implications for household water-related energy demand. <i>Resources, Conservation and Recycling</i> , 2017, 124, 107-115.	10.8	3
14	Energy use for water provision in cities. <i>Journal of Cleaner Production</i> , 2017, 143, 699-709.	9.3	109
15	Defection, recruitment and social change in cooking practices: Energy poverty through a social practice lens. <i>Energy Research and Social Science</i> , 2017, 34, 272-280.	6.4	27
16	The challenge of characterising food waste at a national level—An Australian example. <i>Environmental Science and Policy</i> , 2017, 78, 157-166.	4.9	21
17	Life-cycle energy impacts for adapting an urban water supply system to droughts. <i>Water Research</i> , 2017, 127, 139-149.	11.3	13
18	Producing a CO ₂ -neutral clean cooking fuel in India—Where and at what cost?. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 19067-19078.	7.1	8

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19	Rural energy planning remains out-of-step with contemporary paradigms of energy access and development. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 67, 1412-1419.	16.4	44
20	Food waste consequences: Environmentally extended input-output as a framework for analysis. <i>Journal of Cleaner Production</i> , 2017, 153, 506-514.	9.3	71
21	The Opportunity for High-Performance Biomaterials from Methane. <i>Microorganisms</i> , 2016, 4, 11.	3.6	97
22	Techno-economic assessment of poly-3-hydroxybutyrate (PHB) production from methane – The case for thermophilic bioprocessing. <i>Journal of Environmental Chemical Engineering</i> , 2016, 4, 3724-3733.	6.7	102
23	Comparison of water-energy trajectories of two major regions experiencing water shortage. <i>Journal of Environmental Management</i> , 2016, 181, 403-412.	7.8	31
24	Household analysis identifies water-related energy efficiency opportunities. <i>Energy and Buildings</i> , 2016, 131, 21-34.	6.7	19
25	Understanding Australian household water-related energy use and identifying physical and human characteristics of major end uses. <i>Journal of Cleaner Production</i> , 2016, 135, 892-906.	9.3	44
26	Enhanced methane production from algal digestion using free nitrous acid pre-treatment. <i>Renewable Energy</i> , 2016, 88, 383-390.	8.9	31
27	Value-added bioplastics from services of wastewater treatment. <i>Water Practice and Technology</i> , 2015, 10, 546-555.	2.0	23
28	How Does Energy Efficiency Affect Urban Water Systems?. <i>Global Issues in Water Policy</i> , 2015, , 615-631.	0.1	2
29	A laboratory investigation of interactions between denitrifying anaerobic methane oxidation (DAMO) and anammox processes in anoxic environments. <i>Scientific Reports</i> , 2015, 5, 8706.	3.3	71
30	Enhanced triacylglyceride extraction from microalgae using free nitrous acid pre-treatment. <i>Applied Energy</i> , 2015, 154, 183-189.	10.1	9
31	Environmental Benefits and Burdens of Phosphorus Recovery from Municipal Wastewater. <i>Environmental Science & Technology</i> , 2015, 49, 8611-8622.	10.0	106
32	The diverse environmental burden of city-scale urban water systems. <i>Water Research</i> , 2015, 81, 398-415.	11.3	56
33	A systemic framework and analysis of urban water energy. <i>Environmental Modelling and Software</i> , 2015, 73, 272-285.	4.5	51
34	The contribution of bacteria to algal growth by carbon cycling. <i>Biotechnology and Bioengineering</i> , 2015, 112, 688-695.	3.3	44
35	The chemomechanical properties of microbial polyhydroxyalkanoates. <i>Progress in Polymer Science</i> , 2014, 39, 397-442.	24.7	166
36	Modelling microalgal activity as a function of inorganic carbon concentration: accounting for the impact of pH on the bicarbonate system. <i>Journal of Applied Phycology</i> , 2014, 26, 1343-1350.	2.8	9

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37	Enhanced lipid extraction from algae using free nitrous acid pretreatment. <i>Bioresource Technology</i> , 2014, 159, 36-40.	9.6	58
38	Crystallisation and fractionation of selected polyhydroxyalkanoates produced from mixed cultures. <i>New Biotechnology</i> , 2014, 31, 345-356.	4.4	45
39	Erratum to "The chemomechanical properties of microbial polyhydroxyalkanoates" [Prog. Polym. Sci. 38 (2013) 536-583]. <i>Progress in Polymer Science</i> , 2014, 39, 396.	24.7	0
40	In-line monitoring of thermal degradation of PHA during melt-processing by Near-Infrared spectroscopy. <i>New Biotechnology</i> , 2014, 31, 357-363.	4.4	31
41	Thermal properties and crystallization behavior of fractionated blocky and random polyhydroxyalkanoate copolymers from mixed microbial cultures. <i>Journal of Applied Polymer Science</i> , 2014, 131, .	2.6	29
42	Waste Activated Sludge as Biomass for Production of Commercial-Grade Polyhydroxyalkanoate (PHA). <i>Waste and Biomass Valorization</i> , 2013, 4, 117-127.	3.4	30
43	Physicochemical and mechanical properties of mixed culture polyhydroxyalkanoate (PHBV). <i>European Polymer Journal</i> , 2013, 49, 904-913.	5.4	90
44	The chemomechanical properties of microbial polyhydroxyalkanoates. <i>Progress in Polymer Science</i> , 2013, 38, 536-583.	24.7	372
45	High pressure thermal hydrolysis as pre-treatment to increase the methane yield during anaerobic digestion of microalgae. <i>Bioresource Technology</i> , 2013, 131, 128-133.	9.6	135
46	Fossil organic carbon in wastewater and its fate in treatment plants. <i>Water Research</i> , 2013, 47, 5270-5281.	11.3	96
47	Water-related energy in households: A model designed to understand the current state and simulate possible measures. <i>Energy and Buildings</i> , 2013, 58, 378-389.	6.7	60
48	The Confounding Effect of Nitrite on N ₂ O Production by an Enriched Ammonia-Oxidizing Culture. <i>Environmental Science & Technology</i> , 2013, 47, 7186-7194.	10.0	77
49	Development of a novel electrochemical system for oxygen control (ESOC) to examine dissolved oxygen inhibition on algal activity. <i>Biotechnology and Bioengineering</i> , 2013, 110, 2405-2411.	3.3	8
50	Microbial community analysis during continuous fermentation of thermally hydrolysed waste activated sludge. <i>Water Science and Technology</i> , 2012, 65, 7-14.	2.5	9
51	Life Cycle Assessment Of An Urban Water System On the East Coast Of Australia. <i>Proceedings of the Water Environment Federation</i> , 2012, 2012, 5278-5307.	0.0	2
52	Inhibition by fatty acids during fermentation of pre-treated waste activated sludge. <i>Journal of Biotechnology</i> , 2012, 159, 38-43.	3.8	49
53	Evaluating industry-based doctoral research programs: perspectives and outcomes of Australian Cooperative Research Centre graduates. <i>Studies in Higher Education</i> , 2012, 37, 843-858.	4.5	30
54	Microaerophilic conditions support elevated mixed culture polyhydroxyalkanoate (PHA) yields, but result in decreased PHA production rates. <i>Water Science and Technology</i> , 2012, 65, 243-246.	2.5	23

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55	N ₂ O production rate of an enriched ammonia-oxidising bacteria culture exponentially correlates to its ammonia oxidation rate. <i>Water Research</i> , 2012, 46, 3409-3419.	11.3	190
56	Biodegradation in a soil environment of activated sludge derived polyhydroxyalkanoate (PHBV). <i>Polymer Degradation and Stability</i> , 2012, 97, 2301-2312.	5.8	80
57	Phosphorus recovery from centralised municipal water recycling plants. <i>Chemical Engineering Research and Design</i> , 2012, 90, 78-85.	5.6	40
58	Including N ₂ O in ozone depletion models for LCA. <i>International Journal of Life Cycle Assessment</i> , 2012, 17, 252-257.	4.7	21
59	Quantifying water's energy links and related carbon emissions in cities. <i>Journal of Water and Climate Change</i> , 2011, 2, 247-259.	2.9	45
60	The effect of pH on N ₂ O production under aerobic conditions in a partial nitrification system. <i>Water Research</i> , 2011, 45, 5934-5944.	11.3	152
61	Effect of nitrate and nitrite on the selection of microorganisms in the denitrifying anaerobic methane oxidation process. <i>Environmental Microbiology Reports</i> , 2011, 3, 315-319.	2.4	103
62	Production of volatile fatty acids by fermentation of waste activated sludge pre-treated in full-scale thermal hydrolysis plants. <i>Bioresource Technology</i> , 2011, 102, 3089-3097.	9.6	149
63	The connection between water and energy in cities: a review. <i>Water Science and Technology</i> , 2011, 63, 1983-1990.	2.5	140
64	Rapid quantification of intracellular PHA using infrared spectroscopy: An application in mixed cultures. <i>Journal of Biotechnology</i> , 2010, 150, 372-379.	3.8	69
65	Life Cycle Assessment of High-Rate Anaerobic Treatment, Microbial Fuel Cells, and Microbial Electrolysis Cells. <i>Environmental Science & Technology</i> , 2010, 44, 3629-3637.	10.0	247
66	Nitrous oxide generation in full-scale biological nutrient removal wastewater treatment plants. <i>Water Research</i> , 2010, 44, 831-844.	11.3	352
67	Comprehensive life cycle inventories of alternative wastewater treatment systems. <i>Water Research</i> , 2010, 44, 1654-1666.	11.3	329
68	Production of polyhydroxyalkanoates in open, mixed cultures from a waste sludge stream containing high levels of soluble organics, nitrogen and phosphorus. <i>Water Research</i> , 2010, 44, 5196-5211.	11.3	138
69	Dissolved methane in rising main sewer systems: field measurements and simple model development for estimating greenhouse gas emissions. <i>Water Science and Technology</i> , 2009, 60, 2963-2971.	2.5	85
70	Regional normalisation figures for Australia 2005/2006's inventory and characterisation data from a production perspective. <i>International Journal of Life Cycle Assessment</i> , 2009, 14, 215-224.	4.7	11
71	Simultaneous colour and DON removal from sewage treatment plant effluent: Alum coagulation of melanoidin. <i>Water Research</i> , 2009, 43, 553-561.	11.3	55
72	Enrichment of denitrifying anaerobic methane oxidizing microorganisms. <i>Environmental Microbiology Reports</i> , 2009, 1, 377-384.	2.4	196

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73	Biodegradability of DOC and DON for UV/H ₂ O ₂ pre-treated melanoidin based wastewater. <i>Biochemical Engineering Journal</i> , 2008, 42, 47-54.	3.6	36
74	Decreasing activated sludge thermal hydrolysis temperature reduces product colour, without decreasing degradability. <i>Water Research</i> , 2008, 42, 4699-4709.	11.3	242
75	The degradation of dissolved organic nitrogen associated with melanoidin using a UV/H ₂ O ₂ AOP. <i>Chemosphere</i> , 2008, 71, 1745-1753.	8.2	62
76	Developing professional researchers: research students'™ graduate attributes. <i>Studies in Continuing Education</i> , 2007, 29, 19-36.	1.9	28
77	Bioprocess applications of model-based estimation techniques. <i>Journal of Chemical Technology and Biotechnology</i> , 2007, 53, 265-277.	3.2	30
78	Solids characterisation in an anaerobic migrating bed reactor (AMBR) sewage treatment system. <i>Water Research</i> , 2007, 41, 2437-2448.	11.3	15
79	Comparative life cycle assessment and financial analysis of mixed culture polyhydroxyalkanoate production. <i>Bioresource Technology</i> , 2007, 98, 3393-3403.	9.6	142
80	Thiocyanate degradation during activated sludge treatment of coke-ovens wastewater. <i>Biochemical Engineering Journal</i> , 2007, 34, 122-130.	3.6	98
81	Imagining an interdisciplinary doctoral pedagogy. <i>Teaching in Higher Education</i> , 2006, 11, 365-379.	2.6	76
82	Hydrodynamics and mass transfer coefficient in three-phase air-lift reactors containing activated sludge. <i>Chemical Engineering and Processing: Process Intensification</i> , 2006, 45, 608-617.	3.6	44
83	Balancing Curriculum Processes and Content in a Project Centred Curriculum. <i>Chemical Engineering Research and Design</i> , 2006, 84, 619-628.	5.6	14
84	Introduction to Chemical Product Design. <i>Education for Chemical Engineers</i> , 2006, 1, 66-71.	4.8	5
85	Balancing Curriculum Processes and Content in a Project Centred Curriculum. <i>Education for Chemical Engineers</i> , 2006, 1, 39-48.	4.8	38
86	How Do We Ensure Good PhD Student Outcomes?. <i>Education for Chemical Engineers</i> , 2006, 1, 72-81.	4.8	18
87	Eliminating non-renewable CO ₂ emissions from sewage treatment: An anaerobic migrating bed reactor pilot plant study. <i>Biotechnology and Bioengineering</i> , 2006, 95, 384-398.	3.3	80
88	Simultaneous saccharification and fermentation of potato starch wastewater to lactic acid by <i>Rhizopus oryzae</i> and <i>Rhizopus arrhizus</i> . <i>Biochemical Engineering Journal</i> , 2005, 23, 265-276.	3.6	117
89	Hydrodynamics and mass transfer coefficient in activated sludge aerated stirred column reactor: experimental analysis and modeling. <i>Biotechnology and Bioengineering</i> , 2005, 91, 406-417.	3.3	3
90	Direct fermentation of potato starch wastewater to lactic acid by <i>Rhizopus oryzae</i> and <i>Rhizopus arrhizus</i> . <i>Bioprocess and Biosystems Engineering</i> , 2005, 27, 229-238.	3.4	41

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91	Reply to comment by Denny S. Parker on "Impact of structural characteristics on activated sludge floc stability" by Britt-Marie WilÅ©n, Bo Jin and Paul Lant, published in Water Research (2003) 37, p. 3632-3645.. Water Research, 2005, 39, 738-740.	11.3	1
92	Direct fermentation of potato starch in wastewater to lactic acid by <i>Rhizopus oryzae</i> . Biotechnology and Bioprocess Engineering, 2004, 9, 245-251.	2.6	10
93	Focused beam reflectance technique for in situ particle sizing in wastewater treatment settling tanks. Journal of Chemical Technology and Biotechnology, 2004, 79, 610-618.	3.2	32
94	Impacts of morphological, physical and chemical properties of sludge flocs on dewaterability of activated sludge. Chemical Engineering Journal, 2004, 98, 115-126.	12.7	346
95	Flow regime, hydrodynamics, floc size distribution and sludge properties in activated sludge bubble column, air-lift and aerated stirred reactors. Chemical Engineering Science, 2004, 59, 2379-2388.	3.8	43
96	<i>Rhizopus arrhizus</i> "a producer for simultaneous saccharification and fermentation of starch waste materials to l(+)-lactic acid. Biotechnology Letters, 2003, 25, 1983-1987.	2.2	45
97	Biotechnological production of lactic acid integrated with potato wastewater treatment by <i>Rhizopus arrhizus</i> . Journal of Chemical Technology and Biotechnology, 2003, 78, 899-906.	3.2	65
98	A comprehensive insight into floc characteristics and their impact on compressibility and settleability of activated sludge. Chemical Engineering Journal, 2003, 95, 221-234.	12.7	313
99	The influence of key chemical constituents in activated sludge on surface and flocculating properties. Water Research, 2003, 37, 2127-2139.	11.3	515
100	Impacts of structural characteristics on activated sludge floc stability. Water Research, 2003, 37, 3632-3645.	11.3	105
101	Relationship between flocculation of activated sludge and composition of extracellular polymeric substances. Water Science and Technology, 2003, 47, 95-103.	2.5	45
102	Modelling the effect of shear history on activated sludge flocculation. Water Science and Technology, 2003, 47, 251-257.	2.5	33
103	Optimization and Control of Nitrogen Removal Activated Sludge Processes: A Review of Recent Developments. Focus on Biotechnology, 2003, , 187-227.	0.4	9
104	Modelling the activated sludge flocculation process combining laser light diffraction particle sizing and population balance modelling (PBM). Water Science and Technology, 2002, 45, 41-49.	2.5	86
105	Modelling activated sludge flocculation using population balances. Powder Technology, 2002, 124, 201-211.	4.2	63
106	Activated sludge flocculation: direct determination of the effect of calcium ions. Water Science and Technology, 2001, 43, 75-82.	2.5	35
107	Sequencing batch reactor technology: the key to a BP refinery (Bulwer Island) upgraded environmental protection system - a low cost lagoon based retro-fit. Water Science and Technology, 2001, 43, 339-346.	2.5	10
108	Using the World Wide Web to revolutionise technology transfer and training in the water and wastewater industries. Water Science and Technology, 2001, 44, 127-134.	2.5	1

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109	Using the flexibility index to compare batch and continuous activated sludge processes. <i>Water Science and Technology</i> , 2001, 43, 35-43.	2.5	9
110	Operating space diagrams: a tool for designers of wastewater treatment plants. <i>Water Science and Technology</i> , 2001, 44, 69-76.	2.5	2
111	Biodegradation of high strength phenolic wastewater using SBR. <i>Water Science and Technology</i> , 2001, 43, 299-306.	2.5	18
112	Increasing Flexibility in the Design of Wastewater Treatment Processes. <i>Water Environment Research</i> , 2001, 73, 486-493.	2.7	5
113	Weak Links in the Chain: A Diagnosis of Health Policy in Poor Countries. <i>World Bank Research Observer</i> , 2000, 15, 199-224.	6.0	185
114	In situ respirometry in an SBR treating wastewater with high phenol concentrations. <i>Water Research</i> , 2000, 34, 239-245.	11.3	53
115	Activated sludge flocculation: on-line determination of floc size and the effect of shear. <i>Water Research</i> , 2000, 34, 2542-2550.	11.3	297
116	Advanced process control for biological nutrient removal. <i>Water Science and Technology</i> , 1999, 39, 97-103.	2.5	2
117	Model development for simultaneous nitrification and denitrification. <i>Water Science and Technology</i> , 1999, 39, 235.	2.5	33
118	Advanced process control for biological nutrient removal. <i>Water Science and Technology</i> , 1999, 39, 97.	2.5	3
119	Mathematical modelling of prefermentersâ€”I. Model development and verification. <i>Water Research</i> , 1999, 33, 2757-2768.	11.3	50
120	Mathematical modelling of prefermentersâ€”II. Model applications. <i>Water Research</i> , 1999, 33, 2844-2854.	11.3	9
121	Multivariable control of nutrient-removing activated sludge systems. <i>Water Research</i> , 1999, 33, 2864-2878.	11.3	51
122	Characterising bioreactor mixing with residence time distribution (RTD) tests. <i>Water Science and Technology</i> , 1998, 37, 43.	2.5	13
123	Benchmarking for process control: â€œShould I invest in improved process control?â€. <i>Water Science and Technology</i> , 1998, 37, 49.	2.5	8
124	Output structural controllability: a tool for integrated process design and control. <i>Journal of Process Control</i> , 1998, 8, 57-68.	3.3	10
125	Bacterial growth dynamics in activated sludge batch assays. <i>Water Research</i> , 1998, 32, 587-596.	11.3	32
126	A systematic approach for reducing complex biological wastewater treatment models. <i>Water Research</i> , 1997, 31, 590-606.	11.3	45

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127	The influence of high phenol concentration on microbial growth. <i>Water Science and Technology</i> , 1997, 36, 75.	2.5	12
128	The impact of microbiological tools on mathematical modelling of biological wastewater treatment. <i>Water Science and Technology</i> , 1997, 36, 97.	2.5	1
129	Simultaneous nitrification and denitrification in bench-scale sequencing batch reactors. <i>Water Research</i> , 1996, 30, 277-284.	11.3	364
130	Control relevant model reduction: a reduced order model for $\hat{\sim}$ model IV TM fluid catalytic cracking units. <i>Journal of Process Control</i> , 1994, 4, 3-14.	3.3	5
131	A lumped parameter model for $\hat{\sim}$ Model IV TM fluid catalytic cracking units. <i>Computers and Chemical Engineering</i> , 1994, 18, S177-S181.	3.8	1
132	On the applicability of adaptive bioprocess state estimators. <i>Biotechnology and Bioengineering</i> , 1993, 42, 1311-1321.	3.3	10
133	Soft-sensors for process estimation and inferential control. <i>Journal of Process Control</i> , 1991, 1, 3-14.	3.3	140
134	Estimating the immeasurable without mechanistic models. <i>Trends in Biotechnology</i> , 1990, 8, 82-83.	9.3	2