Luis F Melo

List of Publications by Year
in descending order

97 papers	4,186 citations	117625 34 h-index	123424 61 g-index
97 all docs	97 docs citations	97 times ranked	4922 citing authors

#	Article	IF	Citations
1	Affordable Pretreatment Strategy for Mitigation of Biofouling in Drinking-Water Systems. Journal of Environmental Engineering, ASCE, 2022, 148, .	1.4	1
2	Characterization of biofilm structure and properties via processing of 2D optical coherence tomography images in BISCAP. Bioinformatics, 2022, 38, 1708-1715.	4.1	7
3	A Multi-Purpose Approach to the Mechanisms of Action of Two Biocides (Benzalkonium Chloride and) Tj ETQq1 1 0.784314 rgBT /Ove in Microbiology, 2022, 13, 842414.	3.5	16
4	New Functionalized Macroparticles for Environmentally Sustainable Biofilm Control in Water Systems. Antibiotics, 2021, 10, 399.	3.7	2
5	Legionella and Biofilmsâ€"Integrated Surveillance to Bridge Science and Real-Field Demands. Microorganisms, 2021, 9, 1212.	3.6	15
6	Graph-based network modeling and simulation of condensers in once-through cooling water system under the effect of biofouling formation. Applied Thermal Engineering, 2020, 165, 114577.	6.0	4
7	Quorum sensing in food spoilage and natural-based strategies for its inhibition. Food Research International, 2020, 127, 108754.	6.2	73
8	Surface modifications for antimicrobial effects in the healthcare setting: a critical overview. Journal of Hospital Infection, 2018, 99, 239-249.	2.9	225
9	Pseudomonas fluorescens tolerance to benzyldimethyldodecyl ammonium chloride: Altered phenotype and cross-resistance. Journal of Global Antimicrobial Resistance, 2018, 15, 188-195.	2.2	15
10	Combination of selected enzymes with cetyltrimethylammonium bromide in biofilm inactivation, removal and regrowth. Food Research International, 2017, 95, 101-107.	6.2	30
11	Anti-microbial coating innovations to prevent infectious diseases (AMiCI): Cost action ca15114. Bioengineered, 2017, 8, 679-685.	3.2	20
12	Characterization of the heterotrophic bacteria from a minimally processed vegetables plant. LWT - Food Science and Technology, 2017, 85, 293-300.	5.2	23
13	Impact of polymicrobial biofilms in catheter-associated urinary tract infections. Critical Reviews in Microbiology, 2017, 43, 423-439.	6.1	63
14	An in vitro model of catheter-associated urinary tract infections to investigate the role of uncommon bacteria on the Escherichia coli microbial consortium. Biochemical Engineering Journal, 2017, 118, 64-69.	3.6	15
15	Comparative stability and efficacy of selected chlorine-based biocides against Escherichia coli in planktonic and biofilm states. Food Research International, 2017, 102, 511-518.	6.2	27
16	Staphylococcus aureus and Escherichia coli dualâ€species biofilms on nanohydroxyapatite loaded with CHX or ZnO nanoparticles. Journal of Biomedical Materials Research - Part A, 2017, 105, 491-497.	4.0	19
17	Influence of Flow Velocity on the Characteristics of Pseudomonas fluorescens Biofilms. Journal of Environmental Engineering, ASCE, 2016, 142, .	1.4	40
18	The Effects of Selected Brominated and Chlorinated Chemicals onPseudomonas fluorescensPlanktonic Cells and Flow-Generated Biofilms. Journal of Food Processing and Preservation, 2016, 40, 316-328.	2.0	7

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19	Impact ofDelftia tsuruhatensisandAchromobacter xylosoxidansonEscherichia colidual-species biofilms treated with antibiotic agents. Biofouling, 2016, 32, 227-241.	2.2	17
20	Evaluation of SICON Â® surfaces for biofouling mitigation in critical process areas. Food and Bioproducts Processing, 2016, 98, 173-180.	3.6	8
21	Disinfection with neutral electrolyzed oxidizing water to reduce microbial load and to prevent biofilm regrowth in the processing of fresh-cut vegetables. Food and Bioproducts Processing, 2016, 98, 333-340.	3.6	19
22	Evaluation of SICAN performance for biofouling mitigation in the food industry. Food Control, 2016, 62, 201-207.	5.5	19
23	EFFECTS OF HYDRODYNAMIC STRESS AND FEED RATE ON THE PERFORMANCE OF A MICROBIAL FUEL CELL. Environmental Engineering and Management Journal, 2016, 15, 2497-2504.	0.6	4
24	The impact of material properties, nutrient load and shear stress on biofouling in food industries. Food and Bioproducts Processing, 2015, 95, 228-236.	3.6	27
25	The effect of shear stress on the formation and removal of Bacillus cereus biofilms. Food and Bioproducts Processing, 2015, 93, 242-248.	3.6	58
26	The effects of surface type on the removal of Bacillus cereus and Pseudomonas fluorescens single and dual species biofilms. Food and Bioproducts Processing, 2015, 93, 234-241.	3.6	25
27	Efficacy of antimicrobial combinations to reduce the use of sodium hypochlorite in the control of planktonic and sessile Escherichia coli. Biochemical Engineering Journal, 2015, 104, 115-122.	3.6	15
28	Anti-sessile bacterial and cytocompatibility properties of CHX-loaded nanohydroxyapatite. Colloids and Surfaces B: Biointerfaces, 2015, 130, 305-314.	5.0	17
29	Escherichia coliadhesion, biofilm development and antibiotic susceptibility on biomedical materials. Journal of Biomedical Materials Research - Part A, 2015, 103, 1414-1423.	4.0	68
30	The combined effects of shear stress and mass transfer on the balance between biofilm and suspended cell dynamics. Desalination and Water Treatment, 2015, 53, 3348-3354.	1.0	19
31	Escherichia coli adhesion to surfacesâ€“a thermodynamic assessment. Colloid and Polymer Science, 2015, 293, 177-185.	2.1	12
32	96-well microtiter plates for biofouling simulation in biomedical settings. Biofouling, 2014, 30, 535-546.	2.2	31
33	Biofilm Localization in the Vertical Wall of Shaking 96-Well Plates. Scientifica, 2014, 2014, 1-6.	1.7	17
34	The effects of ferulic and salicylic acids on Bacillus cereus and Pseudomonas fluorescens single- and dual-species biofilms. International Biodeterioration and Biodegradation, 2014, 86, 42-51.	3.9	70
35	The ability of an antimicrobial agent to penetrate a biofilm is not correlated with its killing or removal efficiency. Biofouling, 2014, 30, 675-683.	2.2	34
36	The effects of surface properties on Escherichia coli adhesion are modulated by shear stress. Colloids and Surfaces B: Biointerfaces, 2014, 123, 1-7.	5.0	43

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37	Interaction between atypical microorganisms andE. coliin catheter-associated urinary tract biofilms. Biofouling, 2014, 30, 893-902.	2.2	27
38	Identifying the Nature of Fouling Layers by Online Monitoring of the Propagation of Vibrations Along the Deposition Surface. Heat Transfer Engineering, 2014, 35, 251-257.	1.9	9
39	Influence of nanohydroxyapatite surface properties on Staphylococcus epidermidis biofilm formation. Journal of Biomaterials Applications, 2014, 28, 1325-1335.	2.4	18
40	Influence of the shear stress and salinity on Anammox biofilms formation: modelling results. Bioprocess and Biosystems Engineering, 2014, 37, 1955-1961.	3.4	18
41	Influence of flow rate variation on the development of Escherichia coli biofilms. Bioprocess and Biosystems Engineering, 2013, 36, 1787-1796.	3.4	35
42	Localization of Contamination Sources in Drinking Water Distribution Systems: A Method Based on Successive Positive Readings of Sensors. Water Resources Management, 2013, 27, 4623-4635.	3.9	21
43	A 1D mathematical model for a microbial fuel cell. Energy, 2013, 61, 463-471.	8.8	86
44	Effect of low concentrations of synthetic surfactants on polycyclic aromatic hydrocarbons (PAH) biodegradation. International Biodeterioration and Biodegradation, 2013, 83, 48-55.	3.9	37
45	Overview on the developments of microbial fuel cells. Biochemical Engineering Journal, 2013, 73, 53-64.	3.6	301
46	Biofilm Control With New Microparticles With Immobilized Biocide. Heat Transfer Engineering, 2013, 34, 712-718.	1.9	17
47	The effect of glucose concentration and shaking conditions on Escherichia coli biofilm formation in microtiter plates. Chemical Engineering Science, 2013, 94, 192-199.	3.8	45
48	Flow cells asquasi-ideal systems for biofouling simulation of industrial piping systems. Biofouling, 2013, 29, 953-966.	2.2	28
49	The Influence of Interfering Substances on the Antimicrobial Activity of Selected Quaternary Ammonium Compounds. International Journal of Food Science, 2013, 2013, 1-9.	2.0	36
50	A modular reactor to simulate biofilm development in orthopedic materials. International Microbiology, 2013, 16, 191-8.	2.4	6
51	Setup and Validation of Flow Cell Systems for Biofouling Simulation in Industrial Settings. Scientific World Journal, The, 2012, 2012, 1-10.	2.1	22
52	Flow cell hydrodynamics and their effects onE. colibiofilm formation under different nutrient conditions and turbulent flow. Biofouling, 2011, 27, 1-11.	2.2	118
53	In situ evaluation of a new silorane-based composite resin's bioadhesion properties. Dental Materials, 2011, 27, 1238-1245.	3.5	22
54	Physiological changes induced by the quaternary ammonium compound benzyldimethyldodecylammonium chloride on Pseudomonas fluorescens. Journal of Antimicrobial Chemotherapy, 2011, 66, 1036-1043.	3.0	105

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55	Mechanistic Aspects of Heat Exchanger and Membrane Biofouling and Prevention. , 2010, , 365-380.		7
56	Polyphase development of the FalcÃ³n Basin in northwestern Venezuela: implications for oil generation. Geological Society Special Publication, 2009, 328, 587-612.	1.3	3
57	Monitoring of biofilms in the food and beverage industries. , 2009, , 131-151.		6
58	Monitoring cleaning-in-place of shampoo films using nanovibration technology. Sensors and Actuators B: Chemical, 2009, 136, 376-382.	7.8	24
59	Using nanovibrations to monitor biofouling. Biotechnology and Bioengineering, 2008, 99, 1407-1415.	3.3	44
60	Deposition from a milk mineral solution on novel heat transfer surfaces under turbulent flow conditions. Journal of Food Engineering, 2008, 85, 29-41.	5.2	31
61	Simplified numerical simulation to obtain heat transfer correlations for stirred yoghurt in a plate heat exchanger. Food and Bioproducts Processing, 2008, 86, 296-303.	3.6	9
62	Proteinâ€“calcium phosphate interactions in fouling of modified stainless-steel surfaces by simulated milk. International Dairy Journal, 2008, 18, 72-80.	3.0	34
63	Dynamics of drinking water biofilm in flow/non-flow conditions. Water Research, 2007, 41, 551-562.	11.3	118
64	Effect of proteins on calcium phosphate deposition in turbulent flow as a function of surface properties. Experimental Thermal and Fluid Science, 2007, 32, 375-386.	2.7	13
65	Calcium phosphate fouling on TiN-coated stainless steel surfaces: Role of ions and particles. Chemical Engineering Science, 2007, 62, 3821-3831.	3.8	34
66	Modified stainless steel surfaces targeted to reduce fouling â€“ Evaluation of fouling by milk components. Journal of Food Engineering, 2007, 80, 1176-1187.	5.2	120
67	Monitoring Deposit Build-up using a Novel Mechatronic Surface Sensor (MSS). Food and Bioproducts Processing, 2006, 84, 366-370.	3.6	23
68	Calcium phosphate deposition from simulated milk ultrafiltrate on different stainless steel-based surfaces. International Dairy Journal, 2006, 16, 81-87.	3.0	65
69	Interaction of Desulfovibrio desulfuricans biofilms with stainless steel surface and its impact on bacterial metabolism. Journal of Applied Microbiology, 2006, 101, 1087-1095.	3.1	51
70	The effect of citrate on calcium phosphate deposition from simulated milk ultrafiltrate (SMUF) solution. Journal of Food Engineering, 2006, 73, 379-387.	5.2	43
71	Thermal behaviour of stirred yoghurt during cooling in plate heat exchangers. Journal of Food Engineering, 2006, 76, 433-439.	5.2	22
72	Competition betweenNitrospira spp. andNitrobacter spp. in nitrite-oxidizing bioreactors. Biotechnology and Bioengineering, 2006, 95, 169-175.	3.3	115

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73	A Late Pleistocene-Holocene natural seismograph along the Boconoì•Fault (Meì•rida Andes, Venezuela): the moraine-dammed Los Zerpa paleo-lake. Bulletin - Societie Geologique De France, 2006, 177, 3-17.	2.2	15
74	The influence of nickel on the adhesion ability of Desulfovibrio desulfuricans. Colloids and Surfaces B: Biointerfaces, 2005, 46, 127-133.	5.0	46
75	Fluorene and phenanthrene uptake byPseudomonas putida ATCC 17514: Kinetics and physiological aspects. Biotechnology and Bioengineering, 2005, 90, 281-289.	3.3	59
76	Simulation of stirred yoghurt processing in plate heat exchangers. Journal of Food Engineering, 2005, 69, 281-290.	5.2	43
77	Modified stainless steel surfaces targeted to reduce foulingâ€“â€“surface characterization. Journal of Food Engineering, 2004, 64, 63-79.	5.2	115
78	Online Biofilm Monitoring. Reviews in Environmental Science and Biotechnology, 2003, 2, 269-283.	8.1	81
79	Heat transfer and rheology of stirred yoghurt during cooling in plate heat exchangers. Journal of Food Engineering, 2003, 57, 179-187.	5.2	40
80	Biofilm formation and its role in fixed film processes. , 2003, , 337-349.		8
81	The Role of Kaolin Particles in the Performance of a Carbamate-Based Biocide for Water Bacterial Control. Water Environment Research, 2002, 74, 235-241.	2.7	9
82	Nitrifying and heterotrophic population dynamics in biofilm reactors: effects of hydraulic retention time and the presence of organic carbon. Water Research, 2002, 36, 469-481.	11.3	217
83	Effect of flow regime on the architecture of aPseudomonas fluorescens biofilm. Biotechnology and Bioengineering, 2002, 78, 164-171.	3.3	156
84	A versatile reactor for continuous monitoring of biofilm properties in laboratory and industrial conditions. Letters in Applied Microbiology, 2002, 34, 22-26.	2.2	31
85	Influence of medium composition on the characteristics of a denitrifying biofilm formed by Alcaligenes denitrificans in a fluidised bed reactor. Process Biochemistry, 2002, 37, 837-845.	3.7	35
86	Posttreatment of a Brewery Wastewater Using a Sequencing Batch Reactor. Water Environment Research, 2001, 73, 45-51.	2.7	26
87	The Effect of Clay Particles on the Activity of Suspended Autotrophic Nitrifying Bacteria and on the Performance of an Air-Lift Reactor. Environmental Technology (United Kingdom), 2001, 22, 123-135.	2.2	13
88	Chemical composition and activity of a biofilm during the start-up of an airlift reactor. Water Science and Technology, 2000, 41, 105-111.	2.5	26
89	Mass transfer coefficients within anaerobic biofilms: effects of external liquid velocity. Water Research, 1999, 33, 3673-3678.	11.3	34
90	Retention of bacteria by cellulose fibres as a means of reducing biofouling in paper pulp production processes. Biofouling, 1998, 13, 1-18.	2.2	8

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91	A Simplified Analysis of Reaction and Mass Transfer in UASB and EGSB Reactors. Environmental Technology (United Kingdom), 1997, 18, 35-44.	2.2	24
92	Biofouling in water systems. Experimental Thermal and Fluid Science, 1997, 14, 375-381.	2.7	172
93	Monitoring the thermal efficiency of fouled heat exchangers: A simplified method. Experimental Thermal and Fluid Science, 1997, 14, 455-463.	2.7	22
94	Surface Interactions and Deposit Growth in Fouling of Heat Exchangers. Corrosion Reviews, 1993, 11, 55-96.	2.0	13
95	Biofilm formation: Hydrodynamic effects on internal diffusion and structure. Biofouling, 1993, 7, 67-80.	2.2	152
96	Surface phenomena and hydrodynamic effects on the deposition ofpseudomonas fluorescens. Canadian Journal of Chemical Engineering, 1988, 66, 63-67.	1.7	22
97	The Dynamic Behavior of Once-Through Cooling Water Systems under Fouling Phenomena. Heat Transfer Engineering, 0, , 1-9.	1.9	1