

Filipe J M Mergulhão

List of Publications by Year in descending order

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97
papers

2,887
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230014

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97
docs citations

97
times ranked

3662
citing authors

#	ARTICLE	IF	CITATIONS
1	Oriented immobilization of Pep19-2.5 on antifouling brushes suppresses the development of Staphylococcus aureus biofilms. Progress in Organic Coatings, 2022, 163, 106609.	1.9	3
2	Future Directions for Ureteral Stent Technology: From Bench to the Market. Advanced Therapeutics, 2022, 5, .	1.6	10
3	Performance of Graphene/Polydimethylsiloxane Surfaces against S. aureus and P. aeruginosa Single- and Dual-Species Biofilms. Nanomaterials, 2022, 12, 355.	1.9	7
4	Implementation of a Practical Teaching Course on Protein Engineering. Biology, 2022, 11, 387.	1.3	1
5	Hydrodynamic Effects on Biofilm Development and Recombinant Protein Expression. Microorganisms, 2022, 10, 931.	1.6	4
6	Cell adhesion in microchannel multiple constrictions – Evidence of mass transport limitations. Colloids and Surfaces B: Biointerfaces, 2021, 198, 111490.	2.5	2
7	Developing New Marine Antifouling Surfaces: Learning from Single-Strain Laboratory Tests. Coatings, 2021, 11, 90.	1.2	10
8	Surface activation of medical grade polyurethane for the covalent immobilization of an anti-adhesive biopolymeric coating. Journal of Materials Chemistry B, 2021, 9, 3705-3715.	2.9	8
9	Targeting biofilms in medical devices using probiotic cells: a systematic review. AIMS Materials Science, 2021, 8, 501-523.	0.7	9
10	The association between initial adhesion and cyanobacterial biofilm development. FEMS Microbiology Ecology, 2021, 97, .	1.3	9
11	Antimicrobial Ceramic Filters for Water Bio-Decontamination. Coatings, 2021, 11, 323.	1.2	11
12	Optimizing CNT Loading in Antimicrobial Composites for Urinary Tract Application. Applied Sciences (Switzerland), 2021, 11, 4038.	1.3	15
13	Unveiling the Antifouling Performance of Different Marine Surfaces and Their Effect on the Development and Structure of Cyanobacterial Biofilms. Microorganisms, 2021, 9, 1102.	1.6	17
14	Potential strategies to prevent encrustations on urinary stents and catheters – thinking outside the box: a European network of multidisciplinary research to improve urinary stents (ENIUS) initiative. Expert Review of Medical Devices, 2021, 18, 1-9.	1.4	7
15	Principal Component Analysis to Determine the Surface Properties That Influence the Self-Cleaning Action of Hydrophobic Plant Leaves. Langmuir, 2021, 37, 8177-8189.	1.6	11
16	Drawing inspiration from nature to develop anti-fouling coatings: the development of biomimetic polymer surfaces and their effect on bacterial fouling. Pure and Applied Chemistry, 2021, 93, 1097-1108.	0.9	8
17	Assessment of the environmental compatibility and antifouling performance of an innovative biocidal and foul-release multifunctional marine coating. Environmental Research, 2021, 198, 111219.	3.7	29
18	The Effect of Molecular Weight on the Antimicrobial Activity of Chitosan from Loligo opalescens for Food Packaging Applications. Marine Drugs, 2021, 19, 384.	2.2	11

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19	Development of Chitosan-Based Surfaces to Prevent Single- and Dual-Species Biofilms of <i>Staphylococcus aureus</i> and <i>Pseudomonas aeruginosa</i> . <i>Molecules</i> , 2021, 26, 4378.	1.7	11
20	Effect of <i>Lactobacillus plantarum</i> Biofilms on the Adhesion of <i>Escherichia coli</i> to Urinary Tract Devices. <i>Antibiotics</i> , 2021, 10, 966.	1.5	17
21	The Influence of Nutrient Medium Composition on <i>Escherichia coli</i> Biofilm Development and Heterologous Protein Expression. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 8667.	1.3	7
22	A Selection of Platforms to Evaluate Surface Adhesion and Biofilm Formation in Controlled Hydrodynamic Conditions. <i>Microorganisms</i> , 2021, 9, 1993.	1.6	35
23	Quantitative proteomic analysis of marine biofilms formed by filamentous cyanobacterium. <i>Environmental Research</i> , 2021, 201, 111566.	3.7	10
24	Antimicrobial and anti-adhesive properties of carbon nanotube-based surfaces for medical applications: a systematic review. <i>IScience</i> , 2021, 24, 102001.	1.9	63
25	The Use of Probiotics to Fight Biofilms in Medical Devices: A Systematic Review and Meta-Analysis. <i>Microorganisms</i> , 2021, 9, 27.	1.6	27
26	Antimicrobial coatings based on chitosan to prevent implant-associated infections: A systematic review. <i>IScience</i> , 2021, 24, 103480.	1.9	29
27	Using <i>Lactobacilli</i> to Fight <i>Escherichia coli</i> and <i>Staphylococcus aureus</i> Biofilms on Urinary Tract Devices. <i>Antibiotics</i> , 2021, 10, 1525.	1.5	11
28	Magnetron co-sputtered TiO ₂ /SiO ₂ /Ag nanocomposite thin coatings inhibiting bacterial adhesion and biofilm formation. <i>Surface and Coatings Technology</i> , 2020, 384, 125322.	2.2	35
29	Experimental Assessment of the Performance of Two Marine Coatings to Curb Biofilm Formation of Microfoulers. <i>Coatings</i> , 2020, 10, 893.	1.2	18
30	Combining chemistry and topography to fight biofilm formation: Fabrication of micropatterned surfaces with a peptide-based coating. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020, 196, 111365.	2.5	15
31	Analysing the Initial Bacterial Adhesion to Evaluate the Performance of Antifouling Surfaces. <i>Antibiotics</i> , 2020, 9, 421.	1.5	4
32	Increased Intraspecies Diversity in <i>Escherichia coli</i> Biofilms Promotes Cellular Growth at the Expense of Matrix Production. <i>Antibiotics</i> , 2020, 9, 818.	1.5	8
33	Characterization of planktonic and biofilm cells from two filamentous cyanobacteria using a shotgun proteomic approach. <i>Biofouling</i> , 2020, 36, 631-645.	0.8	12
34	Carbon Nanotube/Poly(dimethylsiloxane) Composite Materials to Reduce Bacterial Adhesion. <i>Antibiotics</i> , 2020, 9, 434.	1.5	20
35	Efficacy of A Poly(MeOEGMA) Brush on the Prevention of <i>Escherichia coli</i> Biofilm Formation and Susceptibility. <i>Antibiotics</i> , 2020, 9, 216.	1.5	18
36	The Relative Importance of Shear Forces and Surface Hydrophobicity on Biofilm Formation by Coccoid Cyanobacteria. <i>Polymers</i> , 2020, 12, 653.	2.0	27

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37	The potential advantages of using a poly(HPMA) brush in urinary catheters: effects on biofilm cells and architecture. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020, 191, 110976.	2.5	32
38	Carbon Nanotube-Based Antimicrobial and Antifouling Surfaces. <i>Materials Horizons</i> , 2020, , 65-93.	0.3	4
39	The Impact of IPTG Induction on Plasmid Stability and Heterologous Protein Expression by <i>Escherichia coli</i> Biofilms. <i>International Journal of Molecular Sciences</i> , 2020, 21, 576.	1.8	28
40	Biofilm formation behaviour of marine filamentous cyanobacterial strains in controlled hydrodynamic conditions. <i>Environmental Microbiology</i> , 2019, 21, 4411-4424.	1.8	33
41	Fabrication and Hydrodynamic Characterization of a Microfluidic Device for Cell Adhesion Tests in Polymeric Surfaces. <i>Micromachines</i> , 2019, 10, 303.	1.4	9
42	Evaluating Efficacy of Antimicrobial and Antifouling Materials for Urinary Tract Medical Devices: Challenges and Recommendations. <i>Macromolecular Bioscience</i> , 2019, 19, e1800384.	2.1	66
43	Incorporation of carbon nanotubes in polydimethylsiloxane to control <i>Escherichia coli</i> adhesion. <i>Polymer Composites</i> , 2019, 40, E1697-E1704.	2.3	18
44	Recombinant protein expression in biofilms. <i>AIMS Microbiology</i> , 2019, 5, 232-250.	1.0	15
45	Impact of modified diamond-like carbon coatings on the spatial organization and disinfection of mixed-biofilms composed of <i>Escherichia coli</i> and <i>Pantoea agglomerans</i> industrial isolates. <i>International Journal of Food Microbiology</i> , 2018, 277, 74-82.	2.1	22
46	The effects of fluid composition and shear conditions on bacterial adhesion to an antifouling peptide-coated surface. <i>MRS Communications</i> , 2018, 8, 938-946.	0.8	12
47	Comparing the Recombinant Protein Production Potential of Planktonic and Biofilm Cells. <i>Microorganisms</i> , 2018, 6, 48.	1.6	9
48	Effect of shear stress on the reduction of bacterial adhesion to antifouling polymers. <i>Bioinspiration and Biomimetics</i> , 2018, 13, 065001.	1.5	27
49	Combination of selected enzymes with cetyltrimethylammonium bromide in biofilm inactivation, removal and regrowth. <i>Food Research International</i> , 2017, 95, 101-107.	2.9	30
50	<i>Pseudomonas grimontii</i> biofilm protects food contact surfaces from <i>Escherichia coli</i> colonization. <i>LWT - Food Science and Technology</i> , 2017, 85, 309-315.	2.5	16
51	Effect of surface conditioning with cellular extracts on <i>Escherichia coli</i> adhesion and initial biofilm formation. <i>Food and Bioproducts Processing</i> , 2017, 104, 1-12.	1.8	31
52	Characterization of the heterotrophic bacteria from a minimally processed vegetables plant. <i>LWT - Food Science and Technology</i> , 2017, 85, 293-300.	2.5	23
53	Heterologous protein production in <i>Escherichia coli</i> biofilms: A non-conventional form of high cell density cultivation. <i>Process Biochemistry</i> , 2017, 57, 1-8.	1.8	11
54	An in vitro model of catheter-associated urinary tract infections to investigate the role of uncommon bacteria on the <i>Escherichia coli</i> microbial consortium. <i>Biochemical Engineering Journal</i> , 2017, 118, 64-69.	1.8	15

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55	Critical review on biofilm methods. <i>Critical Reviews in Microbiology</i> , 2017, 43, 313-351.	2.7	693
56	Effects of antibiotic concentration and nutrient medium composition on <i>Escherichia coli</i> biofilm formation and green fluorescent protein expression. <i>FEMS Microbiology Letters</i> , 2017, 364, .	0.7	15
57	SEM Analysis of Surface Impact on Biofilm Antibiotic Treatment. <i>Scanning</i> , 2017, 2017, 1-7.	0.7	71
58	It is all about location: how to pinpoint microorganisms and their functions in multispecies biofilms. <i>Future Microbiology</i> , 2017, 12, 987-999.	1.0	13
59	Surface conditioning with <i>Escherichia coli</i> cell wall components can reduce biofilm formation by decreasing initial adhesion. <i>AIMS Microbiology</i> , 2017, 3, 613-628.	1.0	5
60	Influence of Flow Velocity on the Characteristics of <i>Pseudomonas fluorescens</i> Biofilms. <i>Journal of Environmental Engineering, ASCE</i> , 2016, 142, .	0.7	40
61	Temporal variation of recombinant protein expression in <i>Escherichia coli</i> biofilms analysed at single-cell level. <i>Process Biochemistry</i> , 2016, 51, 1155-1161.	1.8	12
62	Evaluation of SICON Â® surfaces for biofouling mitigation in critical process areas. <i>Food and Bioproducts Processing</i> , 2016, 98, 173-180.	1.8	8
63	Evaluation of SIKAN performance for biofouling mitigation in the food industry. <i>Food Control</i> , 2016, 62, 201-207.	2.8	19
64	Effect of heterologous protein expression on <i>Escherichia coli</i> biofilm formation and biocide susceptibility. <i>AIMS Microbiology</i> , 2016, 2, 434-446.	1.0	1
65	Choosing When to Clean and How to Clean Biofilms in Heat Exchangers. <i>Heat Transfer Engineering</i> , 2015, 36, 676-684.	1.2	4
66	The impact of material properties, nutrient load and shear stress on biofouling in food industries. <i>Food and Bioproducts Processing</i> , 2015, 95, 228-236.	1.8	27
67	The effect of shear stress on the formation and removal of <i>Bacillus cereus</i> biofilms. <i>Food and Bioproducts Processing</i> , 2015, 93, 242-248.	1.8	58
68	The effects of surface type on the removal of <i>Bacillus cereus</i> and <i>Pseudomonas fluorescens</i> single and dual species biofilms. <i>Food and Bioproducts Processing</i> , 2015, 93, 234-241.	1.8	25
69	Micro- and macro-flow systems to study <i>Escherichia coli</i> adhesion to biomedical materials. <i>Chemical Engineering Science</i> , 2015, 126, 440-445.	1.9	32
70	Efficacy of antimicrobial combinations to reduce the use of sodium hypochlorite in the control of planktonic and sessile <i>Escherichia coli</i> . <i>Biochemical Engineering Journal</i> , 2015, 104, 115-122.	1.8	15
71	Exploring the Antibiotic Effects in Bacterial Biofilms by Epifluorescence and Scanning Electron Microscopy. <i>Springer Proceedings in Physics</i> , 2015, , 241-248.	0.1	0
72	<i>Escherichia coli</i> adhesion, biofilm development and antibiotic susceptibility on biomedical materials. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 1414-1423.	2.1	68

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73	The combined effects of shear stress and mass transfer on the balance between biofilm and suspended cell dynamics. <i>Desalination and Water Treatment</i> , 2015, 53, 3348-3354.	1.0	19
74	<i>Escherichia coli</i> adhesion to surfaces—a thermodynamic assessment. <i>Colloid and Polymer Science</i> , 2015, 293, 177-185.	1.0	12
75	96-well microtiter plates for biofouling simulation in biomedical settings. <i>Biofouling</i> , 2014, 30, 535-546.	0.8	31
76	Biofilm Localization in the Vertical Wall of Shaking 96-Well Plates. <i>Scientifica</i> , 2014, 2014, 1-6.	0.6	17
77	The effects of ferulic and salicylic acids on <i>Bacillus cereus</i> and <i>Pseudomonas fluorescens</i> single- and dual-species biofilms. <i>International Biodeterioration and Biodegradation</i> , 2014, 86, 42-51.	1.9	70
78	The ability of an antimicrobial agent to penetrate a biofilm is not correlated with its killing or removal efficiency. <i>Biofouling</i> , 2014, 30, 675-683.	0.8	34
79	The effects of surface properties on <i>Escherichia coli</i> adhesion are modulated by shear stress. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014, 123, 1-7.	2.5	43
80	Use of phenyl isothiocyanate for biofilm prevention and control. <i>International Biodeterioration and Biodegradation</i> , 2014, 86, 34-41.	1.9	23
81	The Effect of Plasmids and Other Biomolecules on the Effectiveness of Antibiofilm Agents. <i>Springer Series on Biofilms</i> , 2014, , 161-174.	0.0	1
82	Influence of flow rate variation on the development of <i>Escherichia coli</i> biofilms. <i>Bioprocess and Biosystems Engineering</i> , 2013, 36, 1787-1796.	1.7	35
83	Macroscale versus microscale methods for physiological analysis of biofilms formed in 96-well microtiter plates. <i>Journal of Microbiological Methods</i> , 2013, 95, 342-349.	0.7	18
84	Current and emergent strategies for disinfection of hospital environments. <i>Journal of Antimicrobial Chemotherapy</i> , 2013, 68, 2718-2732.	1.3	146
85	The effect of glucose concentration and shaking conditions on <i>Escherichia coli</i> biofilm formation in microtiter plates. <i>Chemical Engineering Science</i> , 2013, 94, 192-199.	1.9	45
86	Flow cells as quasi-ideal systems for biofouling simulation of industrial piping systems. <i>Biofouling</i> , 2013, 29, 953-966.	0.8	28
87	The Influence of Interfering Substances on the Antimicrobial Activity of Selected Quaternary Ammonium Compounds. <i>International Journal of Food Science</i> , 2013, 2013, 1-9.	0.9	36
88	Setup and Validation of Flow Cell Systems for Biofouling Simulation in Industrial Settings. <i>Scientific World Journal</i> , The, 2012, 2012, 1-10.	0.8	22
89	The influence of nonconjugative <i>Escherichia coli</i> plasmids on biofilm formation and resistance. <i>Journal of Applied Microbiology</i> , 2012, 113, 373-382.	1.4	42
90	Flow cell hydrodynamics and their effects on <i>E. coli</i> biofilm formation under different nutrient conditions and turbulent flow. <i>Biofouling</i> , 2011, 27, 1-11.	0.8	118

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91	Periplasmic Targeting of Recombinant Proteins in Escherichia coli. , 2007, 390, 47-61.		7
92	Time-course determination of plasmid content in eukaryotic and prokaryotic cells using Real-Time PCR. Molecular Biotechnology, 2007, 37, 120-126.	1.3	42
93	Analysis of factors affecting the periplasmic production of recombinant proteins in Escherichia coli. Journal of Microbiology and Biotechnology, 2007, 17, 1236-41.	0.9	20
94	Evaluation of inducible promoters on the secretion of a ZZ-proinsulin fusion protein in Escherichia coli. Biotechnology and Applied Biochemistry, 2003, 38, 87.	1.4	15
95	A Quantitative ELISA for Monitoring the Secretion of ZZ-Fusion Proteins Using SpA Domain as Immunodetection Reporter System. Molecular Biotechnology, 2001, 19, 239-244.	1.3	11
96	Troubleshooting in Gene Splicing by Overlap Extension: A Step-Wise Method. Molecular Biotechnology, 1999, 12, 285-288.	1.3	6
97	Periplasmic Targeting of Recombinant Proteins in <i>Escherichia coli</i>. , 0, , 47-62.		0