Filomena Freitas

List of Publications by Year
in descending order

101 papers	3,854 citations	136740 32 h-index	133063 59 g-index
107 all docs	107 docs citations	107 times ranked	3935 citing authors

#	Article	IF	Citations
1	Advances in bacterial exopolysaccharides: from production to biotechnological applications. Trends in Biotechnology, 2011, 29, 388-398.	4.9	607
2	Characterization of an extracellular polysaccharide produced by a Pseudomonas strain grown on glycerol. Bioresource Technology, 2009, 100, 859-865.	4.8	186
3	Emulsifying behaviour and rheological properties of the extracellular polysaccharide produced by Pseudomonas oleovorans grown on glycerol byproduct. Carbohydrate Polymers, 2009, 78, 549-556.	5.1	164
4	Engineering aspects of microbial exopolysaccharide production. Bioresource Technology, 2017, 245, 1674-1683.	4.8	129
5	Fucose-containing exopolysaccharide produced by the newly isolated Enterobacter strain A47 DSM 23139. Carbohydrate Polymers, 2011, 83, 159-165.	5.1	126
6	Recovery of polyhydroxybutyrate (PHB) from <i>Cupriavidus necator</i> biomass by solvent extraction with 1,2â€propylene carbonate. Engineering in Life Sciences, 2009, 9, 454-461.	2.0	114
7	Production of polyhydroxyalkanoates from spent coffee grounds oil obtained by supercritical fluid extraction technology. Bioresource Technology, 2014, 157, 360-363.	4.8	110
8	Conversion of cheese whey into poly(3-hydroxybutyrate-co-3-hydroxyvalerate) by Haloferax mediterranei. New Biotechnology, 2016, 33, 224-230.	2.4	109
9	Exopolysaccharides enriched in rare sugars: bacterial sources, production, and applications. Frontiers in Microbiology, 2015, 6, 288.	1.5	107
10	Development and characterization of bilayer films of FucoPol and chitosan. Carbohydrate Polymers, 2016, 147, 8-15.	5.1	101
11	Valorization of fatty acids-containing wastes and byproducts into short- and medium-chain length polyhydroxyalkanoates. New Biotechnology, 2016, 33, 206-215.	2.4	75
12	Microbial polysaccharideâ€based membranes: Current and future applications. Journal of Applied Polymer Science, 2014, 131, .	1.3	63
13	Recovery of amorphous polyhydroxybutyrate granules from Cupriavidus necator cells grown on used cooking oil. International Journal of Biological Macromolecules, 2014, 71, 117-123.	3.6	62
14	Effect of temperature on the dynamic and steady-shear rheology of a new microbial extracellular polysaccharide produced from glycerol byproduct. Carbohydrate Polymers, 2010, 79, 981-988.	5.1	60
15	Biosynthesis of silver nanoparticles and polyhydroxybutyrate nanocomposites of interest in antimicrobial applications. International Journal of Biological Macromolecules, 2018, 108, 426-435.	3.6	60
16	Chitinâ€“glucan complex production by Komagataella pastoris : Downstream optimization and product characterization. Carbohydrate Polymers, 2015, 130, 455-464.	5.1	55
17	Exopolysaccharide production by a marine Pseudoalteromonas sp. strain isolated from Madeira Archipelago ocean sediments. New Biotechnology, 2016, 33, 460-466.	2.4	51
18	Demonstration of the adhesive properties of the medium-chain-length polyhydroxyalkanoate produced by Pseudomonas chlororaphis subsp. aurantiaca from glycerol. International Journal of Biological Macromolecules, 2019, 122, 1144-1151.	3.6	50

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19	Assessing the abundance and activity of denitrifying polyphosphate accumulating organisms through molecular and chemical techniques. Water Science and Technology, 2010, 61, 2061-2068.	1.2	49
20	Controlled Production of Exopolysaccharides from Enterobacter A47 as a Function of Carbon Source with Demonstration of Their Film and Emulsifying Abilities. Applied Biochemistry and Biotechnology, 2014, 172, 641-657.	1.4	49
21	Biodegradable films produced from the bacterial polysaccharide FucoPol. International Journal of Biological Macromolecules, 2014, 71, 111-116.	3.6	46
22	Rheological and morphological characterization of the culture broth during exopolysaccharide production by Enterobacter sp.. Carbohydrate Polymers, 2010, 81, 758-764.	5.1	45
23	Kinetics of production and characterization of the fucose-containing exopolysaccharide from Enterobacter A47. Journal of Biotechnology, 2011, 156, 261-267.	1.9	44
24	Characterization of biodegradable films from the extracellular polysaccharide produced by Pseudomonas oleovorans grown on glycerol byproduct. Carbohydrate Polymers, 2011, 83, 1582-1590.	5.1	44
25	Preparation and Characterization of Films Based on a Natural P(3HB)/mcl-PHA Blend Obtained through the Co-culture of Cupriavidus Necator and Pseudomonas Citronellolis in Apple Pulp Waste. Bioengineering, 2020, 7, 34.	1.6	44
26	Online monitoring of P(3HB) produced from used cooking oil with near-infrared spectroscopy. Journal of Biotechnology, 2015, 194, 1-9.	1.9	43
27	Study of the interactive effect of temperature and pH on exopolysaccharide production by Enterobacter A47 using multivariate statistical analysis. Bioresource Technology, 2012, 119, 148-156.	4.8	40
28	Production of yeast chitinâ€“glucan complex from biodiesel industry byproduct. Process Biochemistry, 2012, 47, 1670-1675.	1.8	39
29	Production of a new exopolysaccharide (EPS) by Pseudomonas oleovorans NRRL B-14682 grown on glycerol. Process Biochemistry, 2010, 45, 297-305.	1.8	38
30	Robustness of sludge enriched with short SBR cycles for biological nutrient removal. Bioresource Technology, 2009, 100, 1969-1976.	4.8	36
31	Random Mutagenesis as a Promising Tool for Microalgal Strain Improvement towards Industrial Production. Marine Drugs, 2022, 20, 440.	2.2	36
32	Solution properties of an exopolysaccharide from a Pseudomonas strain obtained using glycerol as sole carbon source. Carbohydrate Polymers, 2009, 78, 526-532.	5.1	35
33	Rheological studies of the fucose-rich exopolysaccharide FucoPol. International Journal of Biological Macromolecules, 2015, 79, 611-617.	3.6	35
34	Demonstration of the cryoprotective properties of the fucose-containing polysaccharide FucoPol. Carbohydrate Polymers, 2020, 245, 116500.	5.1	34
35	Characterization of medium chain length polyhydroxyalkanoate produced from olive oil deodorizer distillate. International Journal of Biological Macromolecules, 2016, 82, 243-248.	3.6	33
36	Improvement on the yield of polyhydroxyalkanotes production from cheese whey by a recombinant Escherichia coli strain using the proton suicide methodology. Enzyme and Microbial Technology, 2014, 55, 151-158.	1.6	32

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37	Conversion of fat-containing waste from the margarine manufacturing process into bacterial polyhydroxyalkanoates. International Journal of Biological Macromolecules, 2014, 71, 68-73.	3.6	32
38	Silver nanocomposites based on the bacterial fucose-rich polysaccharide secreted by Enterobacter A47 for wound dressing applications: Synthesis, characterization and in vitro bioactivity. International Journal of Biological Macromolecules, 2020, 163, 959-969.	3.6	32
39	Microbial production of medium-chain length polyhydroxyalkanoates. Process Biochemistry, 2021, 102, 393-407.	1.8	32
40	Biosorption of Heavy Metals by the Bacterial Exopolysaccharide FucoPol. Applied Sciences (Switzerland), 2020, 10, 6708.	1.3	31
41	Production of medium-chain-length polyhydroxyalkanoates by Pseudomonas chlororaphis subsp. aurantiaca: Cultivation on fruit pulp waste and polymer characterization. International Journal of Biological Macromolecules, 2021, 167, 85-92.	3.6	31
42	Chitinous polymers: extraction from fungal sources, characterization and processing towards valueâ€added applications. Journal of Chemical Technology and Biotechnology, 2020, 95, 1277-1289.	1.6	30
43	Microbial population response to changes of the operating conditions in a dynamic nutrient-removal sequencing batch reactor. Bioprocess and Biosystems Engineering, 2005, 28, 199-209.	1.7	28
44	Production of FucoPol by Enterobacter A47 using waste tomato paste by-product as sole carbon source. Bioresource Technology, 2017, 227, 66-73.	4.8	26
45	Influence of temperature on the rheological behavior of a new fucose-containing bacterial exopolysaccharide. International Journal of Biological Macromolecules, 2011, 48, 695-699.	3.6	25
46	Impact of glycerol and nitrogen concentration on Enterobacter A47 growth and exopolysaccharide production. International Journal of Biological Macromolecules, 2014, 71, 81-86.	3.6	25
47	Using a bacterial fucose-rich polysaccharide as encapsulation material of bioactive compounds. International Journal of Biological Macromolecules, 2017, 104, 1099-1106.	3.6	25
48	Pseudomonas chlororaphis as a multiproduct platform: Conversion of glycerol into high-value biopolymers and phenazines. New Biotechnology, 2020, 55, 84-90.	2.4	25
49	Characterization and Biotechnological Potential of Extracellular Polysaccharides Synthesized by Alteromonas Strains Isolated from French Polynesia Marine Environments. Marine Drugs, 2021, 19, 522.	2.2	23
50	An extracellular polymer at the interface of magnetic bioseparations. Journal of the Royal Society Interface, 2014, 11, 20140743.	1.5	22
51	Conversion of cheese whey into a fucose- and glucuronic acid-rich extracellular polysaccharide by Enterobacter A47. Journal of Biotechnology, 2015, 210, 1-7.	1.9	22
52	Assessment of the adhesive properties of the bacterial polysaccharide FucoPol. International Journal of Biological Macromolecules, 2016, 92, 383-389.	3.6	20
53	Bacterial polymers as materials for the development of micro/nanoparticles. International Journal of Polymeric Materials and Polymeric Biomaterials, 2016, 65, 211-224.	1.8	20
54	Occurrence of non-toxic bioemulsifiers during polyhydroxyalkanoate production by Pseudomonas strains valorizing crude glycerol by-product. Bioresource Technology, 2019, 281, 31-40.	4.8	20

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55	Chitin-glucan complex â€“ Based biopolymeric structures using biocompatible ionic liquids. Carbohydrate Polymers, 2020, 247, 116679.	5.1	19
56	Impact of sludge retention time on the fine composition of the microbial community and extracellular polymeric substances in a membrane bioreactor. Applied Microbiology and Biotechnology, 2016, 100, 8507-8521.	1.7	18
57	Co-production of chitin-glucan complex and xylitol by Komagataella pastoris using glucose and xylose mixtures as carbon source. Carbohydrate Polymers, 2017, 166, 24-30.	5.1	18
58	A value-added exopolysaccharide as a coating agent for MRI nanoprobes. Nanoscale, 2015, 7, 14272-14283.	2.8	17
59	Oxygen Plasma Treated-Electrospun Polyhydroxyalkanoate Scaffolds for Hydrophilicity Improvement and Cell Adhesion. Polymers, 2021, 13, 1056.	2.0	17
60	Chitinâ€“glucan complex production by Komagataella (Pichia) pastoris: impact of cultivation pH and temperature on polymer content and composition. New Biotechnology, 2014, 31, 468-474.	2.4	16
61	Novel hydrogels based on yeast chitin-glucan complex: Characterization and safety assessment. International Journal of Biological Macromolecules, 2020, 156, 1104-1111.	3.6	16
62	A Two-Stage Process for Conversion of Brewerâ€™s Spent Grain into Volatile Fatty Acids through Acidogenic Fermentation. Applied Sciences (Switzerland), 2021, 11, 3222.	1.3	14
63	Bacterial Polysaccharides: Production and Applications in Cosmetic Industry. , 2015, , 2017-2043.		13
64	Impact of sludge retention time on MBR fouling: role of extracellular polymeric substances determined through membrane autopsy. Biofouling, 2017, 33, 556-566.	0.8	13
65	Effect of mono- and dipotassium phosphate concentration on extracellular polysaccharide production by the bacterium Enterobacter A47. Process Biochemistry, 2018, 75, 16-21.	1.8	13
66	Photoprotective effect of the fucose-containing polysaccharide FucoPol. Carbohydrate Polymers, 2021, 259, 117761.	5.1	13
67	Biovalorization of Lignocellulosic Materials for Xylitol Production by the Yeast Komagataella pastoris. Applied Sciences (Switzerland), 2021, 11, 5516.	1.3	13
68	Sustainable use of agro-industrial wastes as potential feedstocks for exopolysaccharide production by selected Halomonas strains. Environmental Science and Pollution Research, 2022, 29, 22043-22055.	2.7	12
69	Antioxidant Potential of the Bio-Based Fucose-Rich Polysaccharide FucoPol Supports Its Use in Oxidative Stress-Inducing Systems. Polymers, 2021, 13, 3020.	2.0	11
70	Extraction of the Bacterial Extracellular Polysaccharide FucoPol by Membrane-Based Methods: Efficiency and Impact on Biopolymer Properties. Polymers, 2022, 14, 390.	2.0	11
71	Demonstration of the ability of the bacterial polysaccharide FucoPol to flocculate kaolin suspensions. Environmental Technology (United Kingdom), 2020, 41, 287-295.	1.2	10
72	Cation-mediated gelation of the fucose-rich polysaccharide FucoPol: preparation and characterization of hydrogel beads and their cytotoxicity assessment. International Journal of Polymeric Materials and Polymeric Biomaterials, 2021, 70, 90-99.	1.8	10

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73	Functional and genomic characterization of Komagataeibacter uvaceti FXV3, a multiple stress resistant bacterium producing increased levels of cellulose. Biotechnology Reports (Amsterdam,) Tj ETQq1 1 0.784314 rgBT /Overlock 1	2.1	10
74	Chitin-Glucan Complex Hydrogels: Optimization of Gel Formation and Demonstration of Drug Loading and Release Ability. Polymers, 2022, 14, 785.	2.0	10
75	A Process Engineering Approach to Improve Production of P(3HB) by<i>Cupriavidus necator</i>from Used Cooking Oil. International Journal of Polymer Science, 2019, 2019, 1-7.	1.2	9
76	Microneedle Arrays of Polyhydroxyalkanoate by Laser-Based Micromolding Technique. ACS Applied Bio Materials, 2020, 3, 5856-5864.	2.3	9
77	Enhanced co-production of medium-chain-length polyhydroxyalkanoates and phenazines from crude glycerol by high cell density cultivation of Pseudomonas chlororaphis in membrane bioreactor. International Journal of Biological Macromolecules, 2022, 211, 545-555.	3.6	9
78	Microbial Conversion of Waste and Surplus Materials into High-Value Added Products: The Case of Biosurfactants. , 2017, , 29-77.		8
79	Implementation of a repeated fed-batch process for the production of chitin-glucan complex by Komagataella pastoris. New Biotechnology, 2017, 37, 123-128.	2.4	8
80	Optimization of medium composition for production of chitin-glucan complex and mannose-containing polysaccharides by the yeast Komagataella pastoris. Journal of Biotechnology, 2019, 303, 30-36.	1.9	8
81	Production and Food Applications of Microbial Biopolymers. Contemporary Food Engineering, 2013, , 61-88.	0.2	8
82	Bioconversion of Terephthalic Acid and Ethylene Glycol Into Bacterial Cellulose by Komagataeibacter xylinus DSM 2004 and DSM 46604. Frontiers in Bioengineering and Biotechnology, 2022, 10, 853322.	2.0	8
83	Characterization of the Thermostable Biosurfactant Produced by Burkholderia thailandensis DSM 13276. Polymers, 2022, 14, 2088.	2.0	8
84	Supercritical CO2 Assisted Impregnation of Ibuprofen on Medium-Chain-Length Polyhydroxyalkanoates (mcl-PHA). Molecules, 2021, 26, 4772.	1.7	7
85	Preparation and Characterization of Porous Scaffolds Based on Poly(3-hydroxybutyrate) and Poly(3-hydroxybutyrate-co-3-hydroxyvalerate). Life, 2021, 11, 935.	1.1	7
86	Bacterial Polysaccharides: Production and Applications in Cosmetic Industry. , 2014, , 1-24.		7
87	A New Biosurfactant/Bioemulsifier from Gordonia alkanivorans Strain 1B: Production and Characterization. Processes, 2022, 10, 845.	1.3	7
88	Development of a Cryoprotective Formula Based on the Fucose-Containing Polysaccharide FucoPol. ACS Applied Bio Materials, 2021, 4, 4800-4808.	2.3	6
89	Development of Olive Oil and Î±-Tocopherol Containing Emulsions Stabilized by FucoPol: Rheological and Textural Analyses. Polymers, 2022, 14, 2349.	2.0	6
90	Preparation and Characterization of Electrospun Polysaccharide FucoPol-Based Nanofiber Systems. Nanomaterials, 2022, 12, 498.	1.9	5

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91	Enhanced Control over Ice Nucleation Stochasticity Using a Carbohydrate Polymer Cryoprotectant. ACS Biomaterials Science and Engineering, 2022, 8, 1852-1859.	2.6	5
92	Rheological and morphological characterization of the culture broth during exopolysaccharide production by Enterobacter sp.. Carbohydrate Polymers, 2009, , .	5.1	4
93	Low Temperature Dissolution of Yeast Chitin-Glucan Complex and Characterization of the Regenerated Polymer. Bioengineering, 2020, 7, 28.	1.6	4
94	Hybrid modeling of microbial exopolysaccharide (EPS) production: The case of Enterobacter A47. Journal of Biotechnology, 2017, 246, 61-70.	1.9	3
95	Influence of Dissolved Oxygen Level on Chitinâ€"Glucan Complex and Mannans Production by the Yeast Pichia pastoris. Life, 2022, 12, 161.	1.1	2
96	Subcritical Water as a Pre-Treatment of Mixed Microbial Biomass for the Extraction of Polyhydroxyalkanoates. Bioengineering, 2022, 9, 302.	1.6	2
97	Post-Transcriptional Control in the Regulation of Polyhydroxyalkanoates Synthesis. Life, 2021, 11, 853.	1.1	1
98	Biodegradable Organic Matter. , 2012, , 1-2.		1
99	Bacterial Polysaccharides: Cosmetic Applications. , 2021, , 1-42.		0
100	Biodegradable Membrane. , 2012, , 1-2.		0
101	Bacterial Polysaccharides: Cosmetic Applications. , 2022, , 781-821.		0