

Maciej W Guzik

List of Publications by Year in descending order

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Version: 2024-02-01

38
papers

1,036
citations

471371

17
h-index

434063

31
g-index

39
all docs

39
docs citations

39
times ranked

1308
citing authors

#	ARTICLE	IF	CITATIONS
1	Carbon-Rich Wastes as Feedstocks for Biodegradable Polymer (Polyhydroxyalkanoate) Production Using Bacteria. <i>Advances in Applied Microbiology</i> , 2013, 84, 139-200.	1.3	147
2	Conversion of grass biomass into fermentable sugars and its utilization for medium chain length polyhydroxyalkanoate (mcl-PHA) production by <i>Pseudomonas</i> strains. <i>Bioresource Technology</i> , 2013, 150, 202-209.	4.8	129
3	Conversion of post consumer polyethylene to the biodegradable polymer polyhydroxyalkanoate. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 4223-4232.	1.7	102
4	Medium chain length polyhydroxyalkanoate (mcl-PHA) production from volatile fatty acids derived from the anaerobic digestion of grass. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 611-620.	1.7	68
5	High cell density cultivation of <i>Pseudomonas putida</i> KT2440 using glucose without the need for oxygen enriched air supply. <i>Biotechnology and Bioengineering</i> , 2015, 112, 725-733.	1.7	53
6	Polyhydroxyalkanoate-based 3-hydroxyoctanoic acid and its derivatives as a platform of bioactive compounds. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 161-172.	1.7	50
7	How much of antibiotics can enter surface water with treated wastewater and how it affects the resistance of waterborne bacteria: A case study of the BiaÅ,ka river sewage treatment plant. <i>Environmental Research</i> , 2020, 191, 110037.	3.7	49
8	Lactose esters: synthesis and biotechnological applications. <i>Critical Reviews in Biotechnology</i> , 2018, 38, 245-258.	5.1	41
9	How sustainable are biopolymers? Findings from a life cycle assessment of polyhydroxyalkanoate production from rapeseed-oil derivatives. <i>Science of the Total Environment</i> , 2020, 749, 141279.	3.9	32
10	Polyhydroxyalkanoate-derived hydrogen-bond donors for the synthesis of new deep eutectic solvents. <i>Green Chemistry</i> , 2019, 21, 3116-3126.	4.6	29
11	Structural, topographical, and mechanical characteristics of purified polyhydroxyoctanoate polymer. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47192.	1.3	28
12	What Has Been Trending in the Research of Polyhydroxyalkanoates? A Systematic Review. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 959.	2.0	26
13	Robust process for high yield conversion of non-degradable polyethylene to a biodegradable plastic using a chemo-biotechnological approach. <i>Waste Management</i> , 2021, 135, 60-69.	3.7	23
14	Combining amino acids and carbohydrates into readily biodegradable, task specific ionic liquids. <i>RSC Advances</i> , 2020, 10, 18355-18359.	1.7	22
15	Fed-batch strategies using butyrate for high cell density cultivation of <i>Pseudomonas putida</i> and its use as a biocatalyst. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 9217-9228.	1.7	21
16	Novel bioresorbable tricalcium phosphate/polyhydroxyoctanoate (TCP/PHO) composites as scaffolds for bone tissue engineering applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019, 98, 235-245.	1.5	20
17	Identification and characterization of an acyl-CoA dehydrogenase from <i>Pseudomonas putida</i> KT2440 that shows preference towards medium to long chain length fatty acids. <i>Microbiology (United Kingdom)</i> 147:1018-1028. doi:10.1099/mic/0/000000.0	1.7	18
18	The chain length of biologically produced (R)-3-hydroxyalkanoic acid affects biological activity and structure of anti-cancer peptides. <i>Journal of Biotechnology</i> , 2015, 204, 7-12.	1.9	15

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19	COVID-19 lockdown shows how much natural mountain regions are affected by heavy tourism. <i>Science of the Total Environment</i> , 2022, 806, 151355.	3.9	15
20	The effect of polyphosphate kinase gene deletion on polyhydroxyalkanoate accumulation and carbon metabolism in <i>Pseudomonas putida</i> . <i>Environmental Microbiology Reports</i> , 2013, 5, 740-746.	1.0	14
21	Functionalized tricalcium phosphate and poly(3-hydroxyoctanoate) derived composite scaffolds as platforms for the controlled release of diclofenac. <i>Ceramics International</i> , 2021, 47, 3876-3883.	2.3	13
22	Cellular architecture and migration behavior of fibroblast cells on polyhydroxyoctanoate (PHO): A natural polymer of bacterial origin. <i>Biopolymers</i> , 2019, 110, e23324.	1.2	12
23	Polyhydroxyalkanoate/Antifungal Polyene Formulations with Monomeric Hydroxyalkanoic Acids for Improved Antifungal Efficiency. <i>Antibiotics</i> , 2021, 10, 737.	1.5	12
24	Influence of Chemical Modifications of Polyhydroxyalkanoate-Derived Fatty Acids on Their Antimicrobial Properties. <i>Catalysts</i> , 2019, 9, 510.	1.6	11
25	Physicochemical and Biological Characterisation of Diclofenac Oligomeric Poly(3-hydroxyoctanoate) Hybrids as β -TCP Ceramics Modifiers for Bone Tissue Regeneration. <i>International Journal of Molecular Sciences</i> , 2020, 21, 9452.	1.8	11
26	Silver Decorated β -TCP-Poly(3hydroxybutyrate) Scaffolds for Bone Tissue Engineering. <i>Materials</i> , 2021, 14, 4227.	1.3	10
27	Investigation of quaternary structure of aggregating 3-ketosteroid dehydrogenase from <i>Sterolibacterium denitrificans</i> : In the pursuit of consensus of various biophysical techniques. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2019, 1863, 1027-1039.	1.1	8
28	Insights into In Vitro Wound Closure on Two Biopolyesters—Polylactide and Polyhydroxyoctanoate. <i>Materials</i> , 2020, 13, 2793.	1.3	8
29	Novel Biocompatible Polymers for Biomedical Applications. <i>Biophysical Journal</i> , 2018, 114, 363a.	0.2	7
30	Hollow silica microspheres as robust immobilization carriers. <i>Bioorganic Chemistry</i> , 2019, 93, 102813.	2.0	7
31	Polyhydroxyalkanoates, bacterially synthesized polymers, as a source of chemical compounds for the synthesis of advanced materials and bioactive molecules. <i>Applied Microbiology and Biotechnology</i> , 2021, 105, 7555-7566.	1.7	7
32	Vimentin Association with Nuclear Grooves in Normal MEF 3T3 Cells. <i>International Journal of Molecular Sciences</i> , 2020, 21, 7478.	1.8	6
33	In Search of Effective Anticancer Agents—Novel Sugar Esters Based on Polyhydroxyalkanoate Monomers. <i>International Journal of Molecular Sciences</i> , 2021, 22, 7238.	1.8	6
34	A study on the structure, mechanism, and biochemistry of kanamycin B dioxygenase (KanJ)—an enzyme with a broad range of substrates. <i>FEBS Journal</i> , 2021, 288, 1366-1386.	2.2	5
35	A polyhydroxyalkanoates bioprocess improvement case study based on four fed-batch feeding strategies. <i>Microbial Biotechnology</i> , 2022, 15, 996-1006.	2.0	4
36	Physical properties of biomass-derived novel natural deep eutectic solvents based on choline chloride and (R)-3-hydroxyacids. <i>Journal of Molecular Liquids</i> , 2020, 315, 113680.	2.3	3

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37	Socio-economic Importance of Biomaterials in the Transition to the Circular Economy Model. SHS Web of Conferences, 2021, 92, 05029.	0.1	2
38	Vimentin Cytoskeleton Architecture Analysis on Polylactide and Polyhydroxyoctanoate Substrates for Cell Culturing. International Journal of Molecular Sciences, 2021, 22, 6821.	1.8	2