Enrique Herrero Acero

List of Publications by Year
in descending order

44 papers	2,475 citations	236612 25 h-index	288905 40 g-index
48 all docs	48 docs citations	48 times ranked	1967 citing authors

#	Article	IF	Citations
1	Functionalization Strategies and Fabrication of Solvent-Cast PLLA for Bioresorbable Stents. Applied Sciences (Switzerland), 2021, 11, 1478.	1.3	13
2	Enzymes revolutionize the bioproduction of value-added compounds: From enzyme discovery to special applications. Biotechnology Advances, 2020, 40, 107520.	6.0	97
3	Microbial production of high value molecules using rayon waste material as carbon-source. New Biotechnology, 2019, 51, 8-13.	2.4	6
4	Enzymatic Recycling of High-Value Phosphor Flame-Retardant Pigment and Glucose from Rayon Fibers. ACS Sustainable Chemistry and Engineering, 2018, 6, 2386-2394.	3.2	25
5	Enzymatic recovery of polyester building blocks from polymer blends. Process Biochemistry, 2017, 59, 58-64.	1.8	89
6	Two distinct enzymatic approaches for coupling fatty acids onto lignocellulosic materials. Process Biochemistry, 2017, 59, 111-115.	1.8	6
7	Synergistic chemoâ€enzymatic hydrolysis of poly(ethylene terephthalate) from textile waste. Microbial Biotechnology, 2017, 10, 1376-1383.	2.0	85
8	Superhydrophobic functionalization of cutinase activated poly(lactic acid) surfaces. Green Chemistry, 2017, 19, 816-822.	4.6	25
9	Hisâ€Tag Immobilization of Cutinase 1 From Thermobifida cellulosilytica for Solventâ€Free Synthesis of Polyesters. Biotechnology Journal, 2017, 12, 1700322.	1.8	16
10	Small cause, large effect: Structural characterization of cutinases from Thermobifida cellulosilytica. Biotechnology and Bioengineering, 2017, 114, 2481-2488.	1.7	56
11	Enzymatic Functionalization of HMLS-Polyethylene Terephthalate Fabrics Improves the Adhesion to Rubber. ACS Sustainable Chemistry and Engineering, 2017, 5, 6456-6465.	3.2	27
12	Enzymatic hydrolysis of poly(ethyleneterephthalate) used for and analysed by pore modification of track-etched membranes. New Biotechnology, 2017, 39, 42-50.	2.4	14
13	Enzyme-catalyzed functionalization of poly(L-lactic acid) for drug delivery applications. Process Biochemistry, 2017, 59, 77-83.	1.8	42
14	Fully renewable polyesters via polycondensation catalyzed by Thermobifida cellulosilytica cutinase 1: an integrated approach. Green Chemistry, 2017, 19, 490-502.	4.6	29
15	Enzymatic Degradation of Aromatic and Aliphatic Polyesters by P. pastoris Expressed Cutinase 1 from Thermobifida cellulosilytica. Frontiers in Microbiology, 2017, 8, 938.	1.5	62
16	2. Microbial applications for fabric and textile industries. , 2016, , 33-78.		1
17	Exploring mild enzymatic sustainable routes for the synthesis of bioâ€degradable aromaticâ€aliphatic oligoesters. Biotechnology Journal, 2016, 11, 642-647.	1.8	24
18	A biofidelic 3D culture model to study the development of brain cellular systems. Scientific Reports, 2016, 6, 24953.	1.6	9

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19	Ultrasound-enhanced enzymatic hydrolysis of poly(ethylene terephthalate). Bioresource Technology, 2016, 218, 1298-1302.	4.8	50
20	Renewable building blocks for sustainable polyesters: new biotechnological routes for greener plastics. Polymer International, 2016, 65, 861-871.	1.6	127
21	Phenol red-silk tyrosine cross-linked hydrogels. Acta Biomaterialia, 2016, 42, 102-113.	4.1	21
22	The Closure of the Cycle: Enzymatic Synthesis and Functionalization of Bio-Based Polyesters. Trends in Biotechnology, 2016, 34, 316-328.	4.9	107
23	Enlarging the tools for efficient enzymatic polycondensation: structural and catalytic features of cutinase 1 from Thermobifida cellulosilytica. Catalysis Science and Technology, 2016, 6, 3430-3442.	2.1	33
24	Improving enzymatic polyurethane hydrolysis by tuning enzyme sorption. Polymer Degradation and Stability, 2016, 132, 69-77.	2.7	85
25	Biocatalyzed approach for the surface functionalization of poly(Lâ€lactic acid) films using hydrolytic enzymes. Biotechnology Journal, 2015, 10, 1739-1749.	1.8	55
26	Enhanced Cutinase-Catalyzed Hydrolysis of Polyethylene Terephthalate by Covalent Fusion to Hydrophobins. Applied and Environmental Microbiology, 2015, 81, 3586-3592.	1.4	149
27	Laccase Functionalization of Flax and Coconut Fibers. Polymers, 2014, 6, 1676-1684.	2.0	18
28	Biosilicaâ€loaded poly(Ïµâ€caprolactone) nanofibers: A step closer to bioprinted materials with tunable properties. Biotechnology Journal, 2014, 9, 1231-1232.	1.8	0
29	Green polymer processing with enzymes. New Biotechnology, 2014, 31, S31.	2.4	0
30	Enzymatic hydrolysis of polyester based coatings. Reactive and Functional Polymers, 2013, 73, 1335-1339.	2.0	12
31	Banning toxic heavy-metal catalysts from paints: enzymatic cross-linking of alkyd resins. Green Chemistry, 2013, 15, 381.	4.6	36
32	Bioactive albumin functionalized polylactic acid membranes for improved biocompatibility. Reactive and Functional Polymers, 2013, 73, 1399-1404.	2.0	29
33	Fusion of Binding Domains to Thermobifida cellulosilytica Cutinase to Tune Sorption Characteristics and Enhancing PET Hydrolysis. Biomacromolecules, 2013, 14, 1769-1776.	2.6	137
34	Comparison of oxygen plasma and cutinase effect on polyethylene terephthalate surface. Journal of Applied Polymer Science, 2013, 128, 3570-3575.	1.3	15
35	Two Novel Class II Hydrophobins from Trichoderma spp. Stimulate Enzymatic Hydrolysis of Poly(Ethylene Terephthalate) when Expressed as Fusion Proteins. Applied and Environmental Microbiology, 2013, 79, 4230-4238.	1.4	86
36	Surface engineering of a cutinase from Thermobifida cellulosilytica for improved polyester hydrolysis. Biotechnology and Bioengineering, 2013, 110, 2581-2590.	1.7	118

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37	Characterization of a new cutinase fromThermobifida albafor PET-surface hydrolysis. Biocatalysis and Biotransformation, 2012, 30, 2-9.	1.1	125
38	A New Esterase from Thermobifida halotolerans Hydrolyses Polyethylene Terephthalate (PET) and Polylactic Acid (PLA). Polymers, 2012, 4, 617-629.	2.0	146
39	Two-step enzymatic functionalisation of polyamide with phenolics. Journal of Molecular Catalysis B: Enzymatic, 2012, 79, 54-60.	1.8	35
40	Advances in the Application of Oxidative Enzymes in Biopolymer Chemistry and Biomaterial Research. ACS Symposium Series, 2012, , 329-349.	0.5	1
41	Banning heavy metals from paints: Enzymatic hardening of alkyd resins. New Biotechnology, 2012, 29, S238-S239.	2.4	0
42	Engineering Strategies for Successful Development of Functional Polymers Using Oxidative Enzymes. Chemical Engineering and Technology, 2012, 35, 1359-1372.	0.9	27
43	Enzymatic Surface Hydrolysis of PET: Effect of Structural Diversity on Kinetic Properties of Cutinases from Thermobifida. Macromolecules, 2011, 44, 4632-4640.	2.2	298
44	Hydrolysis of polyethyleneterephthalate by pâ€nitrobenzylesterase from Bacillus subtilis. Biotechnology Progress, 2011, 27, 951-960.	1.3	138