

HÃ©lÃ¨ne Angellier-Coussy

List of Publications by Year in descending order

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65
papers

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citations

172386

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docs citations

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times ranked

3746
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimization of the Preparation of Aqueous Suspensions of Waxy Maize Starch Nanocrystals Using a Response Surface Methodology. <i>Biomacromolecules</i> , 2004, 5, 1545-1551.	2.6	404
2	Thermoplastic Starch/Waxy Maize Starch Nanocrystals Nanocomposites. <i>Biomacromolecules</i> , 2006, 7, 531-539.	2.6	322
3	The Next Generation of Sustainable Food Packaging to Preserve Our Environment in a Circular Economy Context. <i>Frontiers in Nutrition</i> , 2018, 5, 121.	1.6	266
4	Mechanical Properties of Waxy Maize Starch Nanocrystal Reinforced Natural Rubber. <i>Macromolecules</i> , 2005, 38, 9161-9170.	2.2	237
5	Functional properties of wheat gluten/montmorillonite nanocomposite films processed by casting. <i>Journal of Membrane Science</i> , 2007, 289, 159-168.	4.1	216
6	Processing and Structural Properties of Waxy Maize Starch Nanocrystals Reinforced Natural Rubber. <i>Macromolecules</i> , 2005, 38, 3783-3792.	2.2	215
7	Preparation and application of starch nanoparticles for nanocomposites: A review. <i>Reactive and Functional Polymers</i> , 2014, 85, 97-120.	2.0	196
8	A research challenge vision regarding management of agricultural waste in a circular bio-based economy. <i>Critical Reviews in Environmental Science and Technology</i> , 2018, 48, 614-654.	6.6	189
9	Surface Chemical Modification of Waxy Maize Starch Nanocrystals. <i>Langmuir</i> , 2005, 21, 2425-2433.	1.6	170
10	How the shape of fillers affects the barrier properties of polymer/non-porous particles nanocomposites: A review. <i>Journal of Membrane Science</i> , 2018, 556, 393-418.	4.1	147
11	Performance and environmental impact of biodegradable polymers as agricultural mulching films. <i>Chemosphere</i> , 2016, 144, 433-439.	4.2	146
12	Sustainable food packaging: Valorising wheat straw fibres for tuning PHBV-based composites properties. <i>Composites Part A: Applied Science and Manufacturing</i> , 2015, 72, 139-147.	3.8	106
13	Starch Nanocrystal Fillers in an Acrylic Polymer Matrix. <i>Macromolecular Symposia</i> , 2005, 221, 95-104.	0.4	97
14	Exploring the potentialities of using lignocellulosic fibres derived from three food by-products as constituents of biocomposites for food packaging. <i>Industrial Crops and Products</i> , 2015, 69, 110-122.	2.5	91
15	Controlling pesticide release via structuring agropolymer and nanoclays based materials. <i>Journal of Hazardous Materials</i> , 2012, 205-206, 32-39.	6.5	83
16	The molecular structure of waxy maize starch nanocrystals. <i>Carbohydrate Research</i> , 2009, 344, 1558-1566.	1.1	81
17	How does water diffuse in starch/montmorillonite nano-biocomposite materials?. <i>Carbohydrate Polymers</i> , 2010, 82, 128-135.	5.1	79
18	Biocomposites from wheat proteins and fibers: Structure/mechanical properties relationships. <i>Industrial Crops and Products</i> , 2013, 43, 545-555.	2.5	68

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19	Functional properties of thermoformed wheat gluten/montmorillonite materials with respect to formulation and processing conditions. <i>Journal of Applied Polymer Science</i> , 2008, 107, 487-496.	1.3	57
20	Vegetal fiber-based biocomposites: Which stakes for food packaging applications?. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	1.3	54
21	Reinforcing Mechanisms of Starch Nanocrystals in a Nonvulcanized Natural Rubber Matrix. <i>Biomacromolecules</i> , 2011, 12, 1487-1493.	2.6	52
22	Impact of fibre moisture content on the structure/mechanical properties relationships of PHBV/wheat straw fibres biocomposites. <i>Composites Science and Technology</i> , 2015, 117, 386-391.	3.8	49
23	Understanding external plasticization of melt extruded PHBV wheat straw fibers biodegradable composites for food packaging. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	1.3	44
24	Influence of processing temperature on the water vapour transport properties of wheat gluten based agromaterials. <i>Industrial Crops and Products</i> , 2011, 33, 457-461.	2.5	43
25	Torrefaction treatment of lignocellulosic fibres for improving fibre/matrix adhesion in a biocomposite. <i>Materials and Design</i> , 2016, 92, 223-232.	3.3	41
26	Dry fractionation of olive pomace for the development of food packaging biocomposites. <i>Industrial Crops and Products</i> , 2018, 120, 250-261.	2.5	38
27	How olive pomace can be valorized as fillers to tune the biodegradation of PHBV based composites. <i>Polymer Degradation and Stability</i> , 2019, 166, 325-333.	2.7	38
28	How Performance and Fate of Biodegradable Mulch Films are Impacted by Field Ageing. <i>Journal of Polymers and the Environment</i> , 2018, 26, 2588-2600.	2.4	37
29	Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) films for food packaging: Physical-chemical and structural stability under food contact conditions. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	1.3	32
30	How Vine Shoots as Fillers Impact the Biodegradation of PHBV-Based Composites. <i>International Journal of Molecular Sciences</i> , 2020, 21, 228.	1.8	32
31	How the biodegradability of wheat gluten-based agromaterial can be modulated by adding nanoclays. <i>Polymer Degradation and Stability</i> , 2011, 96, 2088-2097.	2.7	31
32	Dry fractionation of olive pomace as a sustainable process to produce fillers for biocomposites. <i>Powder Technology</i> , 2018, 326, 44-53.	2.1	29
33	Investigating the biodegradation pattern of an ecofriendly pesticide delivery system based on wheat gluten and organically modified montmorillonites. <i>Polymer Degradation and Stability</i> , 2012, 97, 2060-2068.	2.7	26
34	Sorting natural fibres: A way to better understand the role of fibre size polydispersity on the mechanical properties of biocomposites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2017, 95, 12-21.	3.8	26
35	Using life cycle assessment to quantify the environmental benefit of upcycling vine shoots as fillers in biocomposite packaging materials. <i>International Journal of Life Cycle Assessment</i> , 2021, 26, 738-752.	2.2	24
36	Mitigating the Impact of Cellulose Particles on the Performance of Biopolyester-Based Composites by Gas-Phase Esterification. <i>Polymers</i> , 2019, 11, 200.	2.0	22

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37	Effect of the Molecular Structure of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) (P(3HB-3HV)) Produced from Mixed Bacterial Cultures on Its Crystallization and Mechanical Properties. <i>Biomacromolecules</i> , 2020, 21, 4709-4723.	2.6	21
38	Exploring the potential of gas-phase esterification to hydrophobize the surface of micrometric cellulose particles. <i>European Polymer Journal</i> , 2019, 115, 138-146.	2.6	20
39	Eco-Conversion of Two Winery Lignocellulosic Wastes into Fillers for Biocomposites: Vine Shoots and Wine Pomaces. <i>Polymers</i> , 2020, 12, 1530.	2.0	18
40	Surfaces and Interfaces in Natural Fibre Reinforced Composites. <i>Springer Briefs in Molecular Science</i> , 2018, , .	0.1	17
41	Investigating Ethofumesate-Clay Interactions for Pesticide Controlled Release. <i>Soil Science Society of America Journal</i> , 2012, 76, 420-431.	1.2	16
42	Urban parks and gardens green waste: A valuable resource for the production of fillers for biocomposites applications. <i>Waste Management</i> , 2021, 120, 538-548.	3.7	16
43	Biodegradable herbicide delivery systems with slow diffusion in soil and UV protection properties. <i>Pest Management Science</i> , 2014, 70, 1697-1705.	1.7	15
44	Water vapor sorption and diffusion in wheat straw particles and their impact on the mass transfer properties of biocomposites. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	1.3	15
45	Water transport mechanisms in wheat gluten based (nano)composite materials. <i>European Polymer Journal</i> , 2013, 49, 1337-1346.	2.6	13
46	Impact of the processing temperature on the crystallization behavior and mechanical properties of poly[R-3-hydroxybutyrate-co-(R-3-hydroxyvalerate)]. <i>Polymer</i> , 2021, 229, 123987.	1.8	13
47	Polyhydroxybutyrate/hemp biocomposite: tuning performances by process and compatibilisation. <i>Green Materials</i> , 2019, 7, 194-204.	1.1	10
48	Nanoparticle size and water diffusivity in nanocomposite agro-polymer based films. <i>European Polymer Journal</i> , 2013, 49, 299-306.	2.6	9
49	Modification of the Interface/Interphase in Natural Fibre Reinforced Composites: Treatments and Processes. <i>Springer Briefs in Molecular Science</i> , 2018, , 35-70.	0.1	9
50	Physicalâchemical and structural stability of PHBV/wheat straw fibers based biocomposites under food contact conditions. <i>Journal of Applied Polymer Science</i> , 2020, 137, 49231.	1.3	9
51	Water Vapor Sorption and Diffusivity in Bio-Based Poly(ethylene vanillate)âPEV. <i>Polymers</i> , 2021, 13, 524.	2.0	8
52	Assessing the potential of quartz crystal microbalance to estimate water vapor transfer in micrometric size cellulose particles. <i>Carbohydrate Polymers</i> , 2018, 190, 307-314.	5.1	6
53	Upcycling of Vine Shoots: Production of Fillers for PHBV-Based Biocomposite Applications. <i>Journal of Polymers and the Environment</i> , 2021, 29, 404-417.	2.4	6
54	Impact of Two-Dimensional Particle Size Distribution on Estimation of Water Vapor Diffusivity in Micrometric Size Cellulose Particles. <i>Materials</i> , 2018, 11, 1712.	1.3	5

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55	3D Modelling of Mass Transfer into Bio-Composite. <i>Polymers</i> , 2021, 13, 2257.	2.0	5
56	Poly(3-hydroxybutyrate-co-hydroxyvalerate) and wheat straw fibers biocomposites produced by co-grinding: Processing and mechanical behavior. <i>Journal of Composite Materials</i> , 2017, 51, 985-996.	1.2	4
57	Combining ontology and probabilistic models for the design of bio-based product transformation processes. <i>Expert Systems With Applications</i> , 2022, 203, 117406.	4.4	4
58	Physical-Chemical and Structural Stability of Poly(3HB-co-3HV)/(ligno-)cellulosic Fibre-Based Biocomposites over Successive Dishwashing Cycles. <i>Membranes</i> , 2022, 12, 127.	1.4	3
59	Interfaces in Natural Fibre Reinforced Composites: Definitions and Roles. <i>Springer Briefs in Molecular Science</i> , 2018, , 23-34.	0.1	2
60	Adapting gravimetric sorption analyzer to estimate water vapor diffusivity in micrometric size cellulose particles. <i>Cellulose</i> , 2019, 26, 8575-8587.	2.4	2
61	Protein/Clay Nano-Biocomposites. <i>Green Energy and Technology</i> , 2012, , 323-343.	0.4	1
62	Characterization of the Fibre Modifications and Localization of the Functionalization Molecules. <i>Springer Briefs in Molecular Science</i> , 2018, , 71-100.	0.1	1
63	Biocomposites from poly(3-hydroxybutyrate-co-3-hydroxyvalerate) and lignocellulosic fillers: Processes stored in data warehouse structured by an ontology. <i>Data in Brief</i> , 2022, 42, 108191.	0.5	1
64	Introduction on Natural Fibre Structure: From the Molecular to the Macrostructural Level. <i>Springer Briefs in Molecular Science</i> , 2018, , 1-22.	0.1	0
65	Characterization of the Interface/Interphase in Natural Fibre Based Composites. <i>Springer Briefs in Molecular Science</i> , 2018, , 101-133.	0.1	0