HÃ©lÃ¨ne Angellier-Coussy

List of Publications by Year
in descending order

65 papers	4,046 citations	172386 29 h-index	114418 63 g-index
68 all docs	68 docs citations	68 times ranked	3746 citing authors

#	Article	IF	Citations
1	Physical-Chemical and Structural Stability of Poly(3HB-co-3HV)/(ligno-)cellulosic Fibre-Based Biocomposites over Successive Dishwashing Cycles. Membranes, 2022, 12, 127.	1.4	3
2	Combining ontology and probabilistic models for the design of bio-based product transformation processes. Expert Systems With Applications, 2022, 203, 117406.	4.4	4
3	Biocomposites from poly(3-hydroxybutyrate-co-3-hydroxyvalerate) and lignocellulosic fillers: Processes stored in data warehouse structured by an ontology. Data in Brief, 2022, 42, 108191.	0.5	1
4	Using life cycle assessment to quantify the environmental benefit of upcycling vine shoots as fillers in biocomposite packaging materials. International Journal of Life Cycle Assessment, 2021, 26, 738-752.	2.2	24
5	Urban parks and gardens green waste: A valuable resource for the production of fillers for biocomposites applications. Waste Management, 2021, 120, 538-548.	3.7	16
6	Upcycling of Vine Shoots: Production of Fillers for PHBV-Based Biocomposite Applications. Journal of Polymers and the Environment, 2021, 29, 404-417.	2.4	6
7	Water Vapor Sorption and Diffusivity in Bio-Based Poly(ethylene vanillate)â€"PEV. Polymers, 2021, 13, 524.	2.0	8
8	3D Modelling of Mass Transfer into Bio-Composite. Polymers, 2021, 13, 2257.	2.0	5
9	Impact of the processing temperature on the crystallization behavior and mechanical properties of poly[R-3-hydroxybutyrate-co-(R-3-hydroxyvalerate)]. Polymer, 2021, 229, 123987.	1.8	13
10	Eco-Conversion of Two Winery Lignocellulosic Wastes into Fillers for Biocomposites: Vine Shoots and Wine Pomaces. Polymers, 2020, 12, 1530.	2.0	18
11	Effect of the Molecular Structure of Poly(3-hydroxybutyrate-<i>co</i>-3-hydroxyvalerate) (P(3HB-3HV)) Produced from Mixed Bacterial Cultures on Its Crystallization and Mechanical Properties. Biomacromolecules, 2020, 21, 4709-4723.	2.6	21
12	Physicalâ€"chemical and structural stability of PHBV/wheat straw fibers based biocomposites under food contact conditions. Journal of Applied Polymer Science, 2020, 137, 49231.	1.3	9
13	How Vine Shoots as Fillers Impact the Biodegradation of PHBV-Based Composites. International Journal of Molecular Sciences, 2020, 21, 228.	1.8	32
14	Adapting gravimetric sorption analyzer to estimate water vapor diffusivity in micrometric size cellulose particles. Cellulose, 2019, 26, 8575-8587.	2.4	2
15	How olive pomace can be valorized as fillers to tune the biodegradation of PHBV based composites. Polymer Degradation and Stability, 2019, 166, 325-333.	2.7	38
16	Mitigating the Impact of Cellulose Particles on the Performance of Biopolyester-Based Composites by Gas-Phase Esterification. Polymers, 2019, 11, 200.	2.0	22
17	Exploring the potential of gas-phase esterification to hydrophobize the surface of micrometric cellulose particles. European Polymer Journal, 2019, 115, 138-146.	2.6	20
18	Polyhydroxybutyrate/hemp biocomposite: tuning performances by process and compatibilisation. Green Materials, 2019, 7, 194-204.	1.1	10

#	Article	IF	Citations
19	Introduction on Natural Fibre Structure: From the Molecular to the Macrostructural Level. Springer Briefs in Molecular Science, 2018, , 1-22.	0.1	0
20	How the shape of fillers affects the barrier properties of polymer/non-porous particles nanocomposites: A review. Journal of Membrane Science, 2018, 556, 393-418.	4.1	147
21	Surfaces and Interfaces in Natural Fibre Reinforced Composites. Springer Briefs in Molecular Science, 2018, , .	0.1	17
22	Modification of the Interface/Interphase in Natural Fibre Reinforced Composites: Treatments and Processes. Springer Briefs in Molecular Science, 2018, , 35-70.	0.1	9
23	Interfaces in Natural Fibre Reinforced Composites: Definitions and Roles. Springer Briefs in Molecular Science, 2018, , 23-34.	0.1	2
24	Characterization of the Fibre Modifications and Localization of the Functionalization Molecules. Springer Briefs in Molecular Science, 2018, , 71-100.	0.1	1
25	Characterization of the Interface/Interphase in Natural Fibre Based Composites. Springer Briefs in Molecular Science, 2018, , 101-133.	0.1	0
26	Dry fractionation of olive pomace as a sustainable process to produce fillers for biocomposites. Powder Technology, 2018, 326, 44-53.	2.1	29
27	Assessing the potential of quartz crystal microbalance to estimate water vapor transfer in micrometric size cellulose particles. Carbohydrate Polymers, 2018, 190, 307-314.	5.1	6
28	How Performance and Fate of Biodegradable Mulch Films are Impacted by Field Ageing. Journal of Polymers and the Environment, 2018, 26, 2588-2600.	2.4	37
29	The Next Generation of Sustainable Food Packaging to Preserve Our Environment in a Circular Economy Context. Frontiers in Nutrition, 2018, 5, 121.	1.6	266
30	Impact of Two-Dimensional Particle Size Distribution on Estimation of Water Vapor Diffusivity in Micrometric Size Cellulose Particles. Materials, 2018, 11, 1712.	1.3	5
31	Dry fractionation of olive pomace for the development of food packaging biocomposites. Industrial Crops and Products, 2018, 120, 250-261.	2.5	38
32	A research challenge vision regarding management of agricultural waste in a circular bio-based economy. Critical Reviews in Environmental Science and Technology, 2018, 48, 614-654.	6.6	189
33	Sorting natural fibres: A way to better understand the role of fibre size polydispersity on the mechanical properties of biocomposites. Composites Part A: Applied Science and Manufacturing, 2017, 95, 12-21.	3.8	26
34	Poly(3-hydroxybutyrate-co-hydroxyvalerate) and wheat straw fibers biocomposites produced by co-grinding: Processing and mechanical behavior. Journal of Composite Materials, 2017, 51, 985-996.	1.2	4
35	Water vapor sorption and diffusion in wheat straw particles and their impact on the mass transfer properties of biocomposites. Journal of Applied Polymer Science, 2016, 133, .	1.3	15
36	Poly(3â€hydroxybutyrateâ€<i>co</i>â€3â€hydroxyvalerate) films for food packaging: Physicalâ€“chemical and structural stability under food contact conditions. Journal of Applied Polymer Science, 2016, 133, .	1.3	32

#	Article	IF	Citations
37	Torrefaction treatment of lignocellulosic fibres for improving fibre/matrix adhesion in a biocomposite. Materials and Design, 2016, 92, 223-232.	3.3	41
38	Performance and environmental impact of biodegradable polymers as agricultural mulching films. Chemosphere, 2016, 144, 433-439.	4.2	146
39	Vegetal fiberâ€based biocomposites: Which stakes for food packaging applications?. Journal of Applied Polymer Science, 2016, 133, .	1.3	54
40	Exploring the potentialities of using lignocellulosic fibres derived from three food by-products as constituents of biocomposites for food packaging. Industrial Crops and Products, 2015, 69, 110-122.	2.5	91
41	Understanding external plasticization of melt extruded <scp>PHBV</scp>â€"wheat straw fibers biodegradable composites for food packaging. Journal of Applied Polymer Science, 2015, 132, .	1.3	44
42	Sustainable food packaging: Valorising wheat straw fibres for tuning PHBV-based composites properties. Composites Part A: Applied Science and Manufacturing, 2015, 72, 139-147.	3.8	106
43	Impact of fibre moisture content on the structure/mechanical properties relationships of PHBV/wheat straw fibres biocomposites. Composites Science and Technology, 2015, 117, 386-391.	3.8	49
44	Preparation and application of starch nanoparticles for nanocomposites: A review. Reactive and Functional Polymers, 2014, 85, 97-120.	2.0	196
45	Biodegradable herbicide delivery systems with slow diffusion in soil and UV protection properties. Pest Management Science, 2014, 70, 1697-1705.	1.7	15
46	Water transport mechanisms in wheat gluten based (nano)composite materials. European Polymer Journal, 2013, 49, 1337-1346.	2.6	13
47	Biocomposites from wheat proteins and fibers: Structure/mechanical properties relationships. Industrial Crops and Products, 2013, 43, 545-555.	2.5	68
48	Nanoparticle size and water diffusivity in nanocomposite agro-polymer based films. European Polymer Journal, 2013, 49, 299-306.	2.6	9
49	Investigating Ethofumesate-Clay Interactions for Pesticide Controlled Release. Soil Science Society of America Journal, 2012, 76, 420-431.	1.2	16
50	Protein/Clay Nano-Biocomposites. Green Energy and Technology, 2012, , 323-343.	0.4	1
51	Investigating the biodegradation pattern of an ecofriendly pesticide delivery system based on wheat gluten and organically modified montmorillonites. Polymer Degradation and Stability, 2012, 97, 2060-2068.	2.7	26
52	Controlling pesticide release via structuring agropolymer and nanoclays based materials. Journal of Hazardous Materials, 2012, 205-206, 32-39.	6.5	83
53	Reinforcing Mechanisms of Starch Nanocrystals in a Nonvulcanized Natural Rubber Matrix. Biomacromolecules, 2011, 12, 1487-1493.	2.6	52
54	How the biodegradability of wheat gluten-based agromaterial can be modulated by adding nanoclays. Polymer Degradation and Stability, 2011, 96, 2088-2097.	2.7	31

#	ARTICLE	IF	CITATIONS
55	Influence of processing temperature on the water vapour transport properties of wheat gluten based agromaterials. Industrial Crops and Products, 2011, 33, 457-461.	2.5	43
56	How does water diffuse in starch/montmorillonite nano-biocomposite materials?. Carbohydrate Polymers, 2010, 82, 128-135.	5.1	79
57	The molecular structure of waxy maize starch nanocrystals. Carbohydrate Research, 2009, 344, 1558-1566.	1.1	81
58	Functional properties of thermoformed wheat gluten/montmorillonite materials with respect to formulation and processing conditions. Journal of Applied Polymer Science, 2008, 107, 487-496.	1.3	57
59	Functional properties of wheat gluten/montmorillonite nanocomposite films processed by casting. Journal of Membrane Science, 2007, 289, 159-168.	4.1	216
60	Thermoplastic Starchâ˘'Waxy Maize Starch Nanocrystals Nanocomposites. Biomacromolecules, 2006, 7, 531-539.	2.6	322
61	Processing and Structural Properties of Waxy Maize Starch Nanocrystals Reinforced Natural Rubber. Macromolecules, 2005, 38, 3783-3792.	2.2	215
62	Starch Nanocrystal Fillers in an Acrylic Polymer Matrix. Macromolecular Symposia, 2005, 221, 95-104.	0.4	97
63	Mechanical Properties of Waxy Maize Starch Nanocrystal Reinforced Natural Rubber. Macromolecules, 2005, 38, 9161-9170.	2.2	237
64	Surface Chemical Modification of Waxy Maize Starch Nanocrystals. Langmuir, 2005, 21, 2425-2433.	1.6	170
65	Optimization of the Preparation of Aqueous Suspensions of Waxy Maize Starch Nanocrystals Using a Response Surface Methodology. Biomacromolecules, 2004, 5, 1545-1551.	2.6	404