

Laurent M Matuana

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5098476/publications.pdf>

Version: 2024-02-01

70
papers

4,600
citations

94433

37
h-index

98798

67
g-index

74
all docs

74
docs citations

74
times ranked

3017
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface chemistry changes of weathered HDPE/wood-flour composites studied by XPS and FTIR spectroscopy. <i>Polymer Degradation and Stability</i> , 2004, 86, 1-9.	5.8	303
2	Cell morphology and property relationships of microcellular foamed pvc/wood-fiber composites. <i>Polymer Engineering and Science</i> , 1998, 38, 1862-1872.	3.1	223
3	Processing and cell morphology relationships for microcellular foamed PVC/wood-fiber composites. <i>Polymer Engineering and Science</i> , 1997, 37, 1137-1147.	3.1	180
4	Characterization of weathered wood-plastic composite surfaces using FTIR spectroscopy, contact angle, and XPS. <i>Polymer Degradation and Stability</i> , 2007, 92, 1883-1890.	5.8	164
5	Influence of interfacial interactions on the properties of PVC/cellulosic fiber composites. <i>Polymer Composites</i> , 1998, 19, 446-455.	4.6	158
6	Effect of processing method on surface and weathering characteristics of wood-flour/HDPE composites. <i>Journal of Applied Polymer Science</i> , 2004, 93, 1021-1030.	2.6	156
7	Photoaging and stabilization of rigid PVC/wood-fiber composites. <i>Journal of Applied Polymer Science</i> , 2001, 80, 1943-1950.	2.6	136
8	Ultraviolet weathering of photostabilized wood-flour-filled high-density polyethylene composites. <i>Journal of Applied Polymer Science</i> , 2003, 90, 2609-2617.	2.6	128
9	Surface chemistry and mechanical property changes of wood-flour/high-density-polyethylene composites after accelerated weathering. <i>Journal of Applied Polymer Science</i> , 2004, 94, 2263-2273.	2.6	126
10	Accelerated ultraviolet weathering of PVC/wood-flour composites. <i>Polymer Engineering and Science</i> , 2002, 42, 1657-1666.	3.1	124
11	Surface of cellulosic materials modified with functionalized polyethylene coupling agents. <i>Journal of Applied Polymer Science</i> , 2003, 88, 278-286.	2.6	121
12	Foam extrusion of high density polyethylene/wood-flour composites using chemical foaming agents. <i>Journal of Applied Polymer Science</i> , 2003, 88, 3139-3150.	2.6	120
13	Ultraviolet weathering of HDPE/wood-flour composites coextruded with a clear HDPE cap layer. <i>Polymer Degradation and Stability</i> , 2011, 96, 97-106.	5.8	118
14	Relationship between cell morphology and impact strength of microcellular foamed high-density polyethylene/polypropylene blends. <i>Polymer Engineering and Science</i> , 2004, 44, 1551-1560.	3.1	115
15	Effect of surface properties on the adhesion between PVC and wood veneer laminates. <i>Polymer Engineering and Science</i> , 1998, 38, 765-773.	3.1	112
16	Influence of photostabilizers on wood flour-HDPE composites exposed to xenon-arc radiation with and without water spray. <i>Polymer Degradation and Stability</i> , 2006, 91, 3048-3056.	5.8	109
17	Chemical modification of nanocellulose with canola oil fatty acid methyl ester. <i>Carbohydrate Polymers</i> , 2017, 169, 108-116.	10.2	104
18	Impact Modification of Polylactide with a Biodegradable Ethylene/Acrylate Copolymer. <i>Macromolecular Materials and Engineering</i> , 2010, 295, 802-811.	3.6	102

#	ARTICLE	IF	CITATIONS
19	Study of Cell Nucleation in Microcellular Poly(lactic acid) Foamed with Supercritical CO ₂ through a Continuous-Extrusion Process. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 2186-2193.	3.7	102
20	Microcellular Foamed Wood-Plastic Composites by Different Processes: a Review. <i>Macromolecular Materials and Engineering</i> , 2007, 292, 113-127.	3.6	97
21	The effect of low levels of plasticizer on the rheological and mechanical properties of polyvinyl chloride/newsprint-fiber composites. <i>Journal of Vinyl and Additive Technology</i> , 1997, 3, 265-273.	3.4	85
22	Foaming of PS/wood fiber composites using moisture as a blowing agent. <i>Polymer Engineering and Science</i> , 2000, 40, 2124-2132.	3.1	85
23	Cell morphology of extrusion foamed poly(lactic acid) using endothermic chemical foaming agent. <i>Bioresource Technology</i> , 2009, 100, 5947-5954.	9.6	85
24	Water vapor and oxygen barrier properties of extrusion-blown poly(lactic acid)/cellulose nanocrystals nanocomposite films. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 114, 204-211.	7.6	85
25	Novel coupling agents for PVC/wood-flour composites. <i>Journal of Vinyl and Additive Technology</i> , 2005, 11, 160-165.	3.4	77
26	Durability of wood flour-plastic composites exposed to accelerated freeze-thaw cycling. Part I. Rigid PVC matrix. <i>Journal of Vinyl and Additive Technology</i> , 2005, 11, 1-8.	3.4	71
27	Effects of impact modifiers on the properties of rigid PVC/wood-fiber composites. <i>Journal of Vinyl and Additive Technology</i> , 2000, 6, 153-157.	3.4	66
28	Performance of high lignin content cellulose nanocrystals in poly(lactic acid). <i>Polymer</i> , 2018, 135, 305-313.	3.8	59
29	Foaming of rigid PVC/wood-flour composites through a continuous extrusion process. <i>Journal of Vinyl and Additive Technology</i> , 2001, 7, 142-148.	3.4	48
30	Reinforcement of rigid PVC/wood-flour composites with multi-walled carbon nanotubes. <i>Journal of Vinyl and Additive Technology</i> , 2008, 14, 60-64.	3.4	47
31	Microcellular foaming of impact-modified rigid PVC/wood-flour composites. <i>Journal of Vinyl and Additive Technology</i> , 2001, 7, 67-75.	3.4	45
32	Manufacture of rigid PVC/wood-flour composite foams using moisture contained in wood as foaming agent. <i>Journal of Vinyl and Additive Technology</i> , 2002, 8, 264-270.	3.4	45
33	Polybutene as a matrix for wood plastic composites. <i>Composites Science and Technology</i> , 2010, 70, 167-172.	7.8	45
34	Thermal and mechanical properties of polypropylene/wood-flour composites. <i>Journal of Applied Polymer Science</i> , 2011, 119, 3321-3328.	2.6	45
35	Durability of wood flour-plastic composites exposed to accelerated freeze-thaw cycling. II. High density polyethylene matrix. <i>Journal of Applied Polymer Science</i> , 2006, 100, 35-39.	2.6	44
36	Trends in sustainable biobased packaging materials: a mini review. <i>Materials Today Sustainability</i> , 2021, 15, 100084.	4.1	40

#	ARTICLE	IF	CITATIONS
37	Continuous Blending Approach in the Manufacture of Epoxidized Soybean Plasticized Poly(lactic acid) Sheets and Films. <i>Macromolecular Materials and Engineering</i> , 2014, 299, 622-630.	3.6	39
38	Fusion characteristics of rigid PVC/wood-flour composites by torque rheometry. <i>Journal of Vinyl and Additive Technology</i> , 2007, 13, 7-13.	3.4	37
39	Functionalization of wood particles through a reactive extrusion process. <i>Journal of Applied Polymer Science</i> , 2006, 101, 3131-3142.	2.6	34
40	Epoxidized soybean oil plasticized poly(lactic acid) films performance as impacted by storage. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	2.6	33
41	Recent research developments in wood plastic composites. <i>Journal of Vinyl and Additive Technology</i> , 2009, 15, 136-138.	3.4	30
42	Mold susceptibility of rigid PVC/wood-flour composites. <i>Journal of Vinyl and Additive Technology</i> , 2004, 10, 179-186.	3.4	29
43	Online measurement of rheological properties of PVC/wood-flour composites. <i>Journal of Vinyl and Additive Technology</i> , 2004, 10, 121-128.	3.4	29
44	Strategy To Produce Microcellular Foamed Poly(lactic acid)/Wood-Flour Composites in a Continuous Extrusion Process. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 12032-12040.	3.7	29
45	Extrusion blown films of poly(lactic acid) chain extended with food grade multifunctional epoxies. <i>Polymer Engineering and Science</i> , 2019, 59, 2211-2219.	3.1	29
46	Coextruded PVC/wood-flour composites with WPC cap layers. <i>Journal of Vinyl and Additive Technology</i> , 2008, 14, 197-203.	3.4	28
47	Thermoplastic modification of urea formaldehyde wood adhesives to improve moisture resistance. <i>Journal of Applied Polymer Science</i> , 2006, 101, 4222-4229.	2.6	27
48	Performance of poly(lactic acid)/ cellulose nanocrystal composite blown films processed by two different compounding approaches. <i>Polymer Engineering and Science</i> , 2018, 58, 1965-1974.	3.1	27
49	Wood/plastic composites co-extruded with multi-walled carbon nanotube-filled rigid poly(vinyl Tj ETQq1 1 0.784314 rgBT /Over	3.1	26
50	Blown film extrusion of poly(lactic acid) without melt strength enhancers. <i>Journal of Applied Polymer Science</i> , 2017, 134, 45212.	2.6	26
51	A Factorial Design Applied to the Extrusion Foaming of Polypropylene/Wood-Flour Composites. <i>Frontiers in Forests and Global Change</i> , 2001, 20, 115-130.	1.1	25
52	Composite materials manufactured from wood particles modified through a reactive extrusion process. <i>Polymer Composites</i> , 2005, 26, 534-541.	4.6	23
53	Preparation and Characterization of the Nanocomposites from Chemically Modified Nanocellulose and Poly(lactic acid). <i>Journal of Renewable Materials</i> , 2017, 5, 410-422.	2.2	21
54	Surface texture and barrier performance of poly(lactic acid) cellulose nanocrystal extruded cast films. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47594.	2.6	19

#	ARTICLE	IF	CITATIONS
55	Amphiphilic Core/Shell Nanoparticles to Reduce Biocide Leaching From Treated Wood, 1 " Leaching and Biological Efficacy. <i>Macromolecular Materials and Engineering</i> , 2010, 295, 442-450.	3.6	18
56	Potential of extrusion-blown poly(lactic acid)/cellulose nanocrystals nanocomposite films for improving the shelf-life of a dry food product. <i>Food Packaging and Shelf Life</i> , 2021, 29, 100689.	7.5	18
57	Colorimetric and vibrational spectroscopic characterization of weathered surfaces of wood and rigid polyvinyl chloride"wood flour composite lumber. <i>Wood Science and Technology</i> , 2009, 43, 669-678.	3.2	16
58	Continuous extrusion production of microcellular rigid PVC. <i>Journal of Vinyl and Additive Technology</i> , 2009, 15, 211-218.	3.4	15
59	Influence of Lactic Acid Surface Modification of Cellulose Nanofibrils on the Properties of Cellulose Nanofibril Films and Cellulose Nanofibril"Poly(lactic acid) Composites. <i>Biomolecules</i> , 2021, 11, 1346.	4.0	14
60	Wirksamkeit zweier verschiedener Holzschutzmittel im Hinblick auf Pilzbefall und Verfärbung von WPCs. <i>European Journal of Wood and Wood Products</i> , 2007, 65, 331-334.	2.9	12
61	Modeling and optimization of formaldehyde-free wood composites using a Box-Behnken design. <i>Polymer Composites</i> , 2006, 27, 497-503.	4.6	11
62	Microcellular foaming of poly(lactic acid) branched with food"grade chain extenders. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50686.	2.6	11
63	Influence of processing conditions and material compositions on the performance of formaldehyde-free wood-based composites. <i>Polymer Composites</i> , 2006, 27, 599-607.	4.6	10
64	Estimation of modulus of elasticity of plastics and wood plastic composites using a Taber stiffness tester. <i>Composites Science and Technology</i> , 2011, 71, 67-70.	7.8	10
65	Statistical Optimization of Ternary Blends of Poly(lactic acid)/Ethylene Acrylate Copolymer/Wood Flour Composites. <i>Macromolecular Materials and Engineering</i> , 2012, 297, 167-175.	3.6	10
66	Improving gas barrier properties of sugarcane"based <sc>LLDPE</sc> with cellulose nanocrystals. <i>Journal of Applied Polymer Science</i> , 2022, 139, 51515.	2.6	10
67	Influence of a stabilized cap layer on the photodegradation of coextruded high density polyethylene/wood"flour composites. <i>Journal of Vinyl and Additive Technology</i> , 2013, 19, 239-249.	3.4	9
68	Fracture toughness of poly(lactic acid)/ ethylene acrylate copolymer/wood"flour composite ternary blends. <i>Polymer International</i> , 2013, 62, 1053-1058.	3.1	7
69	Rigid PVC/(layered silicate) nanocomposites produced through a novel melt"blending approach. <i>Journal of Vinyl and Additive Technology</i> , 2009, 15, 77-86.	3.4	6
70	Effect of processing parameters on the quality of red oak flakes. <i>International Wood Products Journal</i> , 2017, 8, 139-143.	1.1	0