Laurent M Matuana

List of Publications by Year
in descending order

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	Improving gas barrier properties of sugarcaneâ€based <scp>LLDPE</scp> with cellulose nanocrystals. Journal of Applied Polymer Science, 2022, 139, 51515.	2.6	10
2	Microcellular foaming of poly(lactic acid) branched with foodâ€grade chain extenders. Journal of Applied Polymer Science, 2021, 138, 50686.	2.6	11
3	Potential of extrusion-blown poly(lactic acid)/cellulose nanocrystals nanocomposite films for improving the shelf-life of a dry food product. Food Packaging and Shelf Life, 2021, 29, 100689.	7.5	18
4	Influence of Lactic Acid Surface Modification of Cellulose Nanofibrils on the Properties of Cellulose Nanofibril Films and Cellulose Nanofibrilâ€"Poly(lactic acid) Composites. Biomolecules, 2021, 11, 1346.	4.0	14
5	Trends in sustainable biobased packaging materials: a mini review. Materials Today Sustainability, 2021, 15, 100084.	4.1	40
6	Extrusion blown films of poly(lactic acid) chainâ€extended with food grade multifunctional epoxies. Polymer Engineering and Science, 2019, 59, 2211-2219.	3.1	29
7	Surface texture and barrier performance of poly(lactic acid)â€"cellulose nanocrystal extrudedâ€cast films. Journal of Applied Polymer Science, 2019, 136, 47594.	2.6	19
8	Performance of poly(lactic acid)/ cellulose nanocrystal composite blown films processed by two different compounding approaches. Polymer Engineering and Science, 2018, 58, 1965-1974.	3.1	27
9	Performance of high lignin content cellulose nanocrystals in poly(lactic acid). Polymer, 2018, 135, 305-313.	3.8	59
10	Water vapor and oxygen barrier properties of extrusion-blown poly(lactic acid)/cellulose nanocrystals nanocomposite films. Composites Part A: Applied Science and Manufacturing, 2018, 114, 204-211.	7.6	85
11	Blown film extrusion of poly(lactic acid) without melt strength enhancers. Journal of Applied Polymer Science, 2017, 134, 45212.	2.6	26
12	Chemical modification of nanocellulose with canola oil fatty acid methyl ester. Carbohydrate Polymers, 2017, 169, 108-116.	10.2	104
13	Effect of processing parameters on the quality of red oak flakes. International Wood Products Journal, 2017, 8, 139-143.	1.1	0
14	Preparation and Characterization of the Nanocomposites from Chemically Modified Nanocellulose and Poly(lactic acid). Journal of Renewable Materials, 2017, 5, 410-422.	2.2	21
15	Epoxidized soybean oilâ€plasticized poly(lactic acid) films performance as impacted by storage. Journal of Applied Polymer Science, 2016, 133, .	2.6	33
16	Continuous Blending Approach in the Manufacture of Epoxidized Soybeanâ€<scp>P</scp>lasticized Poly(lactic acid) Sheets and Films. Macromolecular Materials and Engineering, 2014, 299, 622-630.	3.6	39
17	Fracture toughness of poly(lactic acid)/ ethylene acrylate copolymer/woodâ€flour composite ternary blends. Polymer International, 2013, 62, 1053-1058.	3.1	7
18	Strategy To Produce Microcellular Foamed Poly(lactic acid)/Wood-Flour Composites in a Continuous Extrusion Process. Industrial & Engineering Chemistry Research, 2013, 52, 12032-12040.	3.7	29

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19	Influence of a stabilized cap layer on the photodegradation of coextruded high density polyethylene/woodâ€flour composites. Journal of Vinyl and Additive Technology, 2013, 19, 239-249.	3.4	9
20	Statistical Optimization of Ternary Blends of Poly(lactic acid)/Ethylene Acrylate Copolymer/Wood Flour Composites. Macromolecular Materials and Engineering, 2012, 297, 167-175.	3.6	10
21	Estimation of modulus of elasticity of plastics and wood plastic composites using a Taber stiffness tester. Composites Science and Technology, 2011, 71, 67-70.	7.8	10
22	Thermal and mechanical properties of polypropylene/woodâ€flour composites. Journal of Applied Polymer Science, 2011, 119, 3321-3328.	2.6	45
23	Ultraviolet weathering of HDPE/wood-flour composites coextruded with a clear HDPE cap layer. Polymer Degradation and Stability, 2011, 96, 97-106.	5.8	118
24	Wood/plastic composites coâ€extruded with multiâ€walled carbon nanotubeâ€filled rigid poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.1	26
25	Amphiphilic Core/Shell Nanoparticles to Reduce Biocide Leaching From Treated Wood, 1 â€“ Leaching and Biological Efficacy. Macromolecular Materials and Engineering, 2010, 295, 442-450.	3.6	18
26	Impact Modification of Polylactide with a Biodegradable Ethylene/Acrylate Copolymer. Macromolecular Materials and Engineering, 2010, 295, 802-811.	3.6	102
27	Polybutene as a matrix for wood plastic composites. Composites Science and Technology, 2010, 70, 167-172.	7.8	45
28	Study of Cell Nucleation in Microcellular Poly(lactic acid) Foamed with Supercritical CO₂ through a Continuous-Extrusion Process. Industrial & Engineering Chemistry Research, 2010, 49, 2186-2193.	3.7	102
29	Recent research developments in wood plastic composites. Journal of Vinyl and Additive Technology, 2009, 15, 136-138.	3.4	30
30	Continuous extrusion production of microcellular rigid PVC. Journal of Vinyl and Additive Technology, 2009, 15, 211-218.	3.4	15
31	Colorimetric and vibrational spectroscopic characterization of weathered surfaces of wood and rigid polyvinyl chlorideâ€“wood flour composite lumber. Wood Science and Technology, 2009, 43, 669-678.	3.2	16
32	Cell morphology of extrusion foamed poly(lactic acid) using endothermic chemical foaming agent. Bioresource Technology, 2009, 100, 5947-5954.	9.6	85
33	Rigid PVC/(layered silicate) nanocomposites produced through a novel meltâ€blending approach. Journal of Vinyl and Additive Technology, 2009, 15, 77-86.	3.4	6
34	Coextruded PVC/wood-flour composites with WPC cap layers. Journal of Vinyl and Additive Technology, 2008, 14, 197-203.	3.4	28
35	Reinforcement of rigid PVC/woodâ€flour composites with multiâ€walled carbon nanotubes. Journal of Vinyl and Additive Technology, 2008, 14, 60-64.	3.4	47
36	Fusion characteristics of rigid PVC/wood-flour composites by torque rheometry. Journal of Vinyl and Additive Technology, 2007, 13, 7-13.	3.4	37

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37	Microcellular Foamed Wood-Plastic Composites by Different Processes: a Review. Macromolecular Materials and Engineering, 2007, 292, 113-127.	3.6	97
38	Wirksamkeit zweier verschiedener Holzschutzmittel im Hinblick auf Pilzbefall und VerfÃrbung von WPCs. European Journal of Wood and Wood Products, 2007, 65, 331-334.	2.9	12
39	Characterization of weathered woodâ€“plastic composite surfaces using FTIR spectroscopy, contact angle, and XPS. Polymer Degradation and Stability, 2007, 92, 1883-1890.	5.8	164
40	Influence of processing conditions and material compositions on the performance of formaldehyde-free wood-based composites. Polymer Composites, 2006, 27, 599-607.	4.6	10
41	Modeling and optimization of formaldehyde-free wood composites using a Box-Behnken design. Polymer Composites, 2006, 27, 497-503.	4.6	11
42	Influence of photostabilizers on wood flourâ€“HDPE composites exposed to xenon-arc radiation with and without water spray. Polymer Degradation and Stability, 2006, 91, 3048-3056.	5.8	109
43	Functionalization of wood particles through a reactive extrusion process. Journal of Applied Polymer Science, 2006, 101, 3131-3142.	2.6	34
44	Durability of wood flour-plastic composites exposed to accelerated freezeâ€“thaw cycling. II. High density polyethylene matrix. Journal of Applied Polymer Science, 2006, 100, 35-39.	2.6	44
45	Thermoplastic modification of ureaâ€“formaldehyde wood adhesives to improve moisture resistance. Journal of Applied Polymer Science, 2006, 101, 4222-4229.	2.6	27
46	Composite materials manufactured from wood particles modified through a reactive extrusion process. Polymer Composites, 2005, 26, 534-541.	4.6	23
47	Durability of wood flour-plastic composites exposed to accelerated freeze-thaw cycling. Part I. Rigid PVC matrix. Journal of Vinyl and Additive Technology, 2005, 11, 1-8.	3.4	71
48	Novel coupling agents for PVC/wood-flour composites. Journal of Vinyl and Additive Technology, 2005, 11, 160-165.	3.4	77
49	Mold susceptibility of rigid PVC/wood-flour composites. Journal of Vinyl and Additive Technology, 2004, 10, 179-186.	3.4	29
50	Online measurement of rheological properties of PVC/wood-flour composites. Journal of Vinyl and Additive Technology, 2004, 10, 121-128.	3.4	29
51	Relationship between cell morphology and impact strength of microcellular foamed high-density polyethylene/polypropylene blends. Polymer Engineering and Science, 2004, 44, 1551-1560.	3.1	115
52	Effect of processing method on surface and weathering characteristics of wood-flour/HDPE composites. Journal of Applied Polymer Science, 2004, 93, 1021-1030.	2.6	156
53	Surface chemistry and mechanical property changes of wood-flour/high-density-polyethylene composites after accelerated weathering. Journal of Applied Polymer Science, 2004, 94, 2263-2273.	2.6	126
54	Surface chemistry changes of weathered HDPE/wood-flour composites studied by XPS and FTIR spectroscopy. Polymer Degradation and Stability, 2004, 86, 1-9.	5.8	303

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55	Surface of cellulosic materials modified with functionalized polyethylene coupling agents. Journal of Applied Polymer Science, 2003, 88, 278-286.	2.6	121
56	Foam extrusion of high density polyethylene/wood-flour composites using chemical foaming agents. Journal of Applied Polymer Science, 2003, 88, 3139-3150.	2.6	120
57	Ultraviolet weathering of photostabilized wood-flour-filled high-density polyethylene composites. Journal of Applied Polymer Science, 2003, 90, 2609-2617.	2.6	128
58	Manufacture of rigid PVC/wood-flour composite foams using moisture contained in wood as foaming agent. Journal of Vinyl and Additive Technology, 2002, 8, 264-270.	3.4	45
59	Accelerated ultraviolet weathering of PVC/wood-flour composites. Polymer Engineering and Science, 2002, 42, 1657-1666.	3.1	124
60	Foaming of rigid PVC/wood-flour composites through a continuous extrusion process. Journal of Vinyl and Additive Technology, 2001, 7, 142-148.	3.4	48
61	Microcellular foaming of impact-modified rigid PVC/wood-flour composites. Journal of Vinyl and Additive Technology, 2001, 7, 67-75.	3.4	45
62	A Factorial Design Applied to the Extrusion Foaming of Polypropylene/Wood-Flour Composites. Frontiers in Forests and Global Change, 2001, 20, 115-130.	1.1	25
63	Photoaging and stabilization of rigid PVC/wood-fiber composites. Journal of Applied Polymer Science, 2001, 80, 1943-1950.	2.6	136
64	Foaming of PS/wood fiber composites using moisture as a blowing agent. Polymer Engineering and Science, 2000, 40, 2124-2132.	3.1	85
65	Effects of impact modifiers on the properties of rigid PVC/wood-fiber composites. Journal of Vinyl and Additive Technology, 2000, 6, 153-157.	3.4	66
66	Influence of interfacial interactions on the properties of PVC/cellulosic fiber composites. Polymer Composites, 1998, 19, 446-455.	4.6	158
67	Effect of surface properties on the adhesion between PVC and wood veneer laminates. Polymer Engineering and Science, 1998, 38, 765-773.	3.1	112
68	Cell morphology and property relationships of microcellular foamed pvc/wood-fiber composites. Polymer Engineering and Science, 1998, 38, 1862-1872.	3.1	223
69	The effect of low levels of plasticizer on the rheological and mechanical properties of polyvinyl chloride/newsprint-fiber composites. Journal of Vinyl and Additive Technology, 1997, 3, 265-273.	3.4	85
70	Processing and cell morphology relationships for microcellular foamed PVC/wood-fiber composites. Polymer Engineering and Science, 1997, 37, 1137-1147.	3.1	180