Maria LluÃ¯sa Maspoch Ruldua

List of Publications by Year
in descending order

109 papers	3,289 citations	172386 29 h-index	182361 51 g-index
111 all docs	111 docs citations	111 times ranked	3117 citing authors

#	Article	IF	Citations
1	Processing of poly(lactic acid): Characterization of chemical structure, thermal stability and mechanical properties. Polymer Degradation and Stability, 2010, 95, 116-125.	2.7	547
2	Effects of recycling on the microstructure and the mechanical properties of isotactic polypropylene. Journal of Materials Science, 2001, 36, 2607-2613.	1.7	160
3	Influence of annealing on the microstructural, tensile and fracture properties of polypropylene films. Polymer, 2001, 42, 1697-1705.	1.8	136
4	The Essential Work of Fracture (EWF) method â€“ Analyzing the Post-Yielding Fracture Mechanics of polymers. Engineering Failure Analysis, 2009, 16, 2604-2617.	1.8	116
5	Polymer/clay aerogel composites with flame retardant agents: Mechanical, thermal and fire behavior. Materials & Design, 2013, 52, 609-614.	5.1	84
6	Processing of poly(lactic acid)/organomontmorillonite nanocomposites: Microstructure, thermal stability and kinetics of the thermal decomposition. Chemical Engineering Journal, 2011, 178, 451-460.	6.6	69
7	Kinetics of the thermal decomposition of processed poly(lactic acid). Polymer Degradation and Stability, 2010, 95, 2508-2514.	2.7	66
8	Sheets of branched poly(lactic acid) obtained by one step reactive extrusion calendering process: Melt rheology analysis. EXPRESS Polymer Letters, 2013, 7, 304-318.	1.1	66
9	Fracture behaviour of polypropylene films at different temperatures: assessment of the EWF parameters. Polymer, 2001, 42, 2665-2674.	1.8	65
10	On the essential work of fracture method: Energy partitioning of the fracture process in iPP films. Polymer Bulletin, 1999, 42, 101-108.	1.7	57
11	On tearing of ductile polymer films using the essential work of fracture (EWF) method. Acta Materialia, 2003, 51, 4929-4938.	3.8	51
12	Essential work of fracture on PET films: influence of the thickness and the orientation. Polymer Testing, 2000, 19, 559-568.	2.3	49
13	Effect of the Recycling and Annealing on the Mechanical and Fracture Properties of Poly(Lactic Acid). Journal of Polymers and the Environment, 2010, 18, 654-660.	2.4	49
14	Fracture behavior of quenched poly(lactic acid). EXPRESS Polymer Letters, 2011, 5, 82-91.	1.1	47
15	Enhanced general analytical equation for the kinetics of the thermal degradation of poly(lactic acid) driven by random scission. Polymer Testing, 2013, 32, 937-945.	2.3	47
16	Characterisation of injected EPBC plaques using the essential work of fracture (EWF) method. Polymer, 2002, 43, 4177-4183.	1.8	45
17	Multilayer cotton fabric bio-composites based on PLA and PHB copolymer for industrial load carrying applications. Composites Part B: Engineering, 2019, 163, 761-768.	5.9	44
18	PLA/SiO₂ composites: Influence of the filler modifications on the morphology, crystallization behavior, and mechanical properties. Journal of Applied Polymer Science, 2017, 134, 45367.	1.3	43

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19	Epoxy coupling agent for PLA and PHB copolymer-based cotton fabric bio-composites. Composites Part B: Engineering, 2018, 148, 188-197.	5.9	42
20	Influence of processing on the ethylene-vinyl alcohol (EVOH) properties: Application of the successive self-nucleation and annealing (SSA) technique. EXPRESS Polymer Letters, 2010, 4, 153-160.	1.1	40
21	Effects of composition and transesterification catalysts on the physico-chemical and dynamic properties of PC/PET blends rich in PC. Journal of Materials Science, 2010, 45, 6623-6633.	1.7	36
22	Microcellular PP/GF composites: Morphological, mechanical and fracture characterization. Composites Part A: Applied Science and Manufacturing, 2018, 104, 1-13.	3.8	35
23	Effects of Thickness, Deformation Rate and Energy Partitioning on the Work of Fracture Parameters of uPVC Films. Polymer Bulletin, 2003, 50, 279-286.	1.7	34
24	Influence of crystallinity on the fracture toughness of poly(lactic acid)/montmorillonite nanocomposites prepared by twinâ€screw extrusion. Journal of Applied Polymer Science, 2011, 120, 896-905.	1.3	34
25	Fracture behaviour of polypropylene films at different temperatures: fractography and deformation mechanisms studied by SEM. Polymer, 2002, 43, 3083-3091.	1.8	33
26	Microcellular Foaming of Layered Double Hydroxideâ^'Polymer Nanocomposites. Industrial & Engineering Chemistry Research, 2011, 50, 5239-5247.	1.8	32
27	Effect of the unidirectional drawing on the thermal and mechanical properties of PLA films with different <scp>L</scp>â€isomer content. Journal of Applied Polymer Science, 2013, 127, 2661-2669.	1.3	31
28	Influence of femtolaser notch sharpening technique in the determination of essential work of fracture (EWF) parameters. Engineering Fracture Mechanics, 2009, 76, 1247-1254.	2.0	30
29	Sheets of branched poly(lactic acid) obtained by one-step reactive extrusionâ€“calendering process: physical aging and fracture behavior. Journal of Materials Science, 2014, 49, 4093-4107.	1.7	30
30	Crystallization of triethylâ€citrateâ€plasticized poly(lactic acid) induced by chitin nanocrystals. Journal of Applied Polymer Science, 2019, 136, 47936.	1.3	30
31	Effects of injection moulding induced morphology on the fracture behaviour of virgin and recycled polypropylene. Polymer, 2003, 44, 6959-6964.	1.8	29
32	Uniaxial tensile behavior and thermoforming characteristics of high barrier EVOH-based blends of interest in food packaging. Polymer Engineering and Science, 2004, 44, 598-608.	1.5	29
33	Microcellular injection moulding: A comparison between MuCell process and the novel micro-foaming technology IQ Foam. Journal of Materials Processing Technology, 2019, 268, 162-170.	3.1	29
34	Fracture behaviour of virgin and recycled isotactic polypropylene. Journal of Materials Science, 2001, 36, 5073-5078.	1.7	28
35	Essential work of fracture analysis of the tearing of a ductile polymer film. Engineering Fracture Mechanics, 2010, 77, 2654-2661.	2.0	27
36	Small punch test on the analysis of fracture behaviour of PLA-nanocomposite films. Polymer Testing, 2014, 33, 21-29.	2.3	27

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37	Microwaveâ€crosslinked bioâ€based starch/clay aerogels. Polymer International, 2016, 65, 899-904.	1.6	27
38	Using viscoelastic properties to quantitatively estimate the amount of modified poly(lactic acid) chains through reactive extrusion. Journal of Rheology, 2015, 59, 1191-1227.	1.3	26
39	Study of the interface behaviour between MABS/TPU bi-layer structures obtained through over moulding. Materials & Design, 2009, 30, 3979-3988.	5.1	25
40	Effect of the viscosity ratio on the PLA/PA10.10 bioblends morphology and mechanical properties. EXPRESS Polymer Letters, 2018, 12, 569-582.	1.1	25
41	Characterisation of filled and recycled PA6. Macromolecular Symposia, 2003, 194, 295-304.	0.4	24
42	Improvement of the thermal stability of branched poly(lactic acid) obtained by reactive extrusion. Polymer Degradation and Stability, 2014, 104, 40-49.	2.7	24
43	Use of extensometers on essential work of fracture (EWF) tests. Polymer Testing, 2008, 27, 491-497.	2.3	22
44	Enhanced general analytical equation for the kinetics of the thermal degradation of poly(lactic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 46 2014, 101, 52-59.	2.7	22
45	Reactive extrusion: A useful process to manufacture structurally modified PLA/o-MMT composites. Composites Part A: Applied Science and Manufacturing, 2016, 88, 106-115.	3.8	22
46	Low-rate fracture behaviour of magnesium hydroxide filled polypropylene block copolymer. Polymer Bulletin, 1998, 41, 615-622.	1.7	21
47	Dynamic mechanical properties of polycarbonate and acrylonitrile-butadiene-styrene copolymer blends. Journal of Applied Polymer Science, 2002, 83, 1507-1516.	1.3	21
48	The essential work of fracture of a thermoplastic elastomer. Polymer Bulletin, 1997, 39, 249-255.	1.7	20
49	Melt-processing of cellulose nanofibril/polylactide bionanocomposites via a sustainable polyethylene glycol-based carrier system. Carbohydrate Polymers, 2019, 224, 115188.	5.1	20
50	Polycarbonate/acrylonitrile-butadiene-styrene blends: miscibility and interfacial adhesion. Polymer Bulletin, 1998, 41, 721-728.	1.7	19
51	Application of the miniature small punch test for the mechanical characterization of polymer materials. Theoretical and Applied Fracture Mechanics, 2016, 86, 78-83.	2.1	19
52	Effect of Chitin Nanocrystals on Crystallization and Properties of Poly(lactic acid)-Based Nanocomposites. Polymers, 2020, 12, 726.	2.0	19
53	Strain induced crystallization in vulcanized natural rubber containing ground tire rubber particles with reinforcement and nucleation abilities. Polymer Testing, 2021, 101, 107313.	2.3	19
54	Kinetics of the Thermal Degradation of Poly(lactic acid) and Polyamide Bioblends. Polymers, 2021, 13, 3996.	2.0	19

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55	Plane strain essential work of fracture in SENB geometry at low and high strain rates of PC/ABS blends. Polymer Bulletin, 1997, 39, 511-518.	1.7	18
56	Influence of EMAA compatibilizer on the structure and properties of HDPE/hydrotalcite nanocomposites prepared by melt mixing. Journal of Applied Polymer Science, 2009, 113, 950-958.	1.3	18
57	Multivariable methods applied to FTIR: A powerful technique to highlight architectural changes in poly(lactic acid). Polymer Testing, 2018, 65, 264-269.	2.3	18
58	Ductile-brittle transition behaviour of PLA/o-MMT films during the physical aging process. EXPRESS Polymer Letters, 2015, 9, 185-195.	1.1	17
59	Structure and Properties of Reactively Extruded Opaque Post-Consumer Recycled PET. Polymers, 2021, 13, 3531.	2.0	17
60	Elastocaloric effect in vulcanized natural rubber and natural/wastes rubber blends. Polymer, 2021, 236, 124309.	1.8	17
61	Toughening of unsaturated polyester with rubber particles. Part I: Morphological study. Polymer Engineering and Science, 1998, 38, 282-289.	1.5	16
62	Glass bead filled polystyrene composites: morphology and fracture. Polymer Bulletin, 2002, 47, 587-594.	1.7	16
63	Fracture behaviour of de-aged poly(lactic acid) assessed by essential work of fracture and J-Integral methods. Polymer Testing, 2010, 29, 984-990.	2.3	16
64	PLA/PA Bio-Blends: Induced Morphology by Extrusion. Polymers, 2020, 12, 10.	2.0	16
65	Effect of microcellular foaming on the fracture behavior of ABS polymer. Journal of Applied Polymer Science, 2016, 133, .	1.3	15
66	Influence of processing on ethylene-propylene block copolymers: Structure and mechanical behavior. Journal of Applied Polymer Science, 2004, 93, 2866-2878.	1.3	14
67	Impact characterization of a carbon fiber-epoxy laminate using a nonconservative model. Journal of Applied Polymer Science, 2005, 97, 2256-2263.	1.3	14
68	Fracture behaviour of poly[ethyleneâ€“(vinyl alcohol)]/organoâ€clay composites. Polymer International, 2009, 58, 648-655.	1.6	14
69	Fracture characterization of ductile polymers through methods based on load separation. Polymer Testing, 2009, 28, 204-208.	2.3	14
70	Methane hydrate: shifting the coexistence temperature to higher temperatures with an external electric field. Molecular Simulation, 2016, 42, 1014-1023.	0.9	14
71	Thermal degradation of poly(lactic acid) and acrylonitrile-butadiene-styrene bioblends: Elucidation of reaction mechanisms. Thermochimica Acta, 2017, 654, 157-167.	1.2	14
72	Toughening of unsaturated polyester with rubber particles. Part II: Fracture behavior. Polymer Engineering and Science, 1998, 38, 290-298.	1.5	13

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73	Poly(propylene)/PET/Undecyl Ammonium Montmorillonite Nanocomposites. Synthesis and Characterization. Macromolecular Symposia, 2005, 221, 63-74.	0.4	13
74	Influence of injection molding parameters on the morphology, mechanical and surface properties of <scp>ABS</scp> foams. Advances in Polymer Technology, 2018, 37, 2707-2720.	0.8	13
75	Kinetics of the thermal degradation of poly(lactic acid) obtained by reactive extrusion: Influence of the addition of montmorillonite nanoparticles. Polymer Testing, 2015, 48, 69-81.	2.3	12
76	Mechanical and Barrier Properties Enhancement in Film Extruded Bioâ€Polyamides With Modified Nanoclay. Polymer Composites, 2019, 40, 2617-2628.	2.3	12
77	Influence of processing on ethylene propylene block copolymers (II): Fracture behavior. Journal of Applied Polymer Science, 2006, 101, 2714-2724.	1.3	11
78	The effect of organoâ€modifier on the structure and properties of poly[ethyleneâ€“(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td	1.6	11
79	Analysis and Thermo-Mechanical Characterization of Mixed Plastic Wastes. Polymer-Plastics Technology and Engineering, 2013, 52, 16-23.	1.9	11
80	Morphology and Mechanical Characterization of ABS Foamed by Microcellular Injection Molding. Procedia Engineering, 2015, 132, 15-22.	1.2	11
81	The Influence of the Clay Particles on the Mechanical Properties and Fracture Behavior of PLA/oâ€MMT Composite Films. Advances in Polymer Technology, 2015, 34, .	0.8	11
82	Biphasic polylactide/polyamide 6,10 blends: Influence of composition on polyamide structure and polyester crystallization. Polymer, 2020, 202, 122676.	1.8	11
83	Determination of essential work of fracture in EPBC sheets obtained by different transformation processes. Journal of Materials Science, 2005, 40, 1967-1974.	1.7	10
84	Essential work of fracture analysis of glass microsphere-filled polypropylene and polypropylene/poly (ethylene terephthalate-co-isophthalate) blend-matrix composites. Polymer Testing, 2007, 26, 761-769.	2.3	10
85	Poly(lactic acid) and acrylonitrileâ^'butadieneâ^'styrene blends: Influence of adding ABSâ^'gâ^'MAH compatibilizer on the kinetics of the thermal degradation. Polymer Testing, 2018, 67, 468-476.	2.3	10
86	The Effect of Titanium Dioxide Surface Modification on the Dispersion, Morphology, and Mechanical Properties of Recycled PP/PET/TiO2 PBNANOs. Polymers, 2019, 11, 1692.	2.0	10
87	Multivariate identification of extruded PLA samples from the infrared spectrum. Journal of Materials Science, 2020, 55, 1269-1279.	1.7	10
88	Impact of Titanium Dioxide in the Mechanical Recycling of Post-Consumer Polyethylene Terephthalate Bottle Waste: Tensile and Fracture Behavior. Polymers, 2021, 13, 310.	2.0	10
89	Poly (Lactic Acid)/Ground Tire Rubber Blends Using Peroxide Vulcanization. Polymers, 2021, 13, 1496.	2.0	10
90	Mechanical Properties and Morphology of Multifunctional Polypropylene Foams. Frontiers in Forests and Global Change, 2011, 30, 187-200.	0.6	9

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91	Improvement of the replication quality of randomly micro-textured injection-moulding components using a multi-scale surface analysis. Journal of Manufacturing Processes, 2019, 42, 67-81.	2.8	9
92	Effect of the Strain Rate on Damage in Filled EPDM during Single and Cyclic Loadings. Polymers, 2020, 12, 3021.	2.0	9
93	Heat source and voiding signatures of Mullins damage in filled EPDM. Polymer Testing, 2020, 91, 106838.	2.3	8
94	The Effect of Glass Fibre and a Phosphorus-Containing Flame Retardant on the Flammability of Recycled PET. Macromolecular Symposia, 2005, 221, 175-184.	0.4	7
95	Essential work of fracture testing of PC-rich PET/PC blends with and without transesterification catalysts. Journal of Materials Science, 2010, 45, 2907-2915.	1.7	7
96	Effect of the Strain Rate and Drawing Temperature on the Mechanical Behavior of EVOH and EVOH Composites. Advances in Polymer Technology, 2013, 32, .	0.8	7
97	Cheaper membrane materials for microalgae dewatering. Journal of Materials Science, 2014, 49, 7031-7039.	1.7	7
98	Filled PMMA: mechanical properties and fracture behaviour. Macromolecular Symposia, 2001, 169, 159-164.	0.4	6
99	Evaluation of the fracture behavior of multilayered polypropylene sheets obtained by coextrusion. Polymer Engineering and Science, 2007, 47, 1365-1372.	1.5	6
100	Using the small punch test to analyse the influence of ultraviolet radiation on the mechanical behaviour of recycled polyethylene terephthalate. Journal of Strain Analysis for Engineering Design, 2019, 54, 401-407.	1.0	5
101	Orientation of Polylactic Acidâ€“Chitin Nanocomposite Films via Combined Calendering and Uniaxial Drawing: Effect on Structure, Mechanical, and Thermal Properties. Nanomaterials, 2021, 11, 3308.	1.9	5
102	Hydrostatic pressure dependence in tensile and compressive behavior of an <scp>acrylonitrileâ€“butadieneâ€“styrene</scp> copolymer. Journal of Applied Polymer Science, 0, , 52295.	1.3	4
103	Polypropylene filled with flame retardant fillers: mechanical and fracture properties. Macromolecular Symposia, 2001, 169, 165-170.	0.4	3
104	The effect of compatibilizing and coupling agents on the mechanical properties of glass bead filled PP/PET blends. Macromolecular Symposia, 2003, 194, 225-232.	0.4	3
105	Influence of topographical features on the surface appearance measurement of injection moulded components. Polymer Testing, 2021, 93, 106968.	2.3	3
106	Extruded-Calendered Sheets of Fully Recycled PP/Opaque PET Blends: Mechanical and Fracture Behaviour. Polymers, 2021, 13, 2360.	2.0	3
107	Characterization of Highly Oriented Organoclay/Poly(methyl methacrylate) Moulded Nanocomposites. Journal of Nanoscience and Nanotechnology, 2010, 10, 1304-1312.	0.9	2
108	IndentaciÃ³n por impacto de baja energÃa: modelo completo. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2004, 43, 324-326.	0.9	1

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109	Essential Work of Fracture of Injection Moulded Samples of Pet and PET/PC Blends. European Structural Integrity Society, 2003, 32, 77-88.	0.1	0