Luc Avérous

List of Publications by Year in descending order

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228 papers

18,449 citations

66 h-index

14655

127 g-index

270 all docs

270 docs citations

times ranked

270

14828 citing authors

#	Article	IF	CITATIONS
1	Chemical modification of lignins: Towards biobased polymers. Progress in Polymer Science, 2014, 39, 1266-1290.	24.7	1,458
2	Poly(lactic acid): plasticization and properties of biodegradable multiphase systems. Polymer, 2001, 42, 6209-6219.	3.8	1,369
3	Nano-biocomposites: Biodegradable polyester/nanoclay systems. Progress in Polymer Science, 2009, 34, 125-155.	24.7	897
4	Biodegradable Multiphase Systems Based on Plasticized Starch: A Review. Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics, 2004, 44, 231-274.	2.2	620
5	Cellulose-Based Bio- and Nanocomposites: A Review. International Journal of Polymer Science, 2011, 2011, 1-35.	2.7	499
6	Properties of thermoplastic blends: starch–polycaprolactone. Polymer, 2000, 41, 4157-4167.	3.8	498
7	Biocomposites based on plasticized starch: thermal and mechanical behaviours. Carbohydrate Polymers, 2004, 56, 111-122.	10.2	477
8	Starch-based nano-biocomposites. Progress in Polymer Science, 2013, 38, 1590-1628.	24.7	455
9	Antioxidant properties of lignin in polypropylene. Polymer Degradation and Stability, 2003, 81, 9-18.	5.8	356
10	Plasticized starch–cellulose interactions in polysaccharide composites. Polymer, 2001, 42, 6565-6572.	3.8	296
11	Progress in nano-biocomposites based on polysaccharides and nanoclays. Materials Science and Engineering Reports, 2009, 67, 1-17.	31.8	267
12	Chemical modification of tannins to elaborate aromatic biobased macromolecular architectures. Green Chemistry, 2015, 17, 2626-2646.	9.0	265
13	Mixed culture polyhydroxyalkanoate (PHA) production from volatile fatty acid (VFA)-rich streams: Effect of substrate composition and feeding regime on PHA productivity, composition and properties. Journal of Biotechnology, 2011, 151, 66-76.	3.8	244
14	Rheology to understand and optimize processibility, structures and properties of starch polymeric materials. Progress in Polymer Science, 2012, 37, 595-623.	24.7	229
15	A fully bio-based polyimine vitrimer derived from fructose. Green Chemistry, 2019, 21, 1596-1601.	9.0	197
16	Biobased polyurethanes for biomedical applications. Bioactive Materials, 2021, 6, 1083-1106.	15.6	191
17	Properties of biocomposites based on lignocellulosic fillers. Carbohydrate Polymers, 2006, 66, 480-493.	10.2	190
18	Polyurethanes Based on Castor Oil: Kinetics, Chemical, Mechanical and Thermal Properties. Macromolecular Materials and Engineering, 2008, 293, 922-929.	3.6	190

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19	From the Synthesis of Biobased Cyclic Carbonate to Polyhydroxyurethanes: A Promising Route towards Renewable Nonâ€Isocyanate Polyurethanes. ChemSusChem, 2019, 12, 3410-3430.	6.8	179
20	Biocomposites based on plasticized starch. Biofuels, Bioproducts and Biorefining, 2009, 3, 329-343.	3.7	167
21	Structure and properties of glycerol-plasticized chitosan obtained by mechanical kneading. Carbohydrate Polymers, 2011, 83, 947-952.	10.2	166
22	Evaluation of biological degradation of polyurethanes. Biotechnology Advances, 2020, 39, 107457.	11.7	164
23	Renewable polyols for advanced polyurethane foams from diverse biomass resources. Polymer Chemistry, 2018, 9, 4258-4287.	3.9	156
24	Properties of Biodegradable Multilayer Films Based on Plasticized Wheat Starch. Starch/Staerke, 2001, 53, 372.	2.1	152
25	Towards bio-upcycling of polyethylene terephthalate. Metabolic Engineering, 2021, 66, 167-178.	7.0	151
26	Aromatic Copolyester-based Nano-biocomposites: Elaboration, Structural Characterization and Properties. Journal of Polymers and the Environment, 2006, 14, 393-401.	5.0	148
27	Blends of thermoplastic starch and polyesteramide: processing and properties. Journal of Applied Polymer Science, 2000, 76, 1117-1128.	2.6	144
28	Starch-based biodegradable blends: morphology and interface properties. Polymer International, 2004, 53, 2115-2124.	3.1	140
29	Thermal and thermo-mechanical degradation of poly(3-hydroxybutyrate)-based multiphase systems. Polymer Degradation and Stability, 2008, 93, 413-421.	5 . 8	138
30	New Approach to Elaborate Exfoliated Starch-Based Nanobiocomposites. Biomacromolecules, 2008, 9, 896-900.	5 . 4	138
31	Association between plasticized starch and polyesters: Processing and performances of injected biodegradable systems. Polymer Engineering and Science, 2001, 41, 727-734.	3.1	134
32	Starch nano-biocomposites based on needle-like sepiolite clays. Carbohydrate Polymers, 2010, 80, 145-153.	10.2	133
33	Properties of glycerol-plasticized alginate films obtained by thermo-mechanical mixing. Food Hydrocolloids, 2017, 63, 414-420.	10.7	131
34	Starch-based nano-biocomposites: Plasticizer impact on the montmorillonite exfoliation process. Carbohydrate Polymers, 2010, 79, 941-947.	10.2	127
35	Original polyols based on organosolv lignin and fatty acids: new bio-based building blocks for segmented polyurethane synthesis. Green Chemistry, 2014, 16, 3958-3970.	9.0	126
36	Biodegradable Polymers. Green Energy and Technology, 2012, , 13-39.	0.6	124

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37	Starch-Based Biodegradable Materials Suitable for Thermoforming Packaging. Starch/Staerke, 2001, 53, 368.	2.1	122
38	Innovative thermoplastic chitosan obtained by thermo-mechanical mixing with polyol plasticizers. Carbohydrate Polymers, 2013, 95, 241-251.	10.2	122
39	Properties of thermoplastic composites based on wheat-straw lignocellulosic fillers. Journal of Applied Polymer Science, 2004, 93, 428-436.	2.6	114
40	Analysis of the Structure-Properties Relationships of Different Multiphase Systems Based on Plasticized Poly(Lactic Acid). Journal of Polymers and the Environment, 2011, 19, 362-371.	5.0	113
41	Structure-properties relationships of cellular materials from biobased polyurethane foams. Materials Science and Engineering Reports, 2021, 145, 100608.	31.8	112
42	Network Design to Control Polyimine Vitrimer Properties: Physical Versus Chemical Approach. Macromolecules, 2020, 53, 3796-3805.	4.8	111
43	Structure and Properties of PHA/Clay Nanoâ€Biocomposites Prepared by Melt Intercalation. Macromolecular Chemistry and Physics, 2008, 209, 1473-1484.	2.2	110
44	Polylactic Acid: Synthesis, Properties and Applications. , 2008, , 433-450.		110
45	Original biobased nonisocyanate polyurethanes: solvent- and catalyst-free synthesis, thermal properties and rheological behaviour. RSC Advances, 2014, 4, 54018-54025.	3.6	109
46	Synthesis and evaluation of functional alginate hydrogels based on click chemistry for drug delivery applications. Carbohydrate Polymers, 2018, 190, 271-280.	10.2	109
47	Synthesis, structure and properties of fully biobased thermoplastic polyurethanes, obtained from a diisocyanate based on modified dimer fatty acids, and different renewable diols. European Polymer Journal, 2014, 61, 197-205.	5.4	108
48	Enzymatic recycling of thermoplastic polyurethanes: Synergistic effect of an esterase and an amidase and recovery of building blocks. Waste Management, 2019, 85, 141-150.	7.4	108
49	New Insights on the Chemical Modification of Lignin: Acetylation versus Silylation. ACS Sustainable Chemistry and Engineering, 2016, 4, 5212-5222.	6.7	103
50	Relationship between morphology, properties and degradation parameters ofÂnovative biobased thermoplastic polyurethanes obtained from dimer fatty acids. Polymer Degradation and Stability, 2012, 97, 1964-1969.	5.8	98
51	Effects of lignin content on the properties of lignocellulose-based biocomposites. Carbohydrate Polymers, 2006, 66, 537-545.	10.2	97
52	Effect of clay organomodifiers on degradation of polyhydroxyalkanoates. Polymer Degradation and Stability, 2009, 94, 789-796.	5.8	97
53	Biobased vitrimers: Towards sustainable and adaptable performing polymer materials. Progress in Polymer Science, 2022, 127, 101515.	24.7	94
54	Dimer acid-based thermoplastic bio-polyamides: Reaction kinetics, properties and structure. Polymer, 2010, 51, 5895-5902.	3.8	90

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55	From Lab to Market: Current Strategies for the Production of Biobased Polyols. ACS Sustainable Chemistry and Engineering, 2021, 9, 10664-10677.	6.7	90
56	Biodegradable Blends Based on Starch and Poly(Lactic Acid): Comparison of Different Strategies and Estimate of Compatibilization. Journal of Polymers and the Environment, 2008, 16, 286-297.	5.0	88
57	Environmental Silicate Nano-Biocomposites. Green Energy and Technology, 2012, , .	0.6	85
58	Cyclic Carbonates as Safe and Versatile Etherifying Reagents for the Functionalization of Lignins and Tannins. ACS Sustainable Chemistry and Engineering, 2017, 5, 7334-7343.	6.7	82
59	Elaboration, morphology and properties of starch/polyester nano-biocomposites based on sepiolite clay. Carbohydrate Polymers, 2015, 118, 250-256.	10.2	80
60	How does water diffuse in starch/montmorillonite nano-biocomposite materials?. Carbohydrate Polymers, 2010, 82, 128-135.	10.2	79
61	Disruption of \hat{l}^2 -oxidation pathway in Pseudomonas putida KT2442 to produce new functionalized PHAs with thioester groups. Applied Microbiology and Biotechnology, 2011, 89, 1583-1598.	3.6	77
62	Tailoring the Structure, Morphology, and Crystallization of Isodimorphic Poly(butylene) Tj ETQq0 0 0 rgBT /Overl History. Macromolecules, 2017, 50, 597-608.	ock 10 Tf : 4.8	50 467 Td (s 77
63	Biobased and Aromatic Reversible Thermoset Networks from Condensed Tannins via the Dielsâ 'Alder Reaction. ACS Sustainable Chemistry and Engineering, 2017, 5, 1199-1207.	6.7	76
64	Isolation and characterization of different promising fungi for biological waste management of polyurethanes. Microbial Biotechnology, 2019, 12, 544-555.	4.2	75
65	Synthesis, thermal properties, rheological and mechanical behaviors of lignins-grafted-poly(ε-caprolactone). Polymer, 2013, 54, 3882-3890.	3.8	74
66	Effect of crystallization on barrier properties of formulated polylactide. Polymer International, 2012, 61, 180-189.	3.1	73
67	Recent developments in the conservation of materials properties of historical wood. Progress in Materials Science, 2019, 102, 167-221.	32.8	72
68	In-line determination of plasticized wheat starch viscoelastic behavior: impact of processing. Carbohydrate Polymers, 2003, 53, 169-182.	10.2	69
69	Nanocomposite foams based on flexible biobased thermoplastic polyurethane and ZnO nanoparticles as potential wound dressing materials. Materials Science and Engineering C, 2019, 104, 109893.	7.3	67
70	Micromechanical modeling and characterization of the effective properties in starch-based nano-biocomposites. Acta Biomaterialia, 2008, 4, 1707-1714.	8.3	66
71	Sepiolite as a promising nanoclay for nano-biocomposites based on starch and biodegradable polyester. Materials Science and Engineering C, 2017, 70, 296-302.	7.3	65
72	Original method for synthesis of chitosan-based antimicrobial agent by quaternary ammonium grafting. Carbohydrate Polymers, 2017, 157, 1922-1932.	10.2	64

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73	Structure and Morphology of New Bioâ€Based Thermoplastic Polyurethanes Obtained From Dimeric Fatty Acids. Macromolecular Materials and Engineering, 2012, 297, 777-784.	3.6	62
74	Structure and properties of clay nanoâ€biocomposites based on poly(lactic acid) plasticized with polyadipates. Polymers for Advanced Technologies, 2011, 22, 2206-2213.	3.2	60
75	Synthesis and characterization of advanced biobased thermoplastic nonisocyanate polyurethanes, with controlled aromatic-aliphatic architectures. European Polymer Journal, 2016, 84, 759-769.	5.4	59
76	Renewable biocomposites of dimer fatty acid-based polyamides with cellulose fibres: Thermal, physical and mechanical properties. Composites Science and Technology, 2010, 70, 504-509.	7.8	58
77	Solvent- and catalyst-free synthesis of fully biobased nonisocyanate polyurethanes with different macromolecular architectures. RSC Advances, 2015, 5, 100390-100400.	3.6	54
78	Thermally healable and remendable lignin-based materials through Diels – Alder click polymerization. Polymer, 2017, 133, 78-88.	3.8	54
79	Starch/graphene hydrogels via click chemistry with relevant electrical and antibacterial properties. Carbohydrate Polymers, 2018, 202, 372-381.	10.2	54
80	Preparation and Characterization of Thermoplastic Potato Starch/Halloysite Nano-Biocomposites: Effect of Plasticizer Nature and Nanoclay Content. Polymers, 2018, 10, 808.	4.5	53
81	Synthesis and characterization of biobased poly(butylene succinate- ran -butylene adipate). Analysis of the composition-dependent physicochemical properties. European Polymer Journal, 2017, 87, 84-98.	5.4	52
82	Morphological, thermal, and mechanical properties of poly(εâ€caprolactone)/poly(εâ€caprolactone)/poly(εâ€caprolactone)å€graftedâ€cellulose nanocrystals mats produced by electrospinning. Journal of Applied Polymer Science, 2016, 133, .	2.6	50
83	Click chemistry for the synthesis of biobased polymers and networks derived from vegetable oils. Green Chemistry, 2021, 23, 4296-4327.	9.0	50
84	Nonisothermal crystallization behavior of poly(butylene adipate-co-terephthalate)/clay nano-biocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 1503-1510.	2.1	48
85	Characterization and Physicochemical Properties of Condensed Tannins from <i>Acacia catechu</i> Journal of Agricultural and Food Chemistry, 2016, 64, 1751-1760.	5.2	48
86	Poly (butylene adipate-co-terephthalate)/hydroxyapatite composite structures for bone tissue recovery. Polymer Degradation and Stability, 2015, 120, 61-69.	5.8	47
87	Elaboration and properties of novel biobased nanocomposites with halloysite nanotubes and thermoplastic polyurethane from dimerized fatty acids. Polymer, 2014, 55, 5226-5234.	3.8	46
88	Effect of TiO2 nanoparticles on the properties of thermoplastic chitosan-based nano-biocomposites obtained by mechanical kneading. Composites Part A: Applied Science and Manufacturing, 2017, 93, 33-40.	7.6	46
89	Elaboration and properties of plasticised chitosan-based exfoliated nano-biocomposites. Polymer, 2013, 54, 3654-3662.	3.8	44
90	Synthesis of potentially biobased copolyesters based on adipic acid and butanediols: Kinetic study between 1,4- and 2,3-butanediol and their influence on crystallization and thermal properties. Polymer, 2016, 99, 204-213.	3.8	44

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91	Production and characterization of two medium-chain-length polydroxyalkanoates by engineered strains of Yarrowia lipolytica. Microbial Cell Factories, 2019, 18, 99.	4.0	44
92	Influence of the microstructure and mechanical strength of nanofibers of biodegradable polymers with hydroxyapatite in stem cells growth. Electrospinning, characterization and cell viability. Polymer Degradation and Stability, 2012, 97, 2037-2051.	5.8	43
93	Oxyalkylation of Condensed Tannin with Propylene Carbonate as an Alternative to Propylene Oxide. ACS Sustainable Chemistry and Engineering, 2016, 4, 3103-3112.	6.7	43
94	Nonisothermal crystallization kinetics of poly(lactide)â€"effect of plasticizers and nucleating agent. Polymer Engineering and Science, 2013, 53, 1085-1098.	3.1	42
95	Oxyalkylation of gambier tannin—Synthesis and characterization of ensuing biobased polyols. Industrial Crops and Products, 2015, 67, 295-304.	5.2	42
96	Elaboration, morphology and properties of renewable thermoplastics blends, based on polyamide and polyurethane synthesized from dimer fatty acids. European Polymer Journal, 2015, 67, 418-427.	5.4	42
97	Renewable and Responsive Cross-Linked Systems Based on Polyurethane Backbones from Clickable Biobased Bismaleimide Architecture. Macromolecules, 2020, 53, 5869-5880.	4.8	42
98	Biobased Polyurethane Foams Based on New Polyol Architectures from Microalgae Oil. ACS Sustainable Chemistry and Engineering, 2020, 8, 12187-12196.	6.7	41
99	Morphology and properties of thermoplastic starch blended with biodegradable polyester and filled with halloysite nanoclay. Carbohydrate Polymers, 2020, 242, 116392.	10.2	41
100	Dynamic network based on eugenol-derived epoxy as promising sustainable thermoset materials. European Polymer Journal, 2020, 135, 109860.	5.4	41
101	Differentiation of human adipose-derived stem cells seeded on mineralized electrospun co-axial poly(ε-caprolactone) (PCL)/gelatin nanofibers. Journal of Materials Science: Materials in Medicine, 2014, 25, 1137-1148.	3.6	40
102	Ligninâ€Based Materials Through Thiol–Maleimide "Click―Polymerization. ChemSusChem, 2017, 10, 984-992.	6.8	39
103	Evolution of the three-dimensional orientation distribution of glass fibers in injected isotactic polypropylene. Polymer Engineering and Science, 1997, 37, 329-337.	3.1	38
104	Nucleation, Crystallization, and Thermal Fractionation of Poly ($\hat{l}\mu$ -Caprolactone)-Grafted-Lignin: Effects of Grafted Chains Length and Lignin Content. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1736-1750.	2.1	38
105	Study on the structure-properties relationship of biodegradable and biobased aliphatic copolyesters based on 1,3-propanediol, 1,4-butanediol, succinic and adipic acids. Polymer, 2017, 122, 105-116.	3.8	38
106	Correlation between Composition, Structure and Properties of Poly(lactic acid)/Polyadipateâ€Based Nanoâ€Biocomposites. Macromolecular Materials and Engineering, 2010, 295, 551-558.	3.6	37
107	Itaconic and Fumaric Acid Production from Biomass Hydrolysates by Aspergillus Strains. Journal of Microbiology and Biotechnology, 2016, 26, 1557-1565.	2.1	37
108	High strain rate behaviour of renewable biocomposites based on dimer fatty acid polyamides and cellulose fibres. Composites Science and Technology, 2011, 71, 674-682.	7.8	36

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109	Elaboration and Characterization of Nano-Biocomposites Based on Plasticized Poly(Hydroxybutyrate-Co-Hydroxyvalerate) with Organo-Modified Montmorillonite. Journal of Polymers and the Environment, 2012, 20, 283-290.	5.0	36
110	Innovative plasticized alginate obtained by thermo-mechanical mixing: Effect of different biobased polyols systems. Carbohydrate Polymers, 2017, 157, 669-676.	10.2	36
111	From D-sorbitol to five-membered bis(cyclo-carbonate) as a platform molecule for the synthesis of different original biobased chemicals and polymers. Scientific Reports, 2018, 8, 9134.	3.3	36
112	Fungal Fermentation of Lignocellulosic Biomass for Itaconic and Fumaric Acid Production. Journal of Microbiology and Biotechnology, 2017, 27, 1-8.	2.1	36
113	Accelerated artificial ageing of new dimer fatty acid-based polyamides. Polymer Degradation and Stability, 2011, 96, 1097-1103.	5.8	35
114	Biorenewable nanocomposites. MRS Bulletin, 2011, 36, 703-710.	3.5	35
115	Enzymatic Synthesis of a Bio-Based Copolyester from Poly(butylene succinate) and Poly($(\langle i\rangle R\langle i\rangle)$ -3-hydroxybutyrate): Study of Reaction Parameters on the Transesterification Rate. Biomacromolecules, 2016, 17, 4054-4063.	5.4	34
116	Synthesis and characterization of polyurethane foams derived of fully renewable polyester polyols from sorbitol. European Polymer Journal, 2017, 97, 319-327.	5.4	34
117	Processing and characterization of biodegradable polymer nanocomposites: detection of dispersion state. Rheologica Acta, 2008, 47, 543-553.	2.4	33
118	Advanced biobased and rigid foams, based on urethane-modified isocyanurate from oxypropylated gambier tannin polyol. Polymer Degradation and Stability, 2016, 132, 62-68.	5.8	33
119	Plastic Biodegradation: Challenges and Opportunities. , 2018, , 1-29.		33
120	Biotic and Abiotic Synthesis of Renewable Aliphatic Polyesters from Short Building Blocks Obtained from Biotechnology. ChemSusChem, 2018, 11, 3836-3870.	6.8	33
121	Breakthrough in polyurethane bio-recycling: An efficient laccase-mediated system for the degradation of different types of polyurethanes. Waste Management, 2021, 132, 23-30.	7.4	33
122	MIXed plastics biodegradation and UPcycling using microbial communities: EU Horizon 2020 project MIX-UP started January 2020. Environmental Sciences Europe, 2021, 33, 99.	5.5	33
123	Enzymatic synthesis of poly(Îμ-caprolactone- co -Îμ-thiocaprolactone). European Polymer Journal, 2017, 87, 147-158.	5.4	31
124	Synthesis and characterization of renewable polyurethane foams using different biobased polyols from olive oil. European Polymer Journal, 2021, 149, 110363.	5.4	31
125	Glycerol plasticised chitosan: A study of biodegradation via carbon dioxide evolution and nuclear magnetic resonance. Polymer Degradation and Stability, 2013, 98, 1236-1246.	5.8	30
126	Natural Fibers, Bio- and Nanocomposites. International Journal of Polymer Science, 2011, 2011, 1-2.	2.7	29

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127	Novative Biomaterials Based on Chitosan and Poly($\hat{l}\mu$ -Caprolactone): Elaboration of Porous Structures. Journal of Polymers and the Environment, 2011, 19, 819-826.	5.0	28
128	Synthesis and characterization of fully biobased aromatic polyols – oxybutylation of condensed tannins towards new macromolecular architectures. RSC Advances, 2014, 4, 61564-61572.	3 . 6	27
129	Lipase catalyzed synthesis of polycaprolactone and clay-based nanohybrids. Polymer, 2014, 55, 1648-1655.	3.8	27
130	Evaluation of starch-PE multilayers: Processing and properties. Polymer Engineering and Science, 2005, 45, 217-224.	3.1	26
131	Synthesis and characterization of block poly(esterâ€etherâ€urethane)s from bacterial poly(3â€hydroxybutyrate) oligomers. Journal of Polymer Science Part A, 2017, 55, 1949-1961.	2.3	26
132	Study of pseudoâ€multilayer structures based on starchâ€polycaprolactone extruded blends. Polymer Engineering and Science, 2009, 49, 1177-1186.	3.1	25
133	Mixed systems to assist enzymatic ring opening polymerization of lactide stereoisomers. RSC Advances, 2015, 5, 84627-84635.	3. 6	25
134	Green Recycling Process for Polyurethane Foams by a Chemâ€Biotech Approach. ChemSusChem, 2021, 14, 4234-4241.	6.8	25
135	Characterization of Nano-Structured Poly(D,L-lactic acid) Nonwoven Mats Obtained from Different Solutions by Electrospinning. Journal of Macromolecular Science - Physics, 2009, 48, 1222-1240.	1.0	24
136	Enzymatic ring-opening (co)polymerization of lactide stereoisomers catalyzed by lipases. Toward the in situ synthesis of organic/inorganic nanohybrids. Journal of Molecular Catalysis B: Enzymatic, 2015, 115, 20-28.	1.8	24
137	Combined effect of nucleating agent and plasticizer on the crystallization behaviour of polylactide. Polymer Bulletin, 2017, 74, 4857-4886.	3.3	24
138	Synthesis and behavior of click cross-linked alginate hydrogels: Effect of cross-linker length and functionality. International Journal of Biological Macromolecules, 2019, 137, 612-619.	7. 5	24
139	Granulometric Characterization of Short Fiberglass in Reinforced Polypropylene. Relation to Processing Conditions and Mechanical Properties. International Journal of Polymer Analysis and Characterization, 1995, 1, 339-347.	1.9	23
140	Yield behaviour of renewable biocomposites of dimer fatty acid-based polyamides with cellulose fibres. Composites Science and Technology, 2010, 70, 525-529.	7.8	23
141	Growth rate, morphology, chemical composition and oligomerization state of plasma polymer films made from acrylic and methacrylic acid under dielectric barrier discharge. Reactive and Functional Polymers, 2012, 72, 341-348.	4.1	23
142	Starch Polymers. , 2014, , 3-10.		23
143	Calcium phosphates grown on bacterial cellulose template. Ceramics International, 2018, 44, 9433-9441.	4.8	23
144	Clicking Biobased Polyphenols: A Sustainable Platform for Aromatic Polymeric Materials. ChemSusChem, 2018, 11, 2472-2491.	6.8	23

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145	Aza-Michael Reaction as a Greener, Safer, and More Sustainable Approach to Biobased Polyurethane Thermosets. ACS Sustainable Chemistry and Engineering, 2021, 9, 4872-4884.	6.7	23
146	Comprehensive experimental study of a starch/polyesteramide coextrusion. Journal of Applied Polymer Science, 2002, 86, 2586-2600.	2.6	22
147	Plasma-polymer coatings onto different biodegradable polyesters surfaces. European Polymer Journal, 2013, 49, 882-892.	5.4	22
148	Nanoclays for Lipase Immobilization: Biocatalyst Characterization and Activity in Polyester Synthesis. Polymers, 2016, 8, 416.	4.5	22
149	Novel Rigid Polyisocyanurate Foams from Synthesized Biobased Polyester Polyol with Enhanced Properties. ACS Sustainable Chemistry and Engineering, 2018, 6, 6577-6589.	6.7	22
150	Mild and controlled lignin methylation with trimethyl phosphate: towards a precise control of lignin functionality. Green Chemistry, 2020, 22, 1671-1680.	9.0	22
151	Green Nano-Biocomposites. Green Energy and Technology, 2012, , 1-11.	0.6	21
152	Optimized Bioproduction of Itaconic and Fumaric Acids Based on Solid-State Fermentation of Lignocellulosic Biomass. Molecules, 2020, 25, 1070.	3.8	21
153	Crystallinity study of nano-biocomposites based on plasticized poly(hydroxybutyrate-co-hydroxyvalerate) with organo-modified montmorillonite. Polymer Testing, 2013, 32, 1253-1260.	4.8	20
154	Solvent―and Halogenâ€Free Modification of Biobased Polyphenols to Introduce Vinyl Groups: Versatile Aromatic Building Blocks for Polymer Synthesis. ChemSusChem, 2017, 10, 1813-1822.	6.8	20
155	One step preparation of plasma based polymer films for drug release. Materials Science and Engineering C, 2012, 32, 2103-2108.	7.3	19
156	Elaboration and Properties of Innovative Biobased PUIR Foams from Microalgae. Journal of Polymers and the Environment, 2018, 26, 254-262.	5.0	19
157	Current Progress on Biodegradable Materials Based on Plasticized Starch. Australian Journal of Chemistry, 2005, 58, 457.	0.9	18
158	Viabilidade celular de nanofibras de polÂmeros biodegradáveis e seus nanocompósitos com argila montmorilonita. Polimeros, 2012, 22, 34-41.	0.7	18
159	Renewable Responsive Systems Based on Original Click and Polyurethane Crossâ€Linked Architectures with Advanced Properties. ChemSusChem, 2020, 13, 238-251.	6.8	18
160	Dihydrolevoglucosenone (Cyreneâ,,¢) as a versatile biobased solvent for lignin fractionation, processing, and chemistry. Green Chemistry, 2022, 24, 338-349.	9.0	18
161	Biocomposites based on chemically modified cellulose fibers with renewable fattyâ€acidâ€based thermoplastic systems: Effect of different fiber treatments. Journal of Applied Polymer Science, 2016, 133, .	2.6	17
162	Biological properties of novel polysuccinimide derivatives synthesized via quaternary ammonium grafting. European Polymer Journal, 2020, 131, 109705.	5.4	17

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163	Determination of the microtexture of reinforced thermoplastics by image analysis. Composites Science and Technology, 1998, 58, 377-387.	7.8	16
164	Cellulose-based biocomposites: comparison of different multiphasic systems. Composite Interfaces, 2007, 14, 787-805.	2.3	16
165	Lipase-catalyzed synthesis of biobased and biodegradable aliphatic copolyesters from short building blocks. Effect of the monomer length. European Polymer Journal, 2017, 97, 328-337.	5 . 4	16
166	Elaboration and Characterization of Advanced Biobased Polyurethane Foams Presenting Anisotropic Behavior. Macromolecular Materials and Engineering, 2018, 303, 1700501.	3.6	16
167	Isolation of Low Dispersity Fractions of Acetone Organosolv Lignins to Understand their Reactivity: Towards Aromatic Building Blocks for Polymers Synthesis. ChemSusChem, 2021, 14, 387-397.	6.8	16
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