Jean-Marie Raquez

List of Publications by Citations

191 papers	8,467 citations	48 h-index	87 g-index
200 ext. papers	9,597 ext. citations	5.6 avg, IF	6.26 L-index

#	Paper	IF	Citations
191	Polylactide (PLA)-based nanocomposites. *Progress in Polymer Science*, **2013**, 38, 1504-1542	29.6	801
190	Thermosetting (bio)materials derived from renewable resources: A critical review. *Progress in Polymer Science*, **2010**, 35, 487-509	29.6	690
189	From interfacial ring-opening polymerization to melt processing of cellulose nanowhisker-filled polylactide-based nanocomposites. *Biomacromolecules*, **2011**, 12, 2456-65	6.9	316
188	Surface-initiated controlled polymerization as a convenient method for designing functional polymer brushes: From self-assembled monolayers to patterned surfaces. *Progress in Polymer Science*, **2012**, 37, 157-181	29.6	204
187	Shape-memory polymers for multiple applications in the materials world. *European Polymer Journal* , **2016**, 80, 268-294	5.2	202
186	Surface-modification of cellulose nanowhiskers and their use as nanoreinforcers into polylactide: A sustainably-integrated approach. *Composites Science and Technology*, **2012**, 72, 544-549	8.6	187
185	Poly(e-caprolactone) based nanocomposites reinforced by surface-grafted cellulose nanowhiskers via extrusion processing: Morphology, rheology, and thermo-mechanical properties. *Polymer*, **2011**, 52, 1532-1538	3.9	183
184	New approach on the development of plasticized polylactide (PLA): Grafting of poly(ethylene glycol) (PEG) via reactive extrusion. *European Polymer Journal*, **2011**, 47, 2134-2144	5.2	169
183	Recent Advances in Reactive Extrusion Processing of Biodegradable Polymer-Based Compositions. *Macromolecular Materials and Engineering*, **2008**, 293, 447-470	3.9	165
182	High molecular weight poly(butylene succinate-co-butylene furandicarboxylate) copolyesters: from catalyzed polycondensation reaction to thermomechanical properties. *Biomacromolecules*, **2012**, 13, 2973-81	6.9	161
181	Nucleation and Crystallization in Double Crystalline Poly(p-dioxanone)-b-poly(Ecaprolactone) Diblock Copolymers. *Macromolecules*, **2003**, 36, 1633-1644	5.5	160
180	Crystallization Kinetics and Morphology of Biodegradable Double Crystalline PLLA-b-PCL Diblock Copolymers. *Macromolecules*, **2010**, 43, 4149-4160	5.5	146
179	Polylactide/cellulose nanocrystal nanocomposites: Efficient routes for nanofiber modification and effects of nanofiber chemistry on PLA reinforcement. *Polymer*, **2015**, 65, 9-17	3.9	136
178	Non-Isocyanate Polyurethanes from Carbonated Soybean Oil Using Monomeric or Oligomeric Diamines To Achieve Thermosets or Thermoplastics. *Macromolecules*, **2016**, 49, 2162-2171	5.5	135
177	Production of starch foams by twin-screw extrusion: effect of maleated poly(butylene adipate-co-terephthalate) as a compatibilizer. *Biomacromolecules*, **2005**, 6, 807-17	6.9	130
176	Designing Multiple-Shape Memory Polymers with Miscible Polymer Blends: Evidence and Origins of a Triple-Shape Memory Effect for Miscible PLLA/PMMA Blends. *Macromolecules*, **2014**, 47, 6791-6803	5.5	122
175	Self-nucleation and crystallization kinetics of double crystalline poly(p-dioxanone)-b-poly(epsilon-caprolactone) diblock copolymers. *Faraday Discussions*, **2005**, 128, 231-52; discussion 321-39	3.6	122

174	CO2-blown microcellular non-isocyanate polyurethane (NIPU) foams: from bio- and CO2-sourced monomers to potentially thermal insulating materials. *Green Chemistry*, **2016**, 18, 2206-2215	10	121
173	Maleated thermoplastic starch by reactive extrusion. *Carbohydrate Polymers*, **2008**, 74, 159-169	10.3	116
172	Thermoreversibly crosslinked poly(ε-caprolactone) as recyclable shape-memory polymer network. *Macromolecular Rapid Communications*, **2011**, 32, 1264-9	4.8	106
171	Recent advances in high performance poly(lactide): from "green" plasticization to super-tough materials via (reactive) compounding. *Frontiers in Chemistry*, **2013**, 1, 32	5	104
170	New development on plasticized poly(lactide): Chemical grafting of citrate on PLA by reactive extrusion. *European Polymer Journal*, **2012**, 48, 404-415	5.2	98
169	Design of cross-linked semicrystalline poly(ε-caprolactone)-based networks with one-way and two-way shape-memory properties through Diels-Alder reactions. *Chemistry - A European Journal*, **2011**, 17, 10135-43	4.8	98
168	In situ compatibilization of maleated thermoplastic starch/polyester melt-blends by reactive extrusion. *Polymer Engineering and Science*, **2008**, 48, 1747-1754	2.3	92
167	Poly(lactic acid)/carbon nanotube nanocomposites with integrated degradation sensing. *Polymer*, **2013**, 54, 6818-6823	3.9	83
166	Polyester-grafted cellulose nanowhiskers: a new approach for tuning the microstructure of immiscible polyester blends. *ACS Applied Materials & Interfaces*, **2012**, 4, 3364-71	9.5	83
165	Tailoring polylactide (PLA) properties for automotive applications: Effect of addition of designed additives on main mechanical properties. *Polymer Testing*, **2014**, 36, 1-9	4.5	73
164	How Composition Determines the Properties of Isodimorphic Poly(butylene succinate-ran-butylene azelate) Random Biobased Copolymers: From Single to Double Crystalline Random Copolymers. *Macromolecules*, **2015**, 48, 43-57	5.5	73
163	Toughening of polylactide by tailoring phase-morphology with P[CL-co-LA] random copolyesters as biodegradable impact modifiers. *European Polymer Journal*, **2013**, 49, 914-922	5.2	71
162	Stereocomplexation of polylactide enhanced by poly(methyl methacrylate): improved processability and thermomechanical properties of stereocomplexable polylactide-based materials. *ACS Applied Materials & Interfaces*, **2013**, 5, 11797-807	9.5	70
161	PLLA/PMMA blends: A shear-induced miscibility with tunable morphologies and properties?. *Polymer*, **2013**, 54, 3931-3939	3.9	68
160	Effects of interfacial stereocomplexation in cellulose nanocrystal-filled polylactide nanocomposites. *Cellulose*, **2013**, 20, 2877-2885	5.5	64
159	Surface-modified cellulose nanocrystals for biobased epoxy nanocomposites. *Polymer*, **2018**, 134, 155-162	3.9	64
158	Healing by the Joule effect of electrically conductive poly(ester-urethane)/carbon nanotube nanocomposites. *Journal of Materials Chemistry A*, **2016**, 4, 4089-4097	13	63
157	Design of Multistimuli-Responsive Shape-Memory Polymer Materials by Reactive Extrusion. *Chemistry of Materials*, **2014**, 26, 5860-5867	9.6	56

156	Random aliphatic copolyesters as new biodegradable impact modifiers for polylactide materials. *European Polymer Journal*, **2012**, 48, 331-340	5.2	54
155	Coordination-insertion ring-opening polymerization of 1,4-dioxan-2-one and controlled synthesis of diblock copolymers with ε-caprolactone. *Macromolecular Rapid Communications*, **2000**, 21, 1063-1071	4.8	54
154	Effect of the addition of polyester-grafted-cellulose nanocrystals on the shape memory properties of biodegradable PLA/PCL nanocomposites. *Polymer Degradation and Stability*, **2018**, 152, 126-138	4.7	53
153	One-Pot Microwave-Assisted Synthesis of Graphene/Layered Double Hydroxide (LDH) Nanohybrids. *Nano-Micro Letters*, **2015**, 7, 332-340	19.5	52
152	Ultra-tough polylactide-based materials synergistically designed in the presence of rubbery ε-caprolactone-based copolyester and silica nanoparticles. *Composites Science and Technology*, **2013**, 84, 86-91	8.6	51
151	Biodegradable materials by reactive extrusion: from catalyzed polymerization to functionalization and blend compatibilization. *Comptes Rendus Chimie*, **2006**, 9, 1370-1379	2.7	51
150	Simple Approach for a Self-Healable and Stiff Polymer Network from Iminoboronate-Based Boroxine Chemistry. *Chemistry of Materials*, **2019**, 31, 3736-3744	9.6	50
149	Preparation of Cellulose Nanocrystal-Reinforced Poly(lactic acid) Nanocomposites through Noncovalent Modification with PLLA-Based Surfactants. *ACS Omega*, **2017**, 2, 2678-2688	3.9	49
148	Tailoring Polylactide Properties for Automotive Applications: Effects of Co-Addition of Halloysite Nanotubes and Selected Plasticizer. *Macromolecular Materials and Engineering*, **2015**, 300, 684-698	3.9	49
147	Poly(ε-pentadecalactone)-b-poly(l-lactide) Block Copolymers via Organic-Catalyzed Ring Opening Polymerization and Potential Applications. *ACS Macro Letters*, **2015**, 4, 408-411	6.6	49
146	Stereocomplexed PLA nanocomposites: From in situ polymerization to materials properties. *European Polymer Journal*, **2014**, 54, 138-150	5.2	49
145	Biobased polyesters with composition-dependent thermomechanical properties: synthesis and characterization of poly(butylene succinate-co-butylene azelate). *Biomacromolecules*, **2013**, 14, 890-9	6.9	49
144	Novel High-Performance Talc/Poly[(butylene adipate)-co-terephthalate] Hybrid Materials. *Macromolecular Materials and Engineering*, **2008**, 293, 310-320	3.9	49
143	Poly(L-lactide) and poly(butylene succinate) immiscible blends: from electrospinning to biologically active materials. *Materials Science and Engineering C*, **2014**, 41, 119-26	8.3	48
142	Recent advances in production of poly(lactic acid) (PLA) nanocomposites: a versatile method to tune crystallization properties of PLA. *Nanocomposites*, **2015**, 1, 71-82	3.4	48
141	Polylactide/Poly(ω-hydroxytetradecanoic acid) Reactive Blending: A Green Renewable Approach to Improving Polylactide Properties. *Biomacromolecules*, **2015**, 16, 1818-26	6.9	44
140	Fast IR-Actuated Shape-Memory Polymers Using in Situ Silver Nanoparticle-Grafted Cellulose Nanocrystals. *ACS Applied Materials & Interfaces*, **2018**, 10, 29933-29942	9.5	44
139	Well defined thermostable cellulose nanocrystals via two-step ionic liquid swelling-hydrolysis extraction. *Cellulose*, **2014**, 21, 4195-4207	5.5	44

138	Current progress in the production of PLA/ZnO nanocomposites: Beneficial effects of chain extender addition on key properties. *Journal of Applied Polymer Science*, **2015**, 132, n/a-n/a	2.9	44
137	From polyester grafting onto POSS nanocage by ring-opening polymerization to high performance polyester/POSS nanocomposites. *Journal of Materials Chemistry*, **2010**, 20, 9415		44
136	Green and Efficient Synthesis of Dispersible Cellulose Nanocrystals in Biobased Polyesters for Engineering Applications. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 2517-2527	8.3	43
135	Dynamic Iminoboronate-Based Boroxine Chemistry for the Design of Ambient Humidity-Sensitive Self-Healing Polymers. *Chemistry - A European Journal*, **2017**, 23, 6730-6735	4.8	41
134	Hierarchical chemomechanical encoding of multi-responsive hydrogel actuators via 3D printing. *Journal of Materials Chemistry A*, **2019**, 7, 15395-15403	13	40
133	Confinement Effects on the Crystallization Kinetics and Self-Nucleation of Double Crystalline Poly(p-dioxanone)-b-poly(?-caprolactone) Diblock Copolymers. *Macromolecular Symposia*, **2004**, 215, 369-382	0.8	40
132	Enzymatic reactive extrusion: moving towards continuous enzyme-catalysed polyester polymerisation and processing. *Green Chemistry*, **2015**, 17, 4146-4150	10	39
131	Single crystals morphology of biodegradable double crystalline PLLA-b-PCL diblock copolymers. *Polymer*, **2011**, 52, 5166-5177	3.9	38
130	PLA/SiO2 composites: Influence of the filler modifications on the morphology, crystallization behavior, and mechanical properties. *Journal of Applied Polymer Science*, **2017**, 134, 45367	2.9	37
129	Controlled Synthesis and Characterization of Poly[ethylene-block-(L,L-lactide)]s by Combining Catalytic Ethylene Oligomerization with "Coordination-Insertion" Ring-Opening Polymerization. *Macromolecular Chemistry and Physics*, **2007**, 208, 896-902	2.6	37
128	Poly(amino-methacrylate) as versatile agent for carbon nanotube dispersion: an experimental, theoretical and application study. *Journal of Materials Chemistry*, **2010**, 20, 6873		36
127	Some Thermodynamic, Kinetic, and Mechanistic Aspects of the Ring-Opening Polymerization of 1,4-Dioxan-2-one Initiated by Al(OiPr)3 in Bulk. *Macromolecules*, **2001**, 34, 8419-8425	5.5	36
126	One-component Diels–Alder based polyurethanes: a unique way to self-heal. *RSC Advances*, **2017**, 7, 48047-48053	3.7	35
125	Poly(methyl methacrylate) capsules as an alternative to the "proof-of-concept" glass capsules used in self-healing concrete. *Cement and Concrete Composites*, **2018**, 89, 260-271	8.6	35
124	Monomer–Linear Macromolecules–Cyclic Oligomers Equilibria in the Polymerization of 1,4-Dioxan-2-one. *Macromolecules*, **2004**, 37, 52-59	5.5	35
123	Shape-Memory Behavior of Polylactide/Silica Ionic Hybrids. *Macromolecules*, **2017**, 50, 2896-2905	5.5	33
122	Advances in intrinsic self-healing polyurethanes and related composites.. *RSC Advances*, **2020**, 10, 13766-13782	3.7	31
121	Multiresponsive Shape Memory Blends and Nanocomposites Based on Starch. *ACS Applied Materials & Interfaces*, **2016**, 8, 19197-201	9.5	31

120	Oxidative degradations of oxodegradable LDPE enhanced with thermoplastic pea starch: Thermo-mechanical properties, morphology, and UV-ageing studies. *Journal of Applied Polymer Science*, **2011**, 122, 489-496	2.9	31
119	Imidazolium end-functionalized poly(L-lactide) for efficient carbon nanotube dispersion. *Chemical Communications*, **2010**, 46, 5527-9	5.8	30
118	Thermal and composting degradation of EVA/Thermoplastic starch blends and their nanocomposites. *Polymer Degradation and Stability*, **2019**, 159, 184-198	4.7	30
117	Toughening of poly(lactide) using polyethylene glycol methyl ether acrylate: Reactive versus physical blending. *Polymer Engineering and Science*, **2015**, 55, 1408-1419	2.3	29
116	Feasibility study into the potential use of fused-deposition modeling to manufacture 3D-printed enteric capsules in compounding pharmacies. *International Journal of Pharmaceutics*, **2019**, 569, 118581	6.5	29
115	Biomimetic Water-Responsive Self-Healing Epoxy with Tunable Properties. *ACS Applied Materials & Interfaces*, **2019**, 11, 17853-17862	9.5	28
114	Design of highly tough poly(l-lactide)-based ternary blends for automotive applications. *Journal of Applied Polymer Science*, **2016**, 133, n/a-n/a	2.9	28
113	Tunable and Durable Toughening of Polylactide Materials Via Reactive Extrusion. *Macromolecular Materials and Engineering*, **2014**, 299, 583-595	3.9	28
112	Poly(ethylene oxide)-b-poly(L-lactide) diblock copolymer/carbon nanotube-based nanocomposites: LiCl as supramolecular structure-directing agent. *Biomacromolecules*, **2011**, 12, 4086-94	6.9	28
111	Thermal degradation of poly(l-lactide): Accelerating effect of residual DBU-based organic catalysts. *Polymer Degradation and Stability*, **2011**, 96, 739-744	4.7	28
110	Hydrolytic Degradation of Double Crystalline PPDX-b-PCL Diblock Copolymers. *Macromolecular Chemistry and Physics*, **2005**, 206, 903-914	2.6	28
109	Melt-stable poly(1,4-dioxan-2-one) (co)polymers by ring-opening polymerization via continuous reactive extrusion. *Polymer Engineering and Science*, **2005**, 45, 622-629	2.3	28
108	The Complex Amorphous Phase in Poly(butylene succinate-ran-butylene azelate) Isodimorphic Copolyesters. *Macromolecules*, **2017**, 50, 1569-1578	5.5	26
107	Investigation of the parameters used in fused deposition modeling of poly(lactic acid) to optimize 3D printing sessions. *International Journal of Pharmaceutics*, **2019**, 565, 367-377	6.5	26
106	Simulation-Aided Design of Tubular Polymeric Capsules for Self-Healing Concrete. *Materials*, **2016**, 10,	3.5	26
105	Processing of PVDF-based electroactive/ferroelectric films: importance of PMMA and cooling rate from the melt state on the crystallization of PVDF beta-crystals. *Soft Matter*, **2018**, 14, 4591-4602	3.6	26
104	Novel poly(ester-urethane)s based on polylactide: From reactive extrusion to crystallization and thermal properties. *Polymer*, **2012**, 53, 5657-5665	3.9	26
103	Ultra-stretchable ionic nanocomposites: from dynamic bonding to multi-responsive behavior. *Journal of Materials Chemistry A*, **2017**, 5, 13357-13363	13	25

102	A supramolecular approach toward organo-dispersible graphene and its straightforward polymer nanocomposites. *Journal of Materials Chemistry*, **2012**, 22, 18124		25
101	Bone-guided regeneration: from inert biomaterials to bioactive polymer (nano)composites. *Polymers for Advanced Technologies*, **2011**, 22, 463-475	3.2	25
100	Tailoring of Co-Continuous Polymer Blend Morphology: Joint Action of Nanoclays and Compatibilizers. *Macromolecular Chemistry and Physics*, **2010**, 211, 1433-1440	2.6	25
99	Biobased waterborne polyurethanes for coating applications: How fully biobased polyols may improve the coating properties. *Progress in Organic Coatings*, **2016**, 97, 175-183	4.8	24
98	In-depth investigation on the effect and role of cardanol in the compatibilization of PLA/ABS immiscible blends by reactive extrusion. *European Polymer Journal*, **2017**, 93, 272-283	5.2	23
97	Supramolecular design of high-performance poly(L-lactide)/carbon nanotube nanocomposites: from melt-processing to rheological, morphological and electrical properties. *Journal of Materials Chemistry*, **2011**, 21, 16190		23
96	A Review on Liquid Crystal Polymers in Free-Standing Reversible Shape Memory Materials. *Molecules*, **2020**, 25,	4.8	22
95	Magnetic poly(vinylpyridine)-coated carbon nanotubes: an efficient supramolecular tool for wastewater purification. *ChemSusChem*, **2013**, 6, 367-73	8.3	22
94	Acid-free extraction of cellulose type I nanocrystals using Brønsted acid-type ionic liquids. *Nanocomposites*, **2016**, 2, 65-75	3.4	21
93	Crystallization-induced toughness of rubber-modified polylactide: combined effects of biodegradable impact modifier and effective nucleating agent. *Polymers for Advanced Technologies*, **2015**, 26, 814-822	3.2	21
92	Preparation and characterization of maleated thermoplastic starch-based nanocomposites. *Journal of Applied Polymer Science*, **2011**, 122, 639-647	2.9	20
91	A comprehensive review of the structures and properties of ionic polymeric materials. *Polymer Chemistry*, **2020**, 11, 5914-5936	4.9	18
90	Bilayer solvent and vapor-triggered actuators made of cross-linked polymer architectures via Diels–Alder pathways. *Journal of Materials Chemistry B*, **2017**, 5, 5556-5563	7.3	17
89	Application of SSA thermal fractionation and X-ray diffraction to elucidate comonomer inclusion or exclusion from the crystalline phases in poly(butylene succinate-ran-butylene azelate) random copolymers. *Journal of Polymer Science, Part B: Polymer Physics*, **2016**, 54, 2346-2358	2.6	17
88	Humidity-Activated Shape Memory Effects on Thermoplastic Starch/EVA Blends and Their Compatibilized Nanocomposites. *Macromolecular Chemistry and Physics*, **2017**, 218, 1700388	2.6	16
87	The role of curvature in Diels-Alder functionalization of carbon-based materials. *Chemical Communications*, **2016**, 52, 7608-11	5.8	16
86	Natural Phenolic Antioxidants As a Source of Biocompatibilizers for Immiscible Polymer Blends. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 13349-13357	8.3	16
85	Binary Mixed Homopolymer Brushes Tethered to Cellulose Nanocrystals: A Step Towards Compatibilized Polyester Blends. *Biomacromolecules*, **2016**, 17, 3048-59	6.9	15

84	Tailoring the isothermal crystallization kinetics of isodimorphic poly (butylene succinate-ran-butylene azelate) random copolymers by changing composition. *Polymer*, **2019**, 183, 121863	3.9	15
83	Semi-crystalline poly(ε-caprolactone) brushes on gold substrate via "grafting from" method: New insights with AFM characterization. *European Polymer Journal*, **2011**, 47, 31-39	5.2	15
82	Synthesis of melt-stable and semi-crystalline poly(1,4-dioxan-2-one) by ring-opening (co)polymerisation of 1,4-dioxan-2-one with different lactones. *Polymer Degradation and Stability*, **2004**, 86, 159-169	4.7	15
81	A dual approach to compatibilize PLA/ABS immiscible blends with epoxidized cardanol derivatives. *European Polymer Journal*, **2019**, 114, 118-126	5.2	15
80	The role of PLLA-g-montmorillonite nanohybrids in the acceleration of the crystallization rate of a commercial PLA. *CrystEngComm*, **2016**, 18, 9334-9344	3.3	14
79	Polylactide stereocomplex crystallization prompted by multiwall carbon nanotubes. *Journal of Applied Polymer Science*, **2013**, 130, n/a-n/a	2.9	14
78	Degradation of Film and Rigid Bioplastics During the Thermophilic Phase and the Maturation Phase of Simulated Composting. *Journal of Polymers and the Environment*, **2021**, 29, 3015-3028	4.5	14
77	Interphase Design of Cellulose Nanocrystals/Poly(hydroxybutyrate--valerate) Bionanocomposites for Mechanical and Thermal Properties Tuning. *Biomacromolecules*, **2020**, 21, 1892-1901	6.9	13
76	Poly(lactic acid)-Based Materials for Automotive Applications. *Advances in Polymer Science*, **2017**, 177-219	2.3	13
75	Stereocomplexes from Biosourced Lactide/Butylene Succinate-Based Copolymers and Their Role as Crystallization Accelerating Agent. *Macromolecular Chemistry and Physics*, **2012**, 213, 643-653	2.6	13
74	Synthesis of clicked imidazolium-containing biosourced copolymers and application in carbon nanotube dispersion. *Macromolecular Rapid Communications*, **2011**, 32, 1960-4	4.8	13
73	On the Sputtering of Titanium and Silver onto Liquids, Discussing the Formation of Nanoparticles. *Journal of Physical Chemistry C*, **2018**, 122, 26605-26612	3.8	13
72	Mechanistic insights on nanosilica self-networking inducing ultra-toughness of rubber-modified polylactide-based materials. *Nanocomposites*, **2015**, 1, 113-125	3.4	12
71	Reversible positioning at submicrometre scale of carbon nanotubes mediated by pH-sensitive poly(amino-methacrylate) patterns. *Chemical Communications*, **2011**, 47, 1163-5	5.8	12
70	Diblock Copolymers Based on 1,4-Dioxan-2-one and ε-Caprolactone: Characterization and Thermal Properties. *Macromolecular Chemistry and Physics*, **2004**, 205, 1764-1773	2.6	12
69	Poly(ε-caprolactone) and Poly(ε-pentadecalactone)-Based Networks with Two-Way Shape-Memory Effect through [2+2] Cycloaddition Reactions. *Macromolecular Chemistry and Physics*, **2018**, 219, 1700345	2.6	11
68	Resolving Inclusion Structure and Deformation Mechanisms in Polylactide Plasticized by Reactive Extrusion. *Macromolecular Materials and Engineering*, **2017**, 302, 1700326	3.9	11
67	On the Nanoscale Mapping of the Mechanical and Piezoelectric Properties of Poly (L-Lactic Acid) Electrospun Nanofibers. *Applied Sciences (Switzerland)*, **2020**, 10, 652	2.6	11

66	Microwave-assisted depolymerization of carrageenans from Kappaphycus alvarezii and Eucheuma spinosum: Controlled and green production of oligosaccharides from the algae biomass. *Algal Research*, **2020**, 51, 102054	5	11
65	Melt-processing of bionanocomposites based on ethylene-co-vinyl acetate and starch nanocrystals. *Carbohydrate Polymers*, **2019**, 208, 382-390	10.3	11
64	Strain-induced deformation mechanisms of polylactide plasticized with acrylated poly(ethylene glycol) obtained by reactive extrusion. *Polymer International*, **2015**, 64, 1544-1554	3.3	10
63	Development of Inherently Flame-Retardant Phosphorylated PLA by Combination of Ring-Opening Polymerization and Reactive Extrusion. *Materials*, **2019**, 13,	3.5	10
62	Mechanistic insights on ultra-tough polylactide-based ionic nanocomposites. *Composites Science and Technology*, **2020**, 191, 108075	8.6	9
61	Hydrolytic degradation of poly(l-lactic acid)/poly(methyl methacrylate) blends. *Polymer International*, **2018**, 67, 1393-1400	3.3	9
60	Supramolecular Approach for Efficient Processing of Polylactide/Starch Nanocomposites. *ACS Omega*, **2018**, 3, 1069-1080	3.9	8
59	Melt-processing of cellulose nanofibril/polylactide bionanocomposites via a sustainable polyethylene glycol-based carrier system. *Carbohydrate Polymers*, **2019**, 224, 115188	10.3	8
58	Self-assembly of poly(L-lactide-co-glycolide) and magnetic nanoparticles into nanoclusters for controlled drug delivery. *European Polymer Journal*, **2020**, 133, 109795	5.2	8
57	Unique two-way free-standing thermo- and photo-responsive shape memory azobenzene-containing polyurethane liquid crystal network. *Science China Materials*, **2020**, 63, 2590-2598	7.1	8
56	Mechanistic Insights on Spontaneous Moisture-Driven Healing of Urea-Based Polyurethanes. *ACS Applied Materials & Interfaces*, **2019**, 11, 46176-46182	9.5	8
55	Microbial biofilm composition and polymer degradation of compostable and non-compostable plastics immersed in the marine environment. *Journal of Hazardous Materials*, **2021**, 419, 126526	12.8	8
54	Design of New Cardanol Derivative: Synthesis and Application as Potential Biobased Plasticizer for Poly(lactide). *Macromolecular Materials and Engineering*, **2016**, 301, 1267-1278	3.9	7
53	Toward "Green" Hybrid Materials: Core-Shell Particles with Enhanced Impact Energy Absorbing Ability. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 3757-3765	8.3	7
52	Synthesis of melt-processable PLA-based stereocomplexes through a sustainable melt-approach. *Green Chemistry*, **2014**, 16, 1759	10	7
51	Imidazolium End-Functionalized ATRP Polymers as Directing Agents for CNT Dispersion and Confinement. *Macromolecular Chemistry and Physics*, **2012**, 213, 1259-1265	2.6	7
50	N-Heterocyclic carbene catalysis - from simple organic reactions to polymerization of cyclic esters. *Polimery*, **2008**, 53, 255-267	3.4	6
49	Composite Elastomer Exhibiting a Stress-Dependent Color Change and High Toughness Prepared by Self-Assembly of Silica Particles in a Polymer Network. *ACS Applied Polymer Materials*, **2020**, 2, 4078-4089	4.3	6

48	Cerium Salts: An Efficient Curing Catalyst for Benzoxazine Based Coatings. *Polymers*, **2020**, 12,	4.5	5
47	Peculiar effect of stereocomplexes on the photochemical ageing of PLA/PMMA blends. *Polymer Degradation and Stability*, **2018**, 150, 92-104	4.7	5
46	Tilted fiber Bragg gratings as a new sensing device for in situ and real time monitoring of surface-initiated polymerization. *Polymer Chemistry*, **2014**, 5, 2506	4.9	5
45	Beta Phase Crystallization and Ferro- and Piezoelectric Performances of Melt-Processed Poly(vinylidene difluoride) Blends with Poly(methyl methacrylate) Copolymers Containing Ionizable Moieties. *ACS Applied Polymer Materials*, **2020**, 2, 3766-3780	4.3	5
44	Enzymatic Polycondensation of 1,6-Hexanediol and Diethyl Adipate: A Statistical Approach Predicting the Key-Parameters in Solution and in Bulk. *Polymers*, **2020**, 12,	4.5	5
43	Tough and Three-Dimensional-Printable Poly(2-methoxyethyl acrylate)-Silica Composite Elastomer with Antiplatelet Adhesion Property. *ACS Applied Materials & Interfaces*, **2020**, 12, 46621-46628	9.5	5
42	Adding Value in Production of Multifunctional Polylactide (PLA)-ZnO Nanocomposite Films through Alternative Manufacturing Methods. *Molecules*, **2021**, 26,	4.8	5
41	Potential of poly(alkylene terephthalate)s to control endothelial cell adhesion and viability. *Materials Science and Engineering C*, **2021**, 129, 112378	8.3	5
40	Reactive plasticization of poly(lactide) with epoxy functionalized cardanol. *Polymer Engineering and Science*, **2018**, 58, E64-E72	2.3	4
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