Minna Hakkarainen

List of Publications by Year
in descending order

201 papers	8,278 citations	41344 49 h-index	69250 77 g-index
205 all docs	205 docs citations	205 times ranked	7681 citing authors

#	Article	IF	Citations
1	From Lactic Acid to Poly(lactic acid) (PLA): Characterization and Analysis of PLA and Its Precursors. Biomacromolecules, 2011, 12, 523-532.	5.4	573
2	Designed to degrade. Science, 2017, 358, 872-873.	12.6	235
3	Weight losses and molecular weight changes correlated with the evolution of hydroxyacids in simulated in vivo degradation of homo- and copolymers of PLA and PGA. Polymer Degradation and Stability, 1996, 52, 283-291.	5.8	224
4	Aliphatic Polyesters: Abiotic and Biotic Degradation and Degradation Products. Advances in Polymer Science, 2002, , 113-138.	0.8	207
5	Degradable Polyethylene: Fantasy or Reality. Environmental Science & Technology, 2011, 45, 4217-4227.	10.0	184
6	Polylactide Stereocomplexation Leads to Higher Hydrolytic Stability but More Acidic Hydrolysis Product Pattern. Biomacromolecules, 2010, 11, 1067-1073.	5.4	151
7	Rapid (bio)degradation of polylactide by mixed culture of compost microorganismsâ€"low molecular weight products and matrix changes. Polymer, 2000, 41, 2331-2338.	3.8	129
8	Environmental Degradation of Polyethylene. Advances in Polymer Science, 2004, , 177-200.	0.8	122
9	Title is missing!. Journal of Polymers and the Environment, 1998, 6, 187-195.	5.0	114
10	Porosity and Pore Size Regulate the Degradation Product Profile of Polylactide. Biomacromolecules, 2011, 12, 1250-1258.	5.4	113
11	Oligomeric isosorbide esters as alternative renewable resource plasticizers for PVC. Journal of Applied Polymer Science, 2011, 119, 2400-2407.	2.6	104
12	Migration and Hydrolysis of Hydrophobic Polylactide Plasticizer. Biomacromolecules, 2010, 11, 277-283.	5.4	102
13	Tuning the Release Rate of Acidic Degradation Products through Macromolecular Design of Caprolactone-Based Copolymers. Journal of the American Chemical Society, 2007, 129, 6308-6312.	13.7	101
14	Trash to Treasure: Microwave-Assisted Conversion of Polyethylene to Functional Chemicals. Industrial & Engineering Chemistry Research, 2017, 56, 14814-14821.	3.7	101
15	Environmentally friendly plasticizers for poly(vinyl chloride)â€"Improved mechanical properties and compatibility by using branched poly(butylene adipate) as a polymeric plasticizer. Journal of Applied Polymer Science, 2006, 100, 2180-2188.	2.6	99
16	Customizing the Hydrolytic Degradation Rate of Stereocomplex PLA through Different PDLA Architectures. Biomacromolecules, 2012, 13, 1212-1222.	5.4	98
17	Thermostable and Impermeable â€œNano-Barrier Wallsâ€• Constructed by Poly(lactic acid) Stereocomplex Crystal Decorated Graphene Oxide Nanosheets. Macromolecules, 2015, 48, 2127-2137.	4.8	95
18	Microwave Heating Causes Rapid Degradation of Antioxidants in Polypropylene Packaging, Leading to Greatly Increased Specific Migration to Food Simulants As Shown by ESI-MS and GC-MS. Journal of Agricultural and Food Chemistry, 2011, 59, 5418-5427.	5.2	93

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19	Microwave carbonized cellulose for trace pharmaceutical adsorption. Chemical Engineering Journal, 2018, 346, 557-566.	12.7	89
20	Degradable or not? Cellulose acetate as a model for complicated interplay between structure, environment and degradation. Chemosphere, 2021, 265, 128731.	8.2	87
21	Photocurable, Thermally Reprocessable, and Chemically Recyclable Vanillin-Based Imine Thermosets. ACS Sustainable Chemistry and Engineering, 2020, 8, 17272-17279.	6.7	79
22	Sustainable polymers. Nature Reviews Methods Primers, 2022, 2, .	21.2	78
23	Dicarboxylic Acids and Ketoacids Formed in Degradable Polyethylenes by Zip Depolymerization through a Cyclic Transition State. Macromolecules, 1997, 30, 7721-7728.	4.8	76
24	Surface Modification Changes the Degradation Process and Degradation Product Pattern of Polylactide. Langmuir, 2010, 26, 378-383.	3.5	76
25	Two Step Extrusion Process: From Thermal Recycling of PHB to Plasticized PLA by Reactive Extrusion Grafting of PHB Degradation Products onto PLA Chains. Macromolecules, 2015, 48, 2509-2518.	4.8	75
26	Nitrogen and phosphorous doped graphene quantum dots: Excellent flame retardants and smoke suppressants for polyacrylonitrile nanocomposites. Journal of Hazardous Materials, 2020, 381, 121013.	12.4	75
27	Headspace solid-phase microextraction â€" a tool for new insights into the long-term thermo-oxidation mechanism of polyamide 6.6. Journal of Chromatography A, 2001, 932, 1-11.	3.7	71
28	Cationic UV-Curing of Epoxidized Biobased Resins. Polymers, 2021, 13, 89.	4.5	69
29	Valorization of cellulose and waste paper to graphene oxide quantum dots. RSC Advances, 2015, 5, 26550-26558.	3.6	68
30	Starch-Derived Nanographene Oxide Paves the Way for Electrospinnable and Bioactive Starch Scaffolds for Bone Tissue Engineering. Biomacromolecules, 2017, 18, 1582-1591.	5.4	68
31	Heterogeneous biodegradation of polycaprolactone â€" low molecular weight products and surface changes. Macromolecular Chemistry and Physics, 2002, 203, 1357-1363.	2.2	66
32	Migration resistant polymeric plasticizer for poly(vinyl chloride). Journal of Applied Polymer Science, 2007, 104, 2458-2467.	2.6	65
33	Cellulose nanofibrils as reinforcing agents for PLA-based nanocomposites: An in situ approach. Composites Science and Technology, 2019, 171, 94-102.	7.8	64
34	DLP 3D Printing Meets Lignocellulosic Biopolymers: Carboxymethyl Cellulose Inks for 3D Biocompatible Hydrogels. Polymers, 2020, 12, 1655.	4.5	64
35	Coffee-Ground-Derived Quantum Dots for Aqueous Processable Nanoporous Graphene Membranes. ACS Sustainable Chemistry and Engineering, 2017, 5, 5360-5367.	6.7	63
36	Tuning the Polylactide Hydrolysis Rate by Plasticizer Architecture and Hydrophilicity without Introducing New Migrants. Biomacromolecules, 2010, 11, 3617-3623.	5.4	62

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37	In vitro and in vivo degradation profile of aliphatic polyesters subjected to electron beam sterilization. Acta Biomaterialia, 2011, 7, 2035-2046.	8.3	62
38	Designed from Recycled: Turning Polyethylene Waste to Covalently Attached Polylactide Plasticizers. ACS Sustainable Chemistry and Engineering, 2019, 7, 11004-11013.	6.7	61
39	Solid phase microextraction (SPME) as an effective means to isolate degradation products in polymers. Journal of Polymers and the Environment, 1997, 5, 67-73.	0.6	58
40	ESI-MS Reveals the Influence of Hydrophilicity and Architecture on the Water-Soluble Degradation Product Patterns of Biodegradable Homo- and Copolyesters of 1,5-dioxepan-2-one and Îµ-Caprolactone. Macromolecules, 2008, 41, 3547-3554.	4.8	58
41	Structural Basis for Unique Hierarchical Cylindrites Induced by Ultrahigh Shear Gradient in Single Natural Fiber Reinforced Poly(lactic acid) Green Composites. Biomacromolecules, 2014, 15, 1676-1686.	5.4	57
42	Finalizing the properties of porous scaffolds of aliphatic polyesters through radiation sterilization. Biomaterials, 2006, 27, 5335-5347.	11.4	56
43	Quantitative determination of degradation products an effective means to study early stages of degradation in linear and branched poly(butylene adipate) and poly(butylene succinate). Polymer Degradation and Stability, 2004, 83, 487-493.	5.8	55
44	Designed from Biobased Materials for Recycling: Imineâ€Based Covalent Adaptable Networks. Macromolecular Rapid Communications, 2022, 43, e2100816.	3.9	55
45	Microwave-Assisted Recycling of Waste Paper to Green Platform Chemicals and Carbon Nanospheres. ACS Sustainable Chemistry and Engineering, 2015, 3, 177-185.	6.7	53
46	Photocurable chitosan as bioink for cellularized therapies towards personalized scaffold architecture. Bioprinting, 2020, 18, e00082.	5.8	53
47	Headspace solid-phase microextraction with gas chromatography/mass spectrometry reveals a correlation between the degradation product pattern and changes in the mechanical properties during the thermooxidation of in-plant recycled polyamide 6,6. Journal of Applied Polymer Science, 2002, 86, 3396-3407.	2.6	51
48	Biobased Nanographene Oxide Creates Stronger Chitosan Hydrogels with Improved Adsorption Capacity for Trace Pharmaceuticals. ACS Sustainable Chemistry and Engineering, 2017, 5, 11525-11535.	6.7	51
49	Carbon dot/polymer nanocomposites: From green synthesis to energy, environmental and biomedical applications. Sustainable Materials and Technologies, 2021, 29, e00304.	3.3	51
50	Controllable Degradation Product Migration from Cross-Linked Biomedical Polyester-Ethers through Predetermined Alterations in Copolymer Composition. Biomacromolecules, 2007, 8, 2025-2032.	5.4	50
51	Zero-Dimensional and Highly Oxygenated Graphene Oxide for Multifunctional Poly(lactic acid) Bionanocomposites. ACS Sustainable Chemistry and Engineering, 2016, 4, 5618-5631.	6.7	50
52	Properties of injection moulded starch/synthetic polymer blendsâ€"I. Effect of processing parameters on physical properties. European Polymer Journal, 1996, 32, 999-1010.	5.4	49
53	Conformational Footprint in Hydrolysis-Induced Nanofibrillation and Crystallization of Poly(lactic) Tj ETQq1 1 0.784314 rgBT /Overloc	5.4	49
54	Fully inkjet printed ultrathin microsupercapacitors based on graphene electrodes and a nano-graphene oxide electrolyte. Nanoscale, 2019, 11, 10172-10177.	5.6	49

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55	Developments in multiple headspace extraction. Journal of Proteomics, 2007, 70, 229-233.	2.4	48
56	Immobilized Graphene Oxide Nanosheets as Thin but Strong Nanointerfaces in Biocomposites. ACS Sustainable Chemistry and Engineering, 2016, 4, 2211-2222.	6.7	48
57	Graphene Oxide-Driven Design of Strong and Flexible Biopolymer Barrier Films: From Smart Crystallization Control to Affordable Engineering. ACS Sustainable Chemistry and Engineering, 2016, 4, 334-349.	6.7	47
58	A Closed-Loop Process from Microwave-Assisted Hydrothermal Degradation of Starch to Utilization of the Obtained Degradation Products as Starch Plasticizers. ACS Sustainable Chemistry and Engineering, 2014, 2, 2172-2181.	6.7	46
59	Microwave-Assisted Reaction in Green Solvents Recycles PHB to Functional Chemicals. ACS Sustainable Chemistry and Engineering, 2014, 2, 2198-2203.	6.7	46
60	Identification by headspace gas chromatography-mass spectrometry of in vitro degradation products of homo- and copolymers of l- and d,l-lactide and 1,5-dioxepan-2-one. Journal of Chromatography A, 1994, 688, 251-259.	3.7	45
61	Influence of low molecular weight lactic acid derivatives on degradability of polylactide. Journal of Applied Polymer Science, 2000, 76, 228-239.	2.6	45
62	Chemo-selective high yield microwave assisted reaction turns cellulose to green chemicals. Carbohydrate Polymers, 2014, 112, 448-457.	10.2	45
63	Recycling PLA to multifunctional oligomeric compatibilizers for PLA/starch composites. European Polymer Journal, 2015, 64, 126-137.	5.4	45
64	Susceptibility of starch-filled and starch-based LDPE to oxygen in water and air. Journal of Applied Polymer Science, 1997, 66, 959-967.	2.6	44
65	New PVC materials for medical applicationsâ€"the release profile of PVC/polycaprolactoneâ€"polycarbonate aged in aqueous environments. Polymer Degradation and Stability, 2003, 80, 451-458.	5.8	44
66	Construction of Bioactive and Reinforced Bioresorbable Nanocomposites by Reduced Nano-Graphene Oxide Carbon Dots. Biomacromolecules, 2018, 19, 1074-1081.	5.4	44
67	Solid-phase extraction and subsequent gas chromatography-mass spectrometry analysis for identification of complex mixtures of degradation products in starch-based polymers. Journal of Chromatography A, 1996, 741, 251-263.	3.7	43
68	Nanoclay effects on the degradation process and product patterns of polylactide. Polymer Degradation and Stability, 2012, 97, 1254-1260.	5.8	42
69	One-Pot Synthesis of Lignin Thermosets Exhibiting Widely Tunable Mechanical Properties and Shape Memory Behavior. ACS Sustainable Chemistry and Engineering, 2019, 7, 13456-13463.	6.7	42
70	Light Processable Starch Hydrogels. Polymers, 2020, 12, 1359.	4.5	42
71	Conformational Selection in Biocatalytic Plastic Degradation by PETase. ACS Catalysis, 2022, 12, 3397-3409.	11.2	42
72	Degradation of Cellulose Derivatives in Laboratory, Man-Made, and Natural Environments. Biomacromolecules, 2022, 23, 2713-2729.	5.4	42

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73	Type of polypropylene material significantly influences the migration of antioxidants from polymer packaging to food simulants during microwave heating. Journal of Applied Polymer Science, 2010, 118, 1084-1093.	2.6	41
74	Coffee Grounds to Multifunctional Quantum Dots: Extreme Nanoenhancers of Polymer Biocomposites. ACS Applied Materials & Interfaces, 2017, 9, 27972-27983.	8.0	41
75	Migration of Monomeric and Polymeric PVC Plasticizers. , 2008, , 159-185.		40
76	From starch to polylactide and nano-graphene oxide: fully starch derived high performance composites. RSC Advances, 2016, 6, 54336-54345.	3.6	38
77	Degradation Products of Aliphatic and Aliphaticâ€“Aromatic Polyesters. , 2008, , 85-116.		37
78	Tunable chitosan hydrogels for adsorption: Property control by biobased modifiers. Carbohydrate Polymers, 2018, 196, 135-145.	10.2	37
79	Microwave Assisted Hydrothermal Carbonization and Solid State Postmodification of Carbonized Polypropylene. ACS Sustainable Chemistry and Engineering, 2018, 6, 11105-11114.	6.7	37
80	Stereocomplexation between PLA-like substituted oligomers and the influence on the hydrolytic degradation. Polymer, 2013, 54, 4105-4111.	3.8	36
81	Improved dispersion of grafted starch granules leads to lower water resistance for starch-g-PLA/PLA composites. Composites Science and Technology, 2013, 86, 149-156.	7.8	35
82	Beyond a Model of Polymer Processing-Triggered Shear: Reconciling Shish-Kebab Formation and Control of Chain Degradation in Sheared Poly(<scp>l</scp>-lactic acid). ACS Sustainable Chemistry and Engineering, 2015, 3, 1443-1452.	6.7	35
83	Starch Derived Nanosized Graphene Oxide Functionalized Bioactive Porous Starch Scaffolds. Macromolecular Bioscience, 2017, 17, 1600397.	4.1	35
84	Novel sample-substrates for the determination of new psychoactive substances in oral fluid by desorption electrospray ionization-high resolution mass spectrometry. Talanta, 2019, 202, 136-144.	5.5	35
85	Solid-phase microextraction (SPME) in polymer characterization-Long-term properties and quality control of polymeric materials. Journal of Applied Polymer Science, 2003, 89, 867-873.	2.6	34
86	Multiple headspace solid-phase microextraction of 2-cyclopentyl-cyclopentanone in polyamide 6.6: possibilities and limitations in the headspace analysis of solid hydrogen-bonding matrices. Journal of Chromatography A, 2004, 1052, 61-68.	3.7	34
87	Degradation Profile of Poly(Îµâ€ɛcaprolactone)â€“the Influence of Macroscopic and Macromolecular Biomaterial Design. Journal of Macromolecular Science - Pure and Applied Chemistry, 2007, 44, 1041-1046.	2.2	34
88	Multiple headspace single-drop microextractionâ€”a new technique for quantitative determination of styrene in polystyrene. Journal of Chromatography A, 2006, 1102, 91-95.	3.7	33
89	Fingerprinting the degradation product patterns of different polyesterâ€ɛther networks by electrospray ionization mass spectrometry. Journal of Polymer Science Part A, 2008, 46, 4617-4629.	2.3	33
90	Migration from polycarbonate packaging to food simulants during microwave heating. Polymer Degradation and Stability, 2012, 97, 1387-1395.	5.8	33

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91	Glucose esters as biobased PVC plasticizers. European Polymer Journal, 2014, 58, 34-40.	5.4	33
92	Isosorbide as Core Component for Tailoring Biobased Unsaturated Polyester Thermosets for a Wide Structureâ€“Property Window. Biomacromolecules, 2018, 19, 3077-3085.	5.4	33
93	Controlling the cooperative self-assembly of graphene oxide quantum dots in aqueous solutions. RSC Advances, 2015, 5, 57425-57432.	3.6	32
94	Nano-Graphene Oxide Functionalized Bioactive Poly(lactic acid) and Poly(Îµ-caprolactone) Nanofibrous Scaffolds. Materials, 2018, 11, 566.	2.9	32
95	Designed Chain Architecture for Enhanced Migration Resistance and Property Preservation in Poly(vinyl chloride)/Polyester Blends. Biomacromolecules, 2007, 8, 1187-1194.	5.4	31
96	Synthesis, characterization, and cellular uptake of magnetic nanocarriers for cancer drug delivery. Journal of Colloid and Interface Science, 2014, 433, 76-85.	9.4	31
97	Structural Hierarchy and Polymorphic Transformation in Shearâ€Induced Shishâ€Kebab of Stereocomplex Poly(Lactic Acid). Macromolecular Rapid Communications, 2016, 37, 745-751.	3.9	31
98	Polyhydroxyalkanoate-based drug delivery systems. Polymer International, 2017, 66, 617-622.	3.1	31
99	Green Strategy to Reduced Nanographene Oxide through Microwave Assisted Transformation of Cellulose. ACS Sustainable Chemistry and Engineering, 2018, 6, 1246-1255.	6.7	31
100	One-Pot Synthesis of Sustainable High-Performance Thermoset by Exploiting Eugenol Functionalized 1,3-Dioxolan-4-one. ACS Sustainable Chemistry and Engineering, 2018, 6, 15201-15211.	6.7	31
101	Microbiological investigations of oxygen plasma treated parylene C surfaces for metal implant coating. Materials Science and Engineering C, 2015, 52, 273-281.	7.3	30
102	Photocrosslinked Chitosan Hydrogels Reinforced with Chitosanâ€Derived Nanoâ€Graphene Oxide. Macromolecular Chemistry and Physics, 2019, 220, 1900174.	2.2	29
103	Osteoconductive and Antibacterial Poly(lactic acid) Fibrous Membranes Impregnated with Biobased Nanocarbons for Biodegradable Bone Regenerative Scaffolds. Industrial & Engineering Chemistry Research, 2021, 60, 12021-12031.	3.7	29
104	Coreâ€“shell nanoparticleâ€“plasticizers for design of high-performance polymeric materials with improved stiffness and toughness. Journal of Materials Chemistry, 2011, 21, 8670.	6.7	28
105	Supramolecular Assembly of Biobased Graphene Oxide Quantum Dots Controls the Morphology of and Induces Mineralization on Poly(Îµ-caprolactone) Films. Biomacromolecules, 2016, 17, 256-261.	5.4	28
106	Recyclable Fully Biobased Chitosan Adsorbents Spray-Dried in One Pot to Microscopic Size and Enhanced Adsorption Capacity. Biomacromolecules, 2019, 20, 1956-1964.	5.4	28
107	Cellulose-derived hydrothermally carbonized materials and their emerging applications. Current Opinion in Green and Sustainable Chemistry, 2020, 23, 18-24.	5.9	28
108	Poly(lactide)-g-poly(butylene succinate-co-adipate) with High Crystallization Capacity and Migration Resistance. Materials, 2016, 9, 313.	2.9	27

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109	Superiorly Plasticized PVC/PBSA Blends through Crotonic and Acrylic Acid Functionalization of PVC. Polymers, 2017, 9, 84.	4.5	27
110	Superior flame retardancy of cotton by synergetic effect of cellulose-derived nano-graphene oxide carbon dots and disulphide-containing polyamidoamines. Polymer Degradation and Stability, 2019, 169, 108993.	5.8	27
111	Nanostructured Phase Morphology of a Biobased Copolymer for Tough and UV-Resistant Polylactide. ACS Applied Polymer Materials, 2021, 3, 1973-1982.	4.4	27
112	Cellulose-Derived Nanographene Oxide Surface-Functionalized Three-Dimensional Scaffolds with Drug Delivery Capability. Biomacromolecules, 2019, 20, 738-749.	5.4	26
113	Cellulose-Derived Nanographene Oxide Reinforced Macroporous Scaffolds of High Internal Phase Emulsion-Templated Cross-Linked Poly(Îµ-caprolactone). Biomacromolecules, 2020, 21, 589-596.	5.4	26
114	Ultrafast microwave assisted recycling of PET to a family of functional precursors and materials. European Polymer Journal, 2021, 151, 110441.	5.4	26
115	A proof-of-concept for folate-conjugated and quercetin-anchored pluronic mixed micelles as molecularly modulated polymeric carriers for doxorubicin. Polymer, 2015, 74, 193-204.	3.8	25
116	Electrospray Ionizationâ€Mass Spectrometry Analysis Reveals Migration of Cyclic Lactide Oligomers from Polylactide Packaging in Contact with Ethanolic Food Simulant. Packaging Technology and Science, 2012, 25, 427-433.	2.8	24
117	Heat-Resistant and Microwaveable Poly(lactic acid) by Quantum-Dot-Promoted Stereocomplexation. ACS Sustainable Chemistry and Engineering, 2017, 5, 11607-11617.	6.7	23
118	Polyacrylonitrile/N,P co-doped graphene quantum dots-layered double hydroxide nanocomposite: Flame retardant property, thermal stability and fire hazard. European Polymer Journal, 2019, 120, 109256.	5.4	23
119	Microwave processing of lignin in green solvents: A high-yield process to narrow-dispersity oligomers. Industrial Crops and Products, 2020, 145, 112152.	5.2	23
120	Qualitative and quantitative solid-phase microextraction gas chromatographicâ€"mass spectrometric determination of the low-molecular-mass compounds released from poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td (chloride)/p 9-16.	3.7	22
121	Solid Phase Microextraction for Analysis of Polymer Degradation Products and Additives. , 2007, , 23-50.		22
122	The viscoelastic interaction between dispersed and continuous phase of PCL/HA-PVA oil-in-water emulsion uncovers the theoretical and experimental basis for fiber formation during emulsion electrospinning. European Polymer Journal, 2017, 96, 44-54.	5.4	22
123	Turning natural Î´-lactones to thermodynamically stable polymers with triggered recyclability. Polymer Chemistry, 2020, 11, 4883-4894.	3.9	22
124	MALDI-TOF MS Reveals the Molecular Level Structures of Different Hydrophilicâ˘'Hydrophobic Polyether-esters. Biomacromolecules, 2009, 10, 1540-1546.	5.4	21
125	Long-term properties and migration of low molecular mass compounds from modified PLLA materials during accelerated ageing. Polymer Degradation and Stability, 2012, 97, 914-920.	5.8	21
126	Recycling Oxidized Model Polyethylene Powder as a Degradation Enhancing Filler for Polyethylene/Polycaprolactone Blends. ACS Sustainable Chemistry and Engineering, 2016, 4, 129-135.	6.7	21

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127	Thermoplastic â€œAll-Celluloseâ€•Composites with Covalently Attached Carbonized Cellulose. Biomacromolecules, 2020, 21, 1752-1761.	5.4	21
128	Carbon Dot-Triggered Photocatalytic Degradation of Cellulose Acetate. Biomacromolecules, 2021, 22, 2211-2223.	5.4	21
129	Hydrolytic Degradation of Porous Crosslinked Poly(Îµ-Caprolactone) Synthesized by High Internal Phase Emulsion Templating. Polymers, 2020, 12, 1849.	4.5	20
130	Microwave Hydrophobized Lignin with Antioxidant Activity for Fused Filament Fabrication. ACS Applied Polymer Materials, 2021, 3, 3538-3548.	4.4	20
131	Indicator Products: A New Tool for Lifetime Prediction of Polymeric Materials. Biomacromolecules, 2005, 6, 775-779.	5.4	19
132	Structurally Diverse and Recyclable Isocyanate-Free Polyurethane Networks from CO₂-Derived Cyclic Carbonates. ACS Sustainable Chemistry and Engineering, 2022, 10, 2522-2531.	6.7	19
133	Development of a solid-phase extraction method for simultaneous extraction of adipic acid, succinic acid and 1,4-butanediol formed during hydrolysis of poly(butylene adipate) and poly(butylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10	4.7	18
134	Combined Chromatographic and Mass Spectrometric Toolbox for Fingerprinting Migration from PET Tray during Microwave Heating. Journal of Agricultural and Food Chemistry, 2013, 61, 1405-1415.	5.2	18
135	Green Plasticizers from Liquefied Wood. Waste and Biomass Valorization, 2014, 5, 651-659.	3.4	18
136	Microwave-assisted methacrylation of chitosan for 3D printable hydrogels in tissue engineering. Materials Advances, 2022, 3, 514-525.	5.4	18
137	Emission of Volatiles from Polymers â€" A New Approach for Understanding Polymer Degradation. Journal of Polymers and the Environment, 2006, 14, 9-13.	5.0	17
138	Degradation profile and preliminary clinical testing of a resorbable device for ligation of blood vessels. Acta Biomaterialia, 2013, 9, 6898-6904.	8.3	17
139	Exploring the Biodegradation Potential of Polyethylene Through a Simple Chemical Test Method. Journal of Polymers and the Environment, 2014, 22, 69-77.	5.0	17
140	Levulinic Acid as a Versatile Building Block for Plasticizer Design. ACS Sustainable Chemistry and Engineering, 0, , .	6.7	17
141	DLP-printable fully biobased soybean oil composites. Polymer, 2022, 247, 124779.	3.8	17
142	Liquefied biomass derived plasticizer for polylactide. Journal of Chemical Technology and Biotechnology, 2013, 88, 897-903.	3.2	16
143	Recyclable and Flexible Polyester Thermosets Derived from Microwave-Processed Lignin. ACS Applied Polymer Materials, 2020, 2, 1917-1924.	4.4	16
144	Degradation of Cellulose Acetate in Simulated Aqueous Environments: Oneâ€•Year Study. Macromolecular Materials and Engineering, 2022, 307, .	3.6	16

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145	Surface Assisted Laser Desorption Ionization-Mass Spectrometry (SALDI-MS) for Analysis of Polyester Degradation Products. Journal of the American Society for Mass Spectrometry, 2012, 23, 1071-1076.	2.8	15
146	Migration resistant glucose esters as bioplasticizers for polylactide. Journal of Applied Polymer Science, 2015, 132, .	2.6	15
147	Correlation between emitted and total amount of 2-cyclopentyl-cyclopentanone in polyamide 6.6 allows rapid assessment by HS and HS-SPME under non-equilibrium conditions. Journal of Chromatography A, 2004, 1052, 151-159.	3.7	14
148	Tunable polylactide plasticizer design: Rigid stereoisomers. European Polymer Journal, 2021, 157, 110649.	5.4	14
149	Frontalâ€Photopolymerization of Fully Biobased Epoxy Composites. Macromolecular Materials and Engineering, 2022, 307, .	3.6	14
150	Miscibility and surface segregation in PVC/polyester blendsâ€”The influence of chain architecture and composition. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 1552-1563.	2.1	13
151	Nanocomposites as novel surfaces for laser desorption ionizationmass spectrometry. Analytical Methods, 2011, 3, 192-197.	2.7	13
152	Pyrolysis-GCâ€“MS reveals important differences in hydrolytic degradation process of wood flour and rice bran filled polylactide composites. Polymer Degradation and Stability, 2012, 97, 281-287.	5.8	13
153	New Solvent and Coagulating Agent for Development of Chitosan Fibers by Wet Spinning. Polymers, 2021, 13, 2121.	4.5	13
154	Tailoring Oligomeric Plasticizers for Polylactide through Structural Control. ACS Omega, 2022, 7, 14305-14316.	3.5	13
155	Prediction by multivariate data analysis of long-term properties of glassfiber reinforced polyester composites. Polymer Degradation and Stability, 1999, 64, 91-99.	5.8	12
156	Importance of Surface Functionalities for Antibacterial Properties of Carbon Spheres. Advanced Sustainable Systems, 2019, 3, 1800148.	5.3	12
157	Dual-Functioning Antibacterial Eugenol-Derived Plasticizers for Polylactide. Biomolecules, 2020, 10, 1077.	4.0	12
158	Solubility-governed architectural design of polyhydroxyurethane-<i>graft</i>-poly(Îµ-caprolactone) copolymers. Polymer Chemistry, 2021, 12, 196-208.	3.9	12
159	Migration and Emission of Plasticizer and Its Degradation Products during Thermal Aging of Nitrile Rubber. International Journal of Polymer Analysis and Characterization, 2003, 8, 279-293.	1.9	11
160	Phenolic prepreg waste as functional filler with antioxidant effect in polypropylene and polyamide-6. Polymer Degradation and Stability, 2006, 91, 1815-1823.	5.8	11
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