Katrien Bernaerts

List of Publications by Year
in descending order

54 papers	1,196 citations	430442 18 h-index	395343 33 g-index
56 all docs	56 docs citations	56 times ranked	1369 citing authors

#	Article	IF	Citations
1	Additive Manufacturing of Î±-Amino Acid Based Poly(ester amide)s for Biomedical Applications. Biomacromolecules, 2022, , .	2.6	8
2	Synergistic complexation of phenol functionalized polymer induced <i>in situ</i> microfiber formation for 3D printing of marine-based hydrogels. Green Chemistry, 2022, 24, 2409-2422.	4.6	16
3	Solid-state modification of poly(butylene terephthalate): Design of process from calorimetric methods for catalyst investigation to reactive extrusion. European Polymer Journal, 2022, 166, 111010.	2.6	3
4	A machine learning approach for the design of hyperbranched polymeric dispersing agents based on aliphatic polyesters for radiationâ€curable inks. Polymer International, 2022, 71, 966-975.	1.6	2
5	Preparation of Renewable Thiolâ€Yne â€œClickâ€•Networks Based on Fractionated Lignin for Anticorrosive Protective Film Applications. Macromolecular Chemistry and Physics, 2022, 223, .	1.1	2
6	Renewable Thiolâ€“yne â€œClickâ€•Networks Based on Propargylated Lignin for Adhesive Resin Applications. ACS Applied Polymer Materials, 2022, 4, 2544-2552.	2.0	12
7	Cholecalciferol as Bioactive Plasticizer of High Molecular Weight Poly(D,L-Lactic Acid) Scaffolds for Bone Regeneration. Tissue Engineering - Part C: Methods, 2022, 28, 335-350.	1.1	3
8	Amphiphilic Crosslinked Four-Armed Poly(lactic-<i>co</i>-glycolide) Electrospun Membranes for Enhancing Cell Adhesion. ACS Biomaterials Science and Engineering, 2022, 8, 2428-2436.	2.6	0
9	An injectable, self-healing, 3D printable, double network co-enzymatically crosslinked hydrogel using marine poly- and oligo-saccharides for wound healing application. Applied Materials Today, 2022, 29, 101581.	2.3	7
10	Polyamides containing a biorenewable aromatic monomer based on coumalate esters: from synthesis to evaluation of the thermal and mechanical properties. Polymer Chemistry, 2021, 12, 2379-2388.	1.9	3
11	The effect of copolymerization of cyclic dioxolane moieties on polyamide properties. Polymer, 2021, 226, 123799.	1.8	2
12	Development of Lignin-Based Mesoporous Carbons for the Adsorption of Humic Acid. ACS Omega, 2021, 6, 15222-15235.	1.6	13
13	Development of marine oligosaccharides for potential wound healing biomaterials engineering. Chemical Engineering Journal Advances, 2021, 7, 100113.	2.4	19
14	Radical Formation in Sugar-Derived Acetals under Solvent-Free Conditions. Molecules, 2021, 26, 5897.	1.7	1
15	Lignin-Based Additives for Improved Thermo-Oxidative Stability of Biolubricants. ACS Sustainable Chemistry and Engineering, 2021, 9, 12548-12559.	3.2	41
16	Shaping and properties of thermoplastic scaffolds in tissue regeneration: The effect of thermal history on polymer crystallization, surface characteristics and cell fate. Journal of Materials Research, 2021, 36, 3914-3935.	1.2	15
17	Synthesis and crystallization behavior of poly (lactide-co-glycolide). Polymer, 2021, 235, 124302.	1.8	4
18	Post-Modification of Biobased Pyrazines and Their Polyesters. Macromolecules, 2021, 54, 10850-10859.	2.2	2

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19	Solvent-free hydrogenation of levulinic acid to Î³-valerolactone using a Shvo catalyst precursor: optimization, thermodynamic insights, and life cycle assessment. Green Chemistry, 2020, 22, 2443-2458.	4.6	22
20	Chitooligosaccharides for wound healing biomaterials engineering. Materials Science and Engineering C, 2020, 117, 111266.	3.8	44
21	Hydrothermal polymerization towards fully biobased polyazomethines. Chemical Communications, 2020, 56, 9194-9197.	2.2	15
22	Thermoresponsive Poly(2-propyl-2-oxazoline) Surfaces of Glass for Nonenzymatic Cell Harvesting. ACS Applied Bio Materials, 2020, 3, 5428-5437.	2.3	6
23	Biobased Pyrazine-Containing Polyesters. ACS Sustainable Chemistry and Engineering, 2020, 8, 12045-12052.	3.2	8
24	Self-Assembled Supramolecular Hybrid Hydrogels Based on Hostâ€"Guest Interaction: Formation and Application in 3D Cell Culture. ACS Applied Bio Materials, 2020, 3, 6768-6778.	2.3	11
25	Small data materials design with machine learning: When the average model knows best. Journal of Applied Physics, 2020, 128, .	1.1	17
26	Organocatalyzed ring opening polymerization of regio-isomeric lactones: reactivity and thermodynamics considerations. Polymer Chemistry, 2020, 11, 3573-3584.	1.9	10
27	The Forgotten Pyrazines: Exploring the Dakinâ€"West Reaction. Chemistry - A European Journal, 2020, 26, 8090-8100.	1.7	3
28	Formation of cyclic structures in the cationic ring-opening polymerization of 1,3-dioxolane. RSC Advances, 2020, 10, 9623-9632.	1.7	3
29	UV-Curable Biobased Polyacrylates Based on a Multifunctional Monomer Derived from Furfural. Macromolecules, 2020, 53, 1388-1404.	2.2	19
30	Expansion of Ovarian Cancer Stem-like Cells in Poly(ethylene glycol)-Cross-Linked Poly(methyl vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 Engineering, 2020, 6, 3310-3326.	2.6	11
31	A Prospective Life Cycle Assessment (LCA) of Monomer Synthesis: Comparison of Biocatalytic and Oxidative Chemistry. ChemSusChem, 2019, 12, 1349-1360.	3.6	33
32	Towards High-performance Materials Based on Carbohydrate-Derived Polyamide Blends. Polymers, 2019, 11, 413.	2.0	3
33	High performing immobilized Baeyer-Villiger monooxygenase and glucose dehydrogenase for the synthesis of Îµ-caprolactone derivative. Applied Catalysis A: General, 2019, 572, 134-141.	2.2	22
34	Application of a thermostable Baeyerâ€"Villiger monooxygenase for the synthesis of branched polyester precursors. Journal of Chemical Technology and Biotechnology, 2018, 93, 2131-2140.	1.6	19
35	In-depth study of the synthesis of polyamides in the melt using biacetal derivatives of galactaric acid. Polymer Degradation and Stability, 2018, 151, 114-125.	2.7	5
36	Exploring the Substrate Scope of Baeyerâ€"Villiger Monooxygenases with Branched Lactones as Entry towards Polyesters. ChemBioChem, 2018, 19, 354-360.	1.3	12

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37	Elastic materials for tissue engineering applications: Natural, synthetic, and hybrid polymers. Acta Biomaterialia, 2018, 79, 60-82.	4.1	116
38	Solvent-Free Method for the Copolymerization of Labile Sugar-Derived Building Blocks into Polyamides. ACS Sustainable Chemistry and Engineering, 2018, 6, 13504-13517.	3.2	10
39	Structureâ€“Property Relations in New Cyclic Galactaric Acid Derived Monomers and Polymers Therefrom: Possibilities and Challenges. Macromolecular Rapid Communications, 2018, 39, e1800077.	2.0	5
40	Synthesis of isotactic polypropylene-block-polystyrene block copolymers as compatibilizers for isotactic polypropylene/polyphenylene oxide blends. Polymer, 2018, 147, 121-132.	1.8	6
41	Toward Upscaled Biocatalytic Preparation of Lactone Building Blocks for Polymer Applications. Organic Process Research and Development, 2018, 22, 803-812.	1.3	19
42	Polyamides based on a partially bio-based spirodiamine. European Polymer Journal, 2017, 96, 221-231.	2.6	15
43	Increasing the solubility range of polyesters by tuning their microstructure with comonomers. Polymer Chemistry, 2017, 8, 4696-4706.	1.9	16
44	Rigid, bio-based polyamides from galactaric acid derivatives with elevated glass transition temperatures and their characterization. Polymer, 2017, 124, 252-262.	1.8	14
45	Advanced Polymer Architectures with Stimuli-Responsive Properties Starting from Inimers. Macromolecules, 2008, 41, 2593-2606.	2.2	28
46	pH-Responsive Diblock Copolymers Prepared by the Dual Initiator Strategy. Macromolecules, 2006, 39, 3760-3769.	2.2	50
47	End-group modified poly(methyl vinyl ether): Characterization and LCST demixing behavior in water. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 461-469.	2.4	28
48	Dual/heterofunctional initiators for the combination of mechanistically distinct polymerization techniques. Progress in Polymer Science, 2006, 31, 671-722.	11.8	176
49	Design of novel poly(methyl vinyl ether) containing AB and ABC block copolymers by the dual initiator strategy. Polymer, 2005, 46, 8469-8482.	1.8	53
50	Preparation of star block co-polymers by combination of cationic ring opening polymerization and atom transfer radical polymerization. Designed Monomers and Polymers, 2005, 8, 705-714.	0.7	22
51	Controlled Synthesis of an ABC Miktoarm Star-Shaped Copolymer by Sequential Ring-Opening Polymerization of Ethylene Oxide, Benzyl Î²-Malolactonate, and Îµ-Caprolactone. Macromolecules, 2005, 38, 10650-10657.	2.2	44
52	Lactone End-Capped Poly(ethylene oxide) as a New Building Block for Biomaterials. Macromolecules, 2004, 37, 9738-9745.	2.2	60
53	Thermo-Responsive and Emulsifying Properties of Poly(N-vinylcaprolactam) Based Graft Copolymers. Macromolecular Chemistry and Physics, 2003, 204, 1217-1225.	1.1	53
54	Synthesis of poly(tetrahydrofuran)-b-polystyrene block copolymers from dual initiators for cationic ring-opening polymerization and atom transfer radical polymerization. Journal of Polymer Science Part A, 2003, 41, 3206-3217.	2.5	63