# Luc AvÃ©rous

List of Publications by Year
in descending order



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|---|---|---|---|
| 228 papers | 18,449 citations | 14644 66 h-index | 14736 127 g-index |
| 270 all docs | 270 docs citations | 270 times ranked | 14828 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Chemical modification of lignins: Towards biobased polymers. Progress in Polymer Science, 2014, 39, 1266-1290. | 11.8 | 1,458 |
| 2 | Poly(lactic acid): plasticization and properties of biodegradable multiphase systems. Polymer, 2001, 42, 6209-6219. | 1.8 | 1,369 |
| 3 | Nano-biocomposites: Biodegradable polyester/nanoclay systems. Progress in Polymer Science, 2009, 34, 125-155. | 11.8 | 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. | 1.2 | 499 |
| 6 | Properties of thermoplastic blends: starchâ€"polycaprolactone. Polymer, 2000, 41, 4157-4167. | 1.8 | 498 |
| 7 | Biocomposites based on plasticized starch: thermal and mechanical behaviours. Carbohydrate Polymers, 2004, 56, 111-122. | 5.1 | 477 |
| 8 | Starch-based nano-biocomposites. Progress in Polymer Science, 2013, 38, 1590-1628. | 11.8 | 455 |
| 9 | Antioxidant properties of lignin in polypropylene. Polymer Degradation and Stability, 2003, 81, 9-18. | 2.7 | 356 |
| 10 | Plasticized starchâ€"cellulose interactions in polysaccharide composites. Polymer, 2001, 42, 6565-6572. | 1.8 | 296 |
| 11 | Progress in nano-biocomposites based on polysaccharides and nanoclays. Materials Science and Engineering Reports, 2009, 67, 1-17. | 14.8 | 267 |
| 12 | Chemical modification of tannins to elaborate aromatic biobased macromolecular architectures. Green Chemistry, 2015, 17, 2626-2646. | 4.6 | 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. | 1.9 | 244 |
| 14 | Rheology to understand and optimize processibility, structures and properties of starch polymeric materials. Progress in Polymer Science, 2012, 37, 595-623. | 11.8 | 229 |
| 15 | A fully bio-based polyimine vitrimer derived from fructose. Green Chemistry, 2019, 21, 1596-1601. | 4.6 | 197 |
| 16 | Biobased polyurethanes for biomedical applications. Bioactive Materials, 2021, 6, 1083-1106. | 8.6 | 191 |
| 17 | Properties of biocomposites based on lignocellulosic fillers. Carbohydrate Polymers, 2006, 66, 480-493. | 5.1 | 190 |
| 18 | Polyurethanes Based on Castor Oil: Kinetics, Chemical, Mechanical and Thermal Properties. Macromolecular Materials and Engineering, 2008, 293, 922-929. | 1.7 | 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. | 3.6 | 179 |
| 20 | Biocomposites based on plasticized starch. Biofuels, Bioproducts and Biorefining, 2009, 3, 329-343. | 1.9 | 167 |
| 21 | Structure and properties of glycerol-plasticized chitosan obtained by mechanical kneading. Carbohydrate Polymers, 2011, 83, 947-952. | 5.1 | 166 |
| 22 | Evaluation of biological degradation of polyurethanes. Biotechnology Advances, 2020, 39, 107457. | 6.0 | 164 |
| 23 | Renewable polyols for advanced polyurethane foams from diverse biomass resources. Polymer Chemistry, 2018, 9, 4258-4287. | 1.9 | 156 |
| 24 | Properties of Biodegradable Multilayer Films Based on Plasticized Wheat Starch. Starch/Staerke, 2001, 53, 372. | 1.1 | 152 |
| 25 | Towards bio-upcycling of polyethylene terephthalate. Metabolic Engineering, 2021, 66, 167-178. | 3.6 | 151 |
| 26 | Aromatic Copolyester-based Nano-biocomposites: Elaboration, Structural Characterization and Properties. Journal of Polymers and the Environment, 2006, 14, 393-401. | 2.4 | 148 |
| 27 | Blends of thermoplastic starch and polyesteramide: processing and properties. Journal of Applied Polymer Science, 2000, 76, 1117-1128. | 1.3 | 144 |
| 28 | Starch-based biodegradable blends: morphology and interface properties. Polymer International, 2004, 53, 2115-2124. | 1.6 | 140 |
| 29 | Thermal and thermo-mechanical degradation of poly(3-hydroxybutyrate)-based multiphase systems. Polymer Degradation and Stability, 2008, 93, 413-421. | 2.7 | 138 |
| 30 | New Approach to Elaborate Exfoliated Starch-Based Nanobiocomposites. Biomacromolecules, 2008, 9, 896-900. | 2.6 | 138 |
| 31 | Association between plasticized starch and polyesters: Processing and performances of injected biodegradable systems. Polymer Engineering and Science, 2001, 41, 727-734. | 1.5 | 134 |
| 32 | Starch nano-biocomposites based on needle-like sepiolite clays. Carbohydrate Polymers, 2010, 80, 145-153. | 5.1 | 133 |
| 33 | Properties of glycerol-plasticized alginate films obtained by thermo-mechanical mixing. Food Hydrocolloids, 2017, 63, 414-420. | 5.6 | 131 |
| 34 | Starch-based nano-biocomposites: Plasticizer impact on the montmorillonite exfoliation process. Carbohydrate Polymers, 2010, 79, 941-947. | 5.1 | 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. | 4.6 | 126 |
| 36 | Biodegradable Polymers. Green Energy and Technology, 2012, , 13-39. | 0.4 | 124 |

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| 37 | Starch-Based Biodegradable Materials Suitable for Thermoforming Packaging. Starch/Staerke, 2001, 53, 368. | 1.1 | 122 |
| 38 | Innovative thermoplastic chitosan obtained by thermo-mechanical mixing with polyol plasticizers. Carbohydrate Polymers, 2013, 95, 241-251. | 5.1 | 122 |
| 39 | Properties of thermoplastic composites based on wheat-straw lignocellulosic fillers. Journal of Applied Polymer Science, 2004, 93, 428-436. | 1.3 | 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. | 2.4 | 113 |
| 41 | Structure-properties relationships of cellular materials from biobased polyurethane foams. Materials Science and Engineering Reports, 2021, 145, 100608. | 14.8 | 112 |
| 42 | Network Design to Control Polyimine Vitrimer Properties: Physical Versus Chemical Approach. Macromolecules, 2020, 53, 3796-3805. | 2.2 | 111 |
| 43 | Structure and Properties of PHA/Clay Nanoâ€Biocomposites Prepared by Melt Intercalation. Macromolecular Chemistry and Physics, 2008, 209, 1473-1484. | 1.1 | 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. | 1.7 | 109 |
| 46 | Synthesis and evaluation of functional alginate hydrogels based on click chemistry for drug delivery applications. Carbohydrate Polymers, 2018, 190, 271-280. | 5.1 | 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. | 2.6 | 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. | 3.7 | 108 |
| 49 | New Insights on the Chemical Modification of Lignin: Acetylation versus Silylation. ACS Sustainable Chemistry and Engineering, 2016, 4, 5212-5222. | 3.2 | 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. | 2.7 | 98 |
| 51 | Effects of lignin content on the properties of lignocellulose-based biocomposites. Carbohydrate Polymers, 2006, 66, 537-545. | 5.1 | 97 |
| 52 | Effect of clay organomodifiers on degradation of polyhydroxyalkanoates. Polymer Degradation and Stability, 2009, 94, 789-796. | 2.7 | 97 |
| 53 | Biobased vitrimers: Towards sustainable and adaptable performing polymer materials. Progress in Polymer Science, 2022, 127, 101515. | 11.8 | 94 |
| 54 | Dimer acid-based thermoplastic bio-polyamides: Reaction kinetics, properties and structure. Polymer, 2010, 51, 5895-5902. | 1.8 | 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. | 3.2 | 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. | 2.4 | 88 |
| 57 | Environmental Silicate Nano-Biocomposites. Green Energy and Technology, 2012, , . | 0.4 | 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. | 3.2 | 82 |
| 59 | Elaboration, morphology and properties of starch/polyester nano-biocomposites based on sepiolite clay. Carbohydrate Polymers, 2015, 118, 250-256. | 5.1 | 80 |
| 60 | How does water diffuse in starch/montmorillonite nano-biocomposite materials?. Carbohydrate Polymers, 2010, 82, 128-135. | 5.1 | 79 |
| 61 | Disruption of Î²-oxidation pathway in Pseudomonas putida KT2442 to produce new functionalized PHAs with thioester groups. Applied Microbiology and Biotechnology, 2011, 89, 1583-1598. | 1.7 | 77 |
| 62 | Tailoring the Structure, Morphology, and Crystallization of Isodimorphic Poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 467 Td (su History. Macromolecules, 2017, 50, 597-608. | 2.2 | 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. | 3.2 | 76 |
| 64 | Isolation and characterization of different promising fungi for biological waste management of polyurethanes. Microbial Biotechnology, 2019, 12, 544-555. | 2.0 | 75 |
| 65 | Synthesis, thermal properties, rheological and mechanical behaviors of lignins-grafted-poly(Îµ-caprolactone). Polymer, 2013, 54, 3882-3890. | 1.8 | 74 |
| 66 | Effect of crystallization on barrier properties of formulated polylactide. Polymer International, 2012, 61, 180-189. | 1.6 | 73 |
| 67 | Recent developments in the conservation of materials properties of historical wood. Progress in Materials Science, 2019, 102, 167-221. | 16.0 | 72 |
| 68 | In-line determination of plasticized wheat starch viscoelastic behavior: impact of processing. Carbohydrate Polymers, 2003, 53, 169-182. | 5.1 | 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. | 3.8 | 67 |
| 70 | Micromechanical modeling and characterization of the effective properties in starch-based nano-biocomposites. Acta Biomaterialia, 2008, 4, 1707-1714. | 4.1 | 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. | 3.8 | 65 |
| 72 | Original method for synthesis of chitosan-based antimicrobial agent by quaternary ammonium grafting. Carbohydrate Polymers, 2017, 157, 1922-1932. | 5.1 | 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. | 1.7 | 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. | 1.6 | 60 |
| 75 | Synthesis and characterization of advanced biobased thermoplastic nonisocyanate polyurethanes, with controlled aromatic-aliphatic architectures. European Polymer Journal, 2016, 84, 759-769. | 2.6 | 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. | 3.8 | 58 |
| 77 | Solvent- and catalyst-free synthesis of fully biobased nonisocyanate polyurethanes with different macromolecular architectures. RSC Advances, 2015, 5, 100390-100400. | 1.7 | 54 |
| 78 | Thermally healable and remendable lignin-based materials through Diels â€“ Alder click polymerization. Polymer, 2017, 133, 78-88. | 1.8 | 54 |
| 79 | Starch/graphene hydrogels via click chemistry with relevant electrical and antibacterial properties. Carbohydrate Polymers, 2018, 202, 372-381. | 5.1 | 54 |
| 80 | Preparation and Characterization of Thermoplastic Potato Starch/Halloysite Nano-Biocomposites: Effect of Plasticizer Nature and Nanoclay Content. Polymers, 2018, 10, 808. | 2.0 | 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. | 2.6 | 52 |
| 82 | Morphological, thermal, and mechanical properties of poly(Îµâ€caprolactone)/poly(Îµâ€caprolactone)â€graftedâ€cellulose nanocrystals mats produced by electrospinning. Journal of Applied Polymer Science, 2016, 133, . | 1.3 | 50 |
| 83 | Click chemistry for the synthesis of biobased polymers and networks derived from vegetable oils. Green Chemistry, 2021, 23, 4296-4327. | 4.6 | 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. | 2.4 | 48 |
| 85 | Characterization and Physicochemical Properties of Condensed Tannins from <i>Acacia catechu</i>. Journal of Agricultural and Food Chemistry, 2016, 64, 1751-1760. | 2.4 | 48 |
| 86 | Poly (butylene adipate-co-terephthalate)/hydroxyapatite composite structures for bone tissue recovery. Polymer Degradation and Stability, 2015, 120, 61-69. | 2.7 | 47 |
| 87 | Elaboration and properties of novel biobased nanocomposites with halloysite nanotubes and thermoplastic polyurethane from dimerized fatty acids. Polymer, 2014, 55, 5226-5234. | 1.8 | 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. | 3.8 | 46 |
| 89 | Elaboration and properties of plasticised chitosan-based exfoliated nano-biocomposites. Polymer, 2013, 54, 3654-3662. | 1.8 | 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. | 1.8 | 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. | 1.9 | 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. | 2.7 | 43 |
| 93 | Oxyalkylation of Condensed Tannin with Propylene Carbonate as an Alternative to Propylene Oxide. ACS Sustainable Chemistry and Engineering, 2016, 4, 3103-3112. | 3.2 | 43 |
| 94 | Nonisothermal crystallization kinetics of poly(lactide)â€"effect of plasticizers and nucleating agent. Polymer Engineering and Science, 2013, 53, 1085-1098. | 1.5 | 42 |
| 95 | Oxyalkylation of gambier tanninâ€"Synthesis and characterization of ensuing biobased polyols. Industrial Crops and Products, 2015, 67, 295-304. | 2.5 | 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. | 2.6 | 42 |
| 97 | Renewable and Responsive Cross-Linked Systems Based on Polyurethane Backbones from Clickable Biobased Bismaleimide Architecture. Macromolecules, 2020, 53, 5869-5880. | 2.2 | 42 |
| 98 | Biobased Polyurethane Foams Based on New Polyol Architectures from Microalgae Oil. ACS Sustainable Chemistry and Engineering, 2020, 8, 12187-12196. | 3.2 | 41 |
| 99 | Morphology and properties of thermoplastic starch blended with biodegradable polyester and filled with halloysite nanoclay. Carbohydrate Polymers, 2020, 242, 116392. | 5.1 | 41 |
| 100 | Dynamic network based on eugenol-derived epoxy as promising sustainable thermoset materials. European Polymer Journal, 2020, 135, 109860. | 2.6 | 41 |
| 101 | Differentiation of human adipose-derived stem cells seeded on mineralized electrospun co-axial poly(Îµ-caprolactone) (PCL)/gelatin nanofibers. Journal of Materials Science: Materials in Medicine, 2014, 25, 1137-1148. | 1.7 | 40 |
| 102 | Ligninâ€Based Materials Through Thiolâ€"Maleimide â€œClickâ€•Polymerization. ChemSusChem, 2017, 10, 984-992. | 3.6 | 39 |
| 103 | Evolution of the three-dimensional orientation distribution of glass fibers in injected isotactic polypropylene. Polymer Engineering and Science, 1997, 37, 329-337. | 1.5 | 38 |
| 104 | Nucleation, Crystallization, and Thermal Fractionation of Poly (Îµ-Caprolactone)-Grafted-Lignin: Effects of Grafted Chains Length and Lignin Content. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1736-1750. | 2.4 | 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. | 1.8 | 38 |
| 106 | Correlation between Composition, Structure and Properties of Poly(lactic acid)/Polyadipateâ€Based Nanoâ€Biocomposites. Macromolecular Materials and Engineering, 2010, 295, 551-558. | 1.7 | 37 |
| 107 | Itaconic and Fumaric Acid Production from Biomass Hydrolysates by Aspergillus Strains. Journal of Microbiology and Biotechnology, 2016, 26, 1557-1565. | 0.9 | 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. | 3.8 | 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. | 2.4 | 36 |
| 110 | Innovative plasticized alginate obtained by thermo-mechanical mixing: Effect of different biobased polyols systems. Carbohydrate Polymers, 2017, 157, 669-676. | 5.1 | 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. | 1.6 | 36 |
| 112 | Fungal Fermentation of Lignocellulosic Biomass for Itaconic and Fumaric Acid Production. Journal of Microbiology and Biotechnology, 2017, 27, 1-8. | 0.9 | 36 |
| 113 | Accelerated artificial ageing of new dimer fatty acid-based polyamides. Polymer Degradation and Stability, 2011, 96, 1097-1103. | 2.7 | 35 |
| 114 | Biorenewable nanocomposites. MRS Bulletin, 2011, 36, 703-710. | 1.7 | 35 |
| 115 | Enzymatic Synthesis of a Bio-Based Copolyester from Poly(butylene succinate) and Poly((<i>R</i>)-3-hydroxybutyrate): Study of Reaction Parameters on the Transesterification Rate. Biomacromolecules, 2016, 17, 4054-4063. | 2.6 | 34 |
| 116 | Synthesis and characterization of polyurethane foams derived of fully renewable polyester polyols from sorbitol. European Polymer Journal, 2017, 97, 319-327. | 2.6 | 34 |
| 117 | Processing and characterization of biodegradable polymer nanocomposites: detection of dispersion state. Rheologica Acta, 2008, 47, 543-553. | 1.1 | 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. | 2.7 | 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. | 3.6 | 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. | 3.7 | 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. | 2.6 | 33 |
| 123 | Enzymatic synthesis of poly(Îµ-caprolactone- co -Îµ-thiocaprolactone). European Polymer Journal, 2017, 87, 147-158. | 2.6 | 31 |
| 124 | Synthesis and characterization of renewable polyurethane foams using different biobased polyols from olive oil. European Polymer Journal, 2021, 149, 110363. | 2.6 | 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. | 2.7 | 30 |
| 126 | Natural Fibers, Bio- and Nanocomposites. International Journal of Polymer Science, 2011, 2011, 1-2. | 1.2 | 29 |

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| 127 | Novative Biomaterials Based on Chitosan and Poly(Îµ-Caprolactone): Elaboration of Porous Structures. Journal of Polymers and the Environment, 2011, 19, 819-826. | 2.4 | 28 |
| 128 | Synthesis and characterization of fully biobased aromatic polyols â€" oxybutylation of condensed tannins towards new macromolecular architectures. RSC Advances, 2014, 4, 61564-61572. | 1.7 | 27 |
| 129 | Lipase catalyzed synthesis of polycaprolactone and clay-based nanohybrids. Polymer, 2014, 55, 1648-1655. | 1.8 | 27 |
| 130 | Evaluation of starch-PE multilayers: Processing and properties. Polymer Engineering and Science, 2005, 45, 217-224. | 1.5 | 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. | 2.5 | 26 |
| 132 | Study of pseudoâ€multilayer structures based on starchâ€polycaprolactone extruded blends. Polymer Engineering and Science, 2009, 49, 1177-1186. | 1.5 | 25 |
| 133 | Mixed systems to assist enzymatic ring opening polymerization of lactide stereoisomers. RSC Advances, 2015, 5, 84627-84635. | 1.7 | 25 |
| 134 | Green Recycling Process for Polyurethane Foams by a Chemâ€Biotech Approach. ChemSusChem, 2021, 14, 4234-4241. | 3.6 | 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. | 0.4 | 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. | 1.7 | 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. | 3.6 | 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. | 0.9 | 23 |
| 140 | Yield behaviour of renewable biocomposites of dimer fatty acid-based polyamides with cellulose fibres. Composites Science and Technology, 2010, 70, 525-529. | 3.8 | 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. | 2.0 | 23 |
| 142 | Starch Polymers. , 2014, , 3-10. | | 23 |
| 143 | Calcium phosphates grown on bacterial cellulose template. Ceramics International, 2018, 44, 9433-9441. | 2.3 | 23 |
| 144 | Clicking Biobased Polyphenols: A Sustainable Platform for Aromatic Polymeric Materials. ChemSusChem, 2018, 11, 2472-2491. | 3.6 | 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. | 3.2 | 23 |
| 146 | Comprehensive experimental study of a starch/polyesteramide coextrusion. Journal of Applied Polymer Science, 2002, 86, 2586-2600. | 1.3 | 22 |
| 147 | Plasma-polymer coatings onto different biodegradable polyesters surfaces. European Polymer Journal, 2013, 49, 882-892. | 2.6 | 22 |
| 148 | Nanoclays for Lipase Immobilization: Biocatalyst Characterization and Activity in Polyester Synthesis. Polymers, 2016, 8, 416. | 2.0 | 22 |
| 149 | Novel Rigid Polyisocyanurate Foams from Synthesized Biobased Polyester Polyol with Enhanced Properties. ACS Sustainable Chemistry and Engineering, 2018, 6, 6577-6589. | 3.2 | 22 |
| 150 | Mild and controlled lignin methylation with trimethyl phosphate: towards a precise control of lignin functionality. Green Chemistry, 2020, 22, 1671-1680. | 4.6 | 22 |
| 151 | Green Nano-Biocomposites. Green Energy and Technology, 2012, , 1-11. | 0.4 | 21 |
| 152 | Optimized Bioproduction of Itaconic and Fumaric Acids Based on Solid-State Fermentation of Lignocellulosic Biomass. Molecules, 2020, 25, 1070. | 1.7 | 21 |
| 153 | Crystallinity study of nano-biocomposites based on plasticized poly(hydroxybutyrate-co-hydroxyvalerate) with organo-modified montmorillonite. Polymer Testing, 2013, 32, 1253-1260. | 2.3 | 20 |
| 154 | Solventâ€•and Halogenâ€Free Modification of Biobased Polyphenols to Introduce Vinyl Groups: Versatile Aromatic Building Blocks for Polymer Synthesis. ChemSusChem, 2017, 10, 1813-1822. | 3.6 | 20 |
| 155 | One step preparation of plasma based polymer films for drug release. Materials Science and Engineering C, 2012, 32, 2103-2108. | 3.8 | 19 |
| 156 | Elaboration and Properties of Innovative Biobased PUIR Foams from Microalgae. Journal of Polymers and the Environment, 2018, 26, 254-262. | 2.4 | 19 |
| 157 | Current Progress on Biodegradable Materials Based on Plasticized Starch. Australian Journal of Chemistry, 2005, 58, 457. | 0.5 | 18 |
| 158 | Viabilidade celular de nanofibras de polÃmeros biodegradÃ¡veis e seus nanocompÃ³sitos com argila montmorilonita. Polimeros, 2012, 22, 34-41. | 0.2 | 18 |
| 159 | Renewable Responsive Systems Based on Original Click and Polyurethane Crossâ€Linked Architectures with Advanced Properties. ChemSusChem, 2020, 13, 238-251. | 3.6 | 18 |
| 160 | Dihydrolevoglucosenone (Cyreneâ„¢) as a versatile biobased solvent for lignin fractionation, processing, and chemistry. Green Chemistry, 2022, 24, 338-349. | 4.6 | 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, . | 1.3 | 17 |
| 162 | Biological properties of novel polysuccinimide derivatives synthesized via quaternary ammonium grafting. European Polymer Journal, 2020, 131, 109705. | 2.6 | 17 |

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