

# Amar Kumar Mohanty

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/2911832/amar-kumar-mohanty-publications-by-citations.pdf>

**Version:** 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

332  
papers

15,265  
citations

63  
h-index

109  
g-index

346  
ext. papers

17,695  
ext. citations

4.8  
avg, IF

7.3  
L-index

#	Paper	IF	Citations
332	Biobased plastics and bionanocomposites: Current status and future opportunities. <i>Progress in Polymer Science</i> , <b>2013</b> , 38, 1653-1689	29.6	722
331	Effect of fiber surface-treatments on the properties of laminated biocomposites from poly(lactic acid) (PLA) and kenaf fibers. <i>Composites Science and Technology</i> , <b>2008</b> , 68, 424-432	8.6	522
330	Perspective on Polylactic Acid (PLA) based Sustainable Materials for Durable Applications: Focus on Toughness and Heat Resistance. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 2899-2916	8.3	446
329	Composites from renewable and sustainable resources: Challenges and innovations. <i>Science</i> , <b>2018</b> , 362, 536-542	33.3	377
328	Chopped glass and recycled newspaper as reinforcement fibers in injection molded poly(lactic acid) (PLA) composites: A comparative study. <i>Composites Science and Technology</i> , <b>2006</b> , 66, 1813-1824	8.6	368
327	A Review on Pineapple Leaf Fibers, Sisal Fibers and Their Biocomposites. <i>Macromolecular Materials and Engineering</i> , <b>2004</b> , 289, 955-974	3.9	272
326	Recent Advances in the Application of Natural Fiber Based Composites. <i>Macromolecular Materials and Engineering</i> , <b>2010</b> , 295, 975-989	3.9	265
325	Green composites from soy based plastic and pineapple leaf fiber: fabrication and properties evaluation. <i>Polymer</i> , <b>2005</b> , 46, 2710-2721	3.9	257
324	"Green" nanocomposites from cellulose acetate bioplastic and clay: effect of eco-friendly triethyl citrate plasticizer. <i>Biomacromolecules</i> , <b>2004</b> , 5, 2281-8	6.9	219
323	Recent advances in biodegradable nanocomposites. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2005</b> , 5, 497-526	1.3	219
322	Fully biodegradable and biorenewable ternary blends from polylactide, poly(3-hydroxybutyrate-co-hydroxyvalerate) and poly(butylene succinate) with balanced properties. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 3091-101	9.5	214
321	A Study on Biocomposites from Recycled Newspaper Fiber and Poly(lactic acid). <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2005</b> , 44, 5593-5601	3.9	208
320	Review of recent advances in the biodegradability of polyhydroxyalkanoate (PHA) bioplastics and their composites. <i>Green Chemistry</i> , <b>2020</b> , 22, 5519-5558	10	188
319	Renewable resource-based green composites from recycled cellulose fiber and poly(3-hydroxybutyrate-co-3-hydroxyvalerate) bioplastic. <i>Biomacromolecules</i> , <b>2006</b> , 7, 2044-51	6.9	172
318	Supertoughened renewable PLA reactive multiphase blends system: phase morphology and performance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 12436-48	9.5	165
317	Polylactide-based renewable green composites from agricultural residues and their hybrids. <i>Biomacromolecules</i> , <b>2010</b> , 11, 1654-60	6.9	164
316	Enhanced properties of lignin-based biodegradable polymer composites using injection moulding process. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2011</b> , 42, 1710-1718	8.4	160

315	Renewable resource based biocomposites from natural fiber and polyhydroxybutyrate-co-valerate (PHBV) bioplastic. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2008</b> , 39, 875-886	8.4	160
314	Modification of brittle polylactide by novel hyperbranched polymer-based nanostructures. <i>Biomacromolecules</i> , <b>2007</b> , 8, 2476-84	6.9	149
313	Effect of the processing methods on the performance of polylactide films: Thermocompression versus solvent casting. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 101, 3736-3742	2.9	146
312	Surface characterization of natural fibers; surface properties and the water up-take behavior of modified sisal and coir fibers. <i>Green Chemistry</i> , <b>2001</b> , 3, 100-107	10	145
311	Effect of Compatibilizer on Nanostructure of the Biodegradable Cellulose Acetate/Organoclay Nanocomposites. <i>Macromolecules</i> , <b>2004</b> , 37, 9076-9082	5.5	144
310	Influence of processing methods and fiber length on physical properties of kenaf fiber reinforced soy based biocomposites. <i>Composites Part B: Engineering</i> , <b>2007</b> , 38, 352-359	10	142
309	Fracture toughness and impact strength of anhydride-cured biobased epoxy. <i>Polymer Engineering and Science</i> , <b>2005</b> , 45, 487-495	2.3	142
308	Biodegradable compatibilized polymer blends for packaging applications: A literature review. <i>Journal of Applied Polymer Science</i> , <b>2018</b> , 135, 45726	2.9	139
307	Soybean (&#x26;i>&#x26;Glycine Max&#x26;i>) Leaf Extract Based Green Synthesis of Palladium Nanoparticles. <i>Journal of Biomaterials and Nanobiotechnology</i> , <b>2012</b> , 03, 14-19	1	138
306	Single-walled carbon nanotubes dispersed in aqueous media via non-covalent functionalization: effect of dispersant on the stability, cytotoxicity, and epigenetic toxicity of nanotube suspensions. <i>Water Research</i> , <b>2010</b> , 44, 505-20	12.5	136
305	Effect of chemical modifications of the pineapple leaf fiber surfaces on the interfacial and mechanical properties of laminated biocomposites. <i>Composite Interfaces</i> , <b>2008</b> , 15, 169-191	2.3	136
304	Hybrid bio-based composites from blends of unsaturated polyester and soybean oil reinforced with nanoclay and natural fibers. <i>Composites Science and Technology</i> , <b>2008</b> , 68, 3344-3351	8.6	136
303	Overcoming the Fundamental Challenges in Improving the Impact Strength and Crystallinity of PLA Biocomposites: Influence of Nucleating Agent and Mold Temperature. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 11203-14	9.5	128
302	Lignin as a reactive reinforcing filler for water-blown rigid biofoam composites from soy oil-based polyurethane. <i>Industrial Crops and Products</i> , <b>2013</b> , 47, 13-19	5.9	124
301	Mechanical properties of carbon nanotubes and their polymer nanocomposites. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2005</b> , 5, 1593-615	1.3	124
300	Biosynthesis of silver nanoparticles using murraya koenigii (curry leaf): An investigation on the effect of broth concentration in reduction mechanism and particle size. <i>Advanced Materials Letters</i> , <b>2011</b> , 2, 429-434	2.4	124
299	Influence of fiber surface treatment on properties of Indian grass fiber reinforced soy protein based biocomposites. <i>Polymer</i> , <b>2004</b> , 45, 7589-7596	3.9	122
298	Study of the Curing Kinetics of Epoxy Resins with Biobased Hardener and Epoxidized Soybean Oil. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2014</b> , 2, 2111-2116	8.3	119

297	Effect of fiber surface treatment on the properties of biocomposites from nonwoven industrial hemp fiber mats and unsaturated polyester resin. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 99, 1055-1068 <sup>29</sup>	117
296	Sustainable Green Composites: Value Addition to Agricultural Residues and Perennial Grasses. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2013</b> , 1, 325-333	8.3 106
295	Thermo-Physical and Impact Properties of Epoxy Containing Epoxidized Linseed Oil, 1. <i>Macromolecular Materials and Engineering</i> , <b>2004</b> , 289, 629-635	3.9 101
294	Improving the Impact Strength and Heat Resistance of 3D Printed Models: Structure, Property, and Processing Correlations during Fused Deposition Modeling (FDM) of Poly(Lactic Acid). <i>ACS Omega</i> , <b>2018</b> , 3, 4400-4411	3.9 100
293	Mechanical behaviour of agro-residue reinforced poly(3-hydroxybutyrate-co-3-hydroxyvalerate), (PHBV) green composites: A comparison with traditional polypropylene composites. <i>Composites Science and Technology</i> , <b>2011</b> , 71, 653-657	8.6 97
292	Preparation and Characterization of Cross-Linked Starch/Poly(vinyl alcohol) Green Films with Low Moisture Absorption. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 2176-2185	3.9 94
291	Effect of Maleated Compatibilizer on Performance of PLA/Wheat Straw-Based Green Composites. <i>Macromolecular Materials and Engineering</i> , <b>2011</b> , 296, 710-718	3.9 93
290	A Study of Carbonized Lignin as an Alternative to Carbon Black. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2014</b> , 2, 1257-1263	8.3 89
289	The Effects of Process Engineering on the Performance of PLA and PHBV Blends. <i>Macromolecular Materials and Engineering</i> , <b>2011</b> , 296, 719-728	3.9 87
288	A New Biodegradable Flexible Composite Sheet from Poly(lactic acid)/Poly(ε-caprolactone) Blends and Micro-Talc. <i>Macromolecular Materials and Engineering</i> , <b>2010</b> , 295, 750-762	3.9 83
287	Thermo-Physical and Impact Properties of Epoxy Containing Epoxidized Linseed Oil, 2. <i>Macromolecular Materials and Engineering</i> , <b>2004</b> , 289, 636-641	3.9 80
286	Challenges and new opportunities on barrier performance of biodegradable polymers for sustainable packaging. <i>Progress in Polymer Science</i> , <b>2021</b> , 117, 101395	29.6 79
285	Advances in the Properties of Polylactides Based Materials: A Review. <i>Journal of Biobased Materials and Bioenergy</i> , <b>2007</b> , 1, 191-209	1.4 78
284	Renewable resource based green composites from kenaf biofiber and poly(furfuryl alcohol) bioresin. <i>Industrial Crops and Products</i> , <b>2013</b> , 41, 94-101	5.9 77
283	New engineered biocomposites from poly(3-hydroxybutyrate-co-3-hydroxyvalerate) (PHBV)/poly(butylene adipate-co-terephthalate) (PBAT) blends and switchgrass: Fabrication and performance evaluation. <i>Industrial Crops and Products</i> , <b>2013</b> , 42, 461-468	5.9 77
282	Novel biobased nanocomposites from functionalized vegetable oil and organically-modified layered silicate clay. <i>Polymer</i> , <b>2005</b> , 46, 445-453	3.9 76
281	Carbon Coated LiMnPO <sub>4</sub> Nanorods for Lithium Batteries. <i>Journal of the Electrochemical Society</i> , <b>2011</b> , 158, A227	3.9 73
280	Biodegradable Poly(butylene succinate) and Poly(butylene adipate-co-terephthalate) Blends: Reactive Extrusion and Performance Evaluation. <i>Journal of Polymers and the Environment</i> , <b>2014</b> , 22, 336-349 <sup>45</sup>	72

279	Influence of Plasticizers on Thermal and Mechanical Properties and Morphology of Soy-Based Bioplastics. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2006</b> , 45, 7491-7496	3.9	72
278	Green Approaches To Engineer Tough Biobased Epoxies: A Review. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2017</b> , 5, 9528-9541	8.3	71
277	Green Composites from Residual Microalgae Biomass and Poly(butylene adipate-co-terephthalate): Processing and Plasticization. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2015</b> , 3, 614-624	8.3	70
276	A study of the mechanical, thermal and morphological properties of microcrystalline cellulose particles prepared from cotton slivers using different acid concentrations. <i>Cellulose</i> , <b>2009</b> , 16, 783-793	5.5	70
275	Biobased epoxy/clay nanocomposites as a new matrix for CFRP. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2006</b> , 37, 54-62	8.4	70
274	Compostability and biodegradation study of PLA-wheat straw and PLA-soy straw based green composites in simulated composting bioreactor. <i>Bioresource Technology</i> , <b>2010</b> , 101, 8489-91	11	68
273	Improved utilization of crude glycerol from biodiesel industries: Synthesis and characterization of sustainable biobased polyesters. <i>Industrial Crops and Products</i> , <b>2015</b> , 78, 141-147	5.9	66
272	Sustainable biocarbon from pyrolyzed perennial grasses and their effects on impact modified polypropylene biocomposites. <i>Composites Part B: Engineering</i> , <b>2017</b> , 118, 116-124	10	65
271	Biodegradable toughened polymers from renewable resources: blends of polyhydroxybutyrate with epoxidized natural rubber and maleated polybutadiene. <i>Green Chemistry</i> , <b>2006</b> , 8, 206-213	10	64
270	Novel biobased resins from blends of functionalized soybean oil and unsaturated polyester resin. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2007</b> , 45, 698-704	2.6	63
269	Injection Molded Sustainable Biocomposites From Poly(butylene succinate) Bioplastic and Perennial Grass. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2015</b> , 3, 2767-2776	8.3	62
268	Biocomposites with Size-Fractionated Biocarbon: Influence of the Microstructure on Macroscopic Properties. <i>ACS Omega</i> , <b>2016</b> , 1, 636-647	3.9	62
267	Effect of compatibilizer and fillers on the properties of injection molded lignin-based hybrid green composites. <i>Journal of Applied Polymer Science</i> , <b>2013</b> , 127, 4110-4121	2.9	61
266	Isolation of Cellulose Nanoparticles from Sesame Husk. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 871-876	3.9	61
265	Load-bearing natural fiber composite cellular beams and panels. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2004</b> , 35, 645-656	8.4	61
264	Recent advances and emerging opportunities in phytochemical synthesis of ZnO nanostructures. <i>Materials Science in Semiconductor Processing</i> , <b>2018</b> , 80, 143-161	4.3	60
263	Crystalline morphology of PLA/clay nanocomposite films and its correlation with other properties. <i>Journal of Applied Polymer Science</i> , <b>2010</b> , 118, 143-151	2.9	59
262	Biodegradable nanocomposites from cellulose acetate: Mechanical, morphological, and thermal properties. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2006</b> , 37, 1428-1433	8.4	59

- 261 Impact of interfacial adhesion on the microstructure and property variations of biocarbons reinforced nylon 6 biocomposites. *Composites Part A: Applied Science and Manufacturing*, **2017**, 98, 32-44<sup>8.4</sup> 56
- 260 Iodine Treatment of Lignin/Cellulose Acetate Electrospun Fibers: Enhancement of Green Fiber Carbonization. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 33-41 8.3 56
- 259 Studies on durability of sustainable biobased composites: a review.. *RSC Advances*, **2020**, 10, 17955-17999<sup>9.7</sup> 56
- 258 Extruded Biodegradable Cast Films from Polyhydroxyalkanoate and Thermoplastic Starch Blends: Fabrication and Characterization. *Macromolecular Materials and Engineering*, **2007**, 292, 1218-1228 3.9 56
- 257 Fabrication of conductive Lignin/PAN carbon nanofibers with enhanced graphene for the modified electrodes. *Carbon*, **2019**, 147, 262-275 10.4 55
- 256 Thermo-mechanical characterization of bioblends from polylactide and poly(butylene adipate-co-terephthalate) and lignin. *Macromolecular Materials and Engineering*, **2015**, 300, 299-311 3.9 55
- 255 Biodegradable green composites from bioethanol co-product and poly(butylene adipate-co-terephthalate). *Industrial Crops and Products*, **2013**, 43, 812-819 5.9 54
- 254 Injection Molded Glass Fiber Reinforced Poly(trimethylene terephthalate) Composites: Fabrication and Properties Evaluation. *Industrial & Engineering Chemistry Research*, **2005**, 44, 857-862 3.9 54
- 253 Characterization of Wastes and Coproducts from the Coffee Industry for Composite Material Production. *BioResources*, **2016**, 11, 1-3 1.3 54
- 252 Hybrid bio-composite from talc, wood fiber and bioplastic: Fabrication and characterization. *Composites Part A: Applied Science and Manufacturing*, **2010**, 41, 304-312 8.4 53
- 251 Thermal, Mechanical and Rheological Behavior of Poly(lactic acid)/Talc Composites. *Journal of Polymers and the Environment*, **2012**, 20, 1027-1037 4.5 52
- 250 Influence of processing parameters on the impact strength of biocomposites: A statistical approach. *Composites Part A: Applied Science and Manufacturing*, **2016**, 83, 120-129 8.4 51
- 249 Green Process for Impregnation of Silver Nanoparticles into Microcrystalline Cellulose and Their Antimicrobial Bionanocomposite Films. *Journal of Biomaterials and Nanobiotechnology*, **2012**, 03, 371-376<sup>1</sup> 51
- 248 Chopped Industrial Hemp Fiber Reinforced Cellulosic Plastic Biocomposites: Thermomechanical and Morphological Properties. *Industrial & Engineering Chemistry Research*, **2004**, 43, 4883-4888 3.9 51
- 247 Toughened Sustainable Green Composites from Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) Based Ternary Blends and Miscanthus Biofiber. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 2345-2354<sup>8.3</sup> 50
- 246 Analysis of Porous Electrospun Fibers from Poly(l-lactic acid)/Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) Blends. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 1976-1982 8.3 50
- 245 Biobased Ternary Blends of Lignin, Poly(Lactic Acid), and Poly(Butylene Adipate-co-Terephthalate): The Effect of Lignin Heterogeneity on Blend Morphology and Compatibility. *Journal of Polymers and the Environment*, **2014**, 22, 439-448 4.5 50
- 244 Electrospinning of aqueous lignin/poly(ethylene oxide) complexes. *Journal of Applied Polymer Science*, **2015**, 132, 2.9 49

243	Biological synthesis of silver nanoparticles using Glycine max (soybean) leaf extract: an investigation on different soybean varieties. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2009</b> , 9, 6828-33	49
242	Effect of Clay and Alumina-Nanowhisker Reinforcements on the Mechanical Properties of Nanocomposites from Biobased Epoxy: A Comparative Study. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 7001-7009	3.9 47
241	Green polyurethane nanocomposites from soy polyol and bacterial cellulose. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 2167-2175	4.3 46
240	Hybrid biofiber-based composites for structural cellular plates. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2005</b> , 36, 581-593	8.4 46
239	Maple leaf ( <i>Acer</i> sp.) extract mediated green process for the functionalization of ZnO powders with silver nanoparticles. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2014</b> , 113, 169-75	6 45
238	Sustainable biocomposites from biobased polyamide 6,10 and biocarbon from pyrolyzed miscanthus fibers. <i>Journal of Applied Polymer Science</i> , <b>2017</b> , 134,	2.9 45
237	Studies on recyclability of polyhydroxybutyrate-co-valerate bioplastic: Multiple melt processing and performance evaluations. <i>Journal of Applied Polymer Science</i> , <b>2012</b> , 125, E324-E331	2.9 45
236	Functionalization of lignin: Fundamental studies on aqueous graft copolymerization with vinyl acetate. <i>Industrial Crops and Products</i> , <b>2013</b> , 46, 191-196	5.9 45
235	Thermally Stable Pyrolytic Biocarbon as an Effective and Sustainable Reinforcing Filler for Polyamide Bio-composites Fabrication. <i>Journal of Polymers and the Environment</i> , <b>2018</b> , 26, 3574-3589	4.5 44
234	Physicomechanical and Thermal Properties of Jute-Nanofiber-Reinforced Biocopolyester Composites. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 2775-2782	3.9 44
233	Bio-poly(butylene succinate) and Its Composites with Grape Pomace: Mechanical Performance and Thermal Properties. <i>ACS Omega</i> , <b>2018</b> , 3, 15205-15216	3.9 44
232	Oxidative acid treatment and characterization of new biocarbon from sustainable Miscanthus biomass. <i>Science of the Total Environment</i> , <b>2016</b> , 550, 241-247	10.2 42
231	Poly(glycerol-co-diacids) Polyesters: From Glycerol Biorefinery to Sustainable Engineering Applications, A Review. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 5681-5693	8.3 41
230	Processability and Biodegradability Evaluation of Composites from Poly(butylene succinate) (PBS) Bioplastic and Biofuel Co-products from Ontario. <i>Journal of Polymers and the Environment</i> , <b>2014</b> , 22, 209-218	4.5 41
229	Bio-based unsaturated polyester/layered silicate nanocomposites: Characterization and thermo-physical properties. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2009</b> , 40, 540-547	8.4 41
228	Graphitization of Miscanthus grass biocarbon enhanced by in situ generated FeCo nanoparticles. <i>Green Chemistry</i> , <b>2018</b> , 20, 2269-2278	10 40
227	Biocomposite consisting of miscanthus fiber and biodegradable binary blend matrix: compatibilization and performance evaluation. <i>RSC Advances</i> , <b>2017</b> , 7, 27538-27548	3.7 39
226	Development of Biobased Unsaturated Polyester Containing Functionalized Linseed Oil. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2006</b> , 45, 1014-1018	3.9 39

225	Preparation of an Electric Double Layer Capacitor (EDLC) Using Miscanthus-Derived Biocarbon. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 318-324	8.3	39
224	Novel Biocomposites from Native Grass and Soy Based Bioplastic: Processing and Properties Evaluation. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2005</b> , 44, 7105-7112	3.9	38
223	Processing techniques for bio-based unsaturated-polyester/clay nanocomposites: Tensile properties, efficiency, and limits. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2009</b> , 40, 394-403	8.4	37
222	Graft copolymerization of acrylonitrile onto acetylated jute fibers. <i>Journal of Applied Polymer Science</i> , <b>1989</b> , 37, 1171-1181	2.9	37
221	Synthesis of Glycerol-Based Biopolyesters as Toughness Enhancers for Polylactic Acid Bioplastic through Reactive Extrusion. <i>ACS Omega</i> , <b>2016</b> , 1, 1284-1295	3.9	36
220	Sustainable biocarbon reinforced nylon 6/polypropylene compatibilized blends: Effect of particle size and morphology on performance of the biocomposites. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2018</b> , 112, 1-10	8.4	36
219	Accelerated hydrothermal aging of biocarbon reinforced nylon biocomposites. <i>Polymer Degradation and Stability</i> , <b>2017</b> , 139, 76-88	4.7	35
218	Novel materials from unsaturated polyester resin/styrene/tung oil blends with high impact strengths and enhanced mechanical properties. <i>Journal of Applied Polymer Science</i> , <b>2011</b> , 119, 2174-2182	2.9	35
217	Characterization of biocarbon generated by high- and low-temperature pyrolysis of soy hulls and coffee chaff: for polymer composite applications. <i>Royal Society Open Science</i> , <b>2018</b> , 5, 171970	3.3	35
216	Mechanical, Chemical, and Physical Properties of Wood and Perennial Grass Biochars for Possible Composite Application. <i>BioResources</i> , <b>2015</b> , 11,	1.3	34
215	Bio-based polymer nanocomposites from UPE/EML blends and nanoclay: Development, experimental characterization and limits to synergistic performance. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2011</b> , 42, 41-49	8.4	34
214	Novel compatibilized nylon-based ternary blends with polypropylene and poly(lactic acid): morphology evolution and rheological behaviour.. <i>RSC Advances</i> , <b>2018</b> , 8, 15709-15724	3.7	33
213	Fermented Soymeals and Their Reactive Blends with Poly(butylene adipate-co-terephthalate) in Engineering Biodegradable Cast Films for Sustainable Packaging. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 782-793	8.3	31
212	Carbonized Lignin as Sustainable Filler in Biobased Poly(trimethylene terephthalate) Polymer for Injection Molding Applications. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 102-110	8.3	31
211	Biodegradable Composites Developed from PBAT/PLA Binary Blends and Silk Powder: Compatibilization and Performance Evaluation. <i>ACS Omega</i> , <b>2018</b> , 3, 12412-12421	3.9	31
210	Influence of epoxidized natural rubber on the phase structure and toughening behavior of biocarbon reinforced nylon 6 biocomposites. <i>RSC Advances</i> , <b>2017</b> , 7, 8727-8739	3.7	30
209	Reactive extrusion of sustainable PHBV/PBAT-based nanocomposite films with organically modified nanoclay for packaging applications: Compression moulding vs. cast film extrusion. <i>Composites Part B: Engineering</i> , <b>2020</b> , 198, 108141	10	30
208	Novel Biodegradable Cast Film from Carbon Dioxide Based Copolymer and Poly(Lactic Acid). <i>Journal of Polymers and the Environment</i> , <b>2016</b> , 24, 23-36	4.5	30



207	Novel biocomposites from biobased PC/PLA blend matrix system for durable applications. <i>Composites Part B: Engineering</i> , <b>2017</b> , 130, 158-166	10	30
206	Biodegradability and Compostability of Lignocellulosic Based Composite Materials. <i>Journal of Renewable Materials</i> , <b>2013</b> , 1, 253-272	2.4	30
205	The Effect of Mold Temperature on the Performance of Injection Molded Poly(lactic acid)-Based Bioplastic. <i>Macromolecular Materials and Engineering</i> , <b>2013</b> , 298, 981-990	3.9	29
204	Preparation and Properties of Vinylester Resin/Clay Nanocomposites. <i>Macromolecular Materials and Engineering</i> , <b>2006</b> , 291, 1513-1520	3.9	29
203	Novel Talc-Filled Biodegradable Bacterial Polyester Composites. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2006</b> , 45, 7497-7503	3.9	29
202	Polycarbonate biocomposites reinforced with a hybrid filler system of recycled carbon fiber and biocarbon: Preparation and thermomechanical characterization. <i>Journal of Applied Polymer Science</i> , <b>2018</b> , 135, 46449	2.9	28
201	Biocomposites From Switchgrass and Lignin Hybrid and Poly(butylene succinate) Bioplastic: Studies on Reactive Compatibilization and Performance Evaluation. <i>Macromolecular Materials and Engineering</i> , <b>2014</b> , 299, 178-189	3.9	28
200	Biodegradable Green Composites from Distiller's Dried Grains with Solubles (DDGS) and a Polyhydroxy(butyrate-co-valerate) (PHBV)-Based Bioplastic. <i>Macromolecular Materials and Engineering</i> , <b>2011</b> , 296, 1035-1045	3.9	28
199	Sustainable Biocomposites from Pyrolyzed Grass and Toughened Polypropylene: Structure-Property Relationships. <i>ACS Omega</i> , <b>2017</b> , 2, 2191-2199	3.9	27
198	Miscibility and Performance Evaluation of Biocomposites Made from Polypropylene/Poly(lactic acid)/Poly(hydroxybutyrate--hydroxyvalerate) with a Sustainable Biocarbon Filler. <i>ACS Omega</i> , <b>2017</b> , 2, 6446-6454	3.9	27
197	Novel Compatibilized Nylon-Based Ternary Blends with Polypropylene and Poly(lactic acid): Fractionated Crystallization Phenomena and Mechanical Performance. <i>ACS Omega</i> , <b>2018</b> , 3, 2845-2854	3.9	27
196	Microwave Synthesis and Melt Blending of Glycerol Based Toughening Agent with Poly(lactic acid). <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 2142-2149	8.3	27
195	Biodegradable biocomposites from poly(butylene adipate-co-terephthalate) and miscanthus: Preparation, compatibilization, and performance evaluation. <i>Journal of Applied Polymer Science</i> , <b>2017</b> , 134, 45448	2.9	27
194	Electrospinning highly oriented and crystalline poly(lactic acid) fiber mats. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 2430-2441	4.3	27
193	Diameter-tuning of electrospun cellulose acetate fibers: a Box-Behnken design (BBD) study. <i>Carbohydrate Polymers</i> , <b>2013</b> , 92, 1100-6	10.3	27
192	Fundamental studies on water-washing of the corn ethanol coproduct (DDGS) and its characterization for biocomposite applications. <i>Biomass and Bioenergy</i> , <b>2013</b> , 55, 251-259	5.3	27
191	Value-Added New Materials from Byproduct of Corn Based Ethanol Industries: Blends of Plasticized Corn Gluten Meal and Poly(Ecaprolactone). <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2006</b> , 45, 6147-6152	3.9	27
190	Fruit waste valorization for biodegradable biocomposite applications: A review. <i>BioResources</i> , <b>2019</b> , 14, 10047-10092	1.3	27

189	Studies on the dimensional stability and mechanical properties of nanobiocomposites from polyamide 6-filled with biocarbon and nanoclay hybrid systems. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2020</b> , 129, 105695	8.4	27
188	Slow pyrolysis of bio-oil and studies on chemical and physical properties of the resulting new bio-carbon. <i>Journal of Cleaner Production</i> , <b>2018</b> , 172, 2748-2758	10.3	27
187	Sustainable composites from poly(3-hydroxybutyrate) (PHB) bioplastic and agave natural fibre. <i>Green Chemistry</i> , <b>2020</b> , 22, 3906-3916	10	26
186	Biocarbon from peanut hulls and their green composites with biobased poly(trimethylene terephthalate) (PTT). <i>Scientific Reports</i> , <b>2020</b> , 10, 3310	4.9	26
185	Statistical design of sustainable thermoplastic blends of poly(glycerol succinate-co-maleate) (PGSMA), poly(lactic acid) (PLA) and poly(butylene succinate) (PBS). <i>Polymer Testing</i> , <b>2018</b> , 65, 420-428	4.5	26
184	Sustainable biobased blends of poly(lactic acid) (PLA) and poly(glycerol succinate-co-maleate) (PGSMA) with balanced performance prepared by dynamic vulcanization. <i>RSC Advances</i> , <b>2017</b> , 7, 38594-38603	3.7	26
183	Carbon nanotubes from renewable feedstocks: A move toward sustainable nanofabrication. <i>Journal of Applied Polymer Science</i> , <b>2017</b> , 134,	2.9	26
182	Biodegradable Blends From Plasticized Soy Meal, Polycaprolactone, and Poly(butylene succinate). <i>Macromolecular Materials and Engineering</i> , <b>2012</b> , 297, 455-463	3.9	26
181	Static and Dynamic Mechanical Properties of Vinylester Resin Matrix Composites Filled with Fly Ash. <i>Macromolecular Materials and Engineering</i> , <b>2006</b> , 291, 784-792	3.9	26
180	Comparative study of the extrinsic properties of poly(lactic acid)-based biocomposites filled with talc sustainable biocarbon.. <i>RSC Advances</i> , <b>2019</b> , 9, 6752-6761	3.7	25
179	Characterization and Application in Biocomposites of Residual Microalgal Biomass Generated in Third Generation Biodiesel. <i>Journal of Polymers and the Environment</i> , <b>2013</b> , 21, 944-951	4.5	25
178	Hierarchical cellular designs for load-bearing biocomposite beams and plates. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 390, 178-187	5.3	25
177	Development of Toughened Blends of Poly(lactic acid) and Poly(butylene adipate-co-terephthalate) for 3D Printing Applications: Compatibilization Methods and Material Performance Evaluation. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 6576-6589	8.3	25
176	Biobased Poly(ethylene terephthalate)/Poly(lactic acid) Blends Tailored with Epoxide Compatibilizers. <i>ACS Omega</i> , <b>2018</b> , 3, 11759-11769	3.9	25
175	Injection molded biocomposites from polypropylene and lignin: Effect of compatibilizers on interfacial adhesion and performance. <i>Industrial Crops and Products</i> , <b>2019</b> , 132, 497-510	5.9	23
174	Blends of polylactic acid with thermoplastic copolyester elastomer: Effect of functionalized terpolymer type on reactive toughening. <i>Polymer Engineering and Science</i> , <b>2018</b> , 58, 280-290	2.3	23
173	Novel super-toughened bio-based blend from polycarbonate and poly(lactic acid) for durable applications. <i>RSC Advances</i> , <b>2016</b> , 6, 105094-105104	3.7	23
172	A Study On The Electrospinning Behaviour And Nanofibre Morphology Of Anionically Charged Lignin. <i>Advanced Materials Letters</i> , <b>2012</b> , 3, 476-480	2.4	23

171	A Solvent Free Graft Copolymerization of Maleic Anhydride onto Cellulose Acetate Butyrate Bioplastic by Reactive Extrusion. <i>Macromolecular Materials and Engineering</i> , <b>2006</b> , 291, 90-95	3.9	23
170	Surface modification of coir fibers I: studies on graft copolymerization of methyl methacrylate on to chemically modified coir fibers. <i>Polymers for Advanced Technologies</i> , <b>1999</b> , 10, 336-344	3.2	23
169	grass-derived carbon dots to selectively detect Fe ions.. <i>RSC Advances</i> , <b>2019</b> , 9, 8628-8637	3.7	22
168	Crystallization behavior and morphology of polylactic acid (PLA) with aromatic sulfonate derivative. <i>Journal of Applied Polymer Science</i> , <b>2016</b> , 133,	2.9	22
167	Improving the interfacial adhesion in a new renewable resource-based biocomposites from biofuel coproduct and biodegradable plastic. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 6025-6038	4.3	22
166	Modification of Soy Protein Plastic with Functional Monomer with Reactive Extrusion. <i>Journal of Polymers and the Environment</i> , <b>2008</b> , 16, 177-182	4.5	22
165	Thermoplastics from Soy Protein: A Review on Processing, Blends and Composites. <i>Journal of Biobased Materials and Bioenergy</i> , <b>2010</b> , 4, 298-316	1.4	22
164	Compatibilization of toughened polypropylene/biocarbon biocomposites: A full factorial design optimization of mechanical properties. <i>Polymer Testing</i> , <b>2017</b> , 61, 364-372	4.5	21
163	Super Toughened Poly(lactic acid)-Based Ternary Blends via Enhancing Interfacial Compatibility. <i>ACS Omega</i> , <b>2019</b> , 4, 1955-1968	3.9	21
162	Sustainable biobased blends from the reactive extrusion of polylactide and acrylonitrile butadiene styrene. <i>Journal of Applied Polymer Science</i> , <b>2016</b> , 133,	2.9	21
161	Toughening of brittle poly(lactide) with hyperbranched poly(ester-amide) and isocyanate-terminated prepolymer of polybutadiene. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 5158-5168	4.3	21
160	Performance Evaluation of Biofibers and Their Hybrids as Reinforcements in Bioplastic Composites. <i>Macromolecular Materials and Engineering</i> , <b>2013</b> , 298, 779-788	3.9	21
159	A Study of Dynamic Mechanical and Thermal Behavior of Starch/Poly(vinylalcohol) Based Films. <i>Journal of Polymers and the Environment</i> , <b>2009</b> , 17, 49-55	4.5	21
158	Effect of Accelerated Weathering on Biocomposites Processed by SMC and Compression Molding. <i>Journal of Polymers and the Environment</i> , <b>2006</b> , 14, 359-368	4.5	21
157	Physicochemical analysis of apple and grape pomaces. <i>BioResources</i> , <b>2019</b> , 14, 3210-3230	1.3	21
156	Sustainable Biocomposites from Poly(butylene succinate) and Apple Pomace: A Study on Compatibilization Performance. <i>Waste and Biomass Valorization</i> , <b>2020</b> , 11, 3775-3787	3.2	21
155	Thermal and Mechanical Properties of the Biocomposites of Biocarbon and Poly(3-ydroxybutyrate--3-ydroxyvalerate) (PHBV). <i>Polymers</i> , <b>2020</b> , 12,	4.5	20
154	Hybrid biocomposites from polypropylene, sustainable biocarbon and graphene nanoplatelets. <i>Scientific Reports</i> , <b>2020</b> , 10, 10714	4.9	20

153	Reactive compatibilization of poly trimethylene terephthalate (PTT) and polylactic acid (PLA) using terpolymer: Factorial design optimization of mechanical properties. <i>Materials and Design</i> , <b>2016</b> , 110, 581-591	8.1	20
152	Optimization of tensile properties thermoplastic blends from soy and biodegradable polyesters: Taguchi design of experiments approach. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 2591-2599	4.3	20
151	Statistical optimization of compatibilized blends of poly(lactic acid) and acrylonitrile butadiene styrene. <i>Journal of Applied Polymer Science</i> , <b>2017</b> , 134,	2.9	20
150	Biobased blends of poly(propylene carbonate) and poly(hydroxybutyrate-co-hydroxyvalerate): Fabrication and characterization. <i>Journal of Applied Polymer Science</i> , <b>2017</b> , 134,	2.9	20
149	Comparative compostability and biodegradation studies of various components of green composites and their blends in simulated aerobic composting bioreactor. <i>International Journal of Plastics Technology</i> , <b>2010</b> , 14, 45-50	2.7	20
148	Thermal and electrical behavior of vinyl ester resin matrix composites filled with fly ash particles. <i>Polymer Composites</i> , <b>2008</b> , 29, 58-62	3	20
147	Characterization and thermophysical properties of unsaturated polyester-layered silicate nanocomposites. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2006</b> , 6, 464-71	1.3	20
146	A New Approach to Supertough Poly(lactic acid): A High Temperature Reactive Blending. <i>Macromolecular Materials and Engineering</i> , <b>2016</b> , 301, 1443-1453	3.9	20
145	Experimental Design of Sustainable 3D-Printed Poly(Lactic Acid)/Biobased Poly(Butylene Succinate) Blends via Fused Deposition Modeling. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 14460-14470	8.3	19
144	Material property characterization of co-products from biofuel industries: Potential uses in value-added biocomposites. <i>Biomass and Bioenergy</i> , <b>2012</b> , 37, 88-96	5.3	19
143	Characterization of Chicken Feather Biocarbon for Use in Sustainable Biocomposites. <i>Frontiers in Materials</i> , <b>2020</b> , 7,	4	19
142	A statistical approach to develop biocomposites from epoxy resin, poly(furfuryl alcohol), poly(propylene carbonate), and biochar. <i>Journal of Applied Polymer Science</i> , <b>2017</b> , 134, 45307	2.9	18
141	Biobased polymer blends of poly(trimethylene terephthalate) and high density polyethylene. <i>Materials and Design</i> , <b>2016</b> , 90, 984-990	8.1	18
140	Mechanical Performance of Soy-Hull-Reinforced Bioplastic Green Composites: A Comparison with Polypropylene Composites. <i>Macromolecular Materials and Engineering</i> , <b>2012</b> , 297, 184-194	3.9	18
139	Green Composites From Soy-Based Biopolyurethane With Microcrystalline Cellulose. <i>Macromolecular Materials and Engineering</i> , <b>2013</b> , 298, 412-418	3.9	18
138	Enhanced conductivity and electrical relaxation studies of carbon-coated LiMnPO <sub>4</sub> nanorods. <i>Ionics</i> , <b>2013</b> , 19, 461-469	2.7	18
137	Tuning the compatibility to achieve toughened biobased poly(lactic acid)/poly(butylene terephthalate) blends.. <i>RSC Advances</i> , <b>2018</b> , 8, 27709-27724	3.7	17
136	Injection Molded Novel Biocomposites from Polypropylene and Sustainable Biocarbon. <i>Molecules</i> , <b>2019</b> , 24,	4.8	17

135	Tailoring the toughness of sustainable polymer blends from biodegradable plastics via morphology transition observed by atomic force microscopy. <i>Polymer Degradation and Stability</i> , <b>2020</b> , 173, 109066	4.7	17
134	Sustainable green composites from biodegradable plastics blend and natural fibre with balanced performance: Synergy of nano-structured blend and reactive extrusion. <i>Composites Science and Technology</i> , <b>2020</b> , 200, 108369	8.6	17
133	Electrospinning Process and Structure Relationship of Biobased Poly(butylene succinate) for Nanoporous Fibers. <i>ACS Omega</i> , <b>2018</b> , 3, 5547-5557	3.9	17
132	Sustainable Hydrophobic and Moisture-Resistant Coating Derived from Downstream Corn Oil. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 8766-8774	8.3	16
131	Biodegradable Blends from Corn Gluten Meal and Poly(butylene adipate-co-terephthalate) (PBAT): Studies on the Influence of Plasticization and Destructurization on Rheology, Tensile Properties and Interfacial Interactions. <i>Journal of Polymers and the Environment</i> , <b>2014</b> , 22, 167-175	4.5	16
130	A New Biodegradable Injection Moulded Bioplastic from Modified Soy Meal and Poly (butylene adipate-co-terephthalate): Effect of Plasticizer and Denaturant. <i>Journal of Polymers and the Environment</i> , <b>2013</b> , 21, 615-622	4.5	16
129	Renewable-Resource-Based Green Blends from Poly(furfuryl alcohol) Bioresin and Lignin. <i>Macromolecular Materials and Engineering</i> , <b>2014</b> , 299, 552-559	3.9	16
128	Renewable Resource Based Biocomposites from Coproduct of Dry Milling Corn Ethanol Industry and Castor Oil Based Biopolyurethanes. <i>Journal of Biobased Materials and Bioenergy</i> , <b>2007</b> , 1, 257-265	1.4	16
127	Processing and physical properties of native grass-reinforced biocomposites. <i>Polymer Engineering and Science</i> , <b>2007</b> , 47, 969-976	2.3	15
126	Comparison in composite performance after thermooxidative aging of injection molded polyamide 6 with glass fiber, talc, and a sustainable biocarbon filler. <i>Journal of Applied Polymer Science</i> , <b>2020</b> , 137, 48618	2.9	15
125	Recent advances in additive manufacturing of engineering thermoplastics: challenges and opportunities.. <i>RSC Advances</i> , <b>2020</b> , 10, 36058-36089	3.7	15
124	Strategy To Improve Printability of Renewable Resource-Based Engineering Plastic Tailored for FDM Applications. <i>ACS Omega</i> , <b>2019</b> , 4, 20297-20307	3.9	15
123	Exploring the Effect of Poly(propylene carbonate) Polyol in a Biobased Epoxy Interpenetrating Network. <i>ACS Omega</i> , <b>2017</b> , 2, 611-617	3.9	14
122	Sustainable Carbonaceous Biofiller from Miscanthus: Size Reduction, Characterization, and Potential Bio-composites Applications. <i>BioResources</i> , <b>2018</b> , 13,	1.3	14
121	Novel sustainable biobased flame retardant from functionalized vegetable oil for enhanced flame retardancy of engineering plastic. <i>Scientific Reports</i> , <b>2019</b> , 9, 15971	4.9	14
120	Mechanical properties of compatibilized nylon 6/polypropylene blends; studies of the interfacial behavior through an emulsion model. <i>Journal of Applied Polymer Science</i> , <b>2014</b> , 131, n/a-n/a	2.9	14
119	Microscopic, structural, and electrical characterization of the carbonaceous materials synthesized from various lignin feedstocks. <i>Journal of Applied Polymer Science</i> , <b>2015</b> , 132, n/a-n/a	2.9	14
118	Injection-moulded biocomposites from polylactic acid (PLA) and recycled carbon fibre: Evaluation of mechanical and thermal properties. <i>Journal of Thermoplastic Composite Materials</i> , <b>2014</b> , 27, 1286-1300	1.9	14

117	Water-Blown Rigid Biofoams from Soy-Based Biopolyurethane and Microcrystalline Cellulose. <i>JAOCS, Journal of the American Oil Chemists Society</i> , <b>2012</b> , 89, 2057-2065	1.8	14
116	Synergistic improvements in the impact strength and % elongation of polyhydroxybutyrate-co-valerate copolymers with functionalized soybean oils and POSS. <i>International Journal of Plastics Technology</i> , <b>2010</b> , 14, 1-16	2.7	14
115	A Preliminary Study on Antimicrobial Edible Films from Pectin and Other Food Hydrocolloids by Extrusion Method. <i>Journal of Natural Fibers</i> , <b>2008</b> , 5, 366-382	1.8	14
114	Ocean plastics: environmental implications and potential routes for mitigation - a perspective.. <i>RSC Advances</i> , <b>2021</b> , 11, 21447-21462	3.7	14
113	Sustainable biocarbon as an alternative of traditional fillers for poly(butylene terephthalate)-based composites: Thermo-oxidative aging and durability. <i>Journal of Applied Polymer Science</i> , <b>2019</b> , 136, 47722-9	2.9	13
112	Underutilized Agricultural Co-Product as a Sustainable Biofiller for Polyamide 6,6: Effect of Carbonization Temperature. <i>Molecules</i> , <b>2020</b> , 25,	4.8	13
111	Preparation and characterization of nanocrystalline CoFe <sub>2</sub> O <sub>4</sub> deposited on SiO <sub>2</sub> : in situ sol-gel process. <i>Journal of Sol-Gel Science and Technology</i> , <b>2011</b> , 58, 24-32	2.3	13
110	A Study of Physicomechanical and Morphological Properties of Starch/Poly(vinylalcohol) Based Films. <i>Journal of Polymers and the Environment</i> , <b>2009</b> , 17, 56-63	4.5	13
109	Rheological, Thermal, and Morphological Characteristics of Plasticized Cellulose Acetate Composite with Natural Fibers. <i>Macromolecular Symposia</i> , <b>2005</b> , 224, 297-308	0.8	13
108	Novel Glycine Max (Soybean) Leaf Extract Based Biological Process for the Functionalization of Carbon Nanotubes with Silver Nanoparticles. <i>Nanoscience and Nanotechnology Letters</i> , <b>2010</b> , 2, 240-243	0.8	13
107	Leaf extract mediated biogenic process for the decoration of graphene with silver nanoparticles. <i>Materials Letters</i> , <b>2016</b> , 178, 115-119	3.3	13
106	Statistical analysis of the effects of carbonization parameters on the structure of carbonized electrospun organosolv lignin fibers. <i>Journal of Applied Polymer Science</i> , <b>2016</b> , 133,	2.9	13
105	Impact of Butyl Glycidyl Ether Comonomer on Poly(glycerol succinate) Architecture and Dynamics for Multifunctional Hyperbranched Polymer Design. <i>Macromolecules</i> , <b>2017</b> , 50, 732-745	5.5	12
104	Reactive compatibilization and performance evaluation of miscanthus biofiber reinforced poly(hydroxybutyrate-co-hydroxyvalerate) biocomposites. <i>Journal of Applied Polymer Science</i> , <b>2017</b> , 134,	2.9	12
103	Biodegradable and Bio-based Green Blends from Carbon Dioxide-Derived Bioplastic and Poly(Butylene Succinate). <i>Journal of Polymers and the Environment</i> , <b>2017</b> , 25, 499-509	4.5	12
102	Synthesis, characterization and electrical properties of carbon coated LiCoPO <sub>4</sub> nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2011</b> , 11, 3314-22	1.3	12
101	Studies of Cu(II)-initiated graft copolymerization of methyl methacrylate from defatted pineapple leaf fibres. <i>Polymer International</i> , <b>1999</b> , 48, 868-872	3.3	12
100	Injection Moulded Biocomposites from Oat Hull and Polypropylene/Poly(lactide) Blend: Fabrication and Performance Evaluation. <i>Advances in Mechanical Engineering</i> , <b>2013</b> , 5, 761840	1.2	12

99	Novel tunable super-tough materials from biodegradable polymer blends: nano-structuring through reactive extrusion.. <i>RSC Advances</i> , <b>2019</b> , 9, 2836-2847	3.7	11
98	Examination of a Biobased Carbon Nucleating Agent on Poly(lactic acid) Crystallization. <i>Journal of Renewable Materials</i> , <b>2017</b> , 5, 94-105	2.4	11
97	In Situ Cellulose Nanocrystal-Reinforced Glycerol-Based Biopolyester for Enhancing Poly(lactic acid) Biocomposites. <i>ACS Omega</i> , <b>2018</b> , 3, 3857-3867	3.9	11
96	Synthesis of Shape Memory Poly(glycerol sebacate)-Stearate Polymer. <i>Macromolecular Materials and Engineering</i> , <b>2017</b> , 302, 1600294	3.9	11
95	Epoxidized pine oil-siloxane: Crosslinking kinetic study and thermomechanical properties. <i>Journal of Applied Polymer Science</i> , <b>2015</b> , 132, n/a-n/a	2.9	11
94	Co-Injection Molded New Green Composites from Biodegradable Polyesters and Miscanthus Fibers. <i>Macromolecular Materials and Engineering</i> , <b>2014</b> , 299, 436-446	3.9	11
93	Biodegradable nanocomposites from toughened polyhydroxybutyrate and titanate-modified montmorillonite clay. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2007</b> , 7, 3580-9	1.3	11
92	Welcome to the Journal of Biobased Materials and Bioenergy. <i>Journal of Biobased Materials and Bioenergy</i> , <b>2007</b> , 1, i-ii	1.4	11
91	Life Cycle Assessment of renewable filler material (biochar) produced from perennial grass (Miscanthus). <i>AIMS Energy</i> , <b>2019</b> , 7, 430-440	1.8	11
90	Long-term performance of nucleated toughened polypropylene-biocarbon composites. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2018</b> , 105, 274-280	8.4	11
89	Evaluation of the life cycle of an automotive component produced from biocomposite. <i>Journal of Cleaner Production</i> , <b>2020</b> , 273, 123051	10.3	11
88	Study on the 3D printability of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/poly(lactic acid) blends with chain extender using fused filament fabrication. <i>Scientific Reports</i> , <b>2020</b> , 10, 11804	4.9	11
87	Synergistic thermo-oxidative maleation of PA11 as compatibilization strategy for PA6 and PBT blend. <i>Polymer</i> , <b>2019</b> , 179, 121594	3.9	10
86	Melt Processing and Characterization of Bionanocomposites Made from Poly(butylene succinate) Bioplastic and Carbon Black. <i>Macromolecular Materials and Engineering</i> , <b>2015</b> , 300, 118-126	3.9	10
85	Hydrolytic stability of polycarbonate/poly(lactic acid) blends and its evaluation via poly(lactic acid) median melting point depression. <i>Polymer Degradation and Stability</i> , <b>2016</b> , 134, 227-236	4.7	10
84	Environmental and economic prospects of biomaterials in the automotive industry. <i>Clean Technologies and Environmental Policy</i> , <b>2019</b> , 21, 1535-1548	4.3	10
83	Thermal, mechanical, and morphological investigation of injection molded poly(trimethylene terephthalate)/carbon fiber composites. <i>Polymer Composites</i> , <b>2012</b> , 33, 1933-1940	3	10
82	Physico-Mechanical and Morphological Study of Starch/Polyvinylalcohol Based Biocomposite Films Reinforced with Microcrystalline Cellulose. <i>Journal of Biobased Materials and Bioenergy</i> , <b>2009</b> , 3, 100-107 <sup>1.4</sup>	1.4	10

81	Durable Polylactic Acid (PLA)-Based Sustainable Engineered Blends and Biocomposites: Recent Developments, Challenges, and Opportunities. <i>ACS Engineering Au</i> , <b>2021</b> , 1, 7-38		10
80	Development of hybrid composites reinforced with biocarbon/carbon fiber system. The comparative study for PC, ABS and PC/ABS based materials. <i>Composites Part B: Engineering</i> , <b>2020</b> , 200, 108319	10	10
79	Physicochemical Characterization and Evaluation of Pecan Nutshell as Biofiller in a Matrix of Poly(lactic acid). <i>Journal of Polymers and the Environment</i> , <b>2019</b> , 27, 521-532	4.5	10
78	Super-tough sustainable biobased composites from polylactide bioplastic and lignin for bio-elastomer application. <i>Polymer</i> , <b>2021</b> , 212, 123153	3.9	10
77	The effect of natural fillers on the marine biodegradation behaviour of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) (PHBV). <i>Scientific Reports</i> , <b>2021</b> , 11, 911	4.9	10
76	Study of the effect of processing conditions on the co-injection of PBS/PBAT and PTT/PBT blends for parts with increased bio-content. <i>Journal of Applied Polymer Science</i> , <b>2015</b> , 132,	2.9	9
75	Mechanical optimization of virgin and recycled poly(ethylene terephthalate) biocomposites with sustainable biocarbon through a factorial design. <i>Results in Materials</i> , <b>2020</b> , 5, 100060	2.3	9
74	A comparative life-cycle assessment of talc- and biochar-reinforced composites for lightweight automotive parts. <i>Clean Technologies and Environmental Policy</i> , <b>2020</b> , 22, 639-649	4.3	9
73	Hybrid Green Bionanocomposites of Bio-based Poly(butylene succinate) Reinforced with Pyrolyzed Perennial Grass Microparticles and Graphene Nanoplatelets. <i>ACS Omega</i> , <b>2019</b> , 4, 20476-20485	3.9	9
72	Progress in research and applications of Polyphenylene Sulfide blends and composites with carbons. <i>Composites Part B: Engineering</i> , <b>2021</b> , 209, 108553	10	9
71	Injection-Molded Bioblends from Lignin and Biodegradable Polymers: Processing and Performance Evaluation. <i>Journal of Polymers and the Environment</i> , <b>2018</b> , 26, 2360-2373	4.5	9
70	Impacts of COVID-19 Outbreak on the Municipal Solid Waste Management: Now and beyond the Pandemic. <i>ACS Environmental Au</i> ,		9
69	Sustainable PHBV/Cellulose Acetate Blends: Effect of a Chain Extender and a Plasticizer. <i>ACS Omega</i> , <b>2020</b> , 5, 14221-14231	3.9	8
68	Toughening of Biodegradable Poly(3-hydroxybutyrate-3-hydroxyvalerate)/Poly(Ecaprolactone) Blends by In Situ Reactive Compatibilization. <i>ACS Omega</i> , <b>2020</b> , 5, 14900-14910	3.9	8
67	Effect of Compatibilization on Biobased Rubber-Toughened Poly(trimethylene terephthalate): Miscibility, Morphology, and Mechanical Properties. <i>ACS Omega</i> , <b>2018</b> , 3, 7300-7309	3.9	8
66	A statistical approach to engineer a biocomposite formulation from biofuel coproduct with balanced properties. <i>Journal of Applied Polymer Science</i> , <b>2014</b> , 131,	2.9	8
65	A study of mechanical properties of biobased epoxy network: Effect of addition of epoxidized soybean oil and poly(furfuryl alcohol). <i>Journal of Applied Polymer Science</i> , <b>2017</b> , 134,	2.9	8
64	Hybrid Bio-Based Composites from UPE/EML Blends, Natural Fibers, and Nanoclay. <i>Macromolecular Materials and Engineering</i> , <b>2014</b> , 299, 1306-1315	3.9	8



63	Effect of Co-Rotation and Counter-Rotation Extrusion Processing on the Thermal and Mechanical Properties, and Morphology of Plasticized Soy Protein Isolate and Poly(butylene succinate) Blends. <i>Macromolecular Materials and Engineering</i> , <b>2011</b> , 296, 788-801	3.9	8
62	Biocomposites from biobased polyamide 4,10 and waste corn cob based biocarbon. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2021</b> , 145, 106340	8.4	8
61	Statistical design of sustainable composites from poly(lactic acid) and grape pomace. <i>Journal of Applied Polymer Science</i> , <b>2020</b> , 137, 49061	2.9	7
60	Tecoma stans flower extract assisted biogenic synthesis of functional Ag-Talc nanostructures for antimicrobial applications. <i>Bioresource Technology Reports</i> , <b>2019</b> , 7, 100298	4.1	7
59	Studies on why the heat deflection temperature of polylactide bioplastic cannot be improved by overcrosslinking. <i>Polymer Crystallization</i> , <b>2019</b> , 2, e10088	0.9	7
58	The effect of particle size on the rheological properties of polyamide 6/biochar composites <b>2015</b> ,		7
57	Novel Materials from Sesame Husks and Unsaturated Polyester Resin. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 6069-6074	3.9	7
56	Synthesis and characterization of novel nitrogen doped biocarbons from distillers dried grains with solubles (DDGS) for supercapacitor applications. <i>Bioresource Technology Reports</i> , <b>2020</b> , 9, 100375	4.1	7
55	Insights on the structure-performance relationship of polyphthalamide (PPA) composites reinforced with high-temperature produced biocarbon.. <i>RSC Advances</i> , <b>2020</b> , 10, 26917-26927	3.7	7
54	Processing, Carbonization, and Characterization of Lignin Based Electrospun Carbon Fibers: A Review. <i>Frontiers in Energy Research</i> , <b>2020</b> , 8,	3.8	7
53	A comprehensive review of renewable and sustainable biosourced carbon through pyrolysis in biocomposites uses: Current development and future opportunity. <i>Renewable and Sustainable Energy Reviews</i> , <b>2021</b> , 152, 111666	16.2	7
52	Novel Biocomposites from Biobased Epoxy and Corn-Based Distillers Dried Grains (DDG). <i>Journal of Polymers and the Environment</i> , <b>2015</b> , 23, 425-436	4.5	6
51	Experimental Investigation on Machinability of Polypropylene Reinforced with Miscanthus Fibers and Biochar. <i>Materials</i> , <b>2020</b> , 13,	3.5	6
50	Surface Modification of Flax Fibers for Manufacture of Engineering Thermoplastic Biocomposites. <i>Journal of Composites Science</i> , <b>2020</b> , 4, 64	3	6
49	Improvement of Impact Toughness of Biodegradable Poly(butylene succinate) by Melt Blending with Sustainable Biobased Glycerol Elastomers. <i>Journal of Polymers and the Environment</i> , <b>2018</b> , 26, 1078-1087	4.5	6
48	Novel biocomposites from poly(trimethylene terephthalate) and recycled carbon fibres. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 6056-6065	4.3	6
47	Green Synthesis for Lignin Plasticization. <i>Journal of Renewable Materials</i> , <b>2013</b> , 1, 154-165	2.4	6
46	Renewable resources-based PTT [poly(trimethylene terephthalate)]/switchgrass fiber composites: The effect of compatibilization. <i>Pure and Applied Chemistry</i> , <b>2012</b> , 85, 521-532	2.1	6

45	Additive manufacturing technology of polymeric materials for customized products: recent developments and future prospective.. <i>RSC Advances</i> , <b>2021</b> , 11, 36398-36438	3.7	6
44	Alkali and Peroxide Bleach Treatments on Spring Harvested Switchgrass for Potential Composite Application. <i>BioResources</i> , <b>2016</b> , 11,	1.3	6
43	Green Toughness Modifier from Downstream Corn Oil in Improving Poly(lactic acid) Performance. <i>ACS Applied Polymer Materials</i> , <b>2019</b> , 1, 3396-3406	4.3	5
42	Morphology and performance relationship studies on biodegradable ternary blends of poly(3-hydroxybutyrate--3-hydroxyvalerate), polylactic acid, and polypropylene carbonate.. <i>RSC Advances</i> , <b>2020</b> , 10, 44624-44632	3.7	5
41	Evolution of drinking straws and their environmental, economic and societal implications. <i>Journal of Cleaner Production</i> , <b>2021</b> , 316, 128234	10.3	5
40	Plywood adhesives derived from distillers' dried grains with solubles (DDGS) incorporating 2-hydroxyethyl acrylate. <i>Journal of Applied Polymer Science</i> , <b>2018</b> , 135, 45689	2.9	4
39	A New Class of Injection Moulded Structural Biocomposites from PHBV Bioplastic and Carbon Fibre. <i>Macromolecular Materials and Engineering</i> , <b>2013</b> , 298, 789-795	3.9	4
38	Sustainable biocomposites from Nylon 6 and polypropylene blends and biocarbon [Studies on tailored morphologies and complex composite structures. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2020</b> , 129, 105680	8.4	4
37	Effect of jute fibers on morphological characteristics and properties of thermoplastic starch/biodegradable polyester blend. <i>Cellulose</i> , <b>2021</b> , 28, 5513	5.5	4
36	Pyrolyzed biomass from corn ethanol industry coproduct and their polypropylene-based composites: Effect of heat treatment temperature on performance of the biocomposites. <i>Composites Part B: Engineering</i> , <b>2021</b> , 215, 108714	10	4
35	Impact of renewable carbon on the properties of composites made by using three types of polymers having different polarity. <i>Journal of Applied Polymer Science</i> , <b>2021</b> , 138, 49948	2.9	4
34	Extrusion Based 3D Printing of Sustainable Biocomposites from Biocarbon and Poly(trimethylene terephthalate). <i>Molecules</i> , <b>2021</b> , 26,	4.8	4
33	Formulation optimization of bioreinforced composites from polyolefins and dried distillers grains using statistical methods. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2019</b> , 119, 246-260	8.4	3
32	Rheological Monitoring of Chemical Gelation of Biodegradable Poly(butylene succinate): Importance of Peroxide Concentration and Temperature in Reactive Extrusion. <i>ACS Applied Polymer Materials</i> , <b>2019</b> , 1, 1604-1612	4.3	3
31	Effect of maleated polypropylene emulsion on the mechanical and thermal properties of lignin-polypropylene blends <b>2015</b> ,		3
30	Studies on the Reaction of Acrylonitrile Butadiene Styrene to Melt Processing Conditions. <i>Macromolecular Materials and Engineering</i> , <b>2015</b> , 300, 750-757	3.9	3
29	Novel Polymeric Resin Route for the Surface Modification of Nanocrystalline LiCoO <sub>2</sub> Particles with Al <sub>2</sub> O <sub>3</sub> . <i>Nanoscience and Nanotechnology Letters</i> , <b>2011</b> , 3, 161-165	0.8	3
28	Biological Treatment of Soy Straw: Physicochemical Characterization. <i>Journal of Biobased Materials and Bioenergy</i> , <b>2009</b> , 3, 373-379	1.4	3

27	Sustainable 3D Printed Composites from Recycled Ocean Plastics and Pyrolyzed Soy-Hulls: Optimization of Printing Parameters, Performance Studies and Prototypes Development. <i>Composites Part C: Open Access</i> , <b>2021</b> , 100197	1.6	3
26	Novel puffball ( <i>Lycoperdon Sp.</i> ) spores derived hierarchical nanostructured Biocarbon: A preliminary investigation on thermochemical conversion and characterization for supercapacitor applications. <i>Materials Letters</i> , <b>2021</b> , 291, 129432	3.3	3
25	Sustainable Biocomposites from Recycled Bale Wrap Plastic and Agave Fiber: Processing and Property Evaluation. <i>ACS Omega</i> , <b>2021</b> , 6, 2856-2864	3.9	3
24	Novel sustainable materials from waste plastics: compatibilized blend from discarded bale wrap and plastic bottles.. <i>RSC Advances</i> , <b>2021</b> , 11, 8594-8605	3.7	3
23	Stereodynamic insight into the thermal history effects on poly(vinyl chloride) calorimetric sub-glass and glass transitions as a fragile glass model. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 16333-16346	3.6	2
22	Effect of titanate-based surface on hydrophilicity and interlayer spacing of montmorillonite clay for polymer nanocomposites. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2005</b> , 5, 2138-43	1.3	2
21	Characterization of methyl methacrylate grafted jute fibers. <i>Journal of Applied Polymer Science</i> , <b>1989</b> , 37, 1423-1427	2.9	2
20	Green design of nanoporous materials and carbonaceous foams from polyfurfuryl alcohol and epoxidized linseed oil. <i>Materials Letters</i> , <b>2017</b> , 196, 238-241	3.3	1
19	Cross-Linkable Liquid-Crystalline Biopolyesteramide as a Multifunctional Polymeric Platform Designed from Corn Oil Side-Stream Product of Bioethanol Industry. <i>Macromolecular Rapid Communications</i> , <b>2019</b> , 40, e1900093	4.8	1
18	Understanding the morphology formation and properties of polyamide 6 and bio-based poly(trimethylene terephthalate) blends. <i>Polymer Engineering and Science</i> , <b>2018</b> , 58, 2210-2218	2.3	1
17	An in-depth analysis of the physico-mechanical properties imparted by agricultural fibers and food processing residues in polypropylene biocomposites <b>2015</b> ,		1
16	Biocomposites from co-polypropylene and distillers grains <b>2015</b> ,		1
15	Studies on curing kinetics of polyphenylene sulfide: An insight into effects of curing temperature and time on structure and thermo-mechanical behavior. <i>Journal of Applied Polymer Science</i> , 51817	2.9	1
14	Evaluating the Performance of a Semiaromatic/Aliphatic Polyamide Blend: The Case for Polyphthalamide (PPA) and Polyamide 4,10 (PA410). <i>Polymers</i> , <b>2021</b> , 13,	4.5	1
13	Effect of a Small Amount of Synthetic Fiber on Performance of Biocarbon-Filled Nylon-Based Hybrid Biocomposites. <i>Macromolecular Materials and Engineering</i> , <b>2021</b> , 306, 2000680	3.9	1
12	Studies on 3D Printability of Novel Impact Modified Nylon 6: Experimental Investigations and Performance Evaluation. <i>Macromolecular Materials and Engineering</i> , <b>2021</b> , 306, 2000548	3.9	1
11	Path-dependent rheology of carbon particle-hydroxyethylcellulose fluids. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2021</b> , 612, 126000	5.1	1
10	Impact of temperature and in situ FeCo catalysis on the architecture and Young's modulus of model wood-based biocarbon. <i>Green Chemistry</i> , <b>2021</b> , 23, 3015-3027	10	1

9	Biocomposites from Thermoplastic Postindustrial Waste Starches Filled with Mineral Fillers for Single-Use Flexible Packaging. <i>Macromolecular Materials and Engineering</i> , 2100960	3.9	1
8	Value-Added Bio-carbon Production through the Slow Pyrolysis of Waste Bio-oil: Fundamental Studies on Their Structure-Property-Processing Co-relation.. <i>ACS Omega</i> , <b>2022</b> , 7, 1612-1627	3.9	0
7	Microplastics in the ecosystems: Their implications and mitigation pathway		0
6	Biocarbon from spent coffee ground and their sustainable biocomposites with recycled water bottle and bale wrap: A new life for waste plastics and waste food residues for industrial uses. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2022</b> , 154, 106759	8.4	0
5	Injection Moldable Hybrid Sustainable Composites of PBS and PHBV Reinforced with Talc and Starch as Potential Alternatives to Single-Use Plastic Packaging. <i>Composites Part C: Open Access</i> , <b>2021</b> , 100201	1.6	0
4	Green Composites from a Bioplastic Blend of Poly(3-hydroxybutyrate--3-hydroxyvalerate) and Carbon Dioxide-Derived Poly(propylene carbonate) and Filled with a Corn Ethanol-Industry Co-product. <i>ACS Omega</i> , <b>2021</b> , 6, 20103-20111	3.9	0
3	International Conference on Natural Fibers Sustainable Materials for Advanced Applications 2013. <i>Conference Papers in Materials Science</i> , <b>2013</b> , 2013, 1-1		
2	Preparation and Characterization of Organoclay Reinforced Polylactic Acid Biocomposite Films. <i>Advanced Materials Research</i> , <b>2009</b> , 67, 289-293	0.5	
1	Characterization of Carbonized Electrospun Lignin Fibers. <i>Plastics Engineering</i> , <b>2016</b> , 72, 38-41	0.8	