Amar Kumar Mohanty

List of Publications by Year
in descending order

343 papers	20,620 citations	10956 71 h-index	15683 125 g-index
346 all docs	346 docs citations	346 times ranked	15171 citing authors

#	Article	IF	Citations
1	Biobased plastics and bionanocomposites: Current status and future opportunities. Progress in Polymer Science, 2013, 38, 1653-1689.	11.8	866
2	Perspective on Polylactic Acid (PLA) based Sustainable Materials for Durable Applications: Focus on Toughness and Heat Resistance. ACS Sustainable Chemistry and Engineering, 2016, 4, 2899-2916.	3.2	633
3	Composites from renewable and sustainable resources: Challenges and innovations. Science, 2018, 362, 536-542.	6.0	613
4	Effect of fiber surface-treatments on the properties of laminated biocomposites from poly(lactic acid) (PLA) and kenaf fibers. Composites Science and Technology, 2008, 68, 424-432.	3.8	603
5	Review of recent advances in the biodegradability of polyhydroxyalkanoate (PHA) bioplastics and their composites. Green Chemistry, 2020, 22, 5519-5558.	4.6	439
6	Chopped glass and recycled newspaper as reinforcement fibers in injection molded poly(lactic acid) (PLA) composites: A comparative study. Composites Science and Technology, 2006, 66, 1813-1824.	3.8	432
7	Recent Advances in the Application of Natural Fiber Based Composites. Macromolecular Materials and Engineering, 2010, 295, 975-989.	1.7	343
8	A Review on Pineapple Leaf Fibers, Sisal Fibers and Their Biocomposites. Macromolecular Materials and Engineering, 2004, 289, 955-974.	1.7	338
9	Challenges and new opportunities on barrier performance of biodegradable polymers for sustainable packaging. Progress in Polymer Science, 2021, 117, 101395.	11.8	321
10	â€˜Greenâ€™ composites from soy based plastic and pineapple leaf fiber: fabrication and properties evaluation. Polymer, 2005, 46, 2710-2721.	1.8	290
11	Fully Biodegradable and Biorenewable Ternary Blends from Polylactide, Poly(3-hydroxybutyrate-co-hydroxyvalerate) and Poly(butylene succinate) with Balanced Properties. ACS Applied Materials & Interfaces, 2012, 4, 3091-3101.	4.0	266
12	Recent Advances in Biodegradable Nanocomposites. Journal of Nanoscience and Nanotechnology, 2005, 5, 497-526.	0.9	251
13	â€œGreenâ€•Nanocomposites from Cellulose Acetate Bioplastic and Clay:Â Effect of Eco-Friendly Triethyl Citrate Plasticizer. Biomacromolecules, 2004, 5, 2281-2288.	2.6	244
14	A Study on Biocomposites from Recycled Newspaper Fiber and Poly(lactic acid). Industrial & Engineering Chemistry Research, 2005, 44, 5593-5601.	1.8	236
15	Biodegradable compatibilized polymer blends for packaging applications: A literature review. Journal of Applied Polymer Science, 2018, 135, 45726.	1.3	234
16	Supertoughened Renewable PLA Reactive Multiphase Blends System: Phase Morphology and Performance. ACS Applied Materials & Interfaces, 2014, 6, 12436-12448.	4.0	207
17	Enhanced properties of lignin-based biodegradable polymer composites using injection moulding process. Composites Part A: Applied Science and Manufacturing, 2011, 42, 1710-1718.	3.8	197
18	Renewable Resource-Based Green Composites from Recycled Cellulose Fiber and Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) Bioplastic. Biomacromolecules, 2006, 7, 2044-2051.	2.6	190

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19	Renewable resource based biocomposites from natural fiber and polyhydroxybutyrate-co-valerate (PHBV) bioplastic. Composites Part A: Applied Science and Manufacturing, 2008, 39, 875-886.	3.8	188
20	Polylactide-Based Renewable Green Composites from Agricultural Residues and Their Hybrids. Biomacromolecules, 2010, 11, 1654-1660.	2.6	186
21	Effect of the processing methods on the performance of polylactide films: Thermocompression versus solvent casting. Journal of Applied Polymer Science, 2006, 101, 3736-3742.	1.3	180
22	Overcoming the Fundamental Challenges in Improving the Impact Strength and Crystallinity of PLA Biocomposites: Influence of Nucleating Agent and Mold Temperature. ACS Applied Materials & Interfaces, 2015, 7, 11203-11214.	4.0	170
23	Influence of processing methods and fiber length on physical properties of kenaf fiber reinforced soy based biocomposites. Composites Part B: Engineering, 2007, 38, 352-359.	5.9	169
24	Surface characterization of natural fibers; surface properties and the water up-take behavior of modified sisal and coir fibers. Green Chemistry, 2001, 3, 100-107.	4.6	167
25	Hybrid bio-based composites from blends of unsaturated polyester and soybean oil reinforced with nanoclay and natural fibers. Composites Science and Technology, 2008, 68, 3344-3351.	3.8	163
26	Soybean (<i>Glycine Max</i>) Leaf Extract Based Green Synthesis of Palladium Nanoparticles. Journal of Biomaterials and Nanobiotechnology, 2012, 03, 14-19.	1.0	162
27	Effect of chemical modifications of the pineapple leaf fiber surfaces on the interfacial and mechanical properties of laminated biocomposites. Composite Interfaces, 2008, 15, 169-191.	1.3	161
28	Modification of Brittle Polylactide by Novel Hyperbranched Polymer-Based Nanostructures. Biomacromolecules, 2007, 8, 2476-2484.	2.6	160
29	Improving the Impact Strength and Heat Resistance of 3D Printed Models: Structure, Property, and Processing Correlationships during Fused Deposition Modeling (FDM) of Poly(Lactic Acid). ACS Omega, 2018, 3, 4400-4411.	1.6	158
30	Biosynthesis of silver nanoparticles using murraya koenigii (curry leaf): An investigation on the effect of broth concentration in reduction mechanism and particle size. Advanced Materials Letters, 2011, 2, 429-434.	0.3	158
31	Fracture toughness and impact strength of anhydride-cured biobased epoxy. Polymer Engineering and Science, 2005, 45, 487-495.	1.5	155
32	Effect of Compatibilizer on Nanostructure of the Biodegradable Cellulose Acetate/Organoclay Nanocomposites. Macromolecules, 2004, 37, 9076-9082.	2.2	151
33	Study of the Curing Kinetics of Epoxy Resins with Biobased Hardener and Epoxidized Soybean Oil. ACS Sustainable Chemistry and Engineering, 2014, 2, 2111-2116.	3.2	150
34	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. Water Research, 2010, 44, 505-520.	5.3	148
35	Lignin as a reactive reinforcing filler for water-blown rigid biofoam composites from soy oil-based polyurethane. Industrial Crops and Products, 2013, 47, 13-19.	2.5	146
36	Mechanical Properties of Carbon Nanotubes and Their Polymer Nanocomposites. Journal of Nanoscience and Nanotechnology, 2005, 5, 1593-1615.	0.9	145

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37	Sustainable Green Composites: Value Addition to Agricultural Residues and Perennial Grasses. ACS Sustainable Chemistry and Engineering, 2013, 1, 325-333.	3.2	141
38	Influence of fiber surface treatment on properties of Indian grass fiber reinforced soy protein based biocomposites. Polymer, 2004, 45, 7589-7596.	1.8	138
39	Effect of fiber surface treatment on the properties of biocomposites from nonwoven industrial hemp fiber mats and unsaturated polyester resin. Journal of Applied Polymer Science, 2006, 99, 1055-1068.	1.3	131
40	A Study of Carbonized Lignin as an Alternative to Carbon Black. ACS Sustainable Chemistry and Engineering, 2014, 2, 1257-1263.	3.2	123
41	Preparation and Characterization of Cross-Linked Starch/Poly(vinyl alcohol) Green Films with Low Moisture Absorption. Industrial & Engineering Chemistry Research, 2010, 49, 2176-2185.	1.8	117
42	Thermo-Physical and Impact Properties of Epoxy Containing Epoxidized Linseed Oil, 1. Macromolecular Materials and Engineering, 2004, 289, 629-635.	1.7	110
43	Effect of Maleated Compatibilizer on Performance of PLA/Wheat Strawâ€Based Green Composites. Macromolecular Materials and Engineering, 2011, 296, 710-718.	1.7	110
44	Studies on durability of sustainable biobased composites: a review. RSC Advances, 2020, 10, 17955-17999.	1.7	110
45	Mechanical behaviour of agro-residue reinforced poly(3-hydroxybutyrate-co-3-hydroxyvalerate), (PHBV) green composites: A comparison with traditional polypropylene composites. Composites Science and Technology, 2011, 71, 653-657.	3.8	109
46	The Effects of Process Engineering on the Performance of PLA and PHBV Blends. Macromolecular Materials and Engineering, 2011, 296, 719-728.	1.7	108
47	New engineered biocomposites from poly(3-hydroxybutyrate-co-3-hydroxyvalerate) (PHBV)/poly(butylene adipate-co-terephthalate) (PBAT) blends and switchgrass: Fabrication and performance evaluation. Industrial Crops and Products, 2013, 42, 461-468.	2.5	107
48	Green Approaches To Engineer Tough Biobased Epoxies: A Review. ACS Sustainable Chemistry and Engineering, 2017, 5, 9528-9541.	3.2	100
49	Biodegradable Poly(butylene succinate) and Poly(butylene adipate-co-terephthalate) Blends: Reactive Extrusion and Performance Evaluation. Journal of Polymers and the Environment, 2014, 22, 336-349.	2.4	99
50	A New Biodegradable Flexible Composite Sheet from Poly(lactic acid)/Poly(<i>Îµ</i>â€caprolactone) Blends and Microâ€Talc. Macromolecular Materials and Engineering, 2010, 295, 750-762.	1.7	97
51	Renewable resource based â€œall green compositesâ€• from kenaf biofiber and poly(furfuryl alcohol) bioresin. Industrial Crops and Products, 2013, 41, 94-101.	2.5	93
52	Green Composites from Residual Microalgae Biomass and Poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 Td (adipate-<i>co</i Engineering, 2015, 3, 614-624.	3.2	91
53	Sustainable biocarbon from pyrolyzed perennial grasses and their effects on impact modified polypropylene biocomposites. Composites Part B: Engineering, 2017, 118, 116-124.	5.9	89
54	Compostability and biodegradation study of PLAâ€"wheat straw and PLAâ€"soy straw based green composites in simulated composting bioreactor. Bioresource Technology, 2010, 101, 8489-8491.	4.8	87

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55	Influence of Plasticizers on Thermal and Mechanical Properties and Morphology of Soy-Based Bioplastics. Industrial & Engineering Chemistry Research, 2006, 45, 7491-7496.	1.8	86
56	Preparation of an Electric Double Layer Capacitor (EDLC) Using <i>Miscanthus</i>-Derived Biocarbon. ACS Sustainable Chemistry and Engineering, 2018, 6, 318-324.	3.2	86
57	Advances in the Properties of Polylactides Based Materials: A Review. Journal of Biobased Materials and Bioenergy, 2007, 1, 191-209.	0.1	86
58	Thermo-Physical and Impact Properties of Epoxy Containing Epoxidized Linseed Oil, 2. Macromolecular Materials and Engineering, 2004, 289, 636-641.	1.7	84
59	A study of the mechanical, thermal and morphological properties of microcrystalline cellulose particles prepared from cotton slivers using different acid concentrations. Cellulose, 2009, 16, 783-793.	2.4	83
60	Improved utilization of crude glycerol from biodiesel industries: Synthesis and characterization of sustainable biobased polyesters. Industrial Crops and Products, 2015, 78, 141-147.	2.5	83
61	Characterization of Wastes and Coproducts from the Coffee Industry for Composite Material Production. BioResources, 2016, 11, .	0.5	83
62	Biobased epoxy/clay nanocomposites as a new matrix for CFRP. Composites Part A: Applied Science and Manufacturing, 2006, 37, 54-62.	3.8	81
63	Novel biobased nanocomposites from functionalized vegetable oil and organically-modified layered silicate clay. Polymer, 2005, 46, 445-453.	1.8	80
64	Injection Molded Sustainable Biocomposites From Poly(butylene succinate) Bioplastic and Perennial Grass. ACS Sustainable Chemistry and Engineering, 2015, 3, 2767-2776.	3.2	80
65	Recent advances and emerging opportunities in phytochemical synthesis of ZnO nanostructures. Materials Science in Semiconductor Processing, 2018, 80, 143-161.	1.9	80
66	Biocomposites with Size-Fractionated Biocarbon: Influence of the Microstructure on Macroscopic Properties. ACS Omega, 2016, 1, 636-647.	1.6	79
67	Fabrication of conductive Lignin/PAN carbon nanofibers with enhanced graphene for the modified electrodes. Carbon, 2019, 147, 262-275.	5.4	79
68	Sustainable polymers. Nature Reviews Methods Primers, 2022, 2, .	11.8	78
69	Biodegradable toughened polymers from renewable resources: blends of polyhydroxybutyrate with epoxidized natural rubber and maleated polybutadiene. Green Chemistry, 2006, 8, 206-213.	4.6	77
70	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.	3.8	77
71	Carbon Coated LiMnPO[sub 4] Nanorods for Lithium Batteries. Journal of the Electrochemical Society, 2011, 158, A227.	1.3	76
72	Thermoâ€mechanical characterization of bioblends from polylactide and poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 Td (adi	1.7	76

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73	Isolation of Cellulose Nanoparticles from Sesame Husk. Industrial & Engineering Chemistry Research, 2011, 50, 871-876.	1.8	75
74	Load-bearing natural fiber composite cellular beams and panels. Composites Part A: Applied Science and Manufacturing, 2004, 35, 645-656.	3.8	73
75	Crystalline morphology of PLA/clay nanocomposite films and its correlation with other properties. Journal of Applied Polymer Science, 2010, 118, 143-151.	1.3	73
76	Iodine Treatment of Ligninâ€“Cellulose Acetate Electrospun Fibers: Enhancement of Green Fiber Carbonization. ACS Sustainable Chemistry and Engineering, 2015, 3, 33-41.	3.2	73
77	Effect of compatibilizer and fillers on the properties of injection molded ligninâ€based hybrid green composites. Journal of Applied Polymer Science, 2013, 127, 4110-4121.	1.3	72
78	Processability and Biodegradability Evaluation of Composites from Poly(butylene succinate) (PBS) Bioplastic and Biofuel Co-products from Ontario. Journal of Polymers and the Environment, 2014, 22, 209-218.	2.4	72
79	Durable Polylactic Acid (PLA)-Based Sustainable Engineered Blends and Biocomposites: Recent Developments, Challenges, and Opportunities. ACS Engineering Au, 2021, 1, 7-38.	2.3	72
80	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.	2.4	70
81	Sustainable biocomposites from biobased polyamide 6,10 and biocarbon from pyrolyzed miscanthus fibers. Journal of Applied Polymer Science, 2017, 134, .	1.3	69
82	Novel biobased resins from blends of functionalized soybean oil and unsaturated polyester resin. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 698-704.	2.4	68
83	Poly(glycerol-<i>co</i>-diacids) Polyesters: From Glycerol Biorefinery to Sustainable Engineering Applications, A Review. ACS Sustainable Chemistry and Engineering, 2018, 6, 5681-5693.	3.2	67
84	Bio-poly(butylene succinate) and Its Composites with Grape Pomace: Mechanical Performance and Thermal Properties. ACS Omega, 2018, 3, 15205-15216.	1.6	67
85	Toughened Sustainable Green Composites from Poly(3-hydroxybutyrate-<i>co</i>-3-hydroxyvalerate) Based Ternary Blends and Miscanthus Biofiber. ACS Sustainable Chemistry and Engineering, 2014, 2, 2345-2354.	3.2	66
86	Biodegradable nanocomposites from cellulose acetate: Mechanical, morphological, and thermal properties. Composites Part A: Applied Science and Manufacturing, 2006, 37, 1428-1433.	3.8	65
87	Extruded Biodegradable Cast Films from Polyhydroxyalkanoate and Thermoplastic Starch Blends: Fabrication and Characterization. Macromolecular Materials and Engineering, 2007, 292, 1218-1228.	1.7	65
88	Thermal, Mechanical and Rheological Behavior of Poly(lactic acid)/Talc Composites. Journal of Polymers and the Environment, 2012, 20, 1027-1037.	2.4	65
89	Reactive extrusion of sustainable PHBV/PBAT-based nanocomposite films with organically modified nanoclay for packaging applications: Compression moulding vs. cast film extrusion. Composites Part B: Engineering, 2020, 198, 108141.	5.9	65
90	Injection Molded Glass Fiber Reinforced Poly(trimethylene terephthalate) Composites:Â Fabrication and Properties Evaluation. Industrial & Engineering Chemistry Research, 2005, 44, 857-862.	1.8	63

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91	Green Process for Impregnation of Silver Nanoparticles into Microcrystalline Cellulose and Their Antimicrobial Bionanocomposite Films. Journal of Biomaterials and Nanobiotechnology, 2012, 03, 371-376.	1.0	63
92	Biodegradable green composites from bioethanol co-product and poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Td (adipate-c	2.5	63
93	Analysis of Porous Electrospun Fibers from Poly(<scp>l</scp>-lactic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 667 Td (acid)/Poly(3 Engineering, 2014, 2, 1976-1982.	3.2	63
94	Development of Toughened Blends of Poly(lactic acid) and Poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (adipate-<i>co</ Performance Evaluation. ACS Sustainable Chemistry and Engineering, 2020, 8, 6576-6589.	3.2	63
95	Electrospinning of aqueous lignin/poly(ethylene oxide) complexes. Journal of Applied Polymer Science, 2015, 132, .	1.3	62
96	Characterization of biocarbon generated by high- and low-temperature pyrolysis of soy hulls and coffee chaff: for polymer composite applications. Royal Society Open Science, 2018, 5, 171970.	1.1	61
97	Hybrid bio-composite from talc, wood fiber and bioplastic: Fabrication and characterization. Composites Part A: Applied Science and Manufacturing, 2010, 41, 304-312.	3.8	60
98	Influence of processing parameters on the impact strength of biocomposites: A statistical approach. Composites Part A: Applied Science and Manufacturing, 2016, 83, 120-129.	3.8	60
99	Graphitization of <i>Miscanthus</i> grass biocarbon enhanced by <i>in situ</i> generated FeCo nanoparticles. Green Chemistry, 2018, 20, 2269-2278.	4.6	60
100	Thermally Stable Pyrolytic Biocarbon as an Effective and Sustainable Reinforcing Filler for Polyamide Bio-composites Fabrication. Journal of Polymers and the Environment, 2018, 26, 3574-3589.	2.4	60
101	Chopped Industrial Hemp Fiber Reinforced Cellulosic Plastic Biocomposites:Â Thermomechanical and Morphological Properties. Industrial & Engineering Chemistry Research, 2004, 43, 4883-4888.	1.8	58
102	Biological Synthesis of Silver Nanoparticles Using Glycine max (Soybean) Leaf Extract: An Investigation on Different Soybean Varieties. Journal of Nanoscience and Nanotechnology, 2009, 9, 6828-33.	0.9	57
103	Studies on recyclability of polyhydroxybutyrateâ€<i>co</i>â€valerate bioplastic: Multiple melt processing and performance evaluations. Journal of Applied Polymer Science, 2012, 125, E324.	1.3	57
104	Biodegradable Composites Developed from PBAT/PLA Binary Blends and Silk Powder: Compatibilization and Performance Evaluation. ACS Omega, 2018, 3, 12412-12421.	1.6	57
105	Oxidative acid treatment and characterization of new biocarbon from sustainable Miscanthus biomass. Science of the Total Environment, 2016, 550, 241-247.	3.9	56
106	Biocarbon from peanut hulls and their green composites with biobased poly(trimethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142 Td	1.6	55
107	Hybrid biofiber-based composites for structural cellular plates. Composites Part A: Applied Science and Manufacturing, 2005, 36, 581-593.	3.8	52
108	Green polyurethane nanocomposites from soy polyol and bacterial cellulose. Journal of Materials Science, 2013, 48, 2167-2175.	1.7	52

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109	Functionalization of lignin: Fundamental studies on aqueous graft copolymerization with vinyl acetate. Industrial Crops and Products, 2013, 46, 191-196.	2.5	52
110	Maple leaf (Acer sp.) extract mediated green process for the functionalization of ZnO powders with silver nanoparticles. Colloids and Surfaces B: Biointerfaces, 2014, 113, 169-175.	2.5	52
111	Biocomposite consisting of miscanthus fiber and biodegradable binary blend matrix: compatibilization and performance evaluation. RSC Advances, 2017, 7, 27538-27548.	1.7	52
112	Novel compatibilized nylon-based ternary blends with polypropylene and poly(lactic acid): morphology evolution and rheological behaviour. RSC Advances, 2018, 8, 15709-15724.	1.7	52
113	Effect of Clay and Alumina-Nanowhisker Reinforcements on the Mechanical Properties of Nanocomposites from Biobased Epoxy:Â A Comparative Study. Industrial & Engineering Chemistry Research, 2004, 43, 7001-7009.	1.8	51
114	Synthesis of Glycerol-Based Biopolyesters as Toughness Enhancers for Polylactic Acid Bioplastic through Reactive Extrusion. ACS Omega, 2016, 1, 1284-1295.	1.6	51
115	Sustainable composites from poly(3-hydroxybutyrate) (PHB) bioplastic and agave natural fibre. Green Chemistry, 2020, 22, 3906-3916.	4.6	51
116	Physicomechanical and Thermal Properties of Jute-Nanofiber-Reinforced Biocopolyester Composites. Industrial & Engineering Chemistry Research, 2010, 49, 2775-2782.	1.8	50
117	Physicochemical analysis of apple and grape pomaces. BioResources, 2019, 14, 3210-3230.	0.5	49
118	Super Toughened Poly(lactic acid)-Based Ternary Blends via Enhancing Interfacial Compatibility. ACS Omega, 2019, 4, 1955-1968.	1.6	48
119	Ocean plastics: environmental implications and potential routes for mitigation â€“ a perspective. RSC Advances, 2021, 11, 21447-21462.	1.7	48
120	Carbon nanotubes from renewable feedstocks: A move toward sustainable nanofabrication. Journal of Applied Polymer Science, 2017, 134, .	1.3	47
121	Fermented Soymeals and Their Reactive Blends with Poly(butylene adipate-<i>co</i>-terephthalate) in Engineering Biodegradable Cast Films for Sustainable Packaging. ACS Sustainable Chemistry and Engineering, 2016, 4, 782-793.	3.2	46
122	Accelerated hydrothermal aging of biocarbon reinforced nylon biocomposites. Polymer Degradation and Stability, 2017, 139, 76-88.	2.7	46
123	Recent advances in additive manufacturing of engineering thermoplastics: challenges and opportunities. RSC Advances, 2020, 10, 36058-36089.	1.7	46
124	Fruit waste valorization for biodegradable biocomposite applications: A review. BioResources, 2019, 14, 10047-10092.	0.5	46
125	Graft copolymerization of acrylonitrile onto acetylated jute fibers. Journal of Applied Polymer Science, 1989, 37, 1171-1181.	1.3	44
126	Slow pyrolysis of bio-oil and studies on chemical and physical properties of the resulting new bio-carbon. Journal of Cleaner Production, 2018, 172, 2748-2758.	4.6	44

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127	Development of Biobased Unsaturated Polyester Containing Functionalized Linseed Oil. Industrial & Engineering Chemistry Research, 2006, 45, 1014-1018.	1.8	43
128	Bio-based unsaturated polyester/layered silicate nanocomposites: Characterization and thermo-physical properties. Composites Part A: Applied Science and Manufacturing, 2009, 40, 540-547.	3.8	43
129	Experimental Design of Sustainable 3D-Printed Poly(Lactic Acid)/Biobased Poly(Butylene Succinate) Blends via Fused Deposition Modeling. ACS Sustainable Chemistry and Engineering, 2019, 7, 14460-14470.	3.2	43
130	Studies on the dimensional stability and mechanical properties of nanobiocomposites from polyamide 6-filled with biocarbon and nanoclay hybrid systems. Composites Part A: Applied Science and Manufacturing, 2020, 129, 105695.	3.8	43
131	Sustainable green composites from biodegradable plastics blend and natural fibre with balanced performance: Synergy of nano-structured blend and reactive extrusion. Composites Science and Technology, 2020, 200, 108369.	3.8	43
132	Progress in research and applications of Polyphenylene Sulfide blends and composites with carbons. Composites Part B: Engineering, 2021, 209, 108553.	5.9	43
133	Novel Biocomposites from Native Grass and Soy Based Bioplastic:â€‰ Processing and Properties Evaluation. Industrial & Engineering Chemistry Research, 2005, 44, 7105-7112.	1.8	42
134	Processing techniques for bio-based unsaturated-polyester/clay nanocomposites: Tensile properties, efficiency, and limits. Composites Part A: Applied Science and Manufacturing, 2009, 40, 394-403.	3.8	42
135	Mechanical, Chemical, and Physical Properties of Wood and Perennial Grass Biochars for Possible Composite Application. BioResources, 2015, 11, .	0.5	42
136	Biodegradable biocomposites from poly(butylene adipateâ€‹<i>co</i>â€‹terephthalate) and miscanthus: Preparation, compatibilization, and performance evaluation. Journal of Applied Polymer Science, 2017, 134, 45448.	1.3	42
137	Characterization of Chicken Feather Biocarbon for Use in Sustainable Biocomposites. Frontiers in Materials, 2020, 7, .	1.2	42
138	Novel Biodegradable Cast Film from Carbon Dioxide Based Copolymer and Poly(Lactic Acid). Journal of Polymers and the Environment, 2016, 24, 23-36.	2.4	41
139	Influence of epoxidized natural rubber on the phase structure and toughening behavior of biocarbon reinforced nylon 6 biocomposites. RSC Advances, 2017, 7, 8727-8739.	1.7	40
140	Miscibility and Performance Evaluation of Biocomposites Made from Polypropylene/Poly(lactic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 22 Omega, 2017, 2, 6446-6454.	1.6	40
141	Polycarbonate biocomposites reinforced with a hybrid filler system of recycled carbon fiber and biocarbon: Preparation and thermomechanical characterization. Journal of Applied Polymer Science, 2018, 135, 46449.	1.3	40
142	Sustainable biocarbon reinforced nylon 6/polypropylene compatibilized blends: Effect of particle size and morphology on performance of the biocomposites. Composites Part A: Applied Science and Manufacturing, 2018, 112, 1-10.	3.8	40
143	Injection molded biocomposites from polypropylene and lignin: Effect of compatibilizers on interfacial adhesion and performance. Industrial Crops and Products, 2019, 132, 497-510.	2.5	40
144	A comprehensive review of renewable and sustainable biosourced carbon through pyrolysis in biocomposites uses: Current development and future opportunity. Renewable and Sustainable Energy Reviews, 2021, 152, 111666.	8.2	40

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145	Biodegradability and Compostability of Lignocellulosic Based Composite Materials. Journal of Renewable Materials, 2013, 1, 253-272.	1.1	39
146	Biobased Poly(ethylene terephthalate)/Poly(lactic acid) Blends Tailored with Epoxide Compatibilizers. ACS Omega, 2018, 3, 11759-11769.	1.6	39
147	Additive manufacturing technology of polymeric materials for customized products: recent developments and future prospective. RSC Advances, 2021, 11, 36398-36438.	1.7	39
148	Novel materials from unsaturated polyester resin/styrene/tung oil blends with high impact strengths and enhanced mechanical properties. Journal of Applied Polymer Science, 2011, 119, 2174-2182.	1.3	38
149	The Effect of Mold Temperature on the Performance of Injection Molded Poly(lactic acid)â€Based Bioplastic. Macromolecular Materials and Engineering, 2013, 298, 981-990.	1.7	38
150	Microwave Synthesis and Melt Blending of Glycerol Based Toughening Agent with Poly(lactic acid). ACS Sustainable Chemistry and Engineering, 2016, 4, 2142-2149.	3.2	38
151	<i>Miscanthus</i> grass-derived carbon dots to selectively detect Fe³⁺ ions. RSC Advances, 2019, 9, 8628-8637.	1.7	38
152	Bio-based polymer nanocomposites from UPE/EML blends and nanoclay: Development, experimental characterization and limits to synergistic performance. Composites Part A: Applied Science and Manufacturing, 2011, 42, 41-49.	3.8	37
153	Carbonized Lignin as Sustainable Filler in Biobased Poly(trimethylene terephthalate) Polymer for Injection Molding Applications. ACS Sustainable Chemistry and Engineering, 2016, 4, 102-110.	3.2	37
154	Novel biocomposites from biobased PC/PLA blend matrix system for durable applications. Composites Part B: Engineering, 2017, 130, 158-166.	5.9	37
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