Suprakas Sinha Ray

List of Publications by Year
in descending order

527 papers	27,929 citations	9786 73 h-index	7160 153 g-index
575 all docs	575 docs citations	575 times ranked	20227 citing authors

#	Article	IF	Citations
1	Polymer/layered silicate nanocomposites: a review from preparation to processing. Progress in Polymer Science, 2003, 28, 1539-1641.	24.7	6,062
2	Biodegradable polymers and their layered silicate nanocomposites: In greening the 21st century materials world. Progress in Materials Science, 2005, 50, 962-1079.	32.8	1,417
3	Structureâ^'Property Relationship in Biodegradable Poly(butylene succinate)/Layered Silicate Nanocomposites. Macromolecules, 2003, 36, 2355-2367.	4.8	590
4	New polylactide-layered silicate nanocomposites. 2. Concurrent improvements of material properties, biodegradability and melt rheology. Polymer, 2003, 44, 857-866.	3.8	518
5	New Polylactide/Layered Silicate Nanocomposites. 1. Preparation, Characterization, and Properties. Macromolecules, 2002, 35, 3104-3110.	4.8	475
6	New Polylactide/Layered Silicate Nanocomposites. 3. High-Performance Biodegradable Materials. Chemistry of Materials, 2003, 15, 1456-1465.	6.7	443
7	Polylactide-Layered Silicate Nanocomposite:â€‰ A Novel Biodegradable Material. Nano Letters, 2002, 2, 1093-1096.	9.1	428
8	Biodegradable Polylactide and Its Nanocomposites: Opening a New Dimension for Plastics and Composites. Macromolecular Rapid Communications, 2003, 24, 815-840.	3.9	416
9	Crystallization Behavior and Morphology of Biodegradable Polylactide/Layered Silicate Nanocomposite. Macromolecules, 2003, 36, 7126-7131.	4.8	399
10	Role of organically modified layered silicate as an active interfacial modifier in immiscible polystyrene/polypropylene blends. Polymer, 2004, 45, 8403-8413.	3.8	399
11	Recent Progress in Synthesis and Evaluation of Polymer-Montmorillonite Nanocomposites. Advances in Polymer Science, 2001, , 167-221.	0.8	393
12	Recent advances in carbon nanomaterial-based adsorbents for water purification. Coordination Chemistry Reviews, 2020, 405, 213111.	18.8	329
13	New polylactide/layered silicate nanocomposites. 5. Designing of materials with desired properties. Polymer, 2003, 44, 6633-6646.	3.8	278
14	Recent progress on natural fiber hybrid composites for advanced applications: A review. EXPRESS Polymer Letters, 2019, 13, 159-198.	2.1	276
15	V-amylose Structural Characteristics, Methods of Preparation, Significance, and Potential Applications. Food Reviews International, 2012, 28, 412-438.	8.4	223
16	Toughening of Biodegradable Polylactide/Poly(butylene succinate-co-adipate) Blends via in Situ Reactive Compatibilization. ACS Applied Materials & Interfaces, 2013, 5, 4266-4276.	8.0	222
17	Preparation and characterization of nano-cellulose with new shape from different precursor. Carbohydrate Polymers, 2013, 98, 562-567.	10.2	215
18	Polylactide-Based Bionanocomposites: A Promising Class of Hybrid Materials. Accounts of Chemical Research, 2012, 45, 1710-1720.	15.6	189

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19	Processing strategies in bionanocomposites. Progress in Polymer Science, 2013, 38, 1543-1589.	24.7	186
20	New Polylactide/Layered Silicate Nanocomposites, 6. Macromolecular Materials and Engineering, 2003, 288, 936-944.	3.6	183
21	Well-Controlled Biodegradable Nanocomposite Foams: From Microcellular to Nanocellular. Macromolecular Rapid Communications, 2003, 24, 457-461.	3.9	182
22	Ultra-high sensitive and selective H2 gas sensor manifested by interface of nâ€“n heterostructure of CeO2-SnO2 nanoparticles. Sensors and Actuators B: Chemical, 2018, 254, 984-995.	7.8	175
23	Control of Biodegradability of Polylactide via Nanocomposite Technology. Macromolecular Materials and Engineering, 2003, 288, 203-208.	3.6	165
24	Synthesis of co-polymer-grafted gum karaya and silica hybrid organicâ€“inorganic hydrogel nanocomposite for the highly effective removal of methylene blue. Chemical Engineering Journal, 2015, 279, 166-179.	12.7	165
25	Effect of Organic Modification on the Compatibilization Efficiency of Clay in an Immiscible Polymer Blend. Macromolecular Rapid Communications, 2005, 26, 1639-1646.	3.9	155
26	New poly(butylene succinate)/layered silicate nanocomposites. II. Effect of organically modified layered silicates on structure, properties, melt rheology, and biodegradability. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 3160-3172.	2.1	154
27	New Polylactide/Layered Silicate Nanocomposite: Nanoscale Control Over Multiple Properties. Macromolecular Rapid Communications, 2002, 23, 943-947.	3.9	153
28	Microwave-assisted synthesis, characterization and antibacterial activity of Ag/ZnO nanoparticles supported bentonite clay. Journal of Hazardous Materials, 2013, 262, 439-446.	12.4	152
29	Selective removal of toxic Cr(VI) from aqueous solution by adsorption combined with reduction at a magnetic nanocomposite surface. Journal of Colloid and Interface Science, 2017, 503, 214-228.	9.4	152
30	Super toughened biodegradable polylactide blends with non-linear copolymer interfacial architecture obtained via facile in-situ reactive compatibilization. Polymer, 2015, 80, 1-17.	3.8	149
31	Recent progress in the structural modification of chitosan for applications in diversified biomedical fields. European Polymer Journal, 2018, 109, 402-434.	5.4	147
32	Top-down synthesis of graphene: A comprehensive review. FlatChem, 2021, 27, 100224.	5.6	143
33	Compatibilization Efficiency of Organoclay in an Immiscible Polycarbonate/Poly(methyl methacrylate) Blend. Macromolecular Rapid Communications, 2005, 26, 450-455.	3.9	142
34	Nitrogen-doped carbon nanotubes as a metal catalyst support. Applied Nanoscience (Switzerland), 2011, 1, 67-77.	3.1	142
35	Adsorption of methyl violet from aqueous solution using gum xanthan/Fe3O4 based nanocomposite hydrogel. International Journal of Biological Macromolecules, 2016, 89, 1-11.	7.5	141
36	Water-dispersible conducting nanocomposites of polyaniline and poly(N-vinylcarbazole) with nanodimensional zirconium dioxide. Synthetic Metals, 2000, 108, 231-236.	3.9	140

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37	Celluloseâ€“polymerâ€“Ag nanocomposite fibers for antibacterial fabrics/skin scaffolds. Carbohydrate Polymers, 2013, 93, 553-560.	10.2	133
38	Efficient Removal of Pb(II) and Cd(II) from Industrial Mine Water by a Hierarchical MoS₂/SH-MWCNT Nanocomposite. ACS Omega, 2019, 4, 13922-13935.	3.5	133
39	Structure and Properties of Nanocomposites Based on Poly(butylene succinate-co-adipate) and Organically Modified Montmorillonite. Macromolecular Materials and Engineering, 2005, 290, 759-768.	3.6	127
40	Role of Specific Interfacial Area in Controlling Properties of Immiscible Blends of Biodegradable Polylactide and Poly[(butylene succinate)-co-adipate]. ACS Applied Materials & Interfaces, 2012, 4, 6690-6701.	8.0	125
41	Preparation and antibacterial activity of chitosan-based nanocomposites containing bentonite-supported silver and zinc oxide nanoparticles for water disinfection. Applied Clay Science, 2015, 114, 330-339.	5.2	120
42	Intercalated Polycarbonate/Clay Nanocomposites: Nanostructure Control and Foam Processing. Macromolecular Materials and Engineering, 2003, 288, 543-548.	3.6	119
43	A study on the adsorption of methylene blue onto gum ghatti/TiO2 nanoparticles-based hydrogel nanocomposite. International Journal of Biological Macromolecules, 2016, 88, 66-80.	7.5	118
44	Shape-Selective Dependence of Room Temperature Ferromagnetism Induced by Hierarchical ZnO Nanostructures. ACS Applied Materials & Interfaces, 2014, 6, 8981-8995.	8.0	117
45	Recent Progress on Nafionâ€Based Nanocomposite Membranes for Fuel Cell Applications. Macromolecular Materials and Engineering, 2009, 294, 719-738.	3.6	116
46	Recent Progress on the Design and Applications of Polysaccharideâ€Based Graft Copolymer Hydrogels as Adsorbents for Wastewater Purification. Macromolecular Materials and Engineering, 2016, 301, 496-522.	3.6	114
47	The Adsorption of Pb²⁺ and Cu²⁺ onto Gum Ghatti-Grafted Poly(acrylamide-co-acrylonitrile) Biodegradable Hydrogel: Isotherms and Kinetic Models. Journal of Physical Chemistry B, 2015, 119, 2026-2039.	2.6	111
48	Achieving Controllable MoS₂ Nanostructures with Increased Interlayer Spacing for Efficient Removal of Pb(II) from Aquatic Systems. ACS Applied Materials & Interfaces, 2019, 11, 19141-19155.	8.0	109
49	Bionanocomposite Hydrogel for the Adsorption of Dye and Reusability of Generated Waste for the Photodegradation of Ciprofloxacin: A Demonstration of the Circularity Concept for Water Purification. ACS Sustainable Chemistry and Engineering, 2018, 6, 17011-17025.	6.7	108
50	Poly(butylene sucinate-co-adipate)/montmorillonite nanocomposites: effect of organic modifier miscibility on structure, properties, and viscoelasticity. Polymer, 2005, 46, 12430-12439.	3.8	107
51	Biodegradable Polylactide/Montmorillonite Nanocomposites. Journal of Nanoscience and Nanotechnology, 2003, 3, 503-510.	0.9	106
52	Morphology and properties of organoclay modified polycarbonate/poly(methyl methacrylate) blend. Polymer Engineering and Science, 2006, 46, 1121-1129.	3.1	106
53	Gum karaya based hydrogel nanocomposites for the effective removal of cationic dyes from aqueous solutions. Applied Surface Science, 2016, 364, 917-930.	6.1	106
54	Effect of Nanoclay Loading on the Thermal and Mechanical Properties of Biodegradable Polylactide/Poly[(butylene succinate)-co-adipate] Blend Composites. ACS Applied Materials & Interfaces, 2012, 4, 2395-2405.	8.0	101

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55	Rheology of poly (lactic acid)-based systems. Polymer Reviews, 2019, 59, 465-509.	10.9	101
56	Efficient removal of rhodamine 6G dye from aqueous solution using nickel sulphide incorporated polyacrylamide grafted gum karaya bionanocomposite hydrogel. RSC Advances, 2016, 6, 21929-21939.	3.6	100
57	Thermodynamic properties and adsorption behaviour of hydrogel nanocomposites for cadmium removal from mine effluents. Journal of Industrial and Engineering Chemistry, 2017, 48, 151-161.	5.8	99
58	Effective removal of cationic dyes from aqueous solution using gum ghatti-based biodegradable hydrogel. International Journal of Biological Macromolecules, 2015, 79, 8-20.	7.5	97
59	Efficient organic dye removal from wastewater by magnetic carbonaceous adsorbent prepared from corn starch. Journal of Environmental Chemical Engineering, 2018, 6, 7119-7131.	6.7	97
60	Preparation and evaluation of composites from montmorillonite and some heterocyclic polymers. 1: Poly(N-vinylcarbazole)â€“montmorillonite nanocomposite system. Polymer, 1998, 39, 6423-6428.	3.8	96
61	Organically Modified Layered Titanate: A New Nanofiller to Improve the Performance of Biodegradable Polylactide. Macromolecular Rapid Communications, 2004, 25, 1359-1364.	3.9	92
62	Polylactide Based Nanostructured Biomaterials and Their Applications. Journal of Nanoscience and Nanotechnology, 2007, 7, 2596-2615.	0.9	91
63	Removal of naphthalene from simulated wastewater through adsorption-photodegradation by ZnO/Ag/GO nanocomposite. Journal of Industrial and Engineering Chemistry, 2020, 81, 393-404.	5.8	89
64	New Poly(butylene succinate)/Layered Silicate Nanocomposites: Preparation and Mechanical Properties. Journal of Nanoscience and Nanotechnology, 2002, 2, 171-176.	0.9	88
65	Flocculation and adsorption properties of biodegradable gum-ghatti-grafted poly(acrylamide-co-methacrylic acid) hydrogels. Carbohydrate Polymers, 2015, 115, 617-628.	10.2	88
66	A highly responsive NH3 sensor based on Pd-loaded ZnO nanoparticles prepared via a chemical precipitation approach. Scientific Reports, 2019, 9, 9881.	3.3	88
67	Occurrence of amyloseâ€“lipid complexes in teff and maize starch biphasic pastes. Carbohydrate Polymers, 2012, 90, 616-622.	10.2	86
68	Apoptotic efficacy of multifaceted biosynthesized silver nanoparticles on human adenocarcinoma cells. Scientific Reports, 2018, 8, 14368.	3.3	86
69	Materials Science Challenges in Skin UV Protection: A Review. Photochemistry and Photobiology, 2020, 96, 779-797.	2.5	84
70	Characteristics of point defects on the room temperature ferromagnetic and highly NO2 selectivity gas sensing of p-type Mn3O4 nanorods. Sensors and Actuators B: Chemical, 2019, 285, 92-107.	7.8	82
71	Novel Porous Ceramic Material via Burning of Polylactide/Layered Silicate Nanocomposite. Nano Letters, 2002, 2, 423-425.	9.1	79
72	Synthetic Biopolymers and Their Composites: Advantages and Limitationsâ€”An Overview. Macromolecular Rapid Communications, 2021, 42, e2100130.	3.9	79

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73	Water dispersible conducting nanocomposites of poly(N-vinylcarbazole), polypyrrole and polyaniline with nanodimensional manganese (IV) oxide. Synthetic Metals, 1999, 105, 99-105.	3.9	78
74	Magnetic carbonyl iron suspension with organoclay additive and its magnetorheological properties. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 377, 103-109.	4.7	74
75	Modification of gum ghatti via grafting with acrylamide and analysis of its flocculation, adsorption, and biodegradation properties. International Journal of Biological Macromolecules, 2018, 114, 283-294.	7.5	74
76	Thermal and thermomechanical properties of poly[(butylene succinate)-co-adipate] nanocomposite. Polymer Degradation and Stability, 2007, 92, 802-812.	5.8	73
77	The quantitative analysis of nano-clay dispersion in polymer nanocomposites by small angle X-ray scattering combined with electron microscopy. Polymer, 2010, 51, 1437-1449.	3.8	73
78	Preparation and properties of biodegradable films from Sterculia urens short fiber/cellulose green composites. Carbohydrate Polymers, 2013, 93, 622-627.	10.2	73
79	Plastic Pollution: A Perspective on Matters Arising: Challenges and Opportunities. ACS Omega, 2021, 6, 19343-19355.	3.5	73
80	Structure and properties of highly toughened biodegradable polylactide/ZnO biocomposite films. International Journal of Biological Macromolecules, 2014, 64, 428-434.	7.5	71
81	Structure and properties of nanocomposites based on poly(butylene succinate) and organically modified montmorillonite. Journal of Applied Polymer Science, 2006, 102, 777-785.	2.6	70
82	Extraction and Characterization of Natural Cellulose Fibers from Maize Tassel. International Journal of Polymer Analysis and Characterization, 2015, 20, 99-109.	1.9	68
83	Synthesis of Nanomaterials by Continuous-Flow Microfluidics: A Review. Journal of Nanoscience and Nanotechnology, 2014, 14, 1338-1363.	0.9	67
84	Recent Trends in the Microwave-Assisted Synthesis of Metal Oxide Nanoparticles Supported on Carbon Nanotubes and Their Applications. Journal of Nanomaterials, 2012, 2012, 1-15.	2.7	66
85	Selective removal of Cr(VI) from aqueous solution by polypyrrole/2,5-diaminobenzene sulfonic acid composite. Journal of Colloid and Interface Science, 2016, 476, 144-157.	9.4	65
86	Nanocomposites Based on Polyethylene and Polyhedral Oligomeric Silsesquioxanes, 1 â€“ Microstructure, Thermal and Thermomechanical Properties. Macromolecular Materials and Engineering, 2008, 293, 752-762.	3.6	64
87	Zinc Oxide Epitaxial Thin Film Deposited Over Carbon on Various Substrate by Pulsed Laser Deposition Technique. Journal of Nanoscience and Nanotechnology, 2010, 10, 5602-5611.	0.9	62
88	Unique isothermal crystallization phenomenon in the ternary blends of biopolymers polylactide and poly[(butylene succinate)-co-adipate] and nano-clay. Polymer, 2012, 53, 505-518.	3.8	62
89	Tuning the Conductivity of Nanocomposites through Nanoparticle Migration and Interface Crossing in Immiscible Polymer Blends: A Review on Fundamental Understanding. Macromolecular Materials and Engineering, 2019, 304, 1800431.	3.6	62
90	Nanocomposites of PEDOT:PSS with Graphene and its Derivatives for Flexible Electronic Applications: A Review. Macromolecular Materials and Engineering, 2021, 306, 2000716.	3.6	62

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91	Recent developments in polymeric electrospun nanofibrous membranes for seawater desalination. RSC Advances, 2018, 8, 37915-37938.	3.6	61
92	Polypyrrole-Promoted rGOâ€“MoS₂ Nanocomposites for Enhanced Photocatalytic Conversion of CO₂ and H₂O to CO, CH₄, and H₂ Products. ACS Applied Energy Materials, 2020, 3, 9897-9909.	5.1	61
93	MoS₂ Nanosheet/ZnS Composites for the Visible-Light-Assisted Photocatalytic Degradation of Oxytetracycline. ACS Applied Nano Materials, 2021, 4, 4721-4734.	5.0	61
94	Mechanical properties of cellulose nanofibril papers and their bionanocomposites: A review. Carbohydrate Polymers, 2021, 273, 118507.	10.2	60
95	Water-dispersible nanocomposites of polyaniline and montmorillonite. Journal of Applied Polymer Science, 2000, 77, 2948-2956.	2.6	59
96	Recent Trends and Future Outlooks in the Field of Clayâ€Containing Polymer Nanocomposites. Macromolecular Chemistry and Physics, 2014, 215, 1162-1179.	2.2	59
97	Optical and structural characterization of nickel selenide nanoparticles synthesized by simple methods. Journal of Crystal Growth, 2009, 311, 3924-3932.	1.5	58
98	Morphology and Properties of Polymer Composites Based on Biodegradable Polylactide/Poly[(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 865-877.	3.6	58
99	Synthesis and flocculation properties of gum ghatti and poly(acrylamide-co-acrylonitrile) based biodegradable hydrogels. Carbohydrate Polymers, 2014, 114, 321-329.	10.2	58
100	Self-Healing Polymeric Composite Material Design, Failure Analysis and Future Outlook: A Review. Polymers, 2017, 9, 535.	4.5	58
101	Dispersion of Multi-Walled Carbon Nanotubes in Biodegradable Poly(butylene succinate) Matrix. Journal of Nanoscience and Nanotechnology, 2006, 6, 2191-2195.	0.9	57
102	Effect of Organoclay on the Morphology and Properties of Poly(propylene)/Poly[(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td	3.6	57
103	Kinetic models for the release of the anticancer drug doxorubicin from biodegradable polylactide/metal oxide-based hybrids. International Journal of Biological Macromolecules, 2015, 72, 1301-1307.	7.5	57
104	Influence of bases on hydrothermal synthesis of titanate nanostructures. Applied Physics A: Materials Science and Processing, 2009, 94, 963-973.	2.3	56
105	Nano-biocomposites based on synthetic aliphatic polyesters and nanoclay. Progress in Materials Science, 2014, 62, 1-57.	32.8	56
106	An overview of the recent advances in polylactideâ€based sustainable nanocomposites. Polymer Engineering and Science, 2021, 61, 617-649.	3.1	56
107	A new possibility for microstructural investigation of clay-based polymer nanocomposite by focused ion beam tomography. Polymer, 2010, 51, 3966-3970.	3.8	55
108	Gum ghatti and poly(acrylamide-co-acrylic acid) based biodegradable hydrogel-evaluation of the flocculation and adsorption properties. Polymer Degradation and Stability, 2015, 120, 42-52.	5.8	55

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109	A novel approach to low-temperature synthesis of cubic HfO2 nanostructures and their cytotoxicity. Scientific Reports, 2017, 7, 9351.	3.3	55
110	Inducing PLA/starch compatibility through butyl-etherification of waxy and high amylose starch. Carbohydrate Polymers, 2014, 112, 216-224.	10.2	54
111	Thiol-modified magnetic polypyrrole nanocomposite: An effective adsorbent for the adsorption of silver ions from aqueous solution and subsequent water disinfection by silver-laden nanocomposite. Chemical Engineering Journal, 2019, 360, 423-434.	12.7	54
112	Influence of nanoparticles and their selective localization on the structure and properties of polylactide-based blend nanocomposites. Composites Part B: Engineering, 2021, 215, 108845.	12.0	54
113	Nanoparticle-Enhanced Î²-Phase Formation in Electroactive PVDF Composites: A Review of Systems for Applications in Energy Harvesting, EMI Shielding, and Membrane Technology. ACS Applied Nano Materials, 2022, 5, 7632-7651.	5.0	53
114	Synthesis and characterization of alginate beads encapsulated zinc oxide nanoparticles for bacteria disinfection in water. Journal of Colloid and Interface Science, 2018, 512, 686-692.	9.4	52
115	Poly(<I>Îµ</I>-caprolactone) Nanocomposite Scaffolds for Tissue Engineering: A Brief Overview. Journal of Nanoscience and Nanotechnology, 2014, 14, 535-545.	0.9	51
116	Designing SnO₂ Nanostructure-Based Sensors with Tailored Selectivity toward Propanol and Ethanol Vapors. ACS Omega, 2019, 4, 13696-13709.	3.5	50
117	Improving methane gas sensing properties of multi-walled carbon nanotubes by vanadium oxide filling. Sensors and Actuators B: Chemical, 2017, 247, 11-18.	7.8	49
118	Induced ferromagnetic and gas sensing properties in ZnO-nanostructures by altering defect concentration of oxygen and zinc vacancies. Materials Letters, 2015, 139, 475-479.	2.6	48
119	Preparation and characterization of gum karaya hydrogel nanocomposite flocculant for metal ions removal from mine effluents. International Journal of Environmental Science and Technology, 2016, 13, 711-724.	3.5	48
120	Highly Conductive Coreâ€“Shell Nanocomposite of Poly(Nâ€vinylcarbazole)â€“Polypyrrole with Multiwalled Carbon Nanotubes. Macromolecular Rapid Communications, 2008, 29, 1582-1587.	3.9	47
121	Influence of degree of intercalation on the crystal growth kinetics of poly[(butylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 26	5.4	47
122	A new insight into morphological, thermal, and mechanical properties of melt-processed polylactide/poly(<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif") Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 Polymer Degradation and Stability, 2018, 154, 84-95.	5.8	47
123	Enzymatic degradation behavior of nanoclay reinforced biodegradable PLA/PBSA blend composites. International Journal of Biological Macromolecules, 2015, 77, 131-142.	7.5	46
124	Kinetic release studies of nitrogen-containing bisphosphonate from gum acacia crosslinked hydrogels. International Journal of Biological Macromolecules, 2015, 73, 115-123.	7.5	46
125	Foamability and Special Applications of Microcellular Thermoplastic Polymers: A Review on Recent Advances and Future Direction. Macromolecular Materials and Engineering, 2020, 305, 2000366.	3.6	46
126	Correlating the magnetism and gas sensing properties of Mn-doped ZnO films enhanced by UV irradiation. RSC Advances, 2016, 6, 26227-26238.	3.6	45

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127	Effect of nanoclay on optical properties of PLA/clay composite films. Polymer Testing, 2014, 36, 24-31.	4.8	44
128	Mechanical, thermal, and fire properties of polylactide/starch blend/clay composites. Journal of Thermal Analysis and Calorimetry, 2013, 113, 703-712.	3.6	43
129	Defect-induced magnetism in undoped and Mn-doped wide band gap zinc oxide grown by aerosol spray pyrolysis. Applied Surface Science, 2014, 311, 14-26.	6.1	43
130	Hierarchically Porous Cu-, Co-, and Mn-Doped Platelet-Like ZnO Nanostructures and Their Photocatalytic Performance for Indoor Air Quality Control. ACS Omega, 2019, 4, 16429-16440.	3.5	42
131	Crystallization Behavior of Poly[(butylene succinate)-co-adipate] Nanocomposite. Macromolecular Chemistry and Physics, 2006, 207, 1207-1219.	2.2	41
132	Thermal properties of poly(ethylene succinate) nanocomposite. Polymer, 2009, 50, 4635-4643.	3.8	41
133	Composite Films of Arabinoxylan and Fibrous Sepiolite: Morphological, Mechanical, and Barrier Properties. ACS Applied Materials & Interfaces, 2012, 4, 3378-3386.	8.0	40
134	Mechanical, Thermal, and Fire Properties of Biodegradable Polylactide/Boehmite Alumina Composites. Industrial & Engineering Chemistry Research, 2013, 52, 6083-6091.	3.7	40
135	Morphology, thermal properties and crystallization kinetics of ternary blends of the polylactide and starch biopolymers and nanoclay: The role of nanoclay hydrophobicity. Polymer, 2015, 71, 82-92.	3.8	40
136	Kinetically Controlled Localization of Carbon Nanotubes in Polylactide/Poly(vinylidene fluoride) Blend Nanocomposites and Their Influence on Electromagnetic Interference Shielding, Electrical Conductivity, and Rheological Properties. Journal of Physical Chemistry C, 2019, 123, 19195-19207.	3.1	40
137	Photoluminescence and Hydrogen Gas-Sensing Properties of Titanium Dioxide Nanostructures Synthesized by Hydrothermal Treatments. ACS Applied Materials & Interfaces, 2012, 4, 1656-1665.	8.0	39
138	Ionic liquid-assisted synthesis of Ag/Ag₂Te nanocrystals via a hydrothermal route for enhanced photocatalytic performance. New Journal of Chemistry, 2017, 41, 14618-14626.	2.8	39
139	The Distribution of Nanoclay Particles at the Interface and Their Influence on the Microstructure Development and Rheological Properties of Reactively Processed Biodegradable Polylactide/Poly(butylene succinate) Blend Nanocomposites. Polymers, 2017, 9, 350.	4.5	39
140	Parametric Analysis of Electrical Conductivity of Polymer-Composites. Polymers, 2019, 11, 1250.	4.5	39
141	Environmentally friendly polymer nanocomposites. , 2013, , .		39
142	Preparation and evaluation of composites from montmorillonite and some heterocyclic polymers. II. A nanocomposite fromN-vinylcarbazole and ferric chloride-impregnated montmorillonite polymerization system. Journal of Applied Polymer Science, 1999, 73, 2971-2976.	2.6	37
143	The effect of different clays on the structure, morphology and degradation behavior of poly(lactic) Tj ETQq1 1 0.784314 rgBT /Overlock	5.2	37
144	Morphology and properties of nanostructured materials based on polypropylene/poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62	5.4	36

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145	Temperature-dependent response to C3H7OH and C2H5OH vapors induced by deposition of Au nanoparticles on SnO2/NiO hollow sphere-based conductometric sensors. Sensors and Actuators B: Chemical, 2020, 316, 128041.	7.8	36
146	New polylactide/layered silicate nanocomposites, 4. Structure, properties and biodegradability. Composite Interfaces, 2003, 10, 435-450.	2.3	35
147	Purification of Multi-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2008, 8, 6187-6207.	0.9	35
148	Structural and optical properties of ZnO nanostructures grown by aerosol spray pyrolysis: Candidates for room temperature methane and hydrogen gas sensing. Applied Surface Science, 2013, 279, 142-149.	6.1	35
149	Properties and Characterization of a PLAâ€“Chitinâ€“Starch Biodegradable Polymer Composite. Polymers, 2019, 11, 1656.	4.5	35
150	Electromagnetic interference cognizance and potential of advanced polymer composites toward electromagnetic interference shielding: A review. Polymer Engineering and Science, 2022, 62, 591-621.	3.1	35
151	Synthesis and characterization of nickel selenide nanoparticles: size and shape determining parameters. Journal of Crystal Growth, 2011, 324, 41-52.	1.5	34
152	Influence of Boehmite Nanoparticle Loading on the Mechanical, Thermal, and Rheological Properties of Biodegradable Polylactide/Poly(Ìµâ€caprolactone) Blends. Macromolecular Materials and Engineering, 2015, 300, 31-47.	3.6	34
153	Are nanoclayâ€containing polymer composites safe for food packaging applications?â€”An overview. Journal of Applied Polymer Science, 2019, 136, 47214.	2.6	34
154	Rheology of organoclay suspension. Colloid and Polymer Science, 2011, 289, 1119-1125.	2.1	33
155	Morphological development and enhancement of thermal, mechanical, and electronic properties of thermally exfoliated graphene oxide-filled biodegradable polylactide/poly(Ìµ-caprolactone) blend composites. Polymer, 2018, 139, 188-200.	3.8	33
156	Influence of Nanoclay Localization on Structureâ€“Property Relationships of Polylactideâ€Based Biodegradable Blend Nanocomposites. Macromolecular Materials and Engineering, 2018, 303, 1800134.	3.6	33
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