

Uttandaraman Sundararaj

List of Publications by Year in descending order

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211
papers

14,658
citations

30070

54
h-index

20961

115
g-index

215
all docs

215
docs citations

215
times ranked

11432
citing authors

#	ARTICLE	IF	CITATIONS
1	Electromagnetic interference shielding mechanisms of CNT/polymer composites. Carbon, 2009, 47, 1738-1746.	10.3	1,274
2	Big returns from small fibers: A review of polymer/carbon nanotube composites. Polymer Composites, 2004, 25, 630-645.	4.6	1,115
3	A review of vapor grown carbon nanofiber/polymer conductive composites. Carbon, 2009, 47, 2-22.	10.3	978
4	Drop Breakup and Coalescence in Polymer Blends: The Effects of Concentration and Compatibilization. Macromolecules, 1995, 28, 2647-2657.	4.8	783
5	EMI shielding effectiveness of carbon based nanostructured polymeric materials: A comparative study. Carbon, 2013, 60, 146-156.	10.3	767
6	Comparative study of electromagnetic interference shielding properties of injection molded versus compression molded multi-walled carbon nanotube/polystyrene composites. Carbon, 2012, 50, 5126-5134.	10.3	408
7	Review of the mechanical properties of carbon nanofiber/polymer composites. Composites Part A: Applied Science and Manufacturing, 2011, 42, 2126-2142.	7.6	383
8	Electrical and electromagnetic interference shielding properties of flow-induced oriented carbon nanotubes in polycarbonate. Carbon, 2011, 49, 3430-3440.	10.3	347
9	Segregated Hybrid Poly(methyl methacrylate)/Graphene/Magnetite Nanocomposites for Electromagnetic Interference Shielding. ACS Applied Materials & Interfaces, 2017, 9, 14171-14179.	8.0	291
10	The electrical conductivity and electromagnetic interference shielding of injection molded multi-walled carbon nanotube/polystyrene composites. Carbon, 2012, 50, 1455-1464.	10.3	275
11	Highly electrically conductive and high performance EMI shielding nanowire/polymer nanocomposites by miscible mixing and precipitation. Journal of Materials Chemistry, 2011, 21, 829-836.	6.7	241
12	Improved synthesis of $\text{Ti}_3\text{C}_2\text{Tx}$ MXenes resulting in exceptional electrical conductivity, high synthesis yield, and enhanced capacitance. Nanoscale, 2021, 13, 3572-3580.	5.6	228
13	Morphology development in polymer blends. Polymer Engineering and Science, 1992, 32, 1814-1823.	3.1	211
14	Copper nanowire/polystyrene nanocomposites: Lower percolation threshold and higher EMI shielding. Composites Part A: Applied Science and Manufacturing, 2011, 42, 92-97.	7.6	208
15	Effect of synthesis catalyst on structure of nitrogen-doped carbon nanotubes and electrical conductivity and electromagnetic interference shielding of their polymeric nanocomposites. Carbon, 2016, 98, 358-372.	10.3	202
16	Low Electrical Percolation Threshold of Silver and Copper Nanowires in Polystyrene Composites. Advanced Functional Materials, 2006, 16, 2423-2430.	14.9	168
17	An innovative method to reduce percolation threshold of carbon black filled immiscible polymer blends. Composites Part A: Applied Science and Manufacturing, 2008, 39, 284-293.	7.6	157
18	High Dielectric Constant and Low Dielectric Loss via Poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Td (alcohol)/ $\text{Ti}_3\text{C}_2\text{Tx}$ Materials & Interfaces, 2019, 11, 18599-18608.	8.0	157

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19	Novel composites of copper nanowire/PVDF with superior dielectric properties. <i>Polymer</i> , 2014, 55, 226-234.	3.8	146
20	X-band EMI shielding mechanisms and shielding effectiveness of high structure carbon black/polypropylene composites. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 035304.	2.8	145
21	Electromagnetic Interference (EMI) Shielding Effectiveness of PP/PS Polymer Blends Containing High Structure Carbon Black. <i>Macromolecular Materials and Engineering</i> , 2008, 293, 621-630.	3.6	142
22	Three-dimensional printing of highly conductive polymer nanocomposites for EMI shielding applications. <i>Materials Today Communications</i> , 2017, 11, 112-118.	1.9	138
23	Inferential sensors for estimation of polymer quality parameters: Industrial application of a PLS-based soft sensor for a LDPE plant. <i>Chemical Engineering Science</i> , 2006, 61, 6372-6384.	3.8	121
24	Direct 3D Printing of Hybrid Nanofiber-Based Nanocomposites for Highly Conductive and Shape Memory Applications. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 24523-24532.	8.0	119
25	Melt Mixing of Polycarbonate with Multi-Walled Carbon Nanotubes in Miniature Mixers. <i>Macromolecular Materials and Engineering</i> , 2006, 291, 227-238.	3.6	110
26	Tunneling Conductivity and Piezoresistivity of Composites Containing Randomly Dispersed Conductive Nano-Platelets. <i>Materials</i> , 2014, 7, 2501-2521.	2.9	109
27	Sheet formation in immiscible polymer blends: model experiments on initial blend morphology. <i>Polymer</i> , 1995, 36, 1957-1968.	3.8	107
28	Carbon nanotube induced double percolation in polymer blends: Morphology, rheology and broadband dielectric properties. <i>Polymer</i> , 2017, 114, 122-134.	3.8	106
29	The effect of temperature on the morphology and chemical surface properties of nitrogen-doped carbon nanotubes. <i>Carbon</i> , 2014, 68, 369-379.	10.3	102
30	Effects of synthesis catalyst and temperature on broadband dielectric properties of nitrogen-doped carbon nanotube/polyvinylidene fluoride nanocomposites. <i>Carbon</i> , 2016, 106, 260-278.	10.3	99
31	Evidence for inversion of phase continuity during morphology development in polymer blending. <i>Polymer Engineering and Science</i> , 1996, 36, 1769-1781.	3.1	95
32	Outstanding electromagnetic interference shielding of silver nanowires: comparison with carbon nanotubes. <i>RSC Advances</i> , 2015, 5, 56590-56598.	3.6	88
33	Boron/Nitrogen Co-Doped Helically Unzipped Multiwalled Carbon Nanotubes as Efficient Electrocatalyst for Oxygen Reduction. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 7786-7794.	8.0	85
34	Electromagnetic interference shielding of Nitrogen-doped and Undoped carbon nanotube/polyvinylidene fluoride nanocomposites: A comparative study. <i>Composites Science and Technology</i> , 2015, 118, 257-263.	7.8	80
35	Silane functionalization of sodium montmorillonite nanoclay and its effect on rheological and mechanical properties of HDPE/clay nanocomposites. <i>Applied Clay Science</i> , 2017, 146, 439-448.	5.2	80
36	Prediction of dispersed phase drop diameter in polymer blends: The effect of elasticity. <i>Polymer Engineering and Science</i> , 1996, 36, 1656-1665.	3.1	79

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37	Significance of interfacial interaction and agglomerates on electrical properties of polymer-carbon nanotube nanocomposites. <i>Materials and Design</i> , 2017, 125, 126-134.	7.0	79
38	Silver Nanowire/MnO ₂ Nanowire Hybrid Polymer Nanocomposites: Materials with High Dielectric Permittivity and Low Dielectric Loss. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 14328-14336.	8.0	77
39	Effect of Nanofiller Geometry on Network Formation in Polymeric Nanocomposites: Comparison of Rheological and Electrical Properties of Multiwalled Carbon Nanotube and Graphene Nanoribbon. <i>Macromolecules</i> , 2017, 50, 3954-3967.	4.8	75
40	Synergistic effect of hybrid stainless steel fiber and carbon nanotube on mechanical properties and electromagnetic interference shielding of polypropylene nanocomposites. <i>Composites Part B: Engineering</i> , 2019, 165, 662-670.	12.0	73
41	Thermal, Rheological, and Mechanical Behaviors of LLDPE/PEMA/Clay Nanocomposites: Effect of Interaction Between Polymer, Compatibilizer, and Nanofiller. <i>Macromolecular Materials and Engineering</i> , 2006, 291, 697-706.	3.6	72
42	Milligrams to kilograms: An evaluation of mixers for reactive polymer blending. <i>Polymer Engineering and Science</i> , 1995, 35, 100-114.	3.1	71
43	Processing-microstructure-property relationship in conductive polymer nanocomposites. <i>Polymer</i> , 2010, 51, 2740-2747.	3.8	71
44	Effects of Nitrogen Doping on X-band Dielectric Properties of Carbon Nanotube/Polymer Nanocomposites. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 17844-17850.	8.0	67
45	Effect of morphology and role of conductivity of embedded metallic nanoparticles on electromagnetic interference shielding of PVDF-carbonaceous-nanofiller composites. <i>Carbon</i> , 2020, 164, 357-368.	10.3	67
46	Carbon Nanotube/Graphene Nanoribbon/Polyvinylidene Fluoride Hybrid Nanocomposites: Rheological and Dielectric Properties. <i>Journal of Physical Chemistry C</i> , 2017, 121, 169-181.	3.1	65
47	Nitrogen/sulfur co-doped helical graphene nanoribbons for efficient oxygen reduction in alkaline and acidic electrolytes. <i>Carbon</i> , 2016, 100, 99-108.	10.3	64
48	Nanostructured carbon black filled polypropylene/polystyrene blends containing styrene- <i>butadiene</i> -styrene copolymer: Influence of morphology on electrical resistivity. <i>European Polymer Journal</i> , 2008, 44, 1931-1939.	5.4	63
49	An innovative method to reduce the energy loss of conductive filler/polymer composites for charge storage applications. <i>Composites Science and Technology</i> , 2013, 78, 24-29.	7.8	63
50	Helical and Dendritic Unzipping of Carbon Nanotubes: A Route to Nitrogen-Doped Graphene Nanoribbons. <i>ACS Nano</i> , 2015, 9, 5833-5845.	14.6	59
51	Application of nonlinear rheology to assess the effect of secondary nanofiller on network structure of hybrid polymer nanocomposites. <i>Physics of Fluids</i> , 2018, 30, .	4.0	58
52	Enhancing absorption dominated microwave shielding in Co@C-PVDF nanocomposites through improved magnetization and graphitization of the Co@C-nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 15595-15608.	2.8	57
53	Viscoelastic properties of poly (vinyl alcohol) hydrogels with cellulose nanocrystals fabricated through sodium chloride addition: Rheological evidence of double network formation. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 609, 125577.	4.7	57
54	Silane functionalization of sodium montmorillonite nanoclay: The effect of dispersing media on intercalation and chemical grafting. <i>Applied Clay Science</i> , 2018, 153, 228-238.	5.2	56

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55	Synthesis of a high-temperature stable electrochemically exfoliated graphene. Carbon, 2020, 157, 681-692.	10.3	55
56	Electrical, Rheological, and Mechanical Properties of Polystyrene/Copper Nanowire Nanocomposites. Industrial & Engineering Chemistry Research, 2007, 46, 2481-2487.	3.7	52
57	Microstructure, electrical, and electromagnetic interference shielding properties of carbon nanotube/acrylonitrile-butadiene-styrene nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 1356-1362.	2.1	51
58	Effect of Processing Techniques on EMI SE of Immiscible PS/PMMA Blends Containing MWCNT: Enhanced Intertube and Interphase Scattering. Industrial & Engineering Chemistry Research, 2019, 58, 11576-11584.	3.7	50
59	Filler-Free Conducting Polymers as a New Class of Transparent Electromagnetic Interference Shields. ACS Applied Materials & Interfaces, 2020, 12, 28596-28606.	8.0	50
60	Electrostatically Dissipative Polystyrene Nanocomposites containing Copper Nanowires. Macromolecular Rapid Communications, 2005, 26, 1677-1681.	3.9	48
61	Carbon nanofiber/polyethylene nanocomposite: Processing behavior, microstructure and electrical properties. Materials & Design, 2013, 52, 128-133.	5.1	48
62	Tunable electrical conductivity of polystyrene/polyamide-6/carbon nanotube blend nanocomposites via control of morphology and nanofiller localization. European Polymer Journal, 2017, 95, 418-429.	5.4	47
63	Electrified single-walled carbon nanotube/epoxy nanocomposite via vacuum shock technique: Effect of alignment on electrical conductivity and electromagnetic interference shielding. Polymer Composites, 2018, 39, E1139.	4.6	47
64	Heavy oil recovery by surface modified silica nanoparticle/HPAM nanofluids. Fuel, 2019, 252, 622-634.	6.4	47
65	Application of graphene oxide nanosheets and HPAM aqueous dispersion for improving heavy oil recovery: Effect of localized functionalization. Fuel, 2020, 265, 116918.	6.4	47
66	Impact of synthesis temperature on morphology, rheology and electromagnetic interference shielding of CVD-grown carbon nanotube/polyvinylidene fluoride nanocomposites. Synthetic Metals, 2017, 230, 39-50.	3.9	45
67	Electrical Permittivity and Electrical Conductivity of Multiwall Carbon Nanotube-Polyaniline (MWCNT-PANI) Core-Shell Nanofibers and MWCNT-PANI/polystyrene Composites. Macromolecular Materials and Engineering, 2014, 299, 1013-1020.	3.6	44
68	Employing Nitrogen Doping as Innovative Technique to Improve Broadband Dielectric Properties of Carbon Nanotube/Polymer Nanocomposites. Macromolecular Materials and Engineering, 2016, 301, 555-565.	3.6	44
69	Enhanced Dielectric Performance of Polymer Nanocomposites Based on CNT/MnO ₂ Nanowire Hybrid Nanostructure. Journal of Physical Chemistry C, 2017, 121, 8327-8334.	3.1	44
70	Prevention of network destruction of partially hydrolyzed polyacrylamide (HPAM): Effects of salt, temperature, and fumed silica nanoparticles. Physics of Fluids, 2019, 31, .	4.0	44
71	Molecular dynamics and thermal analysis study of anomalous thermodynamic behavior of poly (ether) Tj ETQq1 1 0,784314 rgBT /Overlo	3.8	43
72	The design and performance of a new miniature mixer for specialty polymer blends and nanocomposites. Polymer Engineering and Science, 2004, 44, 868-879.	3.1	42

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73	Nonlinear viscoelastic characterization of charged cellulose nanocrystal network structure in the presence of salt in aqueous media. <i>Cellulose</i> , 2020, 27, 5729-5743.	4.9	42
74	Erosion and breakup of polymer drops under simple shear in high viscosity ratio systems. <i>Polymer Engineering and Science</i> , 2003, 43, 891-904.	3.1	41
75	Highly Sensitive and Stretchable Carbon Nanotube/Fluoroelastomer Nanocomposite with a Double-Percolated Network for Wearable Electronics. <i>Advanced Electronic Materials</i> , 2020, 6, 1901067.	5.1	41
76	Synergic effect in electrical conductivity using a combination of two fillers in PVDF hybrids composites. <i>European Polymer Journal</i> , 2013, 49, 3318-3327.	5.4	40
77	Ultrasound-assisted synthesis and characterization of magnetite nanoparticles and poly(methyl methacrylate) nanocomposites. <i>Polymer Composites</i> , 2018, 39, E655.	8.2	39
78	Effect of carbon nanotubes on electromagnetic interference shielding of carbon fiber reinforced polymer composites. <i>Polymer Composites</i> , 2018, 39, E655.	4.6	39
79	Rheology of fumed silica nanoparticles/partially hydrolyzed polyacrylamide aqueous solutions under small and large amplitude oscillatory shear deformations. <i>Journal of Rheology</i> , 2018, 62, 1197-1216.	2.6	39
80	Structural Characterization of CVD Custom-Synthesized Carbon Nanotube/Polymer Nanocomposites in Large-Amplitude Oscillatory Shear (LAOS) Mode: Effect of Dispersion Characteristics in Confined Geometries. <i>Macromolecules</i> , 2019, 52, 1489-1504.	4.8	39
81	Interface Bridging of Multiwalled Carbon Nanotubes in Poly(lactic acid)/Poly(butylene terephthalate) Nanocomposites. <i>Macromolecules</i> , 2020, 53, 10267-10277.	4.8	39
82	Mode-I interlaminar fracture behaviour of nanoparticle modified epoxy/basalt fibre-reinforced laminates. <i>Polymer Testing</i> , 2013, 32, 402-412.	4.8	38
83	Electrical conductivity of electrospun nanofiber mats of polyamide 6/polyaniline coated with nitrogen-doped carbon nanotubes. <i>Materials and Design</i> , 2018, 141, 333-341.	7.0	38
84	Microstructure and mechanical properties of epoxy hybrid nanocomposites modified with acrylic tri-block-copolymer and layered-silicate nanoclay. <i>Composites Part A: Applied Science and Manufacturing</i> , 2012, 43, 945-954.	7.6	37
85	Electrical properties of in situ polymerized polystyrene/polyaniline composites: The effect of feeding ratio. <i>Synthetic Metals</i> , 2012, 162, 1177-1183.	3.9	34
86	Broadband dielectric properties of multiwalled carbon nanotube/polystyrene composites. <i>Polymer Engineering and Science</i> , 2015, 55, 173-179.	3.1	34
87	Impact of BaTiO ₃ as insulative ferroelectric barrier on the broadband dielectric properties of MWCNT/PVDF nanocomposites. <i>Polymer Composites</i> , 2016, 37, 299-304.	4.6	34
88	Cobalt Catalyst Grown Carbon Nanotube/Poly(Vinylidene Fluoride) Nanocomposites: Effect of Synthesis Temperature on Morphology, Electrical Conductivity and Electromagnetic Interference Shielding. <i>ChemistrySelect</i> , 2017, 2, 10271-10284.	1.5	34
89	Bio-based UV curable polyurethane acrylate: Morphology and shape memory behaviors. <i>European Polymer Journal</i> , 2019, 118, 514-527.	5.4	34
90	Electrically conductive carbon nanofiber/polyethylene composite: effect of melt mixing conditions. <i>Polymers for Advanced Technologies</i> , 2011, 22, 246-253.	3.2	32

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91	Carbon Nanotube versus Graphene Nanoribbon: Impact of Nanofiller Geometry on Electromagnetic Interference Shielding of Polyvinylidene Fluoride Nanocomposites. <i>Polymers</i> , 2019, 11, 1064.	4.5	32
92	Polymeric-nanofluids stabilized emulsions: Interfacial versus bulk rheology. <i>Journal of Colloid and Interface Science</i> , 2020, 576, 252-263.	9.4	32
93	Morphology and mechanical properties of nanostructured acrylic tri-block-copolymer modified epoxy. <i>Polymer Engineering and Science</i> , 2014, 54, 1047-1055.	3.1	31
94	Tailoring MWCNT Dispersion, Blend Morphology and EMI Shielding Properties by Sequential Mixing Strategy in Immiscible PS/PVDF Blends. <i>Journal of Electronic Materials</i> , 2020, 49, 1588-1600.	2.2	31
95	The key role of processing in tuning nonlinear viscoelastic properties and microwave absorption in CNT-based polymer nanocomposites. <i>Materials Today Communications</i> , 2020, 24, 101010.	1.9	31
96	Dielectric properties of multiwalled carbon nanotube/clay/polyvinylidene fluoride nanocomposites: Effect of clay incorporation. <i>Polymer Composites</i> , 2016, 37, 161-167.	4.6	30
97	Role of temperature on bio-printability of gelatin methacryloyl bioink in two-step cross-linking strategy for tissue engineering applications. <i>Biomedical Materials (Bristol)</i> , 2021, 16, 015021.	3.3	30
98	Effect of Premade Compatibilizer and Reactive Polymers on Polystyrene Drop Deformation and Breakup in Simple Shear. <i>Macromolecules</i> , 2005, 38, 5609-5616.	4.8	29
99	Tuning the curing behavior of fluoroelastomer (FKM) by incorporation of nitrogen doped graphene nanoribbons (CNx-GNRs). <i>Polymer</i> , 2014, 55, 6293-6302.	3.8	29
100	Enhanced Sensitivity of Dopamine Biosensors: An Electrochemical Approach Based on Nanocomposite Electrodes Comprising Polyaniline, Nitrogen-Doped Graphene, and DNA-Functionalized Carbon Nanotubes. <i>Journal of the Electrochemical Society</i> , 2019, 166, B1415-B1425.	2.9	29
101	Electrical and rheological percolation of polymer nanocomposites prepared with functionalized copper nanowires. <i>Nanotechnology</i> , 2008, 19, 215712.	2.6	28
102	Effect of Nanocomposite Structures on Fracture Behavior of Epoxy-Clay Nanocomposites Prepared by Different Dispersion Methods. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-12.	2.7	28
103	Impact of foaming on the broadband dielectric properties of multi-walled carbon nanotube/polystyrene composites. <i>Journal of Cellular Plastics</i> , 2014, 50, 551-562.	2.4	28
104	The effects of catalyst on the morphology and physicochemical properties of nitrogen-doped carbon nanotubes. <i>Materials Letters</i> , 2014, 116, 289-292.	2.6	28
105	Transformation of petroleum asphaltene to carbon fibers. <i>Carbon</i> , 2022, 190, 92-103.	10.3	28
106	Coaxial electrospun nanofibers of poly(vinylidene fluoride)/polyaniline filled with multi-walled carbon nanotubes. <i>Polymer Composites</i> , 2014, 35, 1198-1203.	4.6	27
107	Large amplitude oscillatory shear flow: Microstructural assessment of polymeric systems. <i>Progress in Polymer Science</i> , 2022, 132, 101580.	24.7	27
108	Silver-coated copper nanowires with improved anti-oxidation property as conductive fillers in low-density polyethylene. <i>Canadian Journal of Chemical Engineering</i> , 2013, 91, 630-637.	1.7	26

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109	Effect of secondary filler properties and geometry on the electrical, dielectric, and electromagnetic interference shielding properties of carbon nanotubes/polyvinylidene fluoride nanocomposites. <i>Polymer Engineering and Science</i> , 2021, 61, 959-970.	3.1	26
110	Nanocomposites of ethylene-vinyl acetate copolymer (EVA) and organoclay prepared by twin-screw melt extrusion. <i>Polymer Composites</i> , 2004, 25, 535-542.	4.6	25
111	Carbon nanotube/ZnO nanowire/polyvinylidene fluoride hybrid nanocomposites for enhanced electromagnetic interference shielding. <i>Canadian Journal of Chemical Engineering</i> , 2020, 98, 1036-1046.	1.7	25
112	Morphology Development of Polymer Blends in Extruder: The Effects of Compatibilization and Rotation Rate. <i>Macromolecular Chemistry and Physics</i> , 2009, 210, 852-863.	2.2	24
113	Tuning the Network Structure of Graphene/Epoxy Nanocomposites by Controlling Edge/Basal Localization of Functional Groups. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 21431-21440.	3.7	24
114	Controlling Short-Range Interactions by Tuning Surface Chemistry in HDPE/Graphene Nanoribbon Nanocomposites. <i>Journal of Physical Chemistry B</i> , 2015, 119, 11867-11878.	2.6	23
115	Critical insights into understanding the effects of synthesis temperature and nitrogen doping towards charge storage capability and microwave shielding in nitrogen-doped carbon nanotube/polymer nanocomposites. <i>RSC Advances</i> , 2016, 6, 63224-63234.	3.6	23
116	Nylon 66/clay nanocomposite structure development in a twin screw extruder. <i>Polymer Engineering and Science</i> , 2009, 49, 824-834.	3.1	22
117	Highly biocompatible multifunctional hybrid nanoparticles based on Fe ₃ O ₄ decorated nanodiamond with superior superparamagnetic behaviors and photoluminescent properties. <i>Materials Science and Engineering C</i> , 2020, 114, 110993.	7.3	22
118	Hybrid energy storage using nitrogen-doped graphene and layered-MXene (Ti ₃ C ₂) for stable high-rate supercapacitors. <i>Electrochimica Acta</i> , 2021, 388, 138664.	5.2	22
119	Nitrogen-Doped Carbon Nanotube/Polypropylene Composites with Negative Seebeck Coefficient. <i>Journal of Composites Science</i> , 2020, 4, 14.	3.0	22
120	Ultrasensitive wearable sensor with novel hybrid structures of silver nanowires and carbon nanotubes in fluoroelastomer: Multi-directional sensing for human health monitoring and stretchable electronics. <i>Applied Materials Today</i> , 2022, 26, 101295.	4.3	22
121	Multilayer polymeric nanocomposite thin film heater and electromagnetic interference shield. <i>Chemical Engineering Journal</i> , 2022, 435, 134598.	12.7	22
122	In situ chemical polymerization of conducting polymer nanocomposites: Effect of DNA-functionalized carbon nanotubes and nitrogen-doped graphene as catalytic molecular templates. <i>Chemical Engineering Journal</i> , 2020, 389, 124500.	12.7	21
123	Parallel Breakup of Polymer Drops under Simple Shear. <i>Macromolecular Rapid Communications</i> , 2003, 24, 783-788.	3.9	20
124	Electrical, Morphological and Rheological Study of Melt-Mixed Polystyrene/Copper Nanowire Nanocomposites. <i>Macromolecular Materials and Engineering</i> , 2008, 293, 631-640.	3.6	20
125	Current-voltage characteristics of nanoplatelet-based conductive nanocomposites. <i>Nanoscale Research Letters</i> , 2014, 9, 369.	5.7	20
126	Co-Doped Electrochemically Exfoliated Graphene/Polymer Nanocomposites with High Dielectric Constant and Low Dielectric Loss for Flexible Dielectrics and Charge Storage. <i>ACS Applied Nano Materials</i> , 2020, 3, 4512-4521.	5.0	20

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127	Viscoelastic behavior of covalently crosslinked hydrogels under large shear deformations: An approach to eliminate wall slip. <i>Physics of Fluids</i> , 2021, 33, .	4.0	20
128	Intra-Cycle Elastic Nonlinearity of Nitrogen-Doped Carbon Nanotube/Polymer Nanocomposites under Medium Amplitude Oscillatory Shear (MAOS) Flow. <i>Nanomaterials</i> , 2020, 10, 1257.	4.1	19
129	Investigation of the Melting Mechanism in a Twin-Screw Extruder Using a Pulse Method and Online Measurement. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 6822-6831.	3.7	18
130	Mechanical properties of carbon black-filled polypropylene/polystyrene blends containing styrene-butadiene-styrene copolymer. <i>Polymer Engineering and Science</i> , 2009, 49, 693-702.	3.1	18
131	Morphological, electrical and electromagnetic interference shielding characterization of vapor grown carbon nanofiber/polystyrene nanocomposites. <i>Polymer International</i> , 2013, 62, 601-607.	3.1	18
132	Effect of Temperature on Electrical Resistivity of Carbon Nanotubes and Graphene Nanoplatelets Nanocomposites. <i>Journal of Nanotechnology in Engineering and Medicine</i> , 2014, 5, .	0.8	18
133	Dual functionality of hierarchical hybrid networks of multiwall carbon nanotubes anchored magnetite particles in soft polymer nanocomposites: Simultaneous enhancement in charge storage and microwave absorption. <i>Composites Science and Technology</i> , 2019, 183, 107802.	7.8	18
134	Study of matrix micro-cracking in nano clay and acrylic tri-block-copolymer modified epoxy/basalt fiber-reinforced pressure-retaining structures. <i>EXPRESS Polymer Letters</i> , 2011, 5, 882-896.	2.1	18
135	Rheological percolation in polystyrene composites filled with polyaniline-coated multiwall carbon nanotubes. <i>Synthetic Metals</i> , 2014, 194, 109-117.	3.9	17
136	Modification of Montmorillonite with Alkyl Silanes and Fluorosurfactant for Clay/fluoroelastomer (FKM) Nanocomposites. <i>Clays and Clay Minerals</i> , 2015, 63, 1-14.	1.3	17
137	A novel electrically conductive water borne epoxy nanocomposite coating based on graphene: facile method and high efficient graphene dispersion. <i>Progress in Organic Coatings</i> , 2019, 136, 105223.	3.9	17
138	A PCA Based Fault Detection Scheme for an Industrial High Pressure Polyethylene Reactor. <i>Macromolecular Reaction Engineering</i> , 2008, 2, 12-30.	1.5	16
139	Direct Creation of Highly Conductive Laser-Induced Graphene Nanocomposites from Polymer Blends. <i>Macromolecular Rapid Communications</i> , 2017, 38, 1700176.	3.9	16
140	Pre-exfoliated nanoclay through two consecutive reaction systems: Silane functionalization followed by grafting of amino acid monomers. <i>Applied Clay Science</i> , 2018, 151, 81-91.	5.2	16
141	Tunable Dielectric Properties Derived from Nitrogen-Doped Carbon Nanotubes in PVDF-Based Nanocomposites. <i>ACS Omega</i> , 2018, 3, 9966-9980.	3.5	16
142	Inversion of phase continuity during polymer-polymer blending: Effect of processing parameters. <i>Macromolecular Symposia</i> , 1996, 112, 85-89.	0.7	15
143	Modeling of polymer melting, drop deformation, and breakup under shear flow. <i>Polymer Engineering and Science</i> , 2004, 44, 1258-1266.	3.1	15
144	Effect of clay surfactant type and clay content on the rheology and morphology of uncured fluoroelastomer/clay nanocomposites prepared by melt-mixing. <i>Journal of Applied Polymer Science</i> , 2009, 112, 3597-3604.	2.6	15

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145	Effects of processing sequence on clay dispersion, phase morphology, and thermal and rheological behaviors of PA6/HDPE/clay nanocomposites. <i>Journal of Applied Polymer Science</i> , 2012, 125, E714.	2.6	15
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