

Uttandaraman Sundararaj

List of Publications by Year in descending order

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211
papers

14,658
citations

29994

54
h-index

20900

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.	5.4	1,274
2	Big returns from small fibers: A review of polymer/carbon nanotube composites. Polymer Composites, 2004, 25, 630-645.	2.3	1,115
3	A review of vapor grown carbon nanofiber/polymer conductive composites. Carbon, 2009, 47, 2-22.	5.4	978
4	Drop Breakup and Coalescence in Polymer Blends: The Effects of Concentration and Compatibilization. Macromolecules, 1995, 28, 2647-2657.	2.2	783
5	EMI shielding effectiveness of carbon based nanostructured polymeric materials: A comparative study. Carbon, 2013, 60, 146-156.	5.4	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.	5.4	408
7	Review of the mechanical properties of carbon nanofiber/polymer composites. Composites Part A: Applied Science and Manufacturing, 2011, 42, 2126-2142.	3.8	383
8	Electrical and electromagnetic interference shielding properties of flow-induced oriented carbon nanotubes in polycarbonate. Carbon, 2011, 49, 3430-3440.	5.4	347
9	Segregated Hybrid Poly(methyl methacrylate)/Graphene/Magnetite Nanocomposites for Electromagnetic Interference Shielding. ACS Applied Materials & Interfaces, 2017, 9, 14171-14179.	4.0	291
10	The electrical conductivity and electromagnetic interference shielding of injection molded multi-walled carbon nanotube/polystyrene composites. Carbon, 2012, 50, 1455-1464.	5.4	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 Ti_3C_2Tx MXenes resulting in exceptional electrical conductivity, high synthesis yield, and enhanced capacitance. Nanoscale, 2021, 13, 3572-3580.	2.8	228
13	Morphology development in polymer blends. Polymer Engineering and Science, 1992, 32, 1814-1823.	1.5	211
14	Copper nanowire/polystyrene nanocomposites: Lower percolation threshold and higher EMI shielding. Composites Part A: Applied Science and Manufacturing, 2011, 42, 92-97.	3.8	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.	5.4	202
16	Low Electrical Percolation Threshold of Silver and Copper Nanowires in Polystyrene Composites. Advanced Functional Materials, 2006, 16, 2423-2430.	7.8	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.	3.8	157
18	High Dielectric Constant and Low Dielectric Loss via Poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Td (alcohol)/ Ti_3C_2 Materials & Interfaces, 2019, 11, 18599-18608.	4.0	157

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19	Novel composites of copper nanowire/PVDF with superior dielectric properties. <i>Polymer</i> , 2014, 55, 226-234.	1.8	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.	1.3	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.	1.7	142
22	Three-dimensional printing of highly conductive polymer nanocomposites for EMI shielding applications. <i>Materials Today Communications</i> , 2017, 11, 112-118.	0.9	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.	1.9	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.	4.0	119
25	Melt Mixing of Polycarbonate with Multi-Walled Carbon Nanotubes in Miniature Mixers. <i>Macromolecular Materials and Engineering</i> , 2006, 291, 227-238.	1.7	110
26	Tunneling Conductivity and Piezoresistivity of Composites Containing Randomly Dispersed Conductive Nano-Platelets. <i>Materials</i> , 2014, 7, 2501-2521.	1.3	109
27	Sheet formation in immiscible polymer blends: model experiments on initial blend morphology. <i>Polymer</i> , 1995, 36, 1957-1968.	1.8	107
28	Carbon nanotube induced double percolation in polymer blends: Morphology, rheology and broadband dielectric properties. <i>Polymer</i> , 2017, 114, 122-134.	1.8	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.	5.4	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.	5.4	99
31	Evidence for inversion of phase continuity during morphology development in polymer blending. <i>Polymer Engineering and Science</i> , 1996, 36, 1769-1781.	1.5	95
32	Outstanding electromagnetic interference shielding of silver nanowires: comparison with carbon nanotubes. <i>RSC Advances</i> , 2015, 5, 56590-56598.	1.7	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.	4.0	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.	3.8	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.	2.6	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.	1.5	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.	3.3	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.	4.0	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.	2.2	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.	5.9	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.	1.7	72
42	Milligrams to kilograms: An evaluation of mixers for reactive polymer blending. <i>Polymer Engineering and Science</i> , 1995, 35, 100-114.	1.5	71
43	Processing-microstructure-property relationship in conductive polymer nanocomposites. <i>Polymer</i> , 2010, 51, 2740-2747.	1.8	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.	4.0	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.	5.4	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.	1.5	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.	5.4	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.	2.6	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.	3.8	63
50	Helical and Dendritic Unzipping of Carbon Nanotubes: A Route to Nitrogen-Doped Graphene Nanoribbons. <i>ACS Nano</i> , 2015, 9, 5833-5845.	7.3	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, .	1.6	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.	1.3	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.	2.3	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.	2.6	56

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55	Synthesis of a high-temperature stable electrochemically exfoliated graphene. Carbon, 2020, 157, 681-692.	5.4	55
56	Electrical, Rheological, and Mechanical Properties of Polystyrene/Copper Nanowire Nanocomposites. Industrial & Engineering Chemistry Research, 2007, 46, 2481-2487.	1.8	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.	2.4	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.	1.8	50
59	Filler-Free Conducting Polymers as a New Class of Transparent Electromagnetic Interference Shields. ACS Applied Materials & Interfaces, 2020, 12, 28596-28606.	4.0	50
60	Electrostatically Dissipative Polystyrene Nanocomposites containing Copper Nanowires. Macromolecular Rapid Communications, 2005, 26, 1677-1681.	2.0	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.	2.6	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.	2.3	47
64	Heavy oil recovery by surface modified silica nanoparticle/HPAM nanofluids. Fuel, 2019, 252, 622-634.	3.4	47
65	Application of graphene oxide nanosheets and HPAM aqueous dispersion for improving heavy oil recovery: Effect of localized functionalization. Fuel, 2020, 265, 116918.	3.4	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.	2.1	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.	1.7	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.	1.7	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.	1.5	44
70	Prevention of network destruction of partially hydrolyzed polyacrylamide (HPAM): Effects of salt, temperature, and fumed silica nanoparticles. Physics of Fluids, 2019, 31, .	1.6	44
71	Molecular dynamics and thermal analysis study of anomalous thermodynamic behavior of poly (ether) Tj ETQq1 1 0,784314 rgBT /Overlo	1.8	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.	1.5	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.	2.4	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.	1.5	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.	2.6	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.	2.6	40
77	Ultrasound-assisted synthesis and characterization of magnetite nanoparticles and poly(methyl methacrylate) nanocomposites. <i>Polymer</i> , 2019, 187, 121753.	3.8	39
78	Effect of carbon nanotubes on electromagnetic interference shielding of carbon fiber reinforced polymer composites. <i>Polymer Composites</i> , 2018, 39, E655.	2.3	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.	1.3	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.	2.2	39
81	Interface Bridging of Multiwalled Carbon Nanotubes in Poly(lactic acid)/Poly(butylene terephthalate) Nanocomposites. <i>Macromolecules</i> , 2020, 53, 10267-10277.	2.2	39
82	Mode-I interlaminar fracture behaviour of nanoparticle modified epoxy/basalt fibre-reinforced laminates. <i>Polymer Testing</i> , 2013, 32, 402-412.	2.3	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.	3.3	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.	3.8	37
85	Electrical properties of in situ polymerized polystyrene/polyaniline composites: The effect of feeding ratio. <i>Synthetic Metals</i> , 2012, 162, 1177-1183.	2.1	34
86	Broadband dielectric properties of multiwalled carbon nanotube/polystyrene composites. <i>Polymer Engineering and Science</i> , 2015, 55, 173-179.	1.5	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.	2.3	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.	0.7	34
89	Bio-based UV curable polyurethane acrylate: Morphology and shape memory behaviors. <i>European Polymer Journal</i> , 2019, 118, 514-527.	2.6	34
90	Electrically conductive carbon nanofiber/polyethylene composite: effect of melt mixing conditions. <i>Polymers for Advanced Technologies</i> , 2011, 22, 246-253.	1.6	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.	2.0	32
92	Polymeric-nanofluids stabilized emulsions: Interfacial versus bulk rheology. <i>Journal of Colloid and Interface Science</i> , 2020, 576, 252-263.	5.0	32
93	Morphology and mechanical properties of nanostructured acrylic tri-block-copolymer modified epoxy. <i>Polymer Engineering and Science</i> , 2014, 54, 1047-1055.	1.5	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.	1.0	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.	0.9	31
96	Dielectric properties of multiwalled carbon nanotube/clay/polyvinylidene fluoride nanocomposites: Effect of clay incorporation. <i>Polymer Composites</i> , 2016, 37, 161-167.	2.3	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.	1.7	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.	2.2	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.	1.8	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.	1.3	29
101	Electrical and rheological percolation of polymer nanocomposites prepared with functionalized copper nanowires. <i>Nanotechnology</i> , 2008, 19, 215712.	1.3	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.	1.5	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.	1.2	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.	1.3	28
105	Transformation of petroleum asphaltene to carbon fibers. <i>Carbon</i> , 2022, 190, 92-103.	5.4	28
106	Coaxial electrospun nanofibers of poly(vinylidene fluoride)/polyaniline filled with multi-walled carbon nanotubes. <i>Polymer Composites</i> , 2014, 35, 1198-1203.	2.3	27
107	Large amplitude oscillatory shear flow: Microstructural assessment of polymeric systems. <i>Progress in Polymer Science</i> , 2022, 132, 101580.	11.8	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.	0.9	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.	1.5	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.	2.3	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.	0.9	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.	1.1	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.	1.8	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.	1.2	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.	1.7	23
116	Nylon 66/clay nanocomposite structure development in a twin screw extruder. <i>Polymer Engineering and Science</i> , 2009, 49, 824-834.	1.5	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.	3.8	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.	2.6	22
119	Nitrogen-Doped Carbon Nanotube/Polypropylene Composites with Negative Seebeck Coefficient. <i>Journal of Composites Science</i> , 2020, 4, 14.	1.4	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.	2.3	22
121	Multilayer polymeric nanocomposite thin film heater and electromagnetic interference shield. <i>Chemical Engineering Journal</i> , 2022, 435, 134598.	6.6	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.	6.6	21
123	Parallel Breakup of Polymer Drops under Simple Shear. <i>Macromolecular Rapid Communications</i> , 2003, 24, 783-788.	2.0	20
124	Electrical, Morphological and Rheological Study of Melt-Mixed Polystyrene/Copper Nanowire Nanocomposites. <i>Macromolecular Materials and Engineering</i> , 2008, 293, 631-640.	1.7	20
125	Current-voltage characteristics of nanoplatelet-based conductive nanocomposites. <i>Nanoscale Research Letters</i> , 2014, 9, 369.	3.1	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.	2.4	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, .	1.6	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.	1.9	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.	1.8	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.	1.5	18
131	Morphological, electrical and electromagnetic interference shielding characterization of vapor grown carbon nanofiber/polystyrene nanocomposites. <i>Polymer International</i> , 2013, 62, 601-607.	1.6	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.	3.8	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.	1.1	18
135	Rheological percolation in polystyrene composites filled with polyaniline-coated multiwall carbon nanotubes. <i>Synthetic Metals</i> , 2014, 194, 109-117.	2.1	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.	0.6	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.	1.9	17
138	A PCA Based Fault Detection Scheme for an Industrial High Pressure Polyethylene Reactor. <i>Macromolecular Reaction Engineering</i> , 2008, 2, 12-30.	0.9	16
139	Direct Creation of Highly Conductive Laser-Induced Graphene Nanocomposites from Polymer Blends. <i>Macromolecular Rapid Communications</i> , 2017, 38, 1700176.	2.0	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.	2.6	16
141	Tunable Dielectric Properties Derived from Nitrogen-Doped Carbon Nanotubes in PVDF-Based Nanocomposites. <i>ACS Omega</i> , 2018, 3, 9966-9980.	1.6	16
142	Inversion of phase continuity during polymer-polymer blending: Effect of processing parameters. <i>Macromolecular Symposia</i> , 1996, 112, 85-89.	0.4	15
143	Modeling of polymer melting, drop deformation, and breakup under shear flow. <i>Polymer Engineering and Science</i> , 2004, 44, 1258-1266.	1.5	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.	1.3	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.	1.3	15
146	Assembling copper nanowires at the interface and in discrete phases in PLA-based polymer blends. <i>European Polymer Journal</i> , 2016, 85, 187-197.	2.6	15
147	The Role of Phase Migration of Carbon Nanotubes in Melt-Mixed PVDF/PE Polymer Blends for High Conductivity and EMI Shielding Applications. <i>Molecules</i> , 2022, 27, 933.	1.7	15
148	Interfacial Assembly of Graphene Oxide: From Super Elastic Interfaces to Liquid/Liquid Printing. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	15
149	Effect of mixing protocol on compatibilized polymer blend morphology. <i>Polymer Engineering and Science</i> , 2006, 46, 691-702.	1.5	14
150	Does drop size affect the mechanism of viscoelastic drop breakup?. <i>Physics of Fluids</i> , 2008, 20, .	1.6	14
151	Nonisothermal modeling of heat transfer inside an internal batch mixer. <i>AIChE Journal</i> , 2011, 57, 2657-2669.	1.8	14
152	Magnetic Mesoporous Photonic Cellulose Films. <i>Langmuir</i> , 2016, 32, 9329-9334.	1.6	14
153	A novel self-expanding primarily bioabsorbable braided flow-diverting stent for aneurysms: initial safety results. <i>Journal of NeuroInterventional Surgery</i> , 2020, 12, 700-705.	2.0	14
154	Development and Characterization of Stable Polymer Formulations for Manufacturing Magnetic Composites. <i>Journal of Manufacturing and Materials Processing</i> , 2020, 4, 4.	1.0	14
155	Structured Ultra-Flyweight Aerogels by Interfacial Complexation: Self-Assembly Enabling Multiscale Designs. <i>Small</i> , 2022, 18, e2200220.	5.2	14
156	Sheet formation during drop deformation and breakup in polyethylene/polycarbonate systems sheared between parallel plates. <i>Polymer</i> , 2004, 45, 7605-7613.	1.8	13
157	Enhancing dispersion of copper nanowires in melt-mixed polystyrene composites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2008, 46, 2064-2078.	2.4	13
158	A new approach for conductive network formation in electrospun poly(vinylidene fluoride) nanofibers. <i>Polymer International</i> , 2015, 64, 1262-1267.	1.6	13
159	Investigation of Chaotic Mixing for MWCNT/Polymer Composites. <i>Macromolecular Materials and Engineering</i> , 2015, 300, 482-496.	1.7	13
160	Visualization of poly(ether imide) and polycarbonate blending in an internal mixer. <i>Journal of Applied Polymer Science</i> , 2004, 92, 1165-1175.	1.3	12
161	Simulation and visualization of flow in a new miniature mixer for multiphase polymer systems. <i>Journal of Applied Polymer Science</i> , 2005, 97, 136-142.	1.3	12
162	New Approach To Develop Dynamic Gray Box Model for a Plasticating Twin-Screw Extruder. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 648-657.	1.8	12

#	ARTICLE	IF	CITATIONS
163	Effect of carbon nanotubes on morphology evolution of polypropylene/polystyrene blends: understanding molecular interactions and carbon nanotube migration mechanisms. RSC Advances, 2017, 7, 54222-54234.	1.7	12
164	Nanofibers of poly(vinylidene fluoride)/copper nanowire: Microstructural analysis and dielectric behavior. European Polymer Journal, 2018, 101, 46-55.	2.6	12
165	Electrochemically Exfoliated Graphite Nanosheet Films for Electromagnetic Interference Shields. ACS Applied Nano Materials, 2021, 4, 7221-7233.	2.4	12
166	X-band dielectric properties of hybrid nanocomposites of nitrogen-doped carbon nanotube/functionalized nanoclay/polyvinylidene fluoride nanocomposite. Polymer Composites, 2021, 42, 1034-1048.	2.3	11
167	Synthesis and characterization of a novel nickel pillared "clay catalyst: In-situ carbon nanotube-clay hybrid nanofiller from Ni-PILC. Applied Clay Science, 2021, 205, 106064.	2.6	11
168	Dielectrorheology of Aspect-Ratio-Tailored Carbon Nanotube/Polyethylene Composites under Large Deformations: Implications for High-Temperature Dielectrics. ACS Applied Nano Materials, 2021, 4, 11493-11504.	2.4	11
169	Morphology Evolution, Molecular Simulation, Electrical Properties, and Rheology of Carbon Nanotube/Polypropylene/Polystyrene Blend Nanocomposites: Effect of Molecular Interaction between Styrene-Butadiene Block Copolymer and Carbon Nanotube. Polymers, 2021, 13, 230.	2.0	10
170	Efficient inductively heated shape memory polyurethane acrylate network with silane modified nanodiamond@Fe3O4 superparamagnetic nanohybrid. European Polymer Journal, 2021, 159, 110735.	2.6	10
171	Experimental investigation of viscoelastic drop deformation in Newtonian matrix at high capillary number under simple shear flow. Journal of Non-Newtonian Fluid Mechanics, 2010, 165, 1219-1227.	1.0	9
172	Water Transport in Polylactide and Polylactide/Montmorillonite Composites. Journal of Polymers and the Environment, 2013, 21, 8-15.	2.4	9
173	Superiority of graphite coated metallic-nanoparticles over graphite coated insulating-nanoparticles for enhancing EMI shielding. New Journal of Chemistry, 2021, 45, 4592-4600.	1.4	9
174	On-line Visualization of PS/PP Melting Mechanisms in a Co-rotating Twin Screw Extruder. International Polymer Processing, 2004, 19, 342-349.	0.3	9
175	Multivariate Statistical Monitoring of a High-Pressure Polymerization Process. Polymer-Plastics Technology and Engineering, 2003, 11, 1017-1052.	0.7	8
176	Oxidation kinetics of copper nanowires synthesized by AC electrodeposition of copper into porous aluminum oxide templates. Journal of Materials Research, 2012, 27, 1755-1762.	1.2	8
177	Facile one step-synthesis and characterisation of high aspect ratio core-shell copper-polyaniline nanowires. Canadian Journal of Chemical Engineering, 2014, 92, 1207-1212.	0.9	8
178	Novel electrical conductive hybrid nanostructures based on PA/6/MWCNT-COOH electrospun nanofibers and anchored MWCNT-COOH. Polymer Engineering and Science, 2015, 55, 1263-1272.	1.5	8
179	Enhancing electrical properties of MWCNTs in immiscible blends of poly(methyl Tj ETQq1 1 0.784314 rgBT /Overlock 10 37, 1523-1530.	2.3	8
180	Covalently cross-linked hydrogels: Mechanisms of nonlinear viscoelasticity. Canadian Journal of Chemical Engineering, 2022, 100, 3227-3239.	0.9	8

#	ARTICLE	IF	CITATIONS
181	Erosion of polymer pellets during blending in a twin-screw extruder. <i>AIChE Journal</i> , 2006, 52, 1267-1270.	1.8	7
182	Enhanced electromagnetic interference shielding effectiveness of hybrid fillers by segregated structure. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	7
183	Nitrogen-doped carbon nanotubes towards electrochemical sensing: Effect of synthesis temperature. <i>Diamond and Related Materials</i> , 2020, 110, 108093.	1.8	7
184	New insight to polymer transport in porous media to enhance heavy oil recovery: Lab experiment and numerical simulation. <i>Fuel</i> , 2022, 322, 124257.	3.4	7
185	Microwave Sintering Process Model. <i>Journal of Microwave Power and Electromagnetic Energy</i> , 2003, 38, 243-258.	0.4	6
186	On the possibility of electrochemical unzipping of multiwalled carbon nanotubes to produce graphene nanoribbons. <i>Materials Research Bulletin</i> , 2016, 80, 243-248.	2.7	6
187	PVDF/Carbonnanotubes/Nanoclay Composites for Piezoelectric Applications. <i>International Polymer Processing</i> , 2014, 29, 81-87.	0.3	5
188	Verapamil eluting stents as a possible treatment for vasospasm after subarachnoid hemorrhage. <i>Journal of NeuroInterventional Surgery</i> , 2017, 9, 875-879.	2.0	5
189	Waste to Value-Added Product: Developing Electrically Conductive Nanocomposites Using a Non-Recyclable Plastic Waste Containing Vulcanized Rubber. <i>Polymers</i> , 2021, 13, 2427.	2.0	5
190	Interface Strengthening of PS/aPA Polymer Blend Nanocomposites via In Situ Compatibilization: Enhancement of Electrical and Rheological Properties. <i>Materials</i> , 2021, 14, 4813.	1.3	5
191	Experimental and simulation studies of heat transfer in polymer melts. <i>AIChE Journal</i> , 2003, 49, 1372-1382.	1.8	4
192	Vulcanization behavior and mechanical properties of organoclay fluoroelastomer nanocomposites. <i>Journal of Applied Polymer Science</i> , 2012, 124, 5056-5063.	1.3	4
193	Identification of transient responses of a plasticating twin screw extruder due to excitation in feed rate. <i>Polymer Engineering and Science</i> , 2011, 51, 482-491.	1.5	4
194	Improvement of barrier properties of rotomolded PE containers with nanoclay. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	4
195	Quantitative analysis of nanoscale electrical properties of CNT/PVDF nanocomposites by current sensing AFM. <i>RSC Advances</i> , 2017, 7, 32564-32573.	1.7	4
196	DC electrorheological response of polyethylene/organically modified layered silicate nanocomposites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2017, 55, 1298-1309.	2.4	3
197	Outstanding in-situ CNTs on Fe-pillared nanoclay for high-performance polymer nanocomposites. <i>Applied Clay Science</i> , 2021, 213, 106240.	2.6	3
198	Exploring the effect of block copolymer architecture and concentration on the microstructure, electrical conductivity and rheological properties of PP/PS blend nanocomposites. <i>Functional Composite Materials</i> , 2022, 3, .	0.9	3

#	ARTICLE	IF	CITATIONS
199	Influence of Melt-Mixing Process Conditions on Mechanical Performance of Organoclay/Fluoroelastomer Nanocomposites. <i>International Polymer Processing</i> , 2016, 31, 2-10.	0.3	2
200	Synergistic Effect of Hybrid Long Silver Nanowires and Carbon Nanotubes on Strain Sensing Behavior of Fluoroelastomer Nanocomposites. , 2019, , .		2
201	A Simple Approach to Control the Physical and Chemical Features of Custom-Synthesized N-Doped Carbon Nanotubes and the Extent of Their Network Formation in Polymers: The Importance of Catalyst to Substrate Ratio. <i>Polymers</i> , 2021, 13, 4156.	2.0	2
202	Grafting of sodium montmorillonite with $\hat{1}^3$ -aminopropyltriethoxysilane in ethanol/water dispersing medium. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	1
203	Chemical engineering in Canada: A special <i>Can. J. Chem. Eng</i>. virtual issue. <i>Canadian Journal of Chemical Engineering</i> , 2017, 95, 1432-1433.	0.9	1
204	Phase Morphology Development in Polymer Blends. , 2005, , 133-164.		1
205	Interfacial Assembly of Graphene Oxide: From Super Elastic Interfaces to Liquidâ€inâ€Liquid Printing (Adv.) <i>Tj ETQq</i> 1, 1 0.7843 14 rgBT (C)	1.9	1
206	Structured Ultraâ€Flyweight Aerogels by Interfacial Complexation: Selfâ€Assembly Enabling Multiscale Designs (Small 20/2022). <i>Small</i> , 2022, 18, .	5.2	1
207	Preparation of Copper Nanowire/Polymer Nanocomposites by Melt Mixing. <i>Materials Research Society Symposia Proceedings</i> , 2005, 879, 1.	0.1	0
208	Macromol. Mater. Eng. 5/2016. <i>Macromolecular Materials and Engineering</i> , 2016, 301, 640-640.	1.7	0
209	Effect of nitrogen doping on medium-amplitude oscillatory shear (MAOS) response of nanotube/polyvinylidene fluoride nanocomposites: Molecular simulations, rheology, and broadband electrical conductivity. <i>Journal of Rheology</i> , 2020, 64, 1343-1356.	1.3	0
210	Special issue in honor of Professor Christopher W. Macosko. <i>Polymer Engineering and Science</i> , 2021, 61, 923-925.	1.5	0
211	Reply to comments on: Synthesis and characterization of a novel nickel pillared-clay catalyst: In-situ carbon nanotubeâ€clay hybrid nanofiller from Ni-PILC. <i>Applied Clay Science</i> , 2021, 213, 106268.	2.6	0