Satish Kumar

List of Publications by Year
in descending order

211 papers	13,290 citations	24978 57 h-index	24915 109 g-index
213 all docs	213 docs citations	213 times ranked	11599 citing authors

#	Article	IF	Citations
1	Crystallization and orientation studies in polypropylene/single wall carbon nanotube composite. Polymer, 2003, 44, 2373-2377.	1.8	694
2	Polymer/Carbon Nanotube Nano Composite Fibersâ€"A Review. ACS Applied Materials & Interfaces, 2014, 6, 6069-6087.	4.0	462
3	Synthesis, Structure, and Properties of PBO/SWNT Composites&. Macromolecules, 2002, 35, 9039-9043.	2.2	455
4	Poly(vinyl alcohol)/SWNT Composite Film. Nano Letters, 2003, 3, 1285-1288.	4.5	450
5	The role of aligned polymer fiber-based constructs in the bridging of long peripheral nerve gaps. Biomaterials, 2008, 29, 3117-3127.	5.7	402
6	Fibers from polypropylene/nano carbon fiber composites. Polymer, 2002, 43, 1701-1703.	1.8	353
7	Recent Progress in Fabrication, Structure, and Properties of Carbon Fibers. Polymer Reviews, 2012, 52, 234-258.	5.3	316
8	Rigid-rod polymeric fibers. Journal of Applied Polymer Science, 2006, 100, 791-802.	1.3	300
9	The processing, properties, and structure of carbon fibers. Jom, 2005, 57, 52-58.	0.9	296
10	Making Strong Fibers. Science, 2008, 319, 908-909.	6.0	262
11	Single-Wall Carbon Nanotube Films. Chemistry of Materials, 2003, 15, 175-178.	3.2	259
12	Properties and Structure of Nitric Acid Oxidized Single Wall Carbon Nanotube Films. Journal of Physical Chemistry B, 2004, 108, 16435-16440.	1.2	244
13	A comparison of reinforcement efficiency of various types of carbon nanotubes in polyacrylonitrile fiber. Polymer, 2005, 46, 10925-10935.	1.8	238
14	Polymer transcrystallinity induced by carbon nanotubes. Polymer, 2008, 49, 1356-1364.	1.8	207
15	Stabilization and carbonization of gel spun polyacrylonitrile/single wall carbon nanotube composite fibers. Polymer, 2007, 48, 3781-3789.	1.8	200
16	Oriented and exfoliated single wall carbon nanotubes in polyacrylonitrile. Polymer, 2006, 47, 3494-3504.	1.8	197
17	Single wall carbon nanotube templated oriented crystallization of poly(vinyl alcohol). Polymer, 2006, 47, 3705-3710.	1.8	195
18	Electrospinning of polyacrylonitrile nanofibers. Journal of Applied Polymer Science, 2006, 102, 1023-1029.	1.3	191

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19	Functionalized Single Wall Carbon Nanotubes Treated with Pyrrole for Electrochemical Supercapacitor Membranes. Chemistry of Materials, 2005, 17, 1997-2002.	3.2	185
20	High strength and high modulus carbon fibers. Carbon, 2015, 93, 81-87.	5.4	176
21	Experimental and Theoretical Investigations of Porous Structure Formation in Electrospun Fibers. Macromolecules, 2007, 40, 7689-7694.	2.2	169
22	PAN precursor fabrication, applications and thermal stabilization process in carbon fiber production: Experimental and mathematical modelling. Progress in Materials Science, 2020, 107, 100575.	16.0	168
23	Rigid-Rod Polymers: Synthesis, Processing, Simulation, Structure, and Properties. Macromolecular Materials and Engineering, 2003, 288, 823-843.	1.7	165
24	Processing and properties of poly(methyl methacrylate)/carbon nano fiber composites. Composites Part B: Engineering, 2004, 35, 173-178.	5.9	165
25	Melt processing of SWCNT-polyimide nanocomposite fibers. Composites Part B: Engineering, 2004, 35, 439-446.	5.9	155
26	Carbon Nanotube Dispersion in Solvents and Polymer Solutions: Mechanisms, Assembly, and Preferences. ACS Nano, 2017, 11, 12805-12816.	7.3	145
27	Gel spinning of PVA/SWNT composite fiber. Polymer, 2004, 45, 8801-8807.	1.8	141
28	Carbon nanotube dispersion and exfoliation in polypropylene and structure and properties of the resulting composites. Polymer, 2008, 49, 1831-1840.	1.8	138
29	Carbon Nanotubes as Liquid Crystals. Small, 2008, 4, 1270-1283.	5.2	136
30	Carbon nanotube reinforced small diameter polyacrylonitrile based carbon fiber. Composites Science and Technology, 2009, 69, 406-413.	3.8	136
31	Processing, Structure, and Properties of Lignin- and CNT-Incorporated Polyacrylonitrile-Based Carbon Fibers. ACS Sustainable Chemistry and Engineering, 2015, 3, 1943-1954.	3.2	135
32	Writtenâ€in Conductive Patterns on Robust Graphene Oxide Biopaper by Electrochemical Microstamping. Angewandte Chemie - International Edition, 2013, 52, 13784-13788.	7.2	132
33	Graphene Nanoribbons as an Advanced Precursor for Making Carbon Fiber. ACS Nano, 2013, 7, 1628-1637.	7.3	117
34	Compressive behavior of materials: Part II. High performance fibers. Journal of Materials Research, 1995, 10, 1044-1061.	1.2	116
35	Solution spinning of cellulose carbon nanotube composites using room temperature ionic liquids. Polymer, 2009, 50, 4577-4583.	1.8	116
36	Crystallization and morphology of poly(aryl-ether-ether-ketone). Polymer, 1986, 27, 329-336.	1.8	114

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37	Structure and properties of polyacrylonitrile/single wall carbon nanotube composite films. Polymer, 2005, 46, 3001-3005.	1.8	108
38	Quantitative characterization of SWNT orientation by polarized Raman spectroscopy. Chemical Physics Letters, 2003, 378, 257-262.	1.2	102
39	Effect of Orientation on the Modulus of SWNT Films and Fibers. Nano Letters, 2003, 3, 647-650.	4.5	98
40	Solid-state spun fibers and yarns from 1-mm long carbon nanotube forests synthesized by water-assisted chemical vapor deposition. Journal of Materials Science, 2008, 43, 4356-4362.	1.7	96
41	Interfacial Crystallization in Gelâ€Spun Poly(vinyl alcohol)/Singleâ€Wall Carbon Nanotube Composite Fibers. Macromolecular Chemistry and Physics, 2009, 210, 1799-1808.	1.1	95
42	Single wall carbon nanotube dispersion and exfoliation in polymers. Journal of Applied Polymer Science, 2005, 98, 985-989.	1.3	93
43	Electron beam damage in high temperature polymers. Polymer, 1990, 31, 15-19.	1.8	91
44	Gel-spun carbon nanotubes/polyacrylonitrile composite fibers. Part I: Effect of carbon nanotubes on stabilization. Carbon, 2011, 49, 4466-4476.	5.4	90
45	High resolution transmission electron microscopy study on polyacrylonitrile/carbon nanotube based carbon fibers and the effect of structure development on the thermal and electrical conductivities. Carbon, 2015, 93, 502-514.	5.4	85
46	Nanocomposites of Carbon Nanotube Fibers Prepared by Polymer Crystallization. ACS Applied Materials & Interfaces, 2010, 2, 1642-1647.	4.0	82
47	SWNT/PAN composite film-based supercapacitors. Carbon, 2003, 41, 2440-2442.	5.4	80
48	Electrical conductivity and Joule heating of polyacrylonitrile/carbon nanotube composite fibers. Polymer, 2014, 55, 6896-6905.	1.8	78
49	High Charge Carrier Mobility, Low Band Gap Donorâ€"Acceptor Benzothiadiazole-oligothiophene Based Polymeric Semiconductors. Chemistry of Materials, 2012, 24, 4123-4133.	3.2	76
50	Microscopic polymer cups by electrospinning. Polymer, 2005, 46, 3211-3214.	1.8	69
51	Gel-spun carbon nanotubes/polyacrylonitrile composite fibers. Part II: Stabilization reaction kinetics and effect of gas environment. Carbon, 2011, 49, 4477-4486.	5.4	66
52	A comparative guide to controlled hydrophobization of cellulose nanocrystals via surface esterification. Cellulose, 2016, 23, 1825-1846.	2.4	66
53	Stabilization kinetics of gel spun polyacrylonitrile/lignin blend fiber. Carbon, 2016, 101, 382-389.	5.4	65
54	Polyethylene Crystallization Nucleated by Carbon Nanotubes under Shear. ACS Applied Materials & Interfaces, 2012, 4, 326-330.	4.0	63

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55	Effect of solvent solubility parameter on SWNT dispersion in PMMA. Polymer, 2005, 46, 3419-3424.	1.8	62
56	Structural and Functional Fibers. Annual Review of Materials Research, 2017, 47, 331-359.	4.3	62
57	Fibers from soybean protein and poly(vinyl alcohol). Journal of Applied Polymer Science, 1999, 71, 11-19.	1.3	60
58	Morphology and modulus of vapor grown carbon nano fibers. Journal of Materials Science, 2006, 41, 5851-5856.	1.7	59
59	Gel-spun carbon nanotubes/polyacrylonitrile composite fibers. Part III: Effect of stabilization conditions on carbon fiber properties. Carbon, 2011, 49, 4487-4496.	5.4	59
60	Molecular engineering of interphases in polymer/carbon nanotube composites to reach the limits of mechanical performance. Composites Science and Technology, 2018, 166, 86-94.	3.8	59
61	Post-sulfonation of cellulose nanofibrils with a one-step reaction to improve dispersibility. Carbohydrate Polymers, 2018, 181, 247-255.	5.1	57
62	Oxidative stabilization of PAN/SWNT composite fiber. Carbon, 2005, 43, 599-604.	5.4	56
63	Dispersion of Nitric Acid-Treated SWNTs in Organic Solvents and Solvent Mixtures. Journal of Physical Chemistry B, 2005, 109, 17128-17133.	1.2	56
64	Stress transfer in polyacrylonitrile/carbon nanotube composite fibers. Polymer, 2014, 55, 2734-2743.	1.8	56
65	On the small-angle X-ray scattering of rigid-rod polymer fibres. Polymer, 1994, 35, 5408-5412.	1.8	54
66	Solution spinning and characterization of poly(vinyl alcohol)/soybean protein blend fibers. Journal of Applied Polymer Science, 2003, 90, 716-721.	1.3	54
67	Highly Conducting and Flexible Few-Walled Carbon Nanotube Thin Film. ACS Nano, 2011, 5, 2324-2331.	7.3	54
68	Low-density and high-modulus carbon fibers from polyacrylonitrile with honeycomb structure. Carbon, 2015, 95, 710-714.	5.4	53
69	Polymer nanotube nanocomposites: Correlating intermolecular interaction to ultimate properties. Polymer, 2006, 47, 4734-4741.	1.8	52
70	Polypropylene nanocomposites with polymer coated multiwall carbon nanotubes. Polymer, 2016, 100, 244-258.	1.8	52
71	Interpretation of small-angle x-ray and neutron scattering data for perfluorosulfonated ionomer membranes. Journal of Polymer Science, Part B: Polymer Physics, 1986, 24, 1767-1782.	2.4	51
72	Polyacrylonitrile/Carbon Nanotube Composite Films. ACS Applied Materials & Interfaces, 2010, 2, 1331-1342.	4.0	51

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73	Gel Spinning of Polyacrylonitrile/Cellulose Nanocrystal Composite Fibers. ACS Biomaterials Science and Engineering, 2015, 1, 610-616.	2.6	51
74	High strength micron size carbon fibers from polyacrylonitrileâ€“carbon nanotube precursors. Carbon, 2014, 77, 442-453.	5.4	50
75	High impact strength polypropylene containing carbon nanotubes. Polymer, 2016, 100, 259-274.	1.8	49
76	Processing, structure, and properties of gel spun PAN and PAN/CNT fibers and gel spun PAN based carbon fibers. Polymer Engineering and Science, 2015, 55, 2603-2614.	1.5	48
77	High-Performance Electrodes for a Hybrid Supercapacitor Derived from a Metalâ€“Organic Framework/Graphene Composite. ACS Applied Energy Materials, 2019, 2, 5029-5038.	2.5	48
78	Processing and properties of carbon nanotube/poly(methyl methacrylate) composite films. Journal of Applied Polymer Science, 2009, 112, 142-156.	1.3	45
79	Nanoscale Structureâ€“Property Relationships of Polyacrylonitrile/CNT Composites as a Function of Polymer Crystallinity and CNT Diameter. ACS Applied Materials & Interfaces, 2018, 10, 1017-1027.	4.0	43
80	Processing and properties of poly(methyl methacrylate)/carbon nanofiber composites. Composites Part B: Engineering, 2004, 35, 245-249.	5.9	41
81	Polyacrylonitrile Fibers Containing Graphene Oxide Nanoribbons. ACS Applied Materials & Interfaces, 2015, 7, 5281-5288.	4.0	41
82	Carbon fibers from polyacrylonitrile/cellulose nanocrystal nanocomposite fibers. Carbon, 2019, 145, 764-771.	5.4	41
83	Carbon nanotube core-polymer shell nanofibers. Journal of Applied Polymer Science, 2005, 96, 1992-1995.	1.3	40
84	Processing, Structure, and Properties of PAN/MWNT Composite Fibers. Macromolecular Materials and Engineering, 2010, 295, 742-749.	1.7	38
85	Structureâ€“property relationship studies in amine functionalized multiwall carbon nanotubes filled polypropylene composite fiber. Polymer Engineering and Science, 2012, 52, 1183-1194.	1.5	38
86	Rheological behavior of polyacrylonitrile and polyacrylonitrile/lignin blends. Polymer, 2017, 111, 177-182.	1.8	37
87	Structural changes during deformation in carbon nanotube-reinforced polyacrylonitrile fibers. Polymer, 2008, 49, 2133-2145.	1.8	36
88	Individually Dispersed Wood-Based Cellulose Nanocrystals. ACS Applied Materials & Interfaces, 2016, 8, 5768-5771.	4.0	36
89	Structure and rheological behavior of polypropylene interphase at high carbon nanotube concentration. Polymer, 2018, 150, 10-25.	1.8	36
90	Structure and electrochemical properties of activated polyacrylonitrile based carbon fibers containing carbon nanotubes. Journal of Power Sources, 2008, 185, 676-684.	4.0	35

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91	Chemistry of Carbon Nanotubes for Everyone. Journal of Chemical Education, 2012, 89, 221-229.	1.1	35
92	The effect of hydrogen bonding on the physical and mechanical properties of rigid-rod polymers. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 3053-3061.	2.4	33
93	PAN/SAN/SWNT ternary composite: Pore size control and electrochemical supercapacitor behavior. Polymer, 2006, 47, 5831-5837.	1.8	32
94	Uniaxial Compressive Strength of High Modulus Fibers for Composites. Journal of Reinforced Plastics and Composites, 1988, 7, 108-119.	1.6	31
95	Orientation and interfacial stress transfer of cellulose nanocrystal nanocomposite fibers. Polymer, 2017, 110, 228-234.	1.8	31
96	Influence of high loading of cellulose nanocrystals in polyacrylonitrile composite films. Cellulose, 2017, 24, 1745-1758.	2.4	30
97	Note: Thermal conductivity measurement of individual poly(ether ketone)/carbon nanotube fibers using a steady-state dc thermal bridge method. Review of Scientific Instruments, 2012, 83, 016103.	0.6	29
98	Ordered wrapping of poly(methyl methacrylate) on single wall carbon nanotubes. Polymer, 2015, 70, 278-281.	1.8	29
99	Polyacrylonitrile sheath and polyacrylonitrile/lignin core bi-component carbon fibers. Carbon, 2019, 149, 165-172.	5.4	29
100	The effect of heat setting on the structure and mechanical properties of poly(ethylene terephthalate) fiber. III. Anelastic properties and their dependence on structure. Journal of Applied Polymer Science, 1981, 26, 1885-1895.	1.3	28
101	Compression behavior of materials: Part I. Glassy polymers. Journal of Materials Research, 1994, 9, 2717-2726.	1.2	27
102	Observations on Solution Crystallization of Poly(vinyl alcohol) in the Presence of Singleâ€Wall Carbon Nanotubes. Macromolecular Rapid Communications, 2010, 31, 310-316.	2.0	27
103	Functional polymerâ€"polymer/carbon nanotube bi-component fibers. Polymer, 2013, 54, 6210-6217.	1.8	27
104	Temperature dependent tensile behavior of gel-spun polyacrylonitrile and polyacrylonitrile/carbon nanotube composite fibers. Polymer, 2013, 54, 4003-4009.	1.8	27
105	High surface area carbon from polyacrylonitrile for high-performance electrochemical capacitive energy storage. Journal of Materials Chemistry A, 2016, 4, 18294-18299.	5.2	27
106	Fracture mechanism of high impact strength polypropylene containing carbon nanotubes. Polymer, 2018, 151, 287-298.	1.8	27
107	Structure, Morphology, and Properties of Methyl-Pendant Poly(p-phenylene benzobisimidazole) and Methyl-Pendant Poly(p-phenylene benzobisthiazole). Macromolecules, 2000, 33, 8731-8738.	2.2	25
108	Electrospun Microâ€•and Nanostructured Polymer Particles. Macromolecular Chemistry and Physics, 2008, 209, 2390-2398.	1.1	25

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109	Polyacrylonitrile solution homogeneity study by dynamic shear rheology and the effect on the carbon fiber tensile strength. Polymer Engineering and Science, 2016, 56, 361-370.	1.5	25
110	Third phase in poly(ethylene terephthalate). Polymer, 1978, 19, 953-955.	1.8	24
111	Fiber Spinning, Structure, and Properties of Poly(ethylene terephthalate-co-4,4'-bibenzoate) Copolyesters. Macromolecules, 2002, 35, 5123-5130.	2.2	24
112	Pore size control and electrochemical capacitor behavior of chemically activated polyacrylonitrile â€" Carbon nanotube composite films. Composites Science and Technology, 2010, 70, 593-598.	3.8	24
113	Orientation distribution of crystallites in polyethylene terephthalate fibers. Journal of Polymer Science, Polymer Physics Edition, 1979, 17, 179-181.	1.0	23
114	Structural studies of epoxy resins, acetylene terminated resins and polycarbonate. Polymer, 1987, 28, 1497-1504.	1.8	23
115	Preparation of porous carbon nanofibers derived from graphene oxide/polyacrylonitrile composites as electrochemical electrode materials. Carbon, 2014, 70, 308-312.	5.4	23
116	Polymerâ€Infiltrated Aligned Carbon Nanotube Fibers by in situ Polymerization. Macromolecular Rapid Communications, 2009, 30, 1936-1939.	2.0	22
117	Processing, structure and properties of poly(ether ketone) grafted few wall carbon nanotube composite fibers. Polymer, 2010, 51, 3940-3947.	1.8	21
118	Smallâ€angle Xâ€ray scattering investigation of carbon nanotubeâ€reinforced polyacrylonitrile fibers during deformation. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 2394-2409.	2.4	20
119	Development of single filament testing procedure for polyacrylonitrile precursor and polyacrylonitrile-based carbon fibers. Journal of Composite Materials, 2015, 49, 2231-2240.	1.2	20
120	Ductile polyacrylonitrile fibers with high cellulose nanocrystals loading. Polymer, 2017, 122, 332-339.	1.8	20
121	Structural changes in trisilanol POSS during nanocomposite melt processing. Composite Interfaces, 2005, 11, 673-685.	1.3	19
122	Polyacrylonitrile/carbon nanofiber nanocomposite fibers. Composites Science and Technology, 2013, 88, 134-141.	3.8	19
123	Polyacrylonitrile Interactions with Carbon Nanotubes in Solution: Conformations and Binding as a Function of Solvent, Temperature, and Concentration. Advanced Functional Materials, 2019, 29, 1905247.	7.8	19
124	Oxidative stabilization of polyacrylonitrile in the presence of functionalized carbon nanotubes. Carbon, 2007, 45, 1114-1116.	5.4	18
125	Origin and Control of Polyacrylonitrile Alignments on Carbon Nanotubes and Graphene Nanoribbons. Advanced Functional Materials, 2018, 28, 1706970.	7.8	18
126	Cellulose nanocrystals effect on the stabilization of polyacrylonitrile composite films. Carbon, 2018, 134, 92-102.	5.4	18

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127	Polyacrylonitrile/vapor grown carbon nanofiber composite films. Journal of Materials Science, 2008, 43, 4363-4369.	1.7	17
128	Shaping Polymer Particles by Carbon Nanotubes. Macromolecular Rapid Communications, 2008, 29, 557-561.	2.0	17
129	Double-sided tin nanowire arrays for advanced thermal interface materials. Applied Physics Letters, 2013, 102, .	1.5	17
130	Development of a gel spinning process for highâ€strength poly(ethylene oxide) fibers. Polymer Engineering and Science, 2014, 54, 2839-2847.	1.5	17
131	The simultaneous addition of styrene maleic anhydride copolymer and multiwall carbon nanotubes during melt-mixing on the morphology of binary blends of polyamide6 and acrylonitrile butadiene styrene copolymer. Polymer Engineering and Science, 2015, 55, 457-465.	1.5	17
132	Hydrothermally Oxidized Singleâ€Walled Carbon Nanotube Networks for High Volumetric Electrochemical Energy Storage. Small, 2016, 12, 3423-3431.	5.2	17
133	Stress transfer in nanocomposites enabled by poly(methyl methacrylate) wrapping of carbon nanotubes. Polymer, 2017, 130, 191-198.	1.8	17
134	Compressive Strength of high Performance Fibers. Materials Research Society Symposia Proceedings, 1988, 134, 363.	0.1	16
135	On the evidence of crosslinking in methyl pendent PBZT fiber. Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 1881-1891.	2.4	16
136	Polyacrylonitrile/boron nitride nanotubes composite precursor and carbon fibers. Carbon, 2019, 147, 419-426.	5.4	16
137	Investigating the efficacy of machine learning tools in modeling the continuous stabilization and carbonization process and predicting carbon fiber properties. Carbon, 2021, 174, 605-616.	5.4	16
138	Preparation of low density hollow carbon fibers by bi-component gel-spinning method. Journal of Materials Science, 2015, 50, 3614-3621.	1.7	15
139	Determining the Orientation and Interfacial Stress Transfer of Boron Nitride Nanotube Composite Fibers for Reinforced Polymeric Materials. ACS Applied Nano Materials, 2019, 2, 6670-6676.	2.4	15
140	A Nonlinear Viscoelastic Model for Textile Fibers. Textile Reseach Journal, 1978, 48, 429-431.	1.1	14
141	High-strength superparamagnetic composite fibers. Polymer, 2014, 55, 4116-4124.	1.8	14
142	Revival of nitrogen-containing bisphosphonate-induced inhibition of osteoclastogenesis and osteoclast function by water-soluble microfibrous borate glass. Acta Biomaterialia, 2016, 31, 312-325.	4.1	14
143	Multichannel hollow carbon fibers: Processing, structure, and properties. Carbon, 2021, 174, 730-740.	5.4	14
144	Towards designing strong porous carbon fibers through gel spinning of polymer blends. Carbon, 2021, 173, 724-735.	5.4	14

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145	Rheological behavior and fiber spinning of polyacrylonitrile (PAN)/Carbon nanotube (CNT) dispersions at high CNT loading. Polymer, 2021, 215, 123369.	1.8	14
146	Cure Behavior Changes and Compression of Carbon Nanotubes in Aerospace Grade Bismaleimide-Carbon Nanotube Sheet Nanocomposites. ACS Applied Nano Materials, 2021, 4, 2476-2485.	2.4	14
147	A Model for Nonlinear Creep of Textile Fibers. Textile Reseach Journal, 1977, 47, 647-649.	1.1	13
148	Tensile and compressive behavior of poly(p-phenylene benzobisthiazole) fibers. Journal of Applied Polymer Science, 1995, 56, 517-526.	1.3	13
149	A Tetramethylbiphenyl Poly(benzobisthiazole):â€‰ Synthesis, Chracterization, Fiber Spinning, and Properties. Macromolecules, 2000, 33, 3342-3348.	2.2	13
150	Processing, structure, and properties of carbon nano fiber filled PBZT composite fiber. Composites Part B: Engineering, 2005, 36, 183-187.	5.9	13
151	Influence of SWNTs on the Preferential Alignment of Molecular Moieties in PVA Fibers. Macromolecular Chemistry and Physics, 2012, 213, 617-626.	1.1	13
152	Modeling the effect of crosslinking in methyl-pendant poly(p-phenylene benzobisthiazole). Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 3057-3064.	2.4	12
153	Structure, morphology, and properties of PBZT and methyl pendant PBZT fibers. Journal of Applied Polymer Science, 1999, 73, 305-314.	1.3	12
154	Carbon nanotube-enabled materials. , 2006, , 213-274.		12
155	A Liquid Crystalline Elastomer with a <i>p</i>â€Pentaphenyl Transverse Rod Laterally Attached to the Main Chain. Macromolecular Chemistry and Physics, 2008, 209, 272-278.	1.1	12
156	Effect of carbon nanotubes on sintering behavior of alumina prepared by solâ€"gel method. Ceramics International, 2014, 40, 6579-6587.	2.3	12
157	Reinforcement efficiency of carbon nanotubes and their effect on crystal-crystal slip in poly(ether) Tj ETQq1 1 0.784314 rgBT /Overlock	3.8	12
158	Microwave dielectric properties and Targeted heating of polypropylene nano-composites containing carbon nanotubes and carbon black. Polymer, 2019, 179, 121658.	1.8	12
159	Stabilization Study of Polyacrylonitrile/Cellulose Nanocrystals Composite Fibers. ACS Applied Polymer Materials, 2019, 1, 1015-1021.	2.0	12
160	Investigation of phonon transport and thermal boundary conductance at the interface of functionalized SWCNT and poly (ether-ketone). Journal of Applied Physics, 2016, 120, .	1.1	11
161	Effect of highâ€shear mixing by twinâ€screw extruder on the dispersion and homogeneity of polyacrylonitrile/carbon nanotube composite solution. Polymer Composites, 2017, 38, 719-726.	2.3	11
162	Structure, properties, and applications of polyacrylonitrile/carbon nanotube (<scp>CNT</scp>) fibers at low <scp>CNT</scp> loading. Polymer Engineering and Science, 2020, 60, 2143-2151.	1.5	11

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163	Structure of the Soluble Lewis Acid Poly(p-phenylenebenzobisthiazole) and Poly(p-phenylenebenzobisoxazole) Complexes. Chemistry of Materials, 1996, 8, 54-59.	3.2	10
164	Synthesis and characterization of poly(benzobisthiazole) with tetramethylbiphenyl moiety in the main chain. Journal of Polymer Science Part A, 1998, 36, 1407-1416.	2.5	10
165	Morphology and properties of polyacrylonitrile/single wall carbon nanotube composite films. Fibers and Polymers, 2004, 5, 198-203.	1.1	10
166	Sponge Behaviors of Functionalized Few-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2010, 114, 14868-14875.	1.5	10
167	Microfibrous borate bioactive glass dressing sequesters bone-bound bisphosphonate in the presence of simulated body fluid. Journal of Materials Chemistry B, 2015, 3, 959-963.	2.9	10
168	High Interfacial Shear Strain in Polyureaâ€"Carbon Nanotube Composite Sheets. ACS Applied Nano Materials, 2019, 2, 6849-6857.	2.4	10
169	Processing, structure and properties of polyacrylonitrile fibers with 15Âweight percent single wall carbon nanotubes. Polymer, 2020, 211, 123065.	1.8	10
170	Engineering the Interphase of Single Wall Carbon Nanotubes/Polyacrylonitrile Nanocomposite Fibers with Poly(methyl methacrylate) and Its Effect on Filler Dispersion, Fillerâ€"Matrix Interactions, and Tensile Properties. ACS Applied Nano Materials, 2020, 3, 4178-4186.	2.4	10
171	Lysozyme Coated DNA and DNA/SWNT Fibers by Solution Spinning. Macromolecular Bioscience, 2011, 11, 875-881.	2.1	9
172	Rheological behavior of polypropylene nanocomposites with tailored polymer/multiwall carbon nanotubes interface. Polymer Engineering and Science, 2019, 59, 1763-1777.	1.5	9
173	A fourier analysis dynamic birefringence apparatus. Journal of Applied Polymer Science, 1987, 34, 1693-1701.	1.3	8
174	Structural investigations on lewis acid mediated solubilization of poly(p-phenylenebenzobisthiazole) in an aprotic solvent. Journal of Polymer Science, Part B: Polymer Physics, 1993, 31, 1965-1973.	2.4	8
175	Synthesis of copolyamides containing octadecanedioic acid: An investigation of nylon 6/6,18 in various ratios. Journal of Applied Polymer Science, 2006, 99, 2062-2067.	1.3	8
176	Structure and dynamic mechanical properties of poly(ethylene terephthalate-co-4,4â€²-bibenzoate) fibers. Polymer, 2007, 48, 1651-1658.	1.8	8
177	Probe diffusion of single-walled carbon nanotubes in semidilute solutions of polyacrylonitrile homo- and copolymers: Effects of topological constraints and polymer/Nanorod interactions. Polymer, 2012, 53, 5069-5077.	1.8	8
178	Orientation in acrylonitrile copolymers. Journal of Applied Polymer Science, 1982, 27, 3407-3426.	1.3	7
179	Morphology of gel-spun polyethylene fibers. Journal of Applied Polymer Science, 1995, 57, 781-787.	1.3	7
180	High Surface Area Electrodes Derived from Polymer Wrapped Carbon Nanotubes for Enhanced Energy Storage Devices. ACS Applied Materials & Interfaces, 2016, 8, 24918-24923.	4.0	7

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181	Effect of interfacial chemistry on crystallization of polypropylene/multiwall carbon nanotube nanocomposites. Polymer Engineering and Science, 2019, 59, 1570-1584.	1.5	7
182	Learning from Nature: Molecular Rearrangement in the Bismaleimide System Leading to Dramatic Increase in Impact Strength. ACS Applied Polymer Materials, 2020, 2, 758-767.	2.0	7
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184	Porous carbon fibers from gel-spun polyacrylonitrile and poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622 Td (methacrylate)-block	5.4	7
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