Arup R Bhattacharyya

List of Publications by Year
in descending order

58 papers	2,617 citations	257101 24 h-index	182168 51 g-index
58 all docs	58 docs citations	58 times ranked	2481 citing authors

#	Article	IF	Citations
1	Synthesis of Microcrystalline Cellulose from Carpenter Waste and Its Characterizations. Journal of Natural Fibers, 2022, 19, 1975-1989.	1.7	7
2	Amine Functionalized MWCNTs Modified MIP-Based Electrode for Detection of Epicatechin in Tea. IEEE Sensors Journal, 2022, 22, 10323-10330.	2.4	6
3	Influence of carbon nanotube type and novel modification on dispersion, meltâ€rheology and electrical conductivity of polypropylene/carbon nanotube composites. Polymer Composites, 2021, 42, 236-252.	2.3	13
4	Role of axial versus radial pore orientation in mesoporous silica particles, on its effect in photocatalysis via impregnated TiO2 nanoparticles in pores. Chemical Engineering Journal Advances, 2021, 5, 100075.	2.4	2
5	Carbon nanotubes interaction with amorphous and <scp>semiâ€crystalline</scp> domains of polypropylene in meltâ€mixed composites: Influence of multiwall carbon nanotubes agglomerate and their modifications. SPE Polymers, 2021, 2, 257-275.	1.4	6
6	Synthesis of Cobaltâ€Doped TiO ₂ â€RPNS as a Controlled Charge Transfer Photocatalyst: The Role of Scavengers and Oxygen as a Promoter**. ChemistrySelect, 2021, 6, 13931-13940.	0.7	0
7	Electrical conductivity of poly(vinyl alcohol)/carbon nanotube multilayer thin films: Influence of sodium polystyrene sulfonate mediated carbon nanotube dispersion. Polymer Engineering and Science, 2020, 60, 2864-2875.	1.5	2
8	Synthesis and Characterization of Microcrystalline Cellulose from Rice Husk. Journal of the Institution of Engineers (India): Series E, 2020, 101, 99-108.	0.5	8
9	Role of impregnated nano-photocatalyst (SnxTi(1-x)O2) inside mesoporous silica (SBA-15) for degradation of organic pollutant (Rhodamine B) under UV light. Journal of Environmental Chemical Engineering, 2019, 7, 103433.	3.3	31
10	Effect of Organic Modification on Multiwalled Carbon Nanotube Dispersions in Highly Concentrated Emulsions. ACS Omega, 2019, 4, 6647-6659.	1.6	16
11	Tunable Energy Barrier for Intercalation of a Carbon Nanotube into Graphene Nanosheets: A Molecular Dynamics Study of a Hybrid Self-Assembly. Journal of Physical Chemistry C, 2019, 123, 1974-1986.	1.5	6
12	Enhanced Thermal Conductivity of High Internal Phase Emulsions with Ultra-Low Volume Fraction of Graphene Oxide. Langmuir, 2019, 35, 2738-2746.	1.6	4
13	Ion Valence and Concentration Effects on the Interaction between Polystyrene Sulfonate-Modified Carbon Nanotubes in Water. Journal of Physical Chemistry C, 2018, 122, 9619-9631.	1.5	7
14	Effect of Incorporation of Multiwalled Carbon Nanotubes on the Microstructure and Flow Behavior of Highly Concentrated Emulsions. ACS Omega, 2018, 3, 13584-13597.	1.6	14
15	Dispersion of non-covalently modified graphene in aqueous medium: a molecular dynamics simulation approach. RSC Advances, 2017, 7, 4460-4467.	1.7	12
16	Development of microstructure and evolution of rheological characteristics of a highly concentrated emulsion during emulsification. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 532, 342-350.	2.3	15
17	Morphology and Electrical Conductivity of Ternary Polymer Blends Involving Liquid Crystalline Polymer Containing Carbon Nanotubes. ChemistrySelect, 2017, 2, 4349-4359.	0.7	2
18	Isothermal crystallization kinetics of polypropylene in meltâ€mixed composites of polypropylene and multiâ€walled carbon nanotubes. Polymer Engineering and Science, 2017, 57, 1136-1146.	1.5	7

#	Article	IF	Citations
19	Synthesis and Stability of Water-in-Oil Emulsion Using Partially Reduced Graphene Oxide as a Tailored Surfactant. Langmuir, 2017, 33, 10311-10321.	1.6	35
20	Melt-mixed composites of multi-walled carbon nanotubes and thermotropic liquid crystalline polymer: Morphology, rheology and mechanical properties. Composites Science and Technology, 2017, 151, 184-192.	3.8	21
21	Multiwalled carbon nanotubes-based polypropylene composites: Influence of interfacial interaction on the crystallization behavior of polypropylene. Polymer Engineering and Science, 2017, 57, 183-196.	1.5	15
22	Phosphoric acid doped poly(2,5â€benzimidazole)â€based proton exchange membrane for high temperature fuel cell application. Polymer Engineering and Science, 2016, 56, 1366-1374.	1.5	19
23	Role of interfacial interactions to control the extent of wrapping of polymer chains on multi-walled carbon nanotubes. RSC Advances, 2016, 6, 42334-42346.	1.7	10
24	Fabrication and characterization of flexible films of poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td (fluoride)/Pb(Fe<sub>0 Advances, 2016, 6, 42892-42898.	1.7	7
25	Nanocomposite solid polymer electrolytes based on polyethylene oxide, modified nanoclay, and tetraethylammonium tetrafluoroborate for application in solidâ€state supercapacitor. Polymer Engineering and Science, 2015, 55, 1536-1545.	1.5	10
26	Influence of hybrid nano-filler on the crystallization behaviour and interfacial interaction in polyamide 6 based hybrid nano-composites. Physical Chemistry Chemical Physics, 2015, 17, 9410-9419.	1.3	30
27	Influence of non-covalent modification of multiwalled carbon nanotubes on the crystallization behaviour of binary blends of polypropylene and polyamide 6. Physical Chemistry Chemical Physics, 2015, 17, 4293-4310.	1.3	14
28	Deagglomeration of multi-walled carbon nanotubes via an organic modifier: structure and mechanism. Physical Chemistry Chemical Physics, 2015, 17, 25365-25378.	1.3	14
29	A supercapacitor based on longitudinal unzipping of multi-walled carbon nanotubes for high temperature application. RSC Advances, 2015, 5, 83546-83557.	1.7	56
30	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
31	Evolution of phase morphology and â€˜network-likeâ€™ structure of multiwall carbon nanotubes in binary polymer blends during melt-mixing. Polymer Engineering and Science, 2015, 55, 429-442.	1.5	14
32	Dispersion, migration, and â€˜network-likeâ€™ structure formation of multiwall carbon nanotubes in co-continuous, binary immiscible blends of polyamide 6 and acrylonitrile-butadiene-styrene copolymer during simultaneous melt-mixing. Polymer Engineering and Science, 2015, 55, 443-456.	1.5	15
33	Influence of Noncovalent Modification on Dispersion State of Multiwalled Carbon Nanotubes in Melt-Mixed Immiscible Polymer Blends. ACS Applied Materials & Interfaces, 2014, 6, 11054-11067.	4.0	35
34	Morphology and dielectric relaxation spectroscopy of ternary polymer blends of polyamide6, polypropylene, and acrylonitrile butadiene styrene coâ€polymer: Influence of compatibilizer and multiwall carbon nanotubes. Journal of Applied Polymer Science, 2013, 127, 1433-1445.	1.3	10
35	The influence of meltâ€mixing process conditions on electrical conductivity of polypropylene/multiwall carbon nanotubes composites. Journal of Applied Polymer Science, 2013, 127, 1017-1026.	1.3	44
36	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

#	Article	IF	Citations
37	Ternary polymer blends of polyamide 6, polypropylene, and acrylonitrileâ€butadieneâ€styrene: Influence of multiwalled carbon nanotubes on phase morphology, electrical conductivity, and crystallization. Polymer Engineering and Science, 2011, 51, 1550-1563.	1.5	20
38	Dispersion of multiwall carbon nanotubes in blends of polypropylene and acrylonitrile butadiene styrene. Polymer Engineering and Science, 2011, 51, 1891-1905.	1.5	26
39	The role of specific interaction and selective localization of multiwall carbon nanotubes on the electrical conductivity and phase morphology of multicomponent polymer blends. Polymer Engineering and Science, 2011, 51, 1987-2000.	1.5	20
40	Meltâ€mixed polypropylene/acrylonitrileâ€butadieneâ€styrene blends with multiwall carbon nanotubes: Effect of compatibilizer and modifier on morphology and electrical conductivity. Journal of Applied Polymer Science, 2011, 120, 2663-2672.	1.3	39
41	SU8 / modified MWNT composite for piezoresistive sensor application. Materials Research Society Symposia Proceedings, 2011, 1299, 1.	0.1	4
42	PP/ABS blends with carbon black: Morphology and electrical properties. Journal of Applied Polymer Science, 2009, 112, 998-1004.	1.3	34
43	Electrical, rheological and morphological studies in co-continuous blends of polyamide 6 and acrylonitrileâ€"butadieneâ€"styrene with multiwall carbon nanotubes prepared by melt blending. Composites Science and Technology, 2009, 69, 365-372.	3.8	193
44	Blends of polypropylene and ethylene octene comonomer with conducting fillers: Influence of state of dispersion of conducting fillers on electrical conductivity. Polymer Engineering and Science, 2009, 49, 1502-1510.	1.5	34
45	Influence of multiwall carbon nanotubes on the mechanical properties and unusual crystallization behavior in meltâ€mixed coâ€continuous blends of polyamide6 and acrylonitrile butadiene styrene. Polymer Engineering and Science, 2009, 49, 1533-1543.	1.5	49
46	Rheology, electrical conductivity, and the phase behavior of cocontinuous PA6/ABS blends with MWNT: Correlating the aspect ratio of MWNT with the percolation threshold. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 1619-1631.	2.4	107
47	Influence of multiwall carbon nanotubes on morphology and electrical conductivity of PP/ABS blends. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 2286-2295.	2.4	109
48	Specific Interactions and Reactive Coupling Induced Dispersion of Multiwall Carbon Nanotubes in Co continuous Polyamide6/Ionomer Blends. Macromolecular Symposia, 2008, 263, 11-20.	0.4	32
49	Tuning the dispersion of multiwall carbon nanotubes in co-continuous polymer blends: a generic approach. Nanotechnology, 2008, 19, 335704.	1.3	55
50	Electrical Conductivity in Polymer Blendsâˆ• Multiwall Carbon Nanotubes. , 2008, , .		2
51	Styrene maleic anhydride copolymer mediated dispersion of single wall carbon nanotubes in polyamide 12: Crystallization behavior and morphology. Journal of Applied Polymer Science, 2007, 106, 345-353.	1.3	34
52	Rheology, morphology, and crystallization behavior of meltâ€mixed blends of polyamide6 and acrylonitrileâ€butadieneâ€styrene: Influence of reactive compatibilizer premixed with multiwall carbon nanotubes. Journal of Applied Polymer Science, 2007, 106, 3394-3408.	1.3	67
53	Mechanical Properties and Morphology of Melt-mixed PA6/SWNT Composites: Effect of Reactive Coupling. Macromolecular Symposia, 2006, 233, 161-169.	0.4	18
54	Control of multiwall carbon nanotubes dispersion in polyamide6 matrix: An assessment through electrical conductivity. Chemical Physics Letters, 2006, 432, 480-485.	1.2	173

#	Article	IF	Citations
55	Reactive Compatibilization of Melt Mixed PA6/SWNT Composites: Mechanical Properties and Morphology. Macromolecular Chemistry and Physics, 2005, 206, 2084-2095.	1.1	72
56	Effect of encapsulated SWNT on the mechanical properties of melt mixed PA12/SWNT composites. Chemical Physics Letters, 2004, 392, 28-33.	1.2	75
57	Crystallization and orientation studies in polypropylene/single wall carbon nanotube composite. Polymer, 2003, 44, 2373-2377.	1.8	694
58	Melt mixing of polycarbonate/multi-wall carbon nanotube composites. Composite Interfaces, 2003, 10, 389-404.	1.3	198