Sati N Bhattacharya

List of Publications by Year
in descending order

128	3,480	109137	174990
papers	citations	35 h-index	52 g-index

134	134	134	3401
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A novel methodology for measuring batch settling velocities of particles using Electrical Resistance Tomography. Chemical Engineering Science, 2022, 250, 117364.	1.9	1
2	Transient viscosity of fibre-filled composites incorporating evolution of fibre orientation and concentration. Rheologica Acta, 2020, 59, 35-46.	1.1	2
3	Experimental and simulation study of effect of thickness on performance of (butylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 electromagnetic interference shielding and metal-backed microwave absorbers. Composites Science and Technology, 2020, 195, 108186.	3.8	16
4	Fiber migration in shear flow: Model predictions and experimental validation. Polymer Composites, 2019, 40, 3573-3581.	2.3	4
5	Anomalous Viscoelastic Behaviors of Polymer Nanocomposites During Shear and Extensional Deformations. , 2019, , 313-342.		0
6	Fiber orientation prediction in nylonâ€6 glass fiber composites using transient rheology and 3â€dimensional xâ€ray computed tomography. Polymer Composites, 2019, 40, E392.	2.3	6
7	Control of the mixing time in vessels agitated by submerged recirculating jets. Royal Society Open Science, 2018, 5, 171037.	1.1	3
8	Potential aspect of rice husk biomass in Australia for nanocrystalline cellulose production. Chinese Journal of Chemical Engineering, 2018, 26, 465-476.	1.7	54
9	Influence of graphene nanoplatelet incorporation and dispersion state on thermal, mechanical and electrical properties of biodegradable matrices. Journal of Materials Science and Technology, 2018, 34, 1026-1034.	5.6	50
10	Phase transition and anomalous rheological behaviour of polylactide/graphene nanocomposites. Composites Part B: Engineering, 2018, 135, 25-34.	5.9	40
11	Size distribution of bubbles in agitated viscous <scp>N</scp>ewtonian and nonâ€<scp>N</scp>ewtonian solutions. Asia-Pacific Journal of Chemical Engineering, 2018, 13, e2267.	0.8	6
12	Chemically imaging the interaction of acetylated nanocrystalline cellulose (NCC) with a polylactic acid (PLA) polymer matrix. Cellulose, 2017, 24, 1717-1729.	2.4	45
13	Effect of low pressure alkaline delignification process on the production of nanocrystalline cellulose from rice husk. Journal of the Taiwan Institute of Chemical Engineers, 2017, 80, 820-834.	2.7	29
14	Rheology and physical characterization of graphene nanoplatelet/poly (butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222 Td (adipate-	0.3	1
15	Optimization and modelling of delignification process for nanocrystalline cellulose production from rice husk biomass. AIP Conference Proceedings, 2017, , .	0.3	0
16	An investigation between high and low pressure processes for nanocrystalline cellulose production from agro-waste biomass. AIP Conference Proceedings, 2017, , .	0.3	3
17	Non-Newtonian thickened tailings slurry flow through open channels. International Journal of Mining and Mineral Engineering, 2017, 8, 310.	0.1	1
18	Evaluating the state of dispersion on cellulosic biopolymer by rheology. Journal of Applied Polymer Science, 2016, 133, .	1.3	15

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19	Thermal, Mechanical, and Rheological Characterization of Polylactic Acid/Halloysite Nanotube Nanocomposites. Journal of Macromolecular Science - Physics, 2016, 55, 680-692.	0.4	17
20	Dielectric properties and electromagnetic interference shielding effectiveness of graphene-based biodegradable nanocomposites. Materials and Design, 2016, 109, 68-78.	3.3	112
21	Viscoelastic properties and physical gelation of poly (butylene adipate-co-terephthalate)/graphene nanoplatelet nanocomposites at elevated temperatures. Polymer, 2016, 101, 347-357.	1.8	17
22	Electrical, thermal, and viscoelastic properties of graphene nanoplatelet/poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (ad 2016, 133, .	1.3	18
23	Morphology, electromagnetic properties and electromagnetic interference shielding performance of poly lactide/graphene nanoplatelet nanocomposites. Materials and Design, 2016, 95, 119-126.	3.3	162
24	Laminar flow of Nonâ€Newtonian thickened tailings slurry through an open channel. Canadian Journal of Chemical Engineering, 2015, 93, 1922-1928.	0.9	2
25	The comparison between the effects of solvent casting and melt intercalation mixing processes on different characteristics of polylactideâ€nanographite platelets composites. Polymer Engineering and Science, 2015, 55, 1560-1570.	1.5	16
26	Recent Advances in the Rheology of Thermotropic Liquid Crystal Polymers. , 2015, , 69-102.		0
27	An assessment of the dynamic stability of microorganisms on patterned surfaces in relation to biofouling control. Biofouling, 2014, 30, 695-707.	0.8	28
28	Anomalous first normal stress difference behavior of polymer nanocomposites and liquid crystalline polymer composites. Polymer Engineering and Science, 2014, 54, 1300-1312.	1.5	15
29	Melt rheological investigation of polylactide-nanographite platelets biopolymer composites. Polymer Engineering and Science, 2014, 54, 175-188.	1.5	37
30	Extensional Rheological Investigation of Biodegradable Polylactide-Nanographite Platelet Composites via Constitutive Equation Modeling. Macromolecular Materials and Engineering, 2014, 299, 851-868.	1.7	20
31	Dispersion study of nanofibrillated cellulose based poly(butylene adipate-co-terephthalate) composites. Carbohydrate Polymers, 2014, 102, 537-542.	5.1	73
32	Improved dispersion of cellulose microcrystals in polylactic acid (PLA) based composites applying surface acetylation. Chemical Engineering Science, 2013, 101, 655-662.	1.9	70
33	Interpreting the near-infrared reflectance of a series of perylene pigments. Dyes and Pigments, 2013, 99, 502-511.	2.0	29
34	Simulation Study of Thermotropic LCPs and Prediction of Normal Stress Difference at High Shear Rate. International Polymer Processing, 2013, 28, 470-482.	0.3	1
35	A novel approach to determine the efficacy of patterned surfaces for biofouling control in relation to its microfluidic environment. Biofouling, 2013, 29, 697-713.	0.8	25
36	Analysis of Gas Permeability Characteristics of Poly(Lactic Acid)/Poly(Butylene Succinate) Nanocomposites. Journal of Nanomaterials, 2012, 2012, 1-11.	1.5	33

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37	Properties of linear poly(lactic acid)/polyethylene glycol blends. Polymer Engineering and Science, 2012, 52, 108-116.	1.5	150
38	Extensional rheology of raw natural rubber from new clones of Hevea brasiliensis. Polymer Engineering and Science, 2012, 52, 139-148.	1.5	7
39	Morphology and rheological behavior of polylactic acid/clay nanocomposites. Polymer Engineering and Science, 2012, 52, 225-232.	1.5	43
40	Modification of styreneâ€“ethylene/butyleneâ€“styrene copolymer microstructure by polystyrene homopolymer and evolution of a cocontinuous blend morphology. Polymer Engineering and Science, 2012, 52, 2559-2572.	1.5	13
41	Near-infrared reflective properties of perylene derivatives. Dyes and Pigments, 2012, 92, 1108-1113.	2.0	67
42	Dye/Clay intercalated nanopigments using commercially available non-ionic dye. Dyes and Pigments, 2012, 93, 1512-1518.	2.0	27
43	Thermal decomposition kinetics of tricomponent polyester/polycarbonate systems. Polymer Engineering and Science, 2011, 51, 2335-2344.	1.5	18
44	A DNS Investigation of the Effect of Yield Stress for Turbulent Non-Newtonian Suspension Flow in Open Channels. Particulate Science and Technology, 2011, 29, 209-228.	1.1	5
45	A DNS Investigation of Non-Newtonian Turbulent Open Channel Flow. , 2010, , .		0
46	Rheology and Physical Characteristics of Synthetic Biodegradable Aliphatic Polymer Blends Dispersed with MWNTs. Macromolecular Materials and Engineering, 2010, 295, 320-328.	1.7	62
47	Role of clay in compatibilization of immiscible high melt strength polypropylene and ethylene vinyl acetate copolymer blends. Polymer Engineering and Science, 2010, 50, 1350-1357.	1.5	11
48	Poly (L-lactic acid)/layered Silicate Nanocomposite Blown Film for Packaging Application: Thermal, Mechanical and Barrier Properties. Journal of Polymer Engineering, 2010, 30, 361-376.	0.6	21
49	Morphological Characterisation and Dynamic Rheology of Nano-Structured Blends of Polystyrene and SEBS. Journal of Polymer Engineering, 2010, 30, .	0.6	3
50	Conducting Nanostructured Polymer Materials and their Electrorheological Application. Journal of Polymer Engineering, 2010, 30, 339-360.	0.6	1
51	Effect of Clay on Thermal, Mechanical and Gas Barrier Properties of Biodegradable Poly(lactic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T 5-14.	0.3	46
52	Enhanced mixing of Newtonian fluids in a stirred vessel using impeller speed modulation. Canadian Journal of Chemical Engineering, 2009, 87, 839-846.	0.9	19
53	Biodegradation of oxoâ€biodegradable polyethylene. Journal of Applied Polymer Science, 2009, 111, 1426-1432.	1.3	68
54	Prediction and experimental verification of bubble and processing characteristics in blownâ€film extrusion. Journal of Applied Polymer Science, 2009, 111, 2657-2668.	1.3	1

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55	Biodegradation of montmorillonite filled oxoâ€biodegradable polyethylene. Journal of Applied Polymer Science, 2009, 113, 2826-2832.	1.3	26
56	An investigation of melt rheology and thermal stability of poly(lactic acid)/ poly(butylene succinate) nanocomposites. Journal of Applied Polymer Science, 2009, 114, 2837-2847.	1.3	51
57	Morphological and rheological characterization of multi-walled carbon nanotube/PLA/PBAT blend nanocomposites. Polymer Bulletin, 2009, 63, 125-134.	1.7	91
58	Investigation of melt extensional deformation of ethyleneâ€vinyl acetate nanocomposites using smallâ€angle light scattering. Polymer Engineering and Science, 2009, 49, 984-992.	1.5	5
59	Foaming behavior of highâ€melt strength polypropylene/clay nanocomposites. Polymer Engineering and Science, 2009, 49, 2070-2084.	1.5	66
60	Rheological and molecular properties of organic peroxide induced long chain branching of recycled and virgin high density polyethylene resin. Polymer Engineering and Science, 2009, 49, 1806-1813.	1.5	14
61	Stability study of nanopigment dispersions. Advanced Powder Technology, 2009, 20, 267-272.	2.0	53
62	The Rheology of Polymeric Nanocomposites. , 2009, , .		1
63	Abiotic Oxidation Studies of Oxo-biodegradable Polyethylene. Journal of Polymers and the Environment, 2008, 16, 27-34.	2.4	52
64	Photo-stability of rhodamine-B/montmorillonite nanopigments in polypropylene matrix. Applied Clay Science, 2008, , .	2.6	10
65	Melt Strength and Thermal Properties of Organic Peroxide Modified Virgin and Recycled HDPE. International Polymer Processing, 2008, 23, 200-207.	0.3	3
66	Oxygen barrier property of polypropylene-polyether treated clay nanocomposite. EXPRESS Polymer Letters, 2008, 2, 429-439.	1.1	38
67	Preparation and Synthesis. , 2007, , 5-33.		0
68	THE EFFECT OF DIE GEOMETRIES AND EXTRUSION RATES ON MELT STRENGTH OF HIGH MELT STRENGTH POLYPROPYLENE. Journal of Polymer Engineering, 2007, 27, .	0.6	4
69	Molecular, rheological, and crystalline properties of lowâ€density polyethylene in blown film extrusion. Polymer Engineering and Science, 2007, 47, 1983-1991.	1.5	10
70	Three-Dimensional Modeling of Tailings Beach Shape. Computer-Aided Civil and Infrastructure Engineering, 2007, 23, 31-44.	6.3	10
71	Effect of coupling agents on the crystallinity and viscoelastic properties of composites of rice hull ash-filled polypropylene. Journal of Materials Science, 2007, 42, 10219-10227.	1.7	12
72	Mathematical modeling and numerical simulation for nucleated solution flow through slit die in foam extrusion. Polymer Engineering and Science, 2006, 46, 751-762.	1.5	6

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73	Magnetorheological characteristics of nanoparticle-added carbonyl iron system. Journal of Magnetism and Magnetic Materials, 2006, 303, e290-e293.	1.0	22
74	Experimental investigation of the linear viscoelastic response of EVA-based nanocomposites. Journal of Applied Polymer Science, 2006, 101, 2127-2135.	1.3	9
75	Role of mixing parameters in the preparation of poly(ethylene vinyl acetate) nanocomposites by melt blending. Journal of Applied Polymer Science, 2006, 100, 2652-2658.	1.3	15
76	Morphological and Mechanical Characterisation of HDPE-EVA Nanocomposites. Journal of Polymer Engineering, 2006, 26, .	0.6	6
77	Tailings beach slope prediction: a new rheological method. International Journal of Mining, Reclamation and Environment, 2006, 20, 181-202.	1.2	12
78	Shear and extensional rheology of EVA/layered silicate-nanocomposites. Journal of Non-Newtonian Fluid Mechanics, 2005, 128, 116-125.	1.0	90
79	Rheological and mechanical comparative study of in situ polymerized and melt-blended nylon 6 nanocomposites. Polymer, 2005, 46, 10405-10418.	1.8	62
80	Clay intercalation and influence on crystallinity of EVA-based clay nanocomposites. Thermochimica Acta, 2005, 433, 187-195.	1.2	78
81	Rheology of shear thickening suspensions and the effects of wall slip in torsional flow. Rheologica Acta, 2005, 45, 124-131.	1.1	16
82	Morphological influence on mechanical characterization of ethylene-vinyl acetate copolymer-clay nanocomposites. Polymer Engineering and Science, 2005, 45, 889-897.	1.5	51
83	Effect of polypropylene on the rheology of co-continuous PS/SEBS blends. Polymer Engineering and Science, 2005, 45, 1432-1444.	1.5	11
84	Molecular-dynamics simulation of model polymer nanocomposite rheology and comparison with experiment. Journal of Chemical Physics, 2005, 123, 194905.	1.2	63
85	Extensional Rheology of Polypropylene in Relation to Processing Characteristics. International Polymer Processing, 2004, 19, 40-46.	0.3	3
86	A Constitutive Analysis of Extensional Flow of EVA Nanocomposites. International Polymer Processing, 2004, 19, 388-394.	0.3	7
87	Effect of vinyl acetate content and silicate loading on EVA nanocomposites under shear and extensional flow. Rheologica Acta, 2004, 43, 99-108.	1.1	80
88	Morphology of EVA based nanocomposites under shear and extensional flow. Polymer Engineering and Science, 2004, 44, 1220-1230.	1.5	58
89	The influence of hormitic clay on the time dependent properties of formulated gypsum plaster pastes. Journal of Materials Science, 2003, 38, 3871-3875.	1.7	2
90	Study of the orientation and the degree of exfoliation of nanoparticles in poly(ethylene-vinyl acetate) nanocomposites. Journal of Applied Polymer Science, 2003, 90, 3026-3031.	1.3	19

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91	Numerical modelling and experimental verification of blown film processing. Journal of Non-Newtonian Fluid Mechanics, 2003, 116, 113-138.	1.0	27
92	Melt strength and extensibility of talc-filled polypropylene. Polymer Engineering and Science, 2003, 43, 1821-1829.	1.5	35
93	Melt strength of calcium carbonate filled polypropylene melts. Polymer International, 2002, 51, 1385-1389.	1.6	18
94	Miscibility Studies on cross-linked EVA/LLDPE Blends by TMDSC. Magyar AprÃ³vad KÃ¶zlemÃ©nyek, 2002, 70, 651-662.	1.4	12
95	Application of an electric field to enhance the flow of coal-water slurries in pipelines. Mining, Metallurgy and Exploration, 2001, 18, 25-30.	0.4	0
96	Extensional rheology of polypropylene melts from the Rheotens test. Journal of Non-Newtonian Fluid Mechanics, 2001, 101, 77-93.	1.0	53
97	Morphological and rheological study of polypropylene blends with a commercial modifier based on hydrogenated oligo (cyclopentadiene). Polymer, 2001, 42, 9809-9817.	1.8	13
98	Molecular simulation and experimental characterisation of monotropic and enantiotropic polymers containing azobenzene and diphenyl mesogens. Computational and Theoretical Polymer Science, 2001, 11, 303-318.	1.1	13
99	The melt extensibility of polypropylene. Polymer International, 2001, 50, 515-523.	1.6	25
100	Dynamic rheology of branched poly(ethylene terephthalate). Polymer International, 2000, 49, 203-208.	1.6	18
101	Rheology of LLDPE, LDPE and LLDPE/LDPE blends and its relevance to the film blowing process. Polymer International, 2000, 49, 1580-1589.	1.6	63
102	Reactive processing of polyolefins with MAH and GMA in the presence of various additives. Journal of Applied Polymer Science, 2000, 78, 2405-2415.	1.3	34
103	Influence of rheological properties on the sagging of polypropylene and abs sheet for thermoforming applications. Polymer Engineering and Science, 2000, 40, 1564-1570.	1.5	22
104	Elongational behavior of polyethylene melts?effect of deformation. Polymer Engineering and Science, 2000, 40, 1571-1580.	1.5	14
105	Shear rheology and thermal properties of linear and branched poly(ethylene terephthalate) blends. Polymer, 1999, 40, 5891-5898.	1.8	36
106	Molecular simulation of aromatic polyesters containing oxetane rings in the main chain. Computational and Theoretical Polymer Science, 1999, 9, 1-9.	1.1	17
107	Title is missing!. Journal of Materials Science, 1999, 34, 607-614.	1.7	23
108	Melt strength and film bubble instability of LLDPE/LDPE blends. Polymer International, 1999, 48, 461-466.	1.6	51

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109	Molecular simulation of thermophysical properties of aromatic polymers containing oxetane ring in the main chain. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 2334-2352.	2.4	20
110	Transient elongational viscosity of LLDPE/LDPE blends and its relevance to bubble stability in the film blowing process. Polymer Engineering and Science, 1998, 38, 1685-1693.	1.5	45
111	Melt strength of polypropylene: Its relevance to thermoforming. Polymer Engineering and Science, 1998, 38, 1915-1923.	1.5	86
112	The effect of temperature on the viscoelastic properties of model and industrial dispersions. Journal of Rheology, 1998, 42, 493-506.	1.3	18
113	Rheological Behaviour of LLDPE/LDPE Blends under Elongational Deformation. International Polymer Processing, 1998, 13, 50-57.	0.3	3
114	Rheological Behaviour of LLDPE/LDPE Blends under Elongational Deformation. International Polymer Processing, 1997, 12, 110-115.	0.3	20
115	Temperature Rise in the Extrusion of Highly Viscous Composite Materials. International Polymer Processing, 1997, 12, 341-345.	0.3	10
116	Liquid crystalline polymers: molecular simulation of some polyethers containing oxetanic rings in the main chain. Computational and Theoretical Polymer Science, 1997, 7, 7-11.	1.1	19
117	Synthesis and Characterisation of Branched Poly(ethylene terephthalate). Polymer International, 1997, 42, 267-275.	1.6	31
118	Estimation of Gelatin Layer Thickness on Polystyrene Particles by a Viscometric Study. Journal of Colloid and Interface Science, 1997, 193, 307-311.	5.0	8
119	Modelling of packing behavior of irregularly shaped particles dispersed in a polymer matrix. Powder Technology, 1996, 89, 115-127.	2.1	14
120	Melt Strength and Elastic Behaviour of LLDPE/LDPE Blends. International Polymer Processing, 1996, 11, 14-20.	0.3	33
121	Effect of Temperature on the Flow Behavior of Polystyrene Latex-Gelatin Dispersions. Journal of Colloid and Interface Science, 1995, 172, 289-296.	5.0	3
122	Influence of temperature on the viscous behavior of some concentrated dispersions. Journal of Rheology, 1990, 34, 637-655.	1.3	5
123	Flow behaviour of oilâ€inâ€water emulsions. Canadian Journal of Chemical Engineering, 1986, 64, 3-10.	0.9	45
124	The effect of temperature and moisture on the rheology of black coalâ€oil suspensions. Canadian Journal of Chemical Engineering, 1985, 63, 870-877.	0.9	0
125	Rheological study of black coal-oil suspensions. Rheologica Acta, 1984, 23, 195-206.	1.1	14
126	Some factors influencing the rheological properties of concentrated brown coalâ€"oil suspensions on storage. Powder Technology, 1984, 40, 291-301.	2.1	3

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127	The effect of moisture on the rheology of brown coalâ€oil suspensions. Canadian Journal of Chemical Engineering, 1983, 61, 785-790.	0.9	7
128	Flow characteristics of primary and digested sewage sludge. Rheologica Acta, 1981, 20, 288-298.	1.1	15