

Sati N Bhattacharya

List of Publications by Citations

Source: <https://exaly.com/author-pdf/9434663/sati-n-bhattacharya-publications-by-citations.pdf>

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

130
papers

2,960
citations

32
h-index

48
g-index

134
ext. papers

3,193
ext. citations

3.2
avg, IF

5.13
L-index

#	Paper	IF	Citations
130	Morphology, electromagnetic properties and electromagnetic interference shielding performance of poly lactide/graphene nanoplatelet nanocomposites. <i>Materials and Design</i> , 2016 , 95, 119-126	8.1	125
129	Properties of linear poly(lactic acid)/polyethylene glycol blends. <i>Polymer Engineering and Science</i> , 2012 , 52, 108-116	2.3	121
128	Shear and extensional rheology of EVA/layered silicate-nanocomposites. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2005 , 128, 116-125	2.7	81
127	Morphological and rheological characterization of multi-walled carbon nanotube/PLA/PBAT blend nanocomposites. <i>Polymer Bulletin</i> , 2009 , 63, 125-134	2.4	79
126	Dielectric properties and electromagnetic interference shielding effectiveness of graphene-based biodegradable nanocomposites. <i>Materials and Design</i> , 2016 , 109, 68-78	8.1	77
125	Melt strength of polypropylene: Its relevance to thermoforming. <i>Polymer Engineering and Science</i> , 1998 , 38, 1915-1923	2.3	74
124	Effect of vinyl acetate content and silicate loading on EVA nanocomposites under shear and extensional flow. <i>Rheologica Acta</i> , 2004 , 43, 99-108	2.3	74
123	Clay intercalation and influence on crystallinity of EVA-based clay nanocomposites. <i>Thermochimica Acta</i> , 2005 , 433, 187-195	2.9	74
122	Improved dispersion of cellulose microcrystals in polylactic acid (PLA) based composites applying surface acetylation. <i>Chemical Engineering Science</i> , 2013 , 101, 655-662	4.4	65
121	Rheological and mechanical comparative study of in situ polymerized and melt-blended nylon 6 nanocomposites. <i>Polymer</i> , 2005 , 46, 10405-10418	3.9	60
120	Rheology and Physical Characteristics of Synthetic Biodegradable Aliphatic Polymer Blends Dispersed with MWNTs. <i>Macromolecular Materials and Engineering</i> , 2010 , 295, 320-328	3.9	59
119	Rheology of LLDPE, LDPE and LLDPE/LDPE blends and its relevance to the film blowing process. <i>Polymer International</i> , 2000 , 49, 1580-1589	3.3	57
118	Foaming behavior of high-melt strength polypropylene/clay nanocomposites. <i>Polymer Engineering and Science</i> , 2009 , 49, 2070-2084	2.3	56
117	Molecular-dynamics simulation of model polymer nanocomposite rheology and comparison with experiment. <i>Journal of Chemical Physics</i> , 2005 , 123, 194905	3.9	56
116	Morphology of EVA based nanocomposites under shear and extensional flow. <i>Polymer Engineering and Science</i> , 2004 , 44, 1220-1230	2.3	56
115	Dispersion study of nanofibrillated cellulose based poly(butylene adipate-co-terephthalate) composites. <i>Carbohydrate Polymers</i> , 2014 , 102, 537-42	10.3	51
114	Near-infrared reflective properties of perylene derivatives. <i>Dyes and Pigments</i> , 2012 , 92, 1108-1113	4.6	51

113	Biodegradation of oxo-biodegradable polyethylene. <i>Journal of Applied Polymer Science</i> , 2009 , 111, 1426-1432	4.32	51
112	Morphological influence on mechanical characterization of ethylene-vinyl acetate copolymer/clay nanocomposites. <i>Polymer Engineering and Science</i> , 2005 , 45, 889-897	2.3	48
111	Extensional rheology of polypropylene melts from the Rheotens test. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2001 , 101, 77-93	2.7	48
110	Melt strength and film bubble instability of LLDPE/LDPE blends. <i>Polymer International</i> , 1999 , 48, 461-466	3	46
109	Abiotic Oxidation Studies of Oxo-biodegradable Polyethylene. <i>Journal of Polymers and the Environment</i> , 2008 , 16, 27-34	4.5	45
108	An investigation of melt rheology and thermal stability of poly(lactic acid)/ poly(butylene succinate) nanocomposites. <i>Journal of Applied Polymer Science</i> , 2009 , 114, 2837-2847	2.9	44
107	Stability study of nanopigment dispersions. <i>Advanced Powder Technology</i> , 2009 , 20, 267-272	4.6	43
106	Transient elongational viscosity of LLDPE/LDPE blends and its relevance to bubble stability in the film blowing process. <i>Polymer Engineering and Science</i> , 1998 , 38, 1685-1693	2.3	42
105	Influence of graphene nanoplatelet incorporation and dispersion state on thermal, mechanical and electrical properties of biodegradable matrices. <i>Journal of Materials Science and Technology</i> , 2018 , 34, 1026-1034	9.1	41
104	Morphology and rheological behavior of polylactic acid/clay nanocomposites. <i>Polymer Engineering and Science</i> , 2012 , 52, 225-232	2.3	38
103	Flow behaviour of oil-in-water emulsions. <i>Canadian Journal of Chemical Engineering</i> , 1986 , 64, 3-10	2.3	38
102	Chemically imaging the interaction of acetylated nanocrystalline cellulose (NCC) with a polylactic acid (PLA) polymer matrix. <i>Cellulose</i> , 2017 , 24, 1717-1729	5.5	36
101	Effect of Clay on Thermal, Mechanical and Gas Barrier Properties of Biodegradable Poly(lactic acid)/Poly(butylene succinate) (PLA/PBS) Nanocomposites. <i>International Polymer Processing</i> , 2010 , 25, 5-14	1	36
100	Melt rheological investigation of polylactide-nanographite platelets biopolymer composites. <i>Polymer Engineering and Science</i> , 2014 , 54, 175-188	2.3	34
99	Shear rheology and thermal properties of linear and branched poly(ethylene terephthalate) blends. <i>Polymer</i> , 1999 , 40, 5891-5898	3.9	33
98	Phase transition and anomalous rheological behaviour of polylactide/graphene nanocomposites. <i>Composites Part B: Engineering</i> , 2018 , 135, 25-34	10	32
97	Reactive processing of polyolefins with MAH and GMA in the presence of various additives. <i>Journal of Applied Polymer Science</i> , 2000 , 78, 2405-2415	2.9	32
96	Melt Strength and Elastic Behaviour of LLDPE/LDPE Blends. <i>International Polymer Processing</i> , 1996 , 11, 14-20	1	31

95	Melt strength and extensibility of talc-filled polypropylene. <i>Polymer Engineering and Science</i> , 2003 , 43, 1821-1829	2.3	31
94	Potential aspect of rice husk biomass in Australia for nanocrystalline cellulose production. <i>Chinese Journal of Chemical Engineering</i> , 2018 , 26, 465-476	3.2	30
93	Oxygen barrier property of polypropylene-polyether treated clay nanocomposite. <i>EXPRESS Polymer Letters</i> , 2008 , 2, 429-439	3.4	30
92	Synthesis and Characterisation of Branched Poly(ethylene terephthalate). <i>Polymer International</i> , 1997 , 42, 267-275	3.3	29
91	Polymeric Nanocomposites 2007 ,		29
90	Analysis of Gas Permeability Characteristics of Poly(Lactic Acid)/Poly(Butylene Succinate) Nanocomposites. <i>Journal of Nanomaterials</i> , 2012 , 2012, 1-11	3.2	26
89	Interpreting the near-infrared reflectance of a series of perylene pigments. <i>Dyes and Pigments</i> , 2013 , 99, 502-511	4.6	26
88	Biodegradation of montmorillonite filled oxo-biodegradable polyethylene. <i>Journal of Applied Polymer Science</i> , 2009 , 113, 2826-2832	2.9	26
87	The melt extensibility of polypropylene. <i>Polymer International</i> , 2001 , 50, 515-523	3.3	24
86	An assessment of the dynamic stability of microorganisms on patterned surfaces in relation to biofouling control. <i>Biofouling</i> , 2014 , 30, 695-707	3.3	23
85	Numerical modelling and experimental verification of blown film processing. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2003 , 116, 113-138	2.7	23
84	Dye/Clay intercalated nanopigments using commercially available non-ionic dye. <i>Dyes and Pigments</i> , 2012 , 93, 1512-1518	4.6	21
83	A novel approach to determine the efficacy of patterned surfaces for biofouling control in relation to its microfluidic environment. <i>Biofouling</i> , 2013 , 29, 697-713	3.3	20
82	Rheological Behaviour of LLDPE/LDPE Blends under Elongational Deformation. <i>International Polymer Processing</i> , 1997 , 12, 110-115	1	20
81	Magnetorheological characteristics of nanoparticle-added carbonyl iron system. <i>Journal of Magnetism and Magnetic Materials</i> , 2006 , 303, e290-e293	2.8	20
80	Poly (L-lactic acid)/layered Silicate Nanocomposite Blown Film for Packaging Application: Thermal, Mechanical and Barrier Properties. <i>Journal of Polymer Engineering</i> , 2010 , 30,	1.4	19
79	Liquid crystalline polymers: molecular simulation of some polyethers containing oxetanic rings in the main chain. <i>Computational and Theoretical Polymer Science</i> , 1997 , 7, 7-11		19
78	Molecular simulation of thermophysical properties of aromatic polymers containing oxetane ring in the main chain. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1999 , 37, 2334-2352	2.6	19

77	Dynamic rheology of branched poly(ethylene terephthalate). <i>Polymer International</i> , 2000 , 49, 203-208	3.3	18
76	Influence of rheological properties on the sagging of polypropylene and abs sheet for thermoforming applications. <i>Polymer Engineering and Science</i> , 2000 , 40, 1564-1570	2.3	18
75	The effect of temperature on the viscoelastic properties of model and industrial dispersions. <i>Journal of Rheology</i> , 1998 , 42, 493-506	4.1	18
74	The effect of dispersed paint particles on the mechanical properties of rubber toughened polypropylene composites. <i>Journal of Materials Science</i> , 1999 , 34, 607-614	4.3	18
73	Study of the orientation and the degree of exfoliation of nanoparticles in poly(ethylene-vinyl acetate) nanocomposites. <i>Journal of Applied Polymer Science</i> , 2003 , 90, 3026-3031	2.9	17
72	Viscoelastic properties and physical gelation of poly (butylene adipate-co-terephthalate)/graphene nanoplatelet nanocomposites at elevated temperatures. <i>Polymer</i> , 2016 , 101, 347-357	3.9	16
71	Effect of low pressure alkaline delignification process on the production of nanocrystalline cellulose from rice husk. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2017 , 80, 820-834	5.3	16
70	Enhanced mixing of Newtonian fluids in a stirred vessel using impeller speed modulation. <i>Canadian Journal of Chemical Engineering</i> , 2009 , 87, 839-846	2.3	16
69	Molecular simulation of aromatic polyesters containing oxetane rings in the main chain. <i>Computational and Theoretical Polymer Science</i> , 1999 , 9, 1-9		16
68	Extensional Rheological Investigation of Biodegradable Polylactide-Nanographite Platelet Composites via Constitutive Equation Modeling. <i>Macromolecular Materials and Engineering</i> , 2014 , 299, 851-868	3.9	15
67	The comparison between the effects of solvent casting and melt intercalation mixing processes on different characteristics of polylactide-nanographite platelets composites. <i>Polymer Engineering and Science</i> , 2015 , 55, 1560-1570	2.3	15
66	Thermal decomposition kinetics of tricomponent polyester/polycarbonate systems. <i>Polymer Engineering and Science</i> , 2011 , 51, 2335-2344	2.3	15
65	Melt strength of calcium carbonate filled polypropylene melts. <i>Polymer International</i> , 2002 , 51, 1385-1389	3.3	15
64	Rheology of shear thickening suspensions and the effects of wall slip in torsional flow. <i>Rheologica Acta</i> , 2005 , 45, 124-131	2.3	15
63	Thermal, Mechanical, and Rheological Characterization of Polylactic Acid/Halloysite Nanotube Nanocomposites. <i>Journal of Macromolecular Science - Physics</i> , 2016 , 55, 680-692	1.4	15
62	Electrical, thermal, and viscoelastic properties of graphene nanoplatelet/poly(butylene adipate-co-terephthalate) biodegradable nanocomposites. <i>Journal of Applied Polymer Science</i> , 2016 , 133,	2.9	14
61	Rheological study of black coal-oil suspensions. <i>Rheologica Acta</i> , 1984 , 23, 195-206	2.3	14
60	Morphological and rheological study of polypropylene blends with a commercial modifier based on hydrogenated oligo (cyclopentadiene). <i>Polymer</i> , 2001 , 42, 9809-9817	3.9	13

59	Elongational behavior of polyethylene melts—Effect of deformation. <i>Polymer Engineering and Science</i> , 2000 , 40, 1571-1580	2.3	13
58	Evaluating the state of dispersion on cellulosic biopolymer by rheology. <i>Journal of Applied Polymer Science</i> , 2016 , 133, n/a-n/a	2.9	13
57	Anomalous first normal stress difference behavior of polymer nanocomposites and liquid crystalline polymer composites. <i>Polymer Engineering and Science</i> , 2014 , 54, 1300-1312	2.3	12
56	Modification of styrene—ethylene/butylene—styrene copolymer microstructure by polystyrene homopolymer and evolution of a cocontinuous blend morphology. <i>Polymer Engineering and Science</i> , 2012 , 52, 2559-2572	2.3	12
55	Role of mixing parameters in the preparation of poly(ethylene vinyl acetate) nanocomposites by melt blending. <i>Journal of Applied Polymer Science</i> , 2006 , 100, 2652-2658	2.9	12
54	Miscibility Studies on cross-linked EVA/LLDPE Blends by TMDSC. <i>Magyar Áprólad Kélemlyek</i> , 2002 , 70, 651-662	0	12
53	Molecular simulation and experimental characterisation of monotropic and enantiotropic polymers containing azobenzene and diphenyl mesogens. <i>Computational and Theoretical Polymer Science</i> , 2001 , 11, 303-318		12
52	Modelling of packing behavior of irregularly shaped particles dispersed in a polymer matrix. <i>Powder Technology</i> , 1996 , 89, 115-127	5.2	12
51	Rheological and molecular properties of organic peroxide induced long chain branching of recycled and virgin high density polyethylene resin. <i>Polymer Engineering and Science</i> , 2009 , 49, 1806-1813	2.3	11
50	Role of clay in compatibilization of immiscible high melt strength polypropylene and ethylene vinyl acetate copolymer blends. <i>Polymer Engineering and Science</i> , 2010 , 50, 1350-1357	2.3	11
49	Effect of polypropylene on the rheology of co-continuous PS/SEBS blends. <i>Polymer Engineering and Science</i> , 2005 , 45, 1432-1444	2.3	11
48	Flow characteristics of primary and digested sewage sludge. <i>Rheologica Acta</i> , 1981 , 20, 288-298	2.3	11
47	Experimental and simulation study of effect of thickness on performance of (butylene adipate-co-terephthalate) and poly lactide nanocomposites incorporated with graphene as stand-alone electromagnetic interference shielding and metal-backed microwave absorbers. <i>Composites Science and Technology</i> , 2020 , 195, 108186	8.6	11
46	Molecular, rheological, and crystalline properties of low-density polyethylene in blown film extrusion. <i>Polymer Engineering and Science</i> , 2007 , 47, 1983-1991	2.3	10
45	Experimental investigation of the linear viscoelastic response of EVA-based nanocomposites. <i>Journal of Applied Polymer Science</i> , 2006 , 101, 2127-2135	2.9	9
44	Three-Dimensional Modeling of Tailings Beach Shape. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2007 , 23, 31-44	8.4	8
43	Effect of coupling agents on the crystallinity and viscoelastic properties of composites of rice hull ash-filled polypropylene. <i>Journal of Materials Science</i> , 2007 , 42, 10219-10227	4.3	8
42	Tailings beach slope prediction: a new rheological method. <i>International Journal of Mining, Reclamation and Environment</i> , 2006 , 20, 181-202	2.2	8

41	Temperature Rise in the Extrusion of Highly Viscous Composite Materials. <i>International Polymer Processing</i> , 1997 , 12, 341-345	1	7
40	Estimation of Gelatin Layer Thickness on Polystyrene Particles by a Viscometric Study. <i>Journal of Colloid and Interface Science</i> , 1997 , 193, 307-11	9.3	7
39	The effect of moisture on the rheology of brown coal-oil suspensions. <i>Canadian Journal of Chemical Engineering</i> , 1983 , 61, 785-790	2.3	7
38	Photo-stability of rhodamine-B/montmorillonite nanopigments in polypropylene matrix. <i>Applied Clay Science</i> , 2008 ,	5.2	6
37	Extensional rheology of raw natural rubber from new clones of Hevea brasiliensis. <i>Polymer Engineering and Science</i> , 2012 , 52, 139-148	2.3	5
36	Morphological and Mechanical Characterisation of HDPE-EVA Nanocomposites. <i>Journal of Polymer Engineering</i> , 2006 , 26,	1.4	5
35	Mathematical modeling and numerical simulation for nucleated solution flow through slit die in foam extrusion. <i>Polymer Engineering and Science</i> , 2006 , 46, 751-762	2.3	5
34	A Constitutive Analysis of Extensional Flow of EVA Nanocomposites. <i>International Polymer Processing</i> , 2004 , 19, 388-394	1	5
33	Influence of temperature on the viscous behavior of some concentrated dispersions. <i>Journal of Rheology</i> , 1990 , 34, 637-655	4.1	5
32	Fiber orientation prediction in nylon-6 glass fiber composites using transient rheology and 3-dimensional x-ray computed tomography. <i>Polymer Composites</i> , 2019 , 40, E392	3	5
31	Fiber migration in shear flow: Model predictions and experimental validation. <i>Polymer Composites</i> , 2019 , 40, 3573-3581	3	4
30	Investigation of melt extensional deformation of ethylene-vinyl acetate nanocomposites using small-angle light scattering. <i>Polymer Engineering and Science</i> , 2009 , 49, 984-992	2.3	4
29	THE EFFECT OF DIE GEOMETRIES AND EXTRUSION RATES ON MELT STRENGTH OF HIGH MELT STRENGTH POLYPROPYLENE. <i>Journal of Polymer Engineering</i> , 2007 , 27,	1.4	4
28	An investigation between high and low pressure processes for nanocrystalline cellulose production from agro-waste biomass 2017 ,		3
27	Morphological Characterisation and Dynamic Rheology of Nano-Structured Blends of Polystyrene and SEBS. <i>Journal of Polymer Engineering</i> , 2010 , 30,	1.4	3
26	Extensional Rheology of Polypropylene in Relation to Processing Characteristics. <i>International Polymer Processing</i> , 2004 , 19, 40-46	1	3
25	Rheological Behaviour of LLDPE/LDPE Blends under Elongational Deformation. <i>International Polymer Processing</i> , 1998 , 13, 50-57	1	3
24	Effect of Temperature on the Flow Behavior of Polystyrene Latex-Gelatin Dispersions. <i>Journal of Colloid and Interface Science</i> , 1995 , 172, 289-296	9.3	3

23	Some factors influencing the rheological properties of concentrated brown coal oil suspensions on storage. <i>Powder Technology</i> , 1984 , 40, 291-301	5.2	3
22	Size distribution of bubbles in agitated viscous Newtonian and non-Newtonian solutions. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2018 , 13, e2267	1.3	3
21	Control of the mixing time in vessels agitated by submerged recirculating jets. <i>Royal Society Open Science</i> , 2018 , 5, 171037	3.3	2
20	A DNS Investigation of the Effect of Yield Stress for Turbulent Non-Newtonian Suspension Flow in Open Channels. <i>Particulate Science and Technology</i> , 2011 , 29, 209-228	2	2
19	Melt Strength and Thermal Properties of Organic Peroxide Modified Virgin and Recycled HDPE. <i>International Polymer Processing</i> , 2008 , 23, 200-207	1	2
18	Application of Polymer Nanocomposites 2007 , 339-373		2
17	Rheology of Nanocomposites 2007 , 145-231		2
16	The influence of hormitic clay on the time dependent properties of formulated gypsum plaster pastes. <i>Journal of Materials Science</i> , 2003 , 38, 3871-3875	4.3	2
15	Transient viscosity of fibre-filled composites incorporating evolution of fibre orientation and concentration. <i>Rheologica Acta</i> , 2020 , 59, 35-46	2.3	2
14	Rheology and physical characterization of graphene nanoplatelet/poly (butylene adipate-co-terephthalate) nanocomposites 2017 ,		1
13	Laminar flow of Non-Newtonian thickened tailings slurry through an open channel. <i>Canadian Journal of Chemical Engineering</i> , 2015 , 93, 1922-1928	2.3	1
12	Simulation Study of Thermotropic LCs and Prediction of Normal Stress Difference at High Shear Rate. <i>International Polymer Processing</i> , 2013 , 28, 470-482	1	1
11	Conducting Nanostructured Polymer Materials and their Electrorheological Application. <i>Journal of Polymer Engineering</i> , 2010 , 30,	1.4	1
10	Prediction and experimental verification of bubble and processing characteristics in blown-film extrusion. <i>Journal of Applied Polymer Science</i> , 2009 , 111, 2657-2668	2.9	1
9	The Rheology of Polymeric Nanocomposites 2009 ,		1
8	A novel methodology for measuring batch settling velocities of particles using Electrical Resistance Tomography. <i>Chemical Engineering Science</i> , 2022 , 250, 117364	4.4	0
7	Anomalous Viscoelastic Behaviors of Polymer Nanocomposites During Shear and Extensional Deformations 2019 , 313-342		
6	Recent Advances in the Rheology of Thermotropic Liquid Crystal Polymers 2015 , 69-102		

5 Preparation and Synthesis **2007**, 5-33

4 Application of an electric field to enhance the flow of coal-water slurries in pipelines. *Mining, Metallurgy and Exploration*, **2001**, 18, 25-30 1.1

3 The effect of temperature and moisture on the rheology of black coal-oil suspensions. *Canadian Journal of Chemical Engineering*, **1985**, 63, 870-877 2.3

2 Structure and Properties Characterization **2007**, 269-338

1 Processing of Nanocomposites **2007**, 233-267