

Sadhan C Jana

List of Publications by Year in descending order

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papers

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66250

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138
all docs

138
docs citations

138
times ranked

6327
citing authors

#	ARTICLE	IF	CITATIONS
1	Fabrication and Characterization of Re-Entrant Honeycomb Polyurethane Aerogels. ACS Applied Polymer Materials, 2022, 4, 3791-3801.	2.0	5
2	A Review on Gel Polymer Electrolytes for Dye-Sensitized Solar Cells. Micromachines, 2022, 13, 680.	1.4	14
3	Surfactant-free oil-in-oil emulsion-templating of polyimide aerogel foams. International Polymer Processing, 2022, 37, 427-441.	0.3	2
4	Analysis of porous structures of cellulose aerogel monoliths and microparticles. Microporous and Mesoporous Materials, 2021, 310, 110625.	2.2	29
5	Surfactant-free syndiotactic polystyrene aerogel foams via Pickering emulsion. Polymer, 2021, 212, 123125.	1.8	21
6	Modular aerogel brick fabrication via 3D-printed molds. Additive Manufacturing, 2021, 46, 102059.	1.7	6
7	Fabrication of Pill-Shaped Polyimide Aerogel Particles Using Microfluidic Flows. Industrial & Engineering Chemistry Research, 2021, 60, 361-370.	1.8	8
8	Continuous fabrication of core-shell aerogel microparticles using microfluidic flows. Journal of Colloid and Interface Science, 2020, 561, 772-781.	5.0	16
9	Solid state polymer ionogel electrolyte for use in Li-ion batteries. SPE Polymers, 2020, 1, 55-65.	1.4	5
10	Effects of surface area and porosity on behavior of IL molecules in meso and macroporous polymeric networks. Polymer, 2020, 211, 123081.	1.8	1
11	May 2020 Editorial in <sc>PES</sc>. Polymer Engineering and Science, 2020, 60, 877-878.	1.5	0
12	Shrinkage reduced polyimide-graphene oxide composite aerogel for oil absorption. Microporous and Mesoporous Materials, 2020, 307, 110501.	2.2	35
13	Our Journey, Our Future. Polymer Composites, 2020, 41, 1699-1700.	2.3	0
14	May 2020 Editorial in <sc><i>JVAT</i></sc>. Journal of Vinyl and Additive Technology, 2020, 26, 111-112.	1.8	0
15	Bicomponent nanofibers from core-shell nozzle in gas jet spinning process. Journal of Applied Polymer Science, 2020, 137, 48901.	1.3	2
16	Fabrication of Hollow and Porous Tin-Doped Indium Oxide Nanofibers and Microtubes via a Gas Jet Fiber Spinning Process. Materials, 2020, 13, 1539.	1.3	3
17	Design Of Emulsion-Templated Mesoporous-Macroporous Polyurea Gels and Aerogels. ACS Applied Polymer Materials, 2019, 1, 3115-3129.	2.0	20
18	Strong and Flexible Composite Solid Polymer Electrolyte Membranes for Li-Ion Batteries. ACS Omega, 2019, 4, 18203-18209.	1.6	44

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19	Development of Intricate Aerogel Articles Using Fused Filament Fabrication. ACS Applied Polymer Materials, 2019, 1, 1749-1756.	2.0	14
20	Role of graphene oxide and functionalized graphene oxide in protective hybrid coatings. Progress in Organic Coatings, 2019, 134, 197-208.	1.9	42
21	Corrosion performance of polyurethane hybrid coatings with encapsulated inhibitor. Progress in Organic Coatings, 2019, 130, 235-243.	1.9	33
22	Mechanism and Factors Influencing Formation and Stability of Chitosan/Lignosulfonate Nanoparticles. Macromolecular Chemistry and Physics, 2019, 220, 1800338.	1.1	14
23	Surfactant-Free Process for the Fabrication of Polyimide Aerogel Microparticles. Langmuir, 2019, 35, 2303-2312.	1.6	14
24	Crosslinked polyurea-co-polyurethane aerogels with hierarchical structures and low stiffness. Journal of Non-Crystalline Solids, 2018, 487, 19-27.	1.5	24
25	Investigation of polybenzoxazine gelation using laser light scattering. Journal of Applied Polymer Science, 2018, 135, 45709.	1.3	6
26	Polyimide-based aerogel foams, via emulsion-templating. Polymer, 2018, 157, 95-102.	1.8	48
27	Fabrication of Hierarchical V_2O_5 Nanorods on TiO_2 Nanofibers and Their Enhanced Photocatalytic Activity under Visible Light. ChemCatChem, 2018, 10, 3305-3318.	1.8	70
28	Exploiting arene-perfluoroarene interactions for dispersion of carbon black in rubber compounds. Polymer, 2018, 148, 247-258.	1.8	47
29	Solvent Effects on Tuning Pore Structures in Polyimide Aerogels. Langmuir, 2018, 34, 8581-8590.	1.6	40
30	Electrostatically Active Polymer Hybrid Aerogels for Airborne Nanoparticle Filtration. ACS Applied Materials & Interfaces, 2017, 9, 6401-6410.	4.0	45
31	Effects of skin layers on air permeability in macroporous polymer aerogels. Polymer, 2017, 126, 432-436.	1.8	13
32	Open Cell Aerogel Foams via Emulsion Templating. Langmuir, 2017, 33, 12729-12738.	1.6	33
33	Influence of secondary stretching on diameter and morphology of bicomponent polymer nanofibers produced by gas jet fiber process. Polymer, 2017, 123, 219-231.	1.8	9
34	Open cell aerogel foams with hierarchical pore structures. Polymer, 2017, 125, 1-9.	1.8	25
35	Tuning Porous Networks in Polyimide Aerogels for Airborne Nanoparticle Filtration. ACS Applied Materials & Interfaces, 2017, 9, 30074-30082.	4.0	66
36	Syndiotactic Polystyrene-Based Ionogel Membranes for High Temperature Electrochemical Applications. ACS Applied Materials & Interfaces, 2017, 9, 30933-30942.	4.0	48

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37	Synergetic Hybrid Aerogels of Vanadia and Graphene as Electrode Materials of Supercapacitors. Journal of Carbon Research, 2016, 2, 21.	1.4	2
38	Aerogel Microparticles from Oil-in-Oil Emulsion Systems. Langmuir, 2016, 32, 5637-5645.	1.6	23
39	Morphology control of bi-component polymer nanofibers produced by gas jet process. Polymer, 2016, 93, 142-151.	1.8	24
40	Correlation of viscosity ratio, morphology, and mechanical properties of polyamide 12/natural rubber blends via reactive compatibilization. Journal of Polymer Research, 2016, 23, 1.	1.2	7
41	The role of mesopores in achieving high efficiency airborne nanoparticle filtration using aerogel monoliths. Separation and Purification Technology, 2016, 166, 48-54.	3.9	47
42	Separation of Water from Ultralow Sulfur Diesel Using Novel Polymer Nanofiber-Coated Glass Fiber Media. ACS Applied Materials & Interfaces, 2016, 8, 21683-21690.	4.0	26
43	Comparison of Electrospinning and Gas Jet Fiber Processes for Fabrication of Bi-Component Polymer Nanofibers from Single Solutions. Macromolecular Symposia, 2016, 369, 8-13.	0.4	8
44	Mesoporous Titanium Dioxide Nanofibers with a Significantly Enhanced Photocatalytic Activity. ChemCatChem, 2016, 8, 2525-2535.	1.8	57
45	Flow and structure of compatibilized Nylon12/natural rubber blend with functional copolymer. Journal of Elastomers and Plastics, 2016, 48, 614-639.	0.7	3
46	Hydrophobic silica aerogels by silylation. Journal of Non-Crystalline Solids, 2016, 437, 26-33.	1.5	27
47	Preparation and characterization of reactive blends of poly(lactic acid), poly(ethylene-co-vinyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	0.3	5
48	Crosslinked polyurea aerogels with controlled porosity. RSC Advances, 2015, 5, 105329-105338.	1.7	48
49	Polymer aerogels for efficient removal of airborne nanoparticles. Separation and Purification Technology, 2015, 156, 803-808.	3.9	47
50	Bi-component inorganic oxide nanofibers from gas jet fiber spinning process. RSC Advances, 2015, 5, 105313-105318.	1.7	15
51	Polybenzoxazine aerogels with controllable pore structures. RSC Advances, 2015, 5, 26801-26805.	1.7	30
52	Self-crosslinkable poly(urethane urea)-reinforced silica aerogels. RSC Advances, 2015, 5, 71551-71558.	1.7	29
53	Effects of Polybenzoxazine on Shape Memory Properties of Polyurethanes with Amorphous and Crystalline Soft Segments. Polymers, 2014, 6, 1008-1025.	2.0	27
54	Effects of Polymer Viscosity and Nanofillers on Morphology of Nanofibers Obtained by a Gas Jet Method. International Polymer Processing, 2014, 29, 103-111.	0.3	13

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55	Polybutadiene-g-poly(pentafluorostyrene) as a coupling agent for lignin-filled rubber compounds. <i>Polymer</i> , 2014, 55, 6754-6763.	1.8	26
56	Hybrid fillers of lignin and carbon black for lowering of viscoelastic loss in rubber compounds. <i>Polymer</i> , 2014, 55, 3825-3835.	1.8	81
57	Surface modification of lignosulfonates for reinforcement of styrene-butadiene rubber compounds. <i>Journal of Applied Polymer Science</i> , 2014, 131, .	1.3	34
58	Polymer reinforced silica aerogels: effects of dimethyldiethoxysilane and bis(trimethoxysilylpropyl)amine as silane precursors. <i>Journal of Materials Chemistry A</i> , 2013, 1, 6642.	5.2	52
59	Sulfonated syndiotactic polystyrene aerogels: properties and applications. <i>Journal of Materials Chemistry A</i> , 2013, 1, 13989.	5.2	27
60	Tailoring of Morphology and Surface Properties of Syndiotactic Polystyrene Aerogels. <i>Langmuir</i> , 2013, 29, 5589-5598.	1.6	46
61	Syndiotactic polystyrene aerogels containing multi-walled carbon nanotubes. <i>Polymer</i> , 2013, 54, 750-759.	1.8	49
62	Synergistic Hybrid Organic-Inorganic Aerogels. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 6423-6429.	4.0	104
63	Reinforcement of Silica Aerogels Using Silane-End-Capped Polyurethanes. <i>Langmuir</i> , 2013, 29, 6156-6165.	1.6	93
64	Synthesis and Characterization of Shape-Memory Polyurethane-Polybenzoxazine Compounds. <i>Macromolecular Chemistry and Physics</i> , 2013, 214, 1225-1237.	1.1	49
65	Role of Liquid Jet Stretching and Bending Instability in Nanofiber Formation by Gas Jet Method. <i>Macromolecules</i> , 2013, 46, 6081-6090.	2.2	24
66	Natural Rubber-Toughened Polystyrene: Effects of Mixing Procedure and Maleic Anhydride Content on Impact Property and Phase Morphology. <i>Advanced Materials Research</i> , 2013, 747, 607-610.	0.3	2
67	- Application of Polymer Drugs to Medical Devices and Preparative Medicine. , 2013, , 192-241.		0
68	Polymer Nanocomposite Processing, Characterization, and Applications 2012. <i>Journal of Nanomaterials</i> , 2012, 2012, 1-1.	1.5	2
69	Transmission electron microscopy study of room temperature cured PMMA grafted natural rubber toughened epoxy/layered silicate nanocomposite. <i>Plastics, Rubber and Composites</i> , 2012, 41, 390-395.	0.9	1
70	Electrically Conductive Compounds of Polycarbonate, Liquid Crystalline Polymer, and Multiwalled Carbon Nanotubes. <i>Journal of Nanomaterials</i> , 2012, 2012, 1-10.	1.5	21
71	- Diffusion through Polymers Containing Platelike Nanomaterials. , 2012, , 490-517.		0
72	Nanofibers from Scalable Gas Jet Process. <i>ACS Macro Letters</i> , 2012, 1, 1032-1036.	2.3	71

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73	Morphological Study on Room-Temperature-Cured PMMA-Grafted Natural Rubber-Toughened Epoxy/Layered Silicate Nanocomposite. <i>Journal of Nanomaterials</i> , 2012, 2012, 1-14.	1.5	10
74	Exploiting POSS-Sorbitol Interactions: Issues of Reinforcement of Isotactic Polypropylene Spun Fibers. <i>Macromolecules</i> , 2012, 45, 2420-2433.	2.2	26
75	Surface Modification and Reinforcement of Silica Aerogels Using Polyhedral Oligomeric Silsesquioxanes. <i>Langmuir</i> , 2012, 28, 15362-15371.	1.6	66
76	New Antifouling Silica Hydrogel. <i>Langmuir</i> , 2012, 28, 9700-9706.	1.6	28
77	Self-assembled structure formation from interactions between polyhedral oligomeric silsesquioxane and sorbitol in preparation of polymer compounds. <i>Polymer</i> , 2012, 53, 1711-1724.	1.8	21
78	Sorbitol-POSS Interactions on Development of Isotactic Polypropylene Composites. <i>Macromolecules</i> , 2011, 44, 8064-8079.	2.2	40
79	Polymer Nanocomposite Processing, Characterization and Applications 2011. <i>Journal of Nanomaterials</i> , 2011, 2011, 1-1.	1.5	1
80	Analysis of energy transfer and ternary non-covalent filler/matrix/UV stabilizer interactions in carbon nanofiber and oxidized carbon nanofiber filled poly(methyl methacrylate) composites. <i>Polymer</i> , 2011, 52, 5355-5361.	1.8	9
81	Tailoring Mechanical Properties of Aerogels for Aerospace Applications. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 613-626.	4.0	482
82	Santosh K. Gupta: Professor extraordinaire and inspiration to several generations. <i>Polymer Engineering and Science</i> , 2011, 51, 1907-1908.	1.5	0
83	Polymer Nanocomposite Processing, Characterization, and Applications. <i>Journal of Nanomaterials</i> , 2010, 2010, 1-2.	1.5	3
84	Analysis of non-covalent interactions between the nanoparticulate fillers and the matrix polymer as applied to shape memory performance. <i>Journal of Materials Chemistry</i> , 2010, 20, 3467.	6.7	36
85	Rheological investigation of interactions between sorbitol and polyhedral oligomeric silsesquioxane in development of nanocomposites of isotactic polypropylene. <i>Journal of Rheology</i> , 2010, 54, 761-779.	1.3	13
86	Composites of carbon nanofibers and thermoplastic polyurethanes with shape-memory properties prepared by chaotic mixing. <i>Polymer Engineering and Science</i> , 2009, 49, 2020-2030.	1.5	35
87	An Investigation on the Capillary Wetting of Glass Fiber Tow and Fabric Structures with Nanoclay-Enriched Reactive Epoxy and Silicone Oil Mixtures. <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 1662-1671.	4.0	5
88	Carbonaceous fillers for shape memory actuation of polyurethane composites by resistive heating. <i>Carbon</i> , 2009, 47, 981-997.	5.4	148
89	Effect of thermal expansion on shape memory behavior of polyurethane and its nanocomposites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2008, 46, 1437-1449.	2.4	61
90	Evaluation of nanoparticulate fillers for development of shape memory polyurethane nanocomposites. <i>Polymer</i> , 2008, 49, 2223-2234.	1.8	229

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91	Hygrothermal effects on properties of highly conductive epoxy/graphite composites for applications as bipolar plates. <i>Journal of Power Sources</i> , 2008, 182, 223-229.	4.0	27
92	Shape Memory Actuation by Resistive Heating in Polyurethane Composites of Carbonaceous Conductive Fillers. <i>Materials Research Society Symposia Proceedings</i> , 2008, 1129, 1.	0.1	0
93	Shape Memory Polymers and Their Nanocomposites: A Review of Science and Technology of New Multifunctional Materials. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 1616-1637.	0.9	149
94	Shape Memory Polymers and Their Nanocomposites: A Review of Science and Technology of New Multifunctional Materials. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 1616-1637.	0.9	45
95	Shape memory polymers and their nanocomposites: a review of science and technology of new multifunctional materials. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 1616-37.	0.9	14
96	Electrically conductive polymer nanocomposites of polymethylmethacrylate and carbon nanofibers prepared by chaotic mixing. <i>Composites Part A: Applied Science and Manufacturing</i> , 2007, 38, 983-993.	3.8	81
97	Analysis of Polymerization in Chaotic Mixers Using Time Scales of Mixing and Chemical Reactions. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 2413-2422.	1.8	14
98	Oxidized carbon nanofiber/polymer composites prepared by chaotic mixing. <i>Carbon</i> , 2007, 45, 2079-2091.	5.4	54
99	Highly conductive epoxy/graphite composites for bipolar plates in proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2007, 172, 734-741.	4.0	144
100	Nanoclay-tethered shape memory polyurethane nanocomposites. <i>Polymer</i> , 2007, 48, 3790-3800.	1.8	204
101	A novel strategy for nanoclay exfoliation in thermoset polyimide nanocomposite systems. <i>Polymer</i> , 2007, 48, 4166-4173.	1.8	43
102	An optimum organic treatment of nanoclay for PMR-15 nanocomposites. <i>Polymer</i> , 2007, 48, 7573-7581.	1.8	5
103	Production of electrically conductive networks in immiscible polymer blends by chaotic mixing. <i>Polymer Engineering and Science</i> , 2006, 46, 19-28.	1.5	29
104	Clay Nanocomposites of Polyurethanes and Epoxies: Preparation Methods and Properties. , 2006, , 419-450.		0
105	Synthesis of thermoplastic polyurethane nanocomposites of reactive nanoclay by bulk polymerization methods. <i>Polymer</i> , 2005, 46, 3275-3288.	1.8	154
106	Properties of bulk-polymerized thermoplastic polyurethane nanocomposites. <i>Polymer</i> , 2005, 46, 3394-3406.	1.8	141
107	Thermoplastic polyurethane nanocomposites of reactive silicate clays: effects of soft segments on properties. <i>Polymer</i> , 2005, 46, 5183-5193.	1.8	142
108	Coalescence of immiscible polymer blends in chaotic mixers. <i>AIChE Journal</i> , 2005, 51, 2675-2685.	1.8	16

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109	Thermal decomposition of alkyl ammonium ions and its effects on surface polarity of organically treated nanoclay. <i>Polymer</i> , 2005, 46, 10139-10147.	1.8	82
110	Nanoclay-induced morphology development in chaotic mixing of immiscible polymers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2005, 43, 3638-3651.	2.4	53
111	High-strength and low-stiffness composites of nanoclay-filled thermoplastic polyurethanes. <i>Polymer Engineering and Science</i> , 2005, 45, 1532-1539.	1.5	36
112	A study on the effects of chaotic mixer design and operating conditions on morphology development in immiscible polymer systems. <i>Polymer Engineering and Science</i> , 2004, 44, 407-422.	1.5	33
113	Shear-induced migration of conductive fillers in injection molding. <i>Polymer Engineering and Science</i> , 2004, 44, 2101-2109.	1.5	33
114	A time-scale approach for analysis of coalescence in processing flows. <i>Polymer Engineering and Science</i> , 2004, 44, 2254-2265.	1.5	20
115	Effect of waveforms on morphology development in chaotic mixing of polymers. <i>AIChE Journal</i> , 2004, 50, 2346-2358.	1.8	13
116	Effects of viscosity ratio and composition on development of morphology in chaotic mixing of polymers. <i>Polymer</i> , 2004, 45, 1665-1678.	1.8	72
117	Adverse effects of thermal dissociation of alkyl ammonium ions on nanoclay exfoliation in epoxy-clay systems. <i>Polymer</i> , 2004, 45, 7673-7679.	1.8	62
118	The relationship between nano- and micro-structures and mechanical properties in PMMA-epoxy-nanoclay composites. <i>Polymer</i> , 2003, 44, 2091-2100.	1.8	211
119	Loss of surface and volume electrical conductivities in polymer compounds due to shear-induced migration of conductive particles. <i>Polymer Engineering and Science</i> , 2003, 43, 570-579.	1.5	17
120	A study on the use of phenoxy resins as compatibilizers of polyamide 6 (PA6) and polybutylene terephthalate (PBT). <i>Polymer Engineering and Science</i> , 2003, 43, 580-595.	1.5	41
121	Mechanism of Exfoliation of Nanoclay Particles in Epoxy-Clay Nanocomposites. <i>Macromolecules</i> , 2003, 36, 2758-2768.	2.2	311
122	Effect of Plasticization of Epoxy Networks by Organic Modifier on Exfoliation of Nanoclay. <i>Macromolecules</i> , 2003, 36, 8391-8397.	2.2	122
123	Natural fiber composites of high-temperature thermoplastic polymers: Effects of coupling agents. <i>Journal of Applied Polymer Science</i> , 2002, 86, 2168-2173.	1.3	33
124	On the development of natural fiber composites of high-temperature thermoplastic polymers. <i>Journal of Applied Polymer Science</i> , 2002, 86, 2159-2167.	1.3	43
125	Dispersion of nanofillers in high performance polymers using reactive solvents as processing aids. <i>Polymer</i> , 2001, 42, 6897-6905.	1.8	196
126	Compatibilization of PBT-PPE blends using low molecular weight epoxy. <i>Polymer</i> , 2001, 42, 8681-8693.	1.8	37

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127	APPLICATION OF BOUNDARY INTEGRAL TECHNIQUES TO FLUID TRACKING AND MIXING. Chemical Engineering Communications, 1996, 148-150, 347-362.	1.5	0
128	Apparent wall slip velocity coefficients in concentrated suspensions of noncolloidal particles. Journal of Rheology, 1995, 39, 1123-1132.	1.3	120
129	Chaotic mixing of viscous fluids by periodic changes in geometry: Baffled cavity flow. AIChE Journal, 1994, 40, 1769-1781.	1.8	67
130	Experimental and computational studies of mixing in complex Stokes flows: the vortex mixing flow and multicellular cavity flows. Journal of Fluid Mechanics, 1994, 269, 199-246.	1.4	168
131	Chaos, Symmetry, and Self-Similarity: Exploiting Order and Disorder in Mixing Processes. Science, 1992, 257, 754-760.	6.0	178
132	COUNTERCURRENT GAS ABSORPTION WITH CHEMICAL REACTION IN A LAMINAR FALLING FILM. Chemical Engineering Communications, 1989, 79, 27-37.	1.5	5
133	Irreversible step growth polymerization having segmental diffusion limitations in HCSTRs simulation and steady state multiplicity. Journal of Applied Polymer Science, 1989, 38, 979-995.	1.3	0
134	Phase Morphology, Thermal and Mechanical Properties of Compatibilized Nylon12/Natural Rubber Blends Using PS/MNR. Advanced Materials Research, 0, 844, 53-56.	0.3	0