N Sanjeeva Murthy

List of Publications by Year
in descending order

73	2,288	24	46
papers	citations	h-index	g-index
		257450	223800

75	75	75	2826
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hydrogen bonding, mobility, and structural transitions in aliphatic polyamides. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1763-1782.	2.1	200
2	Temperature-dependent structure of ionic liquids: X-ray scattering and simulations. Faraday Discussions, 2012, 154, 133-143.	3.2	171
3	Investigation of Brill Transition in Nylon 6 and Nylon 6,6 by Infrared Spectroscopy. Macromolecules, 1998, 31, 8433-8435.	4.8	164
4	Javelin-, Hockey Stick-, and Boomerang-Shaped Liquid Crystals. Structural Variations on p-Quinquephenyl. Journal of Physical Chemistry B, 2001, 105, 8845-8860.	2.6	151
5	How Does the Ionic Liquid Organizational Landscape Change when Nonpolar Cationic Alkyl Groups Are Replaced by Polar Isoelectronic Diethers?. Journal of Physical Chemistry B, 2013, 117, 1130-1135.	2.6	134
6	Communication: X-ray scattering from ionic liquids with pyrrolidinium cations. Journal of Chemical Physics, 2011, 134, 121101.	3.0	127
7	Structure of 1-Alkyl-1-methylpyrrolidinium Bis(trifluoromethylsulfonyl)amide Ionic Liquids with Linear, Branched, and Cyclic Alkyl Groups. Journal of Physical Chemistry B, 2013, 117, 15328-15337.	2.6	121
8	Interactions between Crystalline and Amorphous Domains in Semicrystalline Polymers:Â Small-Angle X-ray Scattering Studies of the Brill Transition in Nylon 6,6. Macromolecules, 1999, 32, 5594-5599.	4.8	64
9	Self-Assembly of Left- and Right-Handed Molecular Screws. Journal of the American Chemical Society, 2013, 135, 18762-18765.	13.7	55
10	Order parameter measurements in polypeptide liquid crystals. Journal of Chemical Physics, 1976, 65, 4835-4839.	3.0	49
11	Machine Learning on a Robotic Platform for the Design of Polymerâ€“Protein Hybrids. Advanced Materials, 2022, 34, e2201809.	21.0	48
12	PET-RAFT and SAXS: High Throughput Tools To Study Compactness and Flexibility of Single-Chain Polymer Nanoparticles. Macromolecules, 2019, 52, 8295-8304.	4.8	43
13	Poly(NaSS) Functionalization Modulates the Conformation of Fibronectin and Collagen Type I To Enhance Osteoblastic Cell Attachment onto Ti6Al4V. Langmuir, 2014, 30, 9477-9483.	3.5	41
14	Design of barrier coatings on kink-resistant peripheral nerve conduits. Journal of Tissue Engineering, 2016, 7, 204173141662947.	5.5	41
15	Molecular, Crystalline, and Lamellar Length-Scale Changes in the Poly(<scp>l</scp>-lactide) (PLLA) during Cyclopentanone (CPO) Desorption in PLLA/CPO Cocrystals. Macromolecules, 2016, 49, 224-233.	4.8	40
16	Competitive Adsorption of Plasma Proteins Using a Quartz Crystal Microbalance. ACS Applied Materials & Interfaces, 2016, 8, 13207-13217.	8.0	39
17	Structural changes during deformation in carbon nanotube-reinforced polyacrylonitrile fibers. Polymer, 2008, 49, 2133-2145.	3.8	36
18	Self-Assembly and Critical Aggregation Concentration Measurements of ABA Triblock Copolymers with Varying B Block Types: Model Development, Prediction, and Validation. Journal of Physical Chemistry B, 2016, 120, 3666-3676.	2.6	34

#	ARTICLE	IF	CITATIONS
19	Fibrin glue as a stabilization strategy in peripheral nerve repair when using porous nerve guidance conduits. Journal of Materials Science: Materials in Medicine, 2017, 28, 79.	3.6	33
20	X-ray diffraction and NMR studies of nylon 6/iodine/potassium iodide complexes and their transformation into the .gamma. crystalline phase. Macromolecules, 1990, 23, 1342-1346.	4.8	32
21	Poly(ethylene terephthalate)-poly(caprolactone) block copolymer. I. Synthesis, reactive extrusion, and fiber morphology. Journal of Applied Polymer Science, 1999, 74, 1858-1867.	2.6	31
22	Poly(ethylene glycol) as a sensitive regulator of cell survival fate on polymeric biomaterials: the interplay of cell adhesion and pro-oxidant signaling mechanisms. Soft Matter, 2010, 6, 5196.	2.7	31
23	Effect of melt temperature and skin-core morphology on the mechanical performance of nylon 6. Polymer Engineering and Science, 2002, 42, 940-950.	3.1	27
24	Effects of Terminal Sterilization on PEGâ€Based Bioresorbable Polymers Used in Biomedical Applications. Macromolecular Materials and Engineering, 2016, 301, 1211-1224.	3.6	27
25	Development of hybrid scaffolds with natural extracellular matrix deposited within synthetic polymeric fibers. Journal of Biomedical Materials Research - Part A, 2017, 105, 2162-2170.	4.0	24
26	A comparison of degradable synthetic polymer fibers for anterior cruciate ligament reconstruction. Journal of Biomedical Materials Research - Part A, 2010, 93A, 738-747.	4.0	23
27	Structure of the iodine columns in iodinated nylon-6. Journal of Polymer Science, Part B: Polymer Physics, 1986, 24, 133-141.	2.1	22
28	International Journal of Polymeric Materials and Polymeric Biomaterials, 1998, 42, 275-283.	3.4	22
29	The interaction of ultrasound with particulate composites. Journal of the Acoustical Society of America, 2006, 119, 1449-1456.	1.1	22
30	UV laser-ablated surface textures as potential regulator of cellular response. Biointerphases, 2010, 5, 53-59.	1.6	22
31	Effect of molecular orientation on the crystallization and melting behavior in poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	3.8	21
32	Substrate micropatterns produced by polymer demixing regulate focal adhesions, actin anisotropy, and lineage differentiation of stem cells. Acta Biomaterialia, 2018, 76, 21-28.	8.3	21
33	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.	2.1	20
34	ACL reconstruction using a novel hybrid scaffold composed of polyarylate fibers and collagen fibers. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2913-2920.	4.0	18
35	Wholly Aromatic Ether-imides. Potential Materials for n-Type Semiconductors. Chemistry of Materials, 2004, 16, 966-974.	6.7	17
36	Structure of Hydrated Poly(<scp>d</scp>,<scp>l</scp>-lactic acid) Studied with X-ray Diffraction and Molecular Simulation Methods. Macromolecules, 2012, 45, 4896-4906.	4.8	17

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37	Achieving molecular orientation in thermally extruded 3D printed objects. Biofabrication, 2019, 11, 045004.	7.1	17
38	Tunable Surface Repellency Maintains Stemness and Redox Capacity of Human Mesenchymal Stem Cells. ACS Applied Materials & Interfaces, 2017, 9, 22994-23006.	8.0	16
39	Observation of a new high-temperature transition in polytetrafluoroethylene. Macromolecules, 1990, 23, 2488-2494.	4.8	14
40	Fibrillar Structure and its Relevance to Diffusion, Shrinkage, and Relaxation Processes in Nylon Fibers. Textile Reseach Journal, 1997, 67, 511-520.	2.2	14
41	Structure of Biodegradable Films at Aqueous Surfaces: X-ray Diffraction and Spectroscopy Studies of Polylactides and Tyrosine-Derived Polycarbonates. Langmuir, 2013, 29, 11420-11430.	3.5	13
42	Nanospheres with a smectic hydrophobic core and an amorphous PEG hydrophilic shell: structural changes and implications for drug delivery. Soft Matter, 2018, 14, 1327-1335.	2.7	13
43	Multilayered crystalline structures and liquid crystalline phases in a mesogen with siloxane tails. Liquid Crystals, 1995, 19, 557-563.	2.2	12
44	Adsorption of Fibrinogen and Fibronectin on Elastomeric Poly(butylene succinate) Copolyesters. Langmuir, 2019, 35, 8850-8859.	3.5	12
45	Glass Transition Temperature and the Nature of the Amorphous Phase in Semicrystalline Polymers: Effects of Drawing, Annealing and Hydration in Polyamide 6. International Journal of Polymeric Materials and Polymeric Biomaterials, 2001, 50, 429-444.	3.4	11
46	Elliptical Smallâ€Angle Xâ€Ray Scattering Patterns from Aligned Lamellar Arrays. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 308-318.	2.1	11
47	Calcium phosphate enriched synthetic tyrosine-derived polycarbonate â€" dicalcium phosphate dihydrate polymer scaffolds for enhanced bone regeneration. Materialia, 2020, 9, 100616.	2.7	11
48	Amorphous orientation and its relationship to processing stages of blended polypropylene/polyethylene fibers. Journal of Applied Polymer Science, 2008, 108, 4047-4057.	2.6	10
49	Construction and Validation of All-Atom Bulk-Phase Models of Amorphous Polymers Using the TIGER2/TIGER3 Empirical Sampling Method. Macromolecules, 2011, 44, 5452-5464.	4.8	10
50	Central smallâ€angle diffuse scattering from fibers is made of two components. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 797-804.	2.1	10
51	A multilayered scaffold for regeneration of smooth muscle and connective tissue layers. Journal of Biomedical Materials Research - Part A, 2021, 109, 733-744.	4.0	10
52	Structure of intermediate filament assembly in hair deduced from hydration studies using small-angle neutron scattering. Journal of Structural Biology, 2019, 206, 295-304.	2.8	9
53	Tyrosineâ€derived polycarbonate nerve guidance tubes elicit proregenerative extracellular matrix deposition when used to bridge segmental nerve defects in swine. Journal of Biomedical Materials Research - Part A, 2021, 109, 1183-1195.	4.0	9
54	Comprehensive hydrolytic degradation study of a new poly(ester-amide) used for total meniscus replacement. Polymer Degradation and Stability, 2021, 190, 109617.	5.8	9

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55	Asymmetric flavone-based liquid crystals: synthesis and properties. Liquid Crystals, 2017, 44, 1436-1449.	2.2	8
56	A step toward engineering thick tissues: Distributing microfibers within 3D printed frames. Journal of Biomedical Materials Research - Part A, 2020, 108, 581-591.	4.0	8
57	Temperature-Activated PEG Surface Segregation Controls the Protein Repellency of Polymers. Langmuir, 2019, 35, 9769-9776.	3.5	7
58	Crystal Structure and Properties of N6/AMCC Copolymer from Theory and Fiber XRD. Macromolecules, 2003, 36, 900-907.	4.8	6
59	Nonsolvent-induced morphological changes and nanoporosity in poly(<scp>l</scp>-lactide) films. Soft Matter, 2018, 14, 1492-1498.	2.7	6
60	Simulation of SAXS patterns from oriented lamellar structures and their elliptical trajectories. Polymer, 2021, 220, 123566.	3.8	5
61	Control of Drug Release from Microparticles by Tuning Their Crystalline Textures: A Structureâ€"Activity Study. ACS Applied Polymer Materials, 2021, 3, 6548-6561.	4.4	5
62	Disassembly of Nanospheres with a PEG Shell upon Adsorption onto PEGylated Substrates. Langmuir, 2020, 36, 232-241.	3.5	4
63	Structural Investigations of Polycarbonates whose Mechanical and Erosion Behavior Can Be Controlled by Their Isomer Sequence. Macromolecules, 2020, 53, 9878-9889.	4.8	4
64	Preliminary analysis of the distribution of water in human hair by small-angle neutron scattering. Journal of Cosmetic Science, 2014, 65, 37-48.	0.1	4
65	Hydration-Induced Phase Separation in Amphiphilic Polymer Matrices and its Influence on Voclosporin Release. Journal of Functional Biomaterials, 2012, 3, 745-759.	4.4	3
66	A method to deliver patterned electrical impulses to Schwann cells cultured on an artificial axon. Neural Regeneration Research, 2019, 14, 1052.	3.0	3
67	Experimental observation of the onset of finite domain boundaries in a simple two-phase system by small-angle x-ray scattering. Macromolecules, 1983, 16, 1943-1944.	4.8	2
68	Carbohydrate-Derived Amphiphilic Macromolecules: A Biophysical Structural Characterization and Analysis of Binding Behaviors to Model Membranes. Journal of Functional Biomaterials, 2015, 6, 171-191.	4.4	2
69	Monitoring the Viscoelastic Properties of Skin in Liquid Environments Using Quartz Crystal Microbalance. Journal of Pharmaceutical Sciences, 2011, 100, 530-535.	3.3	1
70	Thermal processing of a degradable carboxylic acidâ€functionalized polycarbonate into scaffolds for tissue engineering. Polymer Engineering and Science, 2021, 61, 2012-2022.	3.1	1
71	Simultaneous Thermal and Structural Measurements of Oriented Polymers by DSC/XRD Using an Area Detector. Advances in X-ray Analysis, 1988, 32, 617-623.	0.0	1
72	Analysis of X-Ray Diffraction Scans of Poorly Crystallized Semrcrystallkve Polymers. Advances in X-ray Analysis, 1995, 39, 505-514.	0.0	0

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73	Polymer Texture Influences Cell Responses in Osteogenic Microparticles. Cellular and Molecular Bioengineering, 0, , .	2.1	0