Bhanu Nandan

List of Publications by Year
in descending order

104	2,291	186265	265206
papers	citations	28 h-index	42 g-index

106	106	106	2862
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Vertically oriented arrays of polyaniline nanorods and their super electrochemical properties. Chemical Communications, 2009, , 5749.	4.1	204
2	Switching of friction by binary polymer brushes. Soft Matter, 2008, 4, 1024.	2.7	97
3	Crystallization Behavior of Crystallineâ€Amorphous Diblock Copolymers Consisting of a Rubbery Amorphous Block. Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics, 2006, 46, 143-172.	2.2	73
4	Composition-Dependent Morphological Transitions and Pathways in Switching of Fine Structure in Thin Films of Block Copolymer Supramolecular Assemblies. Macromolecules, 2010, 43, 2463-2473.	4.8	66
5	Arrays of Inorganic Nanodots and Nanowires Using Nanotemplates Based on Switchable Block Copolymer Supramolecular Assemblies. Advanced Functional Materials, 2009, 19, 2805-2811.	14.9	64
6	Helical Packing of Nanoparticles Confined in Cylindrical Domains of a Selfâ€Assembled Block Copolymer Structure. Angewandte Chemie - International Edition, 2014, 53, 9090-9093.	13.8	55
7	Molecular Architecture Effect on the Microphase Separations in Supramolecular Combâ^'Coil Complexes of Polystyrene-block-poly(2-vinylpyridine) with Dodecylbenzenesulfonic Acid:â€‰ (AB)nAn Blockâ^'Arm Star Copolymer. Macromolecules, 2005, 38, 10117-10126.	4.8	52
8	Mediating polymer crystal orientation using nanotemplates from block copolymer microdomains and anodic aluminium oxide nanochannels. Soft Matter, 2012, 8, 7306.	2.7	48
9	Supramolecular assemblies of block copolymers as templates for fabrication of nanomaterials. European Polymer Journal, 2011, 47, 584-599.	5.4	47
10	Poly(ether ether ketone)/poly(aryl ether sulphone) blends: thermal degradation behaviour. European Polymer Journal, 2003, 39, 193-198.	5.4	45
11	Poly(ether ether ketone)/poly(aryl ether sulfone) blends: Melt rheological behavior. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 1548-1563.	2.1	45
12	Highly ordered arrays of magnetic nanoparticles prepared via block copolymer assembly. Journal of Materials Chemistry, 2010, 20, 7734.	6.7	45
13	A Stepâ€Wise Approach for Dual Nanoparticle Patterning via Block Copolymer Selfâ€Assembly. Advanced Functional Materials, 2013, 23, 483-490.	14.9	45
14	A selective reaction of polyhydroxy fullerene with cycloaliphatic epoxy resin in designing ether connected epoxy star utilizing fullerene as a molecular core. Polymer, 2003, 44, 3209-3214.	3.8	44
15	Glass transition behaviour of poly(ether ether ketone)/poly(aryl ether sulphone) blends: dynamic mechanical and dielectric relaxation studies. Polymer, 2003, 44, 1267-1279.	3.8	43
16	Highly ordered palladium nanodots and nanowires from switchable block copolymer thin films. Nanotechnology, 2009, 20, 415302.	2.6	43
17	Formation of self-rolled polymer microtubes studied by combinatorial approach. European Polymer Journal, 2008, 44, 4115-4121.	5.4	36
18	Hexagonally ordered arrays of metallic nanodots from thin films of functional block copolymers. Polymer, 2010, 51, 2661-2667.	3.8	35

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19	Control on molecular weight reduction of poly(Îµ-caprolactone) during melt spinning â€" A way to produce high strength biodegradable fibers. Materials Science and Engineering C, 2013, 33, 4213-4220.	7.3	35
20	High-Resolution Metal Nanopatterning by Means of Switchable Block Copolymer Templates. ACS Applied Materials & Interfaces, 2015, 7, 12559-12569.	8.0	35
21	Crystallization Kinetics and Crystallization-Induced Morphological Formation in the Blends of Poly(Îµ-caprolactone)-block-polybutadiene and Polybutadiene Homopolymer. Macromolecules, 2007, 40, 5014-5022.	4.8	34
22	Morphology of electrospun fibers derived from High Internal Phase Emulsions. Journal of Colloid and Interface Science, 2016, 471, 29-36.	9.4	33
23	Molecular Architecture Effect on Microphase Separation in Supramolecular Combâ^'Coil Complexes of Polystyrene-block-poly(2-vinylpyridine) with Dodecylbenzenesulfonic Acid:Â AnBnHeteroarm Star Copolymer. Macromolecules, 2006, 39, 4460-4468.	4.8	32
24	Fabrication of Metallic Microtubes Using Self-Rolled Polymer Tubes as Templates. Langmuir, 2009, 25, 7667-7674.	3.5	32
25	Bio-inspired poly(3,4-ethylenedioxythiophene): Poly(styrene sulfonate)-sulfur@polyacrylonitrile electrospun nanofibers for lithium-sulfur batteries. Journal of Power Sources, 2019, 431, 250-258.	7.8	32
26	A Novel Approach for the Fabrication of Silica and Silica/Metal Hybrid Microtubes. Chemistry of Materials, 2009, 21, 4282-4287.	6.7	30
27	Hairy polymer nanofibers via self-assembly of block copolymers. Journal of Materials Chemistry, 2012, 22, 25102.	6.7	29
28	Electrospun composite matrices of poly(Îµ-caprolactone)-montmorillonite made using tenside free Pickering emulsions. Materials Science and Engineering C, 2016, 69, 685-691.	7.3	29
29	Silica-supported Au@hollow-SiO2 particles with outstanding catalytic activity prepared via block copolymer template approach. Journal of Colloid and Interface Science, 2017, 491, 246-254.	9.4	29
30	Hairy Coreâ€"Shell Polymer Nano-objects from Self-Assembled Block Copolymer Structures. ACS Applied Materials & Interfaces, 2015, 7, 12539-12558.	8.0	28
31	Crystallization behaviour of poly(ethylene oxide) under confinement in the electrospun nanofibers of polystyrene/poly(ethylene oxide) blends. Soft Matter, 2016, 12, 5110-5120.	2.7	28
32	Macroporous scaffolds of cross-linked Poly(É›-caprolactone) via high internal phase emulsion templating. Polymer, 2019, 176, 66-73.	3.8	28
33	Molecular Architecture Effect on the Self-Assembly Behavior of Comb-Coil Block Copolymers Displaying Lamellae-within-Lamellae Morphology. Macromolecules, 2008, 41, 8138-8147.	4.8	27
34	Cellulose-Derived Nanographene Oxide Reinforced Macroporous Scaffolds of High Internal Phase Emulsion-Templated Cross-Linked Poly(Îµ-caprolactone). Biomacromolecules, 2020, 21, 589-596.	5.4	26
35	Conducive 3D porous mesh of poly(Îµ-caprolactone) made via emulsion electrospinning. Polymer, 2014, 55, 3970-3979.	3.8	25
36	Self-Assembly and Crystallization in a Supramolecular Hairy Rod Polymer from the Complex of Polyaniline with Ï‰-Methoxy Poly(ethylene oxide) Phosphates. Macromolecules, 2004, 37, 9561-9570.	4.8	24

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37	Polymer-Derived Electrospun Co₃O₄@C Porous Nanofiber Network for Flexible, High-Performance, and Stable Supercapacitors. ACS Applied Energy Materials, 2020, 3, 11002-11014.	5.1	24
38	Crystallization behavior of crystalline/crystalline polymer blends under confinement in electrospun nanofibers of polystyrene/poly(ethylene oxide)/poly(Îµ-caprolactone) ternary mixtures. Soft Matter, 2017, 13, 1569-1582.	2.7	20
39	Amphiphilic Block Copolymer Micelles in Selective Solvents: The Effect of Solvent Selectivity on Micelle Formation. Polymers, 2019, 11, 1882.	4.5	20
40	Bio-inspired design of electrospun poly(acrylonitrile) and novel ionene based nanofibrous mats as highly flexible solid state polymer electrolyte for lithium batteries. Chemical Engineering Journal, 2022, 440, 135926.	12.7	20
41	Poly(ether ether ketone)/poly(aryl ether sulfone) blends: Relationships between morphology and mechanical properties. Journal of Applied Polymer Science, 2003, 90, 2887-2905.	2.6	19
42	Thin films of block copolymer supramolecular assemblies: Microphase separation and nanofabrication. Physica Status Solidi (B): Basic Research, 2010, 247, 2458-2469.	1.5	19
43	Fabrication of carbon microtubes from thin films of supramolecular assemblies via self-rolling approach. Journal of Materials Chemistry, 2011, 21, 10813.	6.7	19
44	Polyetherether ketone/polyarylethersulfone blends: Thermal and compatibility aspects. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 1407-1424.	2.1	18
45	Highly Oriented Nanowires from the Hierarchical Self-Assembly in Supramolecular Complex of Polyaniline with Ï‰-Methoxypoly(ethylene oxide) Phosphates. Macromolecules, 2007, 40, 395-398.	4.8	18
46	Nanoparticle directed domain orientation in thin films of asymmetric block copolymers. Colloid and Polymer Science, 2014, 292, 2249-2260.	2.1	18
47	Emulsion electrospun composite matrices of poly(Îµ-caprolactone)-hydroxyapatite: Strategy for hydroxyapatite confinement and retention on fiber surface. Materials Letters, 2016, 167, 288-296.	2.6	18
48	Crystallization in the Binary Blends of Crystallineâ^'Amorphous Diblock Copolymers Bearing Chemically Different Crystalline Block. Macromolecules, 2010, 43, 3376-3382.	4.8	17
49	Waste cotton cloth derived flexible current collector with optimized electrical properties for high performance lithiumâ€“sulfur batteries. Carbon, 2022, 192, 429-437.	10.3	17
50	Hydroxyapatite stabilized pickering emulsions of poly(Îµ-caprolactone) and their composite electrospun scaffolds. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 533, 224-230.	4.7	16
51	Crystallization and melting behavior of poly(ether ether ketone)/poly(aryl ether sulfone) blends. Journal of Applied Polymer Science, 2003, 90, 2906-2918.	2.6	15
52	Facile Fabrication of Composite Electrospun Nanofibrous Matrices of Poly(Îµ-caprolactone)â€“Silica Based Pickering Emulsion. Langmuir, 2017, 33, 8062-8069.	3.5	15
53	Cotton cloth templated in situ encapsulation of sulfur into carbon fibers for lithiumâ€“sulfur batteries. Chemical Communications, 2021, 57, 544-547.	4.1	15
54	Correlation between crystallization kinetics and melt phase behavior of crystallineâ€“amorphous block copolymer/homopolymer blends. Polymer, 2005, 46, 11837-11843.	3.8	14

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55	Tetragonally Packed Cylinder Structure of Combâ^'Coil Block Copolymer Bearing Heteroarm Star Architecture. Macromolecules, 2009, 42, 2304-2308.	4.8	14
56	Ligand displacement induced morphologies in block copolymer/quantum dot hybrids and formation of coreâ€"shell hybrid nanoobjects. Physical Chemistry Chemical Physics, 2017, 19, 27651-27663.	2.8	14
57	Electrospun composite matrices from tenside-free poly(Îµ-caprolactone)-grafted acrylic acid/hydroxyapatite oil-in-water emulsions. Journal of Materials Science, 2017, 52, 2254-2262.	3.7	13
58	Miscibility behaviour of poly(ether ether ketone)/poly(ether ketone) blends â€" thermal and morphological studies. European Polymer Journal, 2001, 37, 2147-2151.	5.4	12
59	Multifunctional coreâ€"shell polymerâ€"inorganic hybrid nanofibers prepared via block copolymer self-assembly. RSC Advances, 2015, 5, 89861-89868.	3.6	12
60	Fabrication of titania nanostructures using coreâ€"shell polymer nanofibers from block copolymers as templates. Nano Structures Nano Objects, 2016, 6, 14-22.	3.5	12
61	Hollow Au@TiO₂ porous electrospun nanofibers for catalytic applications. RSC Advances, 2020, 10, 6592-6602.	3.6	12
62	Metal oxide heterostructure decorated carbon nanofiber as a novel redox catalyst for high performance Lithium-Sulfur batteries. Applied Surface Science, 2021, 569, 151054.	6.1	12
63	Nanowear studies in reversibly switchable polystyreneâ€"poly(acrylic acid) mixed brushes. Journal of Colloid and Interface Science, 2008, 328, 58-66.	9.4	11
64	Synthesis of hollow silica nanostructures using functional hairy polymer nanofibers as templates. RSC Advances, 2013, 3, 24009.	3.6	11
65	Degradation product profiles of melt spun in situ cross-linked poly(Îµ-caprolactone) fibers. Materials Chemistry and Physics, 2015, 156, 82-88.	4.0	11
66	High Internal Phase Emulsion Ringâ€Opening Polymerization of Pentadecanolide: Strategy to Obtain Porous Scaffolds in a Single Step. Macromolecular Chemistry and Physics, 2016, 217, 1752-1758.	2.2	11
67	Cocrystallization Behavior in Binary Blend of Crystallineâ^'Amorphous Diblock Copolymers. Macromolecules, 2004, 37, 8175-8179.	4.8	10
68	Electrodeposition of Coâ€"Pt continuous films and nanowires within diblock copolymer template. Electrochimica Acta, 2009, 54, 2536-2539.	5.2	10
69	Nanowear studies in chemically heterogeneous responsive polymeric brushes by surface force microscopy. European Polymer Journal, 2009, 45, 1367-1376.	5.4	10
70	Fluorescence resonance energy transfer in multifunctional nanofibers designed via block copolymer self-assembly. Physical Chemistry Chemical Physics, 2019, 21, 16137-16146.	2.8	10
71	Electrospinning of a Near Gel Resin To Produce Cross-Linked Fibrous Matrices. Langmuir, 2020, 36, 2419-2426.	3.5	10
72	Facile synthesis of templated macrocellular nanocomposite scaffold via emulsifier-free HIPE-ROP. Chemical Communications, 2020, 56, 12604-12607.	4.1	9

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73	Crystallization of Polymers in Confined Space. , 2018, , 367-431.		8
74	Nanoparticle assembly under block copolymer confinement: The effect of nanoparticle size and confinement strength. Journal of Colloid and Interface Science, 2020, 578, 441-451.	9.4	8
75	Nanoparticle-Stabilized Perforated Lamellar Morphology in Block Copolymer/Quantum Dot Hybrids. Macromolecules, 2021, 54, 1216-1223.	4.8	8
76	Supramolecular Route for Enhancing Polymer Electrospinnability. ACS Omega, 2018, 3, 15666-15678.	3.5	7
77	Excellent electrochemical performance of Lithium-sulfur batteries via self-standing cathode from interwoven Î±-Fe2O3 integrated carbon nanofiber networks. Journal of Electroanalytical Chemistry, 2021, 880, 114829.	3.8	7
78	Block Copolymer Template-Directed Catalytic Systems: Recent Progress and Perspectives. Membranes, 2021, 11, 318.	3.0	7
79	Fascinating morphology and crystallization behavior of melt miscible binary blends of crystalline homopolymers depicting nearly simultaneous melting transitions. Polymer, 2021, 231, 124119.	3.8	7
80	Block copolymer compatibilization driven frustrated crystallization in electrospun nanofibers of polystyrene/poly(ethylene oxide) blends. RSC Advances, 2018, 8, 17989-18007.	3.6	6
81	Polymer crystallization under dual confinement of High internal phase emulsion templated crosslinked polymer. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 600, 124938.	4.7	6
82	Melt-diffused binary solidâ€“solid ionic mixture in a porous polymeric host as free-standing solid electrolyte for lithium batteries. Journal of Electroanalytical Chemistry, 2021, 899, 115698.	3.8	6
83	Nonpolar Graphene Quantum Dot-Based Hydrophobic Coating from Microwave-Assisted Treatment of Styrofoam Waste. ACS Sustainable Chemistry and Engineering, 2022, 10, 1070-1077.	6.7	6
84	Emulsion templated dual crosslinked core-sheath fibrous matrices for efficient oil/water separation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 635, 128037.	4.7	6
85	Structure and magnetic properties of electrodeposited CoPtP/Pt multilayer nanowires. Chemical Physics Letters, 2017, 684, 378-382.	2.6	5
86	Enhanced Photoluminescence of Gold Nanoparticleâ€Quantum Dot Hybrids Confined in Hairy Polymer Nanofibers. ChemNanoMat, 2021, 7, 831-841.	2.8	5
87	Microphase separation in thin films of supramolecular assemblies composed of a triblock copolymer and lowâ€molecularâ€weight additive. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 1594-1605.	2.1	4
88	Thermally Initiated Trans-esterification in Poly(Îµ-caprolactone) and Its Dependence on Molecular Weight. Journal of Polymers and the Environment, 2014, 22, 479-487.	5.0	4
89	In-situ monitoring of silica shell growth on PS-b-P4VP micelles as templates using DLS. Polymer, 2016, 107, 485-491.	3.8	4
90	Photoluminescent poly(4-vinylpyridine)-based ionic liquids coded with <scp>l</scp>- and <scp>d</scp>-histidine: a supramolecular self-assembly leading to the formation of red-shifted photoluminescent helical aggregates. Polymer Chemistry, 2019, 10, 2734-2740.	3.9	4

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91	Electrospinnability of hydrogen bonded supramolecular comb polymers based on Poly(4-vinylpyridine) and 3-pentadecylphenol. Polymer, 2020, 199, 122594.	3.8	4
92	Handed Mirror Symmetry Breaking at the Photo-Excited State of Ï€-Conjugated Rotamers in Solutions. Symmetry, 2021, 13, 272.	2.2	4
93	Polymer Tubes by Rolling of Polymer Bilayers. Materials Research Society Symposia Proceedings, 2010, 1272, 1.	0.1	3
94	Tuned interactions within inclusion complex to generate electrospun matrices of superior strength. Materials Today Communications, 2021, 29, 102794.	1.9	3
95	Poly(acrylonitrile-butadiene-styrene)/Poly(ether ether ketone) Blends: an Attempt Towards a Polymer Reinforced Polymer Composite. Macromolecular Materials and Engineering, 2004, 289, 749-756.	3.6	2
96	Confinementâ€driven cocrystallization of binary polymer mixtures of different chain length in electrospun nanofibers. Polymer Crystallization, 2018, 1, e10017.	0.8	2
97	Phase transitions of liquid crystal confined in electrospun polymer nanofibres. Bulletin of Materials Science, 2020, 43, 1.	1.7	2
98	Frustrated Crystallization behavior of Poly(ethylene oxide) in Electrospun Core-Shell Nanofibers and Beads. Fibers and Polymers, 2021, 22, 2750-2761.	2.1	2
99	Functional Nanostructured Materials via Self-Assembly of Block Copolymers. World Scientific Series in Nanoscience and Nanotechnology, 2019, , 1-44.	0.1	2
100	Non-isothermal crystallization kinetics of confined poly (ethylene oxide) in electrospun nanofibers prepared from polystyrene/ poly (ethylene oxide) blends. Journal of Polymer Research, 2022, 29, 1.	2.4	2
101	Rheology and Electrospinnability of Supramolecular Comb Polymer Networks Formed via Coordination Interactions. ACS Applied Polymer Materials, 2020, 2, 5094-5109.	4.4	1
102	Effect of spinning solvent on crystallization behavior of confined polymers in electrospun nanofibers. Polymer Crystallization, 2021, 4, e10209.	0.8	1
103	Polymer Nanocomposite Fibers via Self-Assembly. , 2020, , 573-625.		0
104	Reversal of handedness of ionic liquid-based chiral block copolymers via self-assembly in solution and bulk phase. Polymer Chemistry, 2022, 13, 1911-1919.	3.9	0