

# Chinedum O Osuji

## List of Publications by Year in descending order

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Version: 2024-02-01

142  
papers

9,148  
citations

44042

48  
h-index

42364

92  
g-index

143  
all docs

143  
docs citations

143  
times ranked

11319  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Self-assembly of supramolecular complexes of charged conjugated polymers and imidazolium-based ionic liquid crystals. <i>Giant</i> , 2022, 9, 100088.                                     | 2.5 | 5         |
| 2  | Tunable organic solvent nanofiltration in self-assembled membranes at the sub-1 nm scale. <i>Science Advances</i> , 2022, 8, eabm5899.  | 4.7 | 16        |
| 3  | Fast Photoswitchable Order-Disorder Transitions in Liquid-Crystalline Block Co-oligomers. <i>Journal of the American Chemical Society</i> , 2022, 144, 390-399.                           | 6.6 | 17        |
| 4  | Dynamic magnetic field alignment and polarized emission of semiconductor nanoplatelets in a liquid crystal polymer. <i>Nature Communications</i> , 2022, 13, 2507.                        | 5.8 | 12        |
| 5  | Two-Photon Laser Microprinting of Highly Ordered Nanoporous Materials Based on Hexagonal Columnar Liquid Crystals. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 33746-33755. | 4.0 | 6         |
| 6  | Stable cross-linked lyotropic gyroid mesophases from single-head/single-tail cross-linkable monomers. <i>Chemical Communications</i> , 2021, 57, 10931-10934.                             | 2.2 | 11        |
| 7  | Lyotropic liquid crystals as templates for advanced materials. <i>Journal of Materials Chemistry A</i> , 2021, 9, 21607-21658.  | 5.2 | 19        |
| 8  | Rapid Fabrication by Lyotropic Self-Assembly of Thin Nanofiltration Membranes with Uniform 1 Nanometer Pores. <i>ACS Nano</i> , 2021, 15, 8192-8203.                                      | 7.3 | 33        |
| 9  | Effects of Labile Mesogens on the Morphology of Liquid Crystalline Block Copolymers in Thin Films. <i>Macromolecules</i> , 2021, 54, 3223-3231.   | 2.2 | 6         |
| 10 | Nanocomposites of 2D-MoS <sub>2</sub> Exfoliated in Thermotropic Liquid Crystals. , 2021, 3, 704-712.   |     | 9         |
| 11 | 100th Anniversary of Macromolecular Science Viewpoint: Opportunities for Liquid Crystal Polymers in Nanopatterning and Beyond. <i>ACS Macro Letters</i> , 2021, 10, 945-957.              | 2.3 | 9         |
| 12 | Plasmonic Sensing from Vertical Au-Coated ZnO Nanorod Arrays Templated by Block Copolymers. <i>ACS Applied Nano Materials</i> , 2021, 4, 8556-8563.                                       | 2.4 | 2         |
| 13 | Soft robotic constrictor for in vitro modeling of dynamic tissue compression. <i>Scientific Reports</i> , 2021, 11, 16478.  | 1.6 | 7         |
| 14 | Film Thickness and Composition Effects in Symmetric Ternary Block Copolymer/Homopolymer Blend Films: Domain Spacing and Orientation. <i>Macromolecules</i> , 2021, 54, 7970-7986.         | 2.2 | 12        |
| 15 | Simple production of cellulose nanofibril microcapsules and the rheology of their suspensions. <i>Soft Matter</i> , 2021, 17, 4517-4524.  | 1.2 | 7         |
| 16 | Nanoscale Thickness Control of Nanoporous Films Derived from Directionally Photopolymerized Mesophases. <i>Advanced Materials Interfaces</i> , 2021, 8, 2001977.                          | 1.9 | 9         |
| 17 | Synthesis of High Etch Contrast Poly(3-hydroxystyrene)-Based Triblock Copolymers and Self-Assembly of Sub-5 nm Features. <i>Macromolecules</i> , 2021, 54, 9542-9550.                     | 2.2 | 7         |
| 18 | Shaping and Locomotion of Soft Robots Using Filament Actuators Made from Liquid Crystal Elastomer-Carbon Nanotube Composites. <i>Advanced Intelligent Systems</i> , 2020, 2, 2070063.     | 3.3 | 5         |

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|----|---|------|-----------|
| 19 | Relating Selectivity and Separation Performance of Lamellar Two-Dimensional Molybdenum Disulfide (MoS <sub>2</sub> ) Membranes to Nanosheet Stacking Behavior. <i>Environmental Science &amp; Technology</i> , 2020, 54, 9640-9651. | 4.6  | 82        |
| 20 | Sustainable manufacturing of sensors onto soft systems using self-coagulating conductive Pickering emulsions. <i>Science Robotics</i> , 2020, 5, .  | 9.9  | 50        |
| 21 | Correlation of droplet elasticity and volume fraction effects on emulsion dynamics. <i>Soft Matter</i> , 2020, 16, 2574-2580.   | 1.2  | 3         |
| 22 | Shaping and Locomotion of Soft Robots Using Filament Actuators Made from Liquid Crystal Elastomer–Carbon Nanotube Composites. <i>Advanced Intelligent Systems</i> , 2020, 2, 1900163.   | 3.3  | 80        |
| 23 | Electrospray deposition tool: Creating compositionally gradient libraries of nanomaterials. <i>Review of Scientific Instruments</i> , 2020, 91, 013701.   | 0.6  | 15        |
| 24 | High-throughput morphology mapping of self-assembling ternary polymer blends. <i>RSC Advances</i> , 2020, 10, 42529-42541.  | 1.7  | 9         |
| 25 | Yielding and bifurcated aging in nanofibrillar networks. <i>Physical Review Materials</i> , 2020, 4, .  | 0.9  | 4         |
| 26 | Precise nanofiltration in a fouling-resistant self-assembled membrane with water-continuous transport pathways. <i>Science Advances</i> , 2019, 5, eaav9308.  | 4.7  | 79        |
| 27 | Aligned Morphologies in Near-Edge Regions of Block Copolymer Thin Films. <i>Macromolecules</i> , 2019, 52, 7224-7233.   | 2.2  | 11        |
| 28 | The Effects of Magnetic Field Alignment on Lithium Ion Transport in a Polymer Electrolyte Membrane with Lamellar Morphology. <i>Polymers</i> , 2019, 11, 887.   | 2.0  | 23        |
| 29 | Single crystal texture by directed molecular self-assembly along dual axes. <i>Nature Materials</i> , 2019, 18, 1235-1243.  | 13.3 | 34        |
| 30 | Tuning the permselectivity of polymeric desalination membranes via control of polymer crystallite size. <i>Nature Communications</i> , 2019, 10, 2347.  | 5.8  | 43        |
| 31 | Optical materials and metamaterials from nanostructured soft matter. <i>Nano Research</i> , 2019, 12, 2172-2183.  | 5.8  | 25        |
| 32 | Creating Aligned Nanopores by Magnetic Field Processing of Block Copolymer/Homopolymer Blends. <i>ACS Macro Letters</i> , 2019, 8, 261-266.   | 2.3  | 13        |
| 33 | Directed Assembly of Hybrid Nanomaterials and Nanocomposites. <i>Advanced Materials</i> , 2018, 30, e1705794.   | 11.1 | 74        |
| 34 | Sub-10 nm Self-Assembly of Mesogen-Containing Grafted Macromonomers and Their Bottlebrush Polymers. <i>Macromolecules</i> , 2018, 51, 3680-3690.  | 2.2  | 29        |
| 35 | Evaluating the Dispersant Stabilization of Colloidal Suspensions from the Scaling Behavior of Gel Rheology and Adsorption Measurements. <i>Langmuir</i> , 2018, 34, 1092-1099.  | 1.6  | 14        |
| 36 | Pathway-engineering for highly-aligned block copolymer arrays. <i>Nanoscale</i> , 2018, 10, 416-427.  | 2.8  | 28        |

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|----|---|-----|-----------|
| 37 | Atomic imprinting into metallic glasses. <i>Communications Physics</i> , 2018, 1, .   | 2.0 | 28        |
| 38 | Three-Dimensional Compatible Sacrificial Nanoimprint Lithography for Tuning the Wettability of Thermoplastic Materials. <i>Journal of Micro and Nano-Manufacturing</i> , 2018, 6, .                             | 0.8 | 2         |
| 39 | Janus Graft Block Copolymers: Design of a Polymer Architecture for Independently Tuned Nanostructures and Polymer Properties. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 8493-8497.           | 7.2 | 79        |
| 40 | Janus Graft Block Copolymers: Design of a Polymer Architecture for Independently Tuned Nanostructures and Polymer Properties. <i>Angewandte Chemie</i> , 2018, 130, 8629-8633.                                  | 1.6 | 13        |
| 41 | High Performance Nanofiltration Membrane for Effective Removal of Perfluoroalkyl Substances at High Water Recovery. <i>Environmental Science &amp; Technology</i> , 2018, 52, 7279-7288.                        | 4.6 | 218       |
| 42 | Facile Protein Immobilization Using Engineered Surface-Active Biofilm Proteins. <i>ACS Applied Nano Materials</i> , 2018, 1, 2483-2488.   | 2.4 | 12        |
| 43 | Self-Assembly of an Ultrahigh- $\beta$ Block Copolymer with Versatile Etch Selectivity. <i>Macromolecules</i> , 2018, 51, 6460-6467.  | 2.2 | 56        |
| 44 | Fabrication of a Desalination Membrane with Enhanced Microbial Resistance through Vertical Alignment of Graphene Oxide. <i>Environmental Science and Technology Letters</i> , 2018, 5, 614-620.                 | 3.9 | 37        |
| 45 | Multi-Scale Assembly of Polythiophene-Surfactant Supramolecular Complexes for Charge Transport Anisotropy. <i>Macromolecules</i> , 2017, 50, 1047-1055.   | 2.2 | 18        |
| 46 | Post-fabrication modification of electrospun nanofiber mats with polymer coating for membrane distillation applications. <i>Journal of Membrane Science</i> , 2017, 530, 158-165.                               | 4.1 | 91        |
| 47 | Highly stiff yet elastic microcapsules incorporating cellulose nanofibrils. <i>Soft Matter</i> , 2017, 13, 2733-2737.   | 1.2 | 23        |
| 48 | Implications of Grain Size Variation in Magnetic Field Alignment of Block Copolymer Blends. <i>ACS Macro Letters</i> , 2017, 6, 404-409.  | 2.3 | 17        |
| 49 | Highly Selective Vertically Aligned Nanopores in Sustainably Derived Polymer Membranes by Molecular Templating. <i>ACS Nano</i> , 2017, 11, 3911-3921.  | 7.3 | 83        |
| 50 | Enhanced antibacterial activity through the controlled alignment of graphene oxide nanosheets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E9793-E9801. | 3.3 | 275       |
| 51 | Hexagonally Ordered Arrays of $\beta$ -Helical Bundles Formed from Peptide-Dendron Hybrids. <i>Journal of the American Chemical Society</i> , 2017, 139, 15977-15983.   | 6.6 | 9         |
| 52 | Controlling orientational order in block copolymers using low-intensity magnetic fields. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E9437-E9444.       | 3.3 | 39        |
| 53 | Smart Cellulose Nanofluids Produced by Tunable Hydrophobic Association of Polymer-Grafted Cellulose Nanocrystals. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 31095-31101.                         | 4.0 | 34        |
| 54 | Polymer Nanosheets from Supramolecular Assemblies of Conjugated Linoleic Acid—High Surface Area Adsorbents from Renewable Materials. <i>Langmuir</i> , 2017, 33, 10690-10697.                                   | 1.6 | 9         |

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|----|---|------|-----------|
| 55 | Loss of Phospholipid Membrane Integrity Induced by Two-Dimensional Nanomaterials. <i>Environmental Science and Technology Letters</i> , 2017, 4, 404-409.   | 3.9  | 39        |
| 56 | Optically Active Elastomers from Liquid Crystalline Comb Copolymers with Dual Physical and Chemical Cross-Links. <i>Macromolecules</i> , 2017, 50, 5929-5939.   | 2.2  | 22        |
| 57 | Photoresponsive and Magneto-responsive Graphene Oxide Microcapsules Fabricated by Droplet Microfluidics. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 44192-44198.                                  | 4.0  | 30        |
| 58 | Flat Drops, Elastic Sheets, and Microcapsules by Interfacial Assembly of a Bacterial Biofilm Protein, BslA. <i>Langmuir</i> , 2017, 33, 13590-13597.  | 1.6  | 10        |
| 59 | Directing block copolymer self-assembly with permanent magnets: photopatterning microdomain alignment and generating oriented nanopores. <i>Molecular Systems Design and Engineering</i> , 2017, 2, 549-559.    | 1.7  | 19        |
| 60 | Sequential deposition of block copolymer thin films and formation of lamellar heterolattices by electrospray deposition. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 247-253.        | 2.4  | 12        |
| 61 | Dual-Functionality Fullerene and Silver Nanoparticle Antimicrobial Composites via Block Copolymer Templates. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 33583-33591.                              | 4.0  | 24        |
| 62 | Effect of Final Monomer Deposition Steps on Molecular Layer-by-Layer Polyamide Surface Properties. <i>Langmuir</i> , 2016, 32, 10815-10823.   | 1.6  | 15        |
| 63 | Fabrication of Modularly Functionalizable Microcapsules Using Protein-Based Technologies. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 1856-1861.   | 2.6  | 23        |
| 64 | Materials for next-generation desalination and water purification membranes. <i>Nature Reviews Materials</i> , 2016, 1, .   | 23.3 | 1,977     |
| 65 | Guided Evolution of Bulk Metallic Glass Nanostructures: A Platform for Designing 3D Electrocatalytic Surfaces. <i>Advanced Materials</i> , 2016, 28, 1940-1949.   | 11.1 | 71        |
| 66 | Isomeric Effect Enabled Thermally Driven Self-Assembly of Hydroxystyrene-Based Block Copolymers. <i>ACS Macro Letters</i> , 2016, 5, 833-838.   | 2.3  | 23        |
| 67 | Thin Polymer Films with Continuous Vertically Aligned 1 nm Pores Fabricated by Soft Confinement. <i>ACS Nano</i> , 2016, 10, 150-158.   | 7.3  | 92        |
| 68 | Electrocatalysts: Guided Evolution of Bulk Metallic Glass Nanostructures: A Platform for Designing 3D Electrocatalytic Surfaces ( <i>Adv. Mater.</i> 10/2016). <i>Advanced Materials</i> , 2016, 28, 1902-1902. | 11.1 | 0         |
| 69 | Strong Orientational Coupling of Block Copolymer Microdomains to Smectic Layering Revealed by Magnetic Field Alignment. <i>ACS Macro Letters</i> , 2016, 5, 292-296.  | 2.3  | 15        |
| 70 | Rapid fabrication of ZnO nanorod arrays with controlled spacing by micelle-templated solvothermal growth. <i>Nanoscale</i> , 2016, 8, 149-156.  | 2.8  | 4         |
| 71 | Rheology of cellulose nanofibrils in the presence of surfactants. <i>Soft Matter</i> , 2016, 12, 157-164.   | 1.2  | 93        |
| 72 | Continuous and patterned deposition of functional block copolymer thin films using electrospray. <i>MRS Communications</i> , 2015, 5, 235-242.  | 0.8  | 8         |

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|----|---|------|-----------|
| 73 | Magnetic Alignment of Block Copolymer Microdomains by Intrinsic Chain Anisotropy. <i>Physical Review Letters</i> , 2015, 115, 258302.   | 2.9  | 51        |
| 74 | Multiscale patterning of a metallic glass using sacrificial imprint lithography. <i>Microsystems and Nanoengineering</i> , 2015, 1, .   | 3.4  | 16        |
| 75 | Physical Continuity and Vertical Alignment of Block Copolymer Domains by Kinetically Controlled Electrospray Deposition. <i>Macromolecular Rapid Communications</i> , 2015, 36, 1290-1296.              | 2.0  | 10        |
| 76 | Nanoimprinting Sub-100 nm Features in a Photovoltaic Nanocomposite using Durable Bulk Metallic Glass Molds. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 3456-3461.                         | 4.0  | 15        |
| 77 | Shear-accelerated crystallization in a supercooled atomic liquid. <i>Physical Review E</i> , 2015, 91, 020301.  | 0.8  | 28        |
| 78 | Elements Provide a Clue: Nanoscale Characterization of Thin-Film Composite Polyamide Membranes. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 16917-16922.                                   | 4.0  | 50        |
| 79 | Experimental Evidence for Proposed Transformation Pathway from the Inverse Hexagonal to Inverse Diamond Cubic Phase from Oriented Lipid Samples. <i>Langmuir</i> , 2015, 31, 7707-7711.                 | 1.6  | 10        |
| 80 | Engineering flat sheet microporous PVDF films for membrane distillation. <i>Journal of Membrane Science</i> , 2015, 492, 355-363.   | 4.1  | 118       |
| 81 | Soft microcapsules with highly plastic shells formed by interfacial polyelectrolyte-nanoparticle complexation. <i>Soft Matter</i> , 2015, 11, 7478-7482.  | 1.2  | 30        |
| 82 | Structural Diversity of Arthropod Biophotonic Nanostructures Spans Amphiphilic Phase-Space. <i>Nano Letters</i> , 2015, 15, 3735-3742.  | 4.5  | 80        |
| 83 | Selectivity and Mass Transfer Limitations in Pressure-Retarded Osmosis at High Concentrations and Increased Operating Pressures. <i>Environmental Science &amp; Technology</i> , 2015, 49, 12551-12559. | 4.6  | 46        |
| 84 | Production of amorphous nanoparticles by supersonic spray-drying with a microfluidic nebulator. <i>Science</i> , 2015, 349, 956-960.  | 6.0  | 110       |
| 85 | Nanoscale size effects in crystallization of metallic glass nanorods. <i>Nature Communications</i> , 2015, 6, 8157.   | 5.8  | 65        |
| 86 | Phase Behavior of Polylactide-Based Liquid Crystalline Brushlike Block Copolymers. <i>Macromolecules</i> , 2015, 48, 8315-8322.   | 2.2  | 36        |
| 87 | Mesenchymal stromal cells form vascular tubes when placed in fibrin sealant and accelerate wound healing in vivo. <i>Biomaterials</i> , 2015, 40, 61-71.  | 5.7  | 43        |
| 88 | Aligned Nanostructured Polymers by Magnetic-Field-Directed Self-Assembly of a Polymerizable Lyotropic Mesophase. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 19710-19717.                  | 4.0  | 35        |
| 89 | Thermally Switchable Aligned Nanopores by Magnetic-Field Directed Self-Assembly of Block Copolymers. <i>Advanced Materials</i> , 2014, 26, 5148-5154.   | 11.1 | 66        |
| 90 | Scalable High-Fidelity Growth of Semiconductor Nanorod Arrays with Controlled Geometry for Photovoltaic Devices Using Block Copolymers. <i>Small</i> , 2014, 10, 4304-4309.                             | 5.2  | 10        |

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|-----|--|-----|-----------|
| 91  | Molecular Design of Liquid Crystalline Brush-Like Block Copolymers for Magnetic Field Directed Self-Assembly: A Platform for Functional Materials. ACS Macro Letters, 2014, 3, 462-466.                        | 2.3 | 59        |
| 92  | Scalable Fabrication of Polymer Membranes with Vertically Aligned 1 nm Pores by Magnetic Field Directed Self-Assembly. ACS Nano, 2014, 8, 11977-11986.   | 7.3 | 183       |
| 93  | Role of HF in Oxygen Removal from Carbon Nanotubes: Implications for High Performance Carbon Electronics. Nano Letters, 2014, 14, 6179-6184.   | 4.5 | 32        |
| 94  | Single-step microfluidic fabrication of soft monodisperse polyelectrolyte microcapsules by interfacial complexation. Lab on A Chip, 2014, 14, 3494-3497.   | 3.1 | 65        |
| 95  | Directed self-assembly of block copolymers: a tutorial review of strategies for enabling nanotechnology with soft matter. Soft Matter, 2014, 10, 3867.   | 1.2 | 343       |
| 96  | Poly(ethylenimine)-Based Polymer Blends as Single-Ion Lithium Conductors. Macromolecules, 2014, 47, 3401-3408.   | 2.2 | 70        |
| 97  | Morphology Development in Thin Films of a Lamellar Block Copolymer Deposited by Electrospray. Macromolecules, 2014, 47, 5703-5710.   | 2.2 | 29        |
| 98  | Rational Design of a Block Copolymer with a High Interaction Parameter. Macromolecules, 2014, 47, 6687-6696.   | 2.2 | 59        |
| 99  | Omniphobic Membrane for Robust Membrane Distillation. Environmental Science and Technology Letters, 2014, 1, 443-447.  | 3.9 | 288       |
| 100 | Viscoelasticity of a colloidal gel during dynamical arrest: Evolution through the critical gel and comparison with a soft colloidal glass. Journal of Rheology, 2014, 58, 1557-1579.                           | 1.3 | 38        |
| 101 | Hybrid Pressure Retarded Osmosis Membrane Distillation System for Power Generation from Low-Grade Heat: Thermodynamic Analysis and Energy Efficiency. Environmental Science & Technology, 2014, 48, 5306-5313. | 4.6 | 129       |
| 102 | Domain Orientation in Bulk Block Copolymers. , 2014, , 1-10.   |     | 0         |
| 103 | Large area vertical alignment of ZnO nanowires in semiconducting polymer thin films directed by magnetic fields. Nanoscale, 2013, 5, 10511.  | 2.8 | 22        |
| 104 | Role of interparticle attraction in the yielding response of microgel suspensions. Soft Matter, 2013, 9, 5492.   | 1.2 | 95        |
| 105 | Continuous Equilibrated Growth of Ordered Block Copolymer Thin Films by Electrospray Deposition. ACS Nano, 2013, 7, 2960-2970.   | 7.3 | 51        |
| 106 | Monoliths of Semiconducting Block Copolymers by Magnetic Alignment. ACS Nano, 2013, 7, 5514-5521.  | 7.3 | 56        |
| 107 | Hierarchically Self-Assembled Photonic Materials from Liquid Crystalline Random Brush Copolymers. Macromolecules, 2013, 46, 4558-4566.   | 2.2 | 31        |
| 108 | Size-dependent viscosity in the super-cooled liquid state of a bulk metallic glass. Applied Physics Letters, 2013, 102, 221901.  | 1.5 | 29        |

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|-----|---|------|-----------|
| 109 | Understanding anisotropic transport in self-assembled membranes and maximizing ionic conductivity by microstructure alignment. <i>Soft Matter</i> , 2013, 9, 7106.  | 1.2  | 44        |
| 110 | Finite size effects in the crystallization of a bulk metallic glass. <i>Applied Physics Letters</i> , 2013, 103, .  | 1.5  | 14        |
| 111 | Order-Disorder Transition and Alignment Dynamics of a Block Copolymer Under High Magnetic Fields by <i>In Situ</i> X-Ray Scattering. <i>Physical Review Letters</i> , 2013, 110, 078301.  | 2.9  | 67        |
| 112 | Magnetic Field Alignment of a Diblock Copolymer Using a Supramolecular Route. <i>ACS Macro Letters</i> , 2012, 1, 184-189.  | 2.3  | 59        |
| 113 | Stable Sequestration of Single-Walled Carbon Nanotubes in Self-Assembled Aqueous Nanopores. <i>Journal of the American Chemical Society</i> , 2012, 134, 3950-3953.   | 6.6  | 14        |
| 114 | Cholesteric mesophase in side-chain liquid crystalline polymers: influence of mesogen interdigitation and motional decoupling. <i>Soft Matter</i> , 2012, 8, 3185.  | 1.2  | 29        |
| 115 | Synthesis and suspension rheology of titania nanoparticles grafted with zwitterionic polymer brushes. <i>Journal of Colloid and Interface Science</i> , 2012, 386, 135-140.   | 5.0  | 6         |
| 116 | Magnetic field alignment of block copolymers and polymer nanocomposites: Scalable microstructure control in functional soft materials. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012, 50, 2-8.                                      | 2.4  | 107       |
| 117 | Directed Self-Assembly of Hybrid Oxide/Polymer Core/Shell Nanowires with Transport Optimized Morphology for Photovoltaics. <i>Advanced Materials</i> , 2012, 24, 82-87.   | 11.1 | 37        |
| 118 | Antifouling Ultrafiltration Membranes via Post-Fabrication Grafting of Biocidal Nanomaterials. <i>ACS Applied Materials &amp; Interfaces</i> , 2011, 3, 2861-2868.  | 4.0  | 268       |
| 119 | Tailoring Crystallization Behavior of PEO-Based Liquid Crystalline Block Copolymers through Variation in Liquid Crystalline Content. <i>Macromolecules</i> , 2011, 44, 3924-3934.   | 2.2  | 54        |
| 120 | Side-Chain Liquid Crystalline Polymer Networks: Exploiting Nanoscale Smectic Polymorphism To Design Shape-Memory Polymers. <i>ACS Nano</i> , 2011, 5, 3085-3095.  | 7.3  | 75        |
| 121 | Lyotropic Self-Assembly of High-Aspect-Ratio Semiconductor Nanowires of Single-Crystal ZnO. <i>Langmuir</i> , 2011, 27, 11616-11621.  | 1.6  | 28        |
| 122 | Liquid Crystalline Order and Magnetocrystalline Anisotropy in Magnetically Doped Semiconducting ZnO Nanowires. <i>ACS Nano</i> , 2011, 5, 8357-8364.  | 7.3  | 38        |
| 123 | Structure, function, and self-assembly of single network gyroid ( $4 \times 1 \times 32$ ) photonic crystals in butterfly wing scales. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 11676-11681. | 3.3  | 428       |
| 124 | Stimuli-Responsive Smart Gels Realized via Modular Protein Design. <i>Journal of the American Chemical Society</i> , 2010, 132, 14024-14026.  | 6.6  | 105       |
| 125 | Time-resolved viscoelastic properties during structural arrest and aging of a colloidal glass. <i>Physical Review E</i> , 2010, 82, 031404.   | 0.8  | 47        |
| 126 | Alignment of Self-Assembled Structures in Block Copolymer Films by Solvent Vapor Permeation. <i>Macromolecules</i> , 2010, 43, 3132-3135.   | 2.2  | 19        |



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|-----|---|-----|-----------|
| 127 | Lyotropic Hexagonal Ordering in Aqueous Media by Conjugated Hairy-Rod Supramolecules. <i>Macromolecules</i> , 2010, 43, 7549-7555.  | 2.2 | 25        |
| 128 | Smectic Demixing in the Phase Behavior and Self-Assembly of a Hydrogen-Bonded Polymer with Mesogenic Side Chains. <i>Macromolecules</i> , 2010, 43, 6646-6654.  | 2.2 | 31        |
| 129 | Facile Alignment of Amorphous Poly(ethylene oxide) Microdomains in a Liquid Crystalline Block Copolymer Using Magnetic Fields: Toward Ordered Electrolyte Membranes. <i>Macromolecules</i> , 2010, 43, 3286-3293. | 2.2 | 79        |
| 130 | Controlled Alignment of Lamellar Lyotropic Mesophases by Rotation in a Magnetic Field. <i>Langmuir</i> , 2010, 26, 8737-8742.   | 1.6 | 25        |
| 131 | Physical aging and relaxation of residual stresses in a colloidal glass following flow cessation. <i>Journal of Rheology</i> , 2010, 54, 943-958.   | 1.3 | 40        |
| 132 | Anisotropic Ionic Conductivity in Block Copolymer Membranes by Magnetic Field Alignment. <i>Journal of the American Chemical Society</i> , 2010, 132, 17516-17522.  | 6.6 | 192       |
| 133 | Nanocomposites of Vertically Aligned Single-Walled Carbon Nanotubes by Magnetic Alignment and Polymerization of a Lyotropic Precursor. <i>ACS Nano</i> , 2010, 4, 6651-6658.                                      | 7.3 | 86        |
| 134 | Dynamics of internal stresses and scaling of strain recovery in an aging colloidal gel. <i>Physical Review E</i> , 2009, 80, 010404.  | 0.8 | 41        |
| 135 | New insights on fumed colloidal rheology—shear thickening and vorticity-aligned structures in flocculating dispersions. <i>Rheologica Acta</i> , 2009, 48, 871-881.   | 1.1 | 77        |
| 136 | Non-degenerate magnetic alignment of self-assembled mesophases. <i>Soft Matter</i> , 2009, 5, 3417.   | 1.2 | 19        |
| 137 | Dynamics of Transient Vorticity-Aligned Structures and Internal Stresses in Shear Thickening Colloidal Gels. <i>AIP Conference Proceedings</i> , 2008, , .  | 0.3 | 1         |
| 138 | Highly anisotropic vorticity aligned structures in a shear thickening attractive colloidal system. <i>Soft Matter</i> , 2008, 4, 1388.  | 1.2 | 65        |
| 139 | Shear thickening and scaling of the elastic modulus in a fractal colloidal system with attractive interactions. <i>Physical Review E</i> , 2008, 77, 060402.  | 0.8 | 84        |
| 140 | Supramolecular Microphase Separation in a Hydrogen-Bonded Liquid Crystalline Comb Copolymer in the Melt State. <i>Macromolecules</i> , 2006, 39, 3114-3117.   | 2.2 | 33        |
| 141 | Alignment of Self-Assembled Hierarchical Microstructure in Liquid Crystalline Diblock Copolymers Using High Magnetic Fields. <i>Macromolecules</i> , 2004, 37, 9903-9908.   | 2.2 | 128       |
| 142 | Transverse Cylindrical Microdomain Orientation in an LC Diblock Copolymer under Oscillatory Shear. <i>Macromolecules</i> , 1999, 32, 7703-7706.   | 2.2 | 57        |