

Sitaraman Krishnan

List of Publications by Year in descending order

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62
papers

3,235
citations

201674

27
h-index

149698

56
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69
all docs

69
docs citations

69
times ranked

3874
citing authors

#	ARTICLE	IF	CITATIONS
1	Advances in polymers for anti-biofouling surfaces. Journal of Materials Chemistry, 2008, 18, 3405.	6.7	741
2	Anti-Biofouling Properties of Comblike Block Copolymers with Amphiphilic Side Chains. Langmuir, 2006, 22, 5075-5086.	3.5	331
3	Comparison of the Fouling Release Properties of Hydrophobic Fluorinated and Hydrophilic PEGylated Block Copolymer Surfaces: A Attachment Strength of the Diatom <i>Navicula</i> and the Green Alga <i>Ulva</i> . Biomacromolecules, 2006, 7, 1449-1462.	5.4	261
4	ABC Triblock Surface Active Block Copolymer with Grafted Ethoxylated Fluoroalkyl Amphiphilic Side Chains for Marine Antifouling/Fouling-Release Applications. Langmuir, 2009, 25, 12266-12274.	3.5	141
5	Patterned Biofunctional Poly(acrylic acid) Brushes on Silicon Surfaces. Biomacromolecules, 2007, 8, 3082-3092.	5.4	140
6	Surfaces of Fluorinated Pyridinium Block Copolymers with Enhanced Antibacterial Activity. Langmuir, 2006, 22, 11255-11266.	3.5	121
7	Settlement of <i>Ulva</i> Zoospores on Patterned Fluorinated and PEGylated Monolayer Surfaces. Langmuir, 2008, 24, 503-510.	3.5	121
8	PEGylated Imidazolium Ionic Liquid Electrolytes: Thermophysical and Electrochemical Properties. Chemistry of Materials, 2010, 22, 6347-6360.	6.7	94
9	Protein adsorption resistance of anti-biofouling block copolymers containing amphiphilic side chains. Soft Matter, 2010, 6, 3237.	2.7	77
10	Probing the Ordering of Semiconducting Fluorene ⁺ Thiophene Copolymer Surfaces on Rubbed Polyimide Substrates by Near-Edge X-ray Absorption Fine Structure. Macromolecules, 2006, 39, 2225-2231.	4.8	66
11	Self-assembled polysaccharide nanostructures for controlled-release applications. Nanotechnology Reviews, 2014, 3, .	5.8	66
12	Carboxybetaine, sulfobetaine, and cationic block copolymer coatings: A comparison of the surface properties and antibiofouling behavior. Journal of Applied Polymer Science, 2012, 124, 2154-2170.	2.6	65
13	Role of ionic strength in chemical mechanical polishing of silicon carbide using silica slurries. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 445, 119-127.	4.7	57
14	Surface Organization, Light-Driven Surface Changes, and Stability of Semifluorinated Azobenzene Polymers. Langmuir, 2007, 23, 5110-5119.	3.5	55
15	Surface engineering of styrene/PEGylated α -fluoroalkyl styrene block copolymer thin films. Journal of Polymer Science Part A, 2009, 47, 267-284.	2.3	52
16	Fluorinated polymers: liquid crystalline properties and applications in lithography. Chemical Record, 2004, 4, 315-330.	5.8	49
17	Antimicrobial Behavior of Semifluorinated-Quaternized Triblock Copolymers against Airborne and Marine Microorganisms. ACS Applied Materials & Interfaces, 2010, 2, 703-711.	8.0	49
18	NEXAFS Depth Profiling of Surface Segregation in Block Copolymer Thin Films. Macromolecules, 2010, 43, 4733-4743.	4.8	45

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19	Influence of Chain Transfer Agent on the Cross-Linking of Poly(n-butyl methacrylate-co-N-methylol) Tj ETQq1 1 0.784314 rgBT /Overlock	4.8	44
20	Surface Induced Tilt Propagation in Thin Films of Semifluorinated Liquid Crystalline Side Chain Block Copolymers. <i>Macromolecules</i> , 2007, 40, 81-89.	4.8	43
21	Polymer Microspheres Prepared by Water-Borne Thiol-Ene Suspension Photopolymerization. <i>ACS Macro Letters</i> , 2012, 1, 1134-1137.	4.8	42
22	Thermophysical Properties and Proton Transport Mechanisms of Trialkylammonium and 1-Alkyl-1H-imidazol-3-ium Protic Ionic Liquids. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 14084-14098.	3.7	38
23	New poly(dimethylsiloxane)/poly(perfluorooctylethyl acrylate) block copolymers: structure and order across multiple length scales in thin films. <i>Journal of Materials Chemistry</i> , 2011, 21, 15357.	6.7	33
24	Structure-property relationships in transport and thermodynamic properties of imidazolium bistriflamide ionic liquids for CO ₂ capture. <i>Chemical Engineering Journal</i> , 2014, 250, 377-389.	12.7	33
25	Effect of Surfactant Concentration on Particle Nucleation in Emulsion Polymerization of n-Butyl Methacrylate. <i>Macromolecules</i> , 2003, 36, 3152-3159.	4.8	30
26	Ionic liquids with fluorinated block-oligomer tails: Influence of self-assembly on transport properties. <i>Journal of Materials Chemistry</i> , 2011, 21, 19275.	6.7	30
27	Fundamental Investigation of Chemical Mechanical Polishing of GaAs in Silica Dispersions: Material Removal and Arsenic Trihydride Formation Pathways. <i>ECS Journal of Solid State Science and Technology</i> , 2013, 2, P432-P439.	1.8	29
28	Radical Mediated Thiol-Ene Emulsion Polymerizations. <i>Macromolecules</i> , 2017, 50, 775-783.	4.8	26
29	Nanomechanical properties of poly(para-phenylene vinylene) determined using quasi-static and dynamic nanoindentation. <i>Polymer Testing</i> , 2014, 37, 86-93.	4.8	25
30	Role of polycation adsorption in poly-Si, SiO ₂ and Si ₃ N ₄ removal during chemical mechanical polishing: Effect of polishing pad surface chemistry. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011, 388, 21-28.	4.7	22
31	Asymmetric and Symmetric Redox Flow Batteries for Energy-Efficient, High-Recovery Water Desalination. <i>Environmental Science & Technology</i> , 2022, 56, 4477-4488.	10.0	19
32	Elevated temperature nanoindentation characterization of poly(para-phenylene vinylene) conjugated polymer films. <i>Polymer Testing</i> , 2015, 41, 17-25.	4.8	18
33	The effects of initial crack length on fracture characterization of rubbers using the J-Integral approach. <i>Polymer Testing</i> , 2019, 73, 327-337.	4.8	18
34	Simulated Dilatometry and Static Deformation Prediction of Glass Transition and Mechanical Properties of Polyacetylene and Poly(para-phenylene vinylene). <i>Macromolecular Theory and Simulations</i> , 2016, 25, 238-253.	1.4	16
35	Mapping electrospray modes and droplet size distributions for chitosan solutions in unentangled and entangled concentration regimes. <i>Advanced Powder Technology</i> , 2018, 29, 3007-3021.	4.1	16
36	Continuous Solar Desalination of Brackish Water via a Monolithically Integrated Redox Flow Device. <i>ACS ES&T Engineering</i> , 2021, 1, 1678-1687.	7.6	16

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37	Use of Multifunctional Carboxylic Acids and Hydrogen Peroxide To Improve Surface Quality and Minimize Phosphine Evolution During Chemical Mechanical Polishing of Indium Phosphide Surfaces. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 10664-10672.	3.7	15
38	Interfacial Characteristics of a PEGylated Imidazolium Bistriflamide Ionic Liquid Electrolyte at a Lithium Ion Battery Cathode of LiMn_2O_4 . <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 2075-2084.	8.0	14
39	Simultaneous electronic and ionic conduction in ionic liquid imbibed polyacetylene-like conjugated polymer films. <i>RSC Advances</i> , 2015, 5, 88425-88435.	3.6	13
40	Controlled Release of Glucose from Orally Delivered Temperature- and pH-Responsive Polysaccharide Microparticle Dispersions. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 21056-21069.	3.7	13
41	Agitation Effects in Emulsion Copolymerization of <i>n</i> -Butyl Methacrylate and <i>N</i> -Methylol Acrylamide. <i>Polymer-Plastics Technology and Engineering</i> , 2003, 11, 335-357.	0.7	11
42	Glass transition, viscosity, and conductivity correlations in solutions of lithium salts in PEGylated imidazolium ionic liquids. <i>Journal of Molecular Liquids</i> , 2014, 198, 398-408.	4.9	11
43	Microporous Graphite Composites of Tailorable Porosity, Surface Wettability, and Water Permeability for Fuel Cell Bipolar Plates. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 10203-10216.	3.7	11
44	Effects of Agitation on Oxygen Inhibition, Particle Nucleation, Reaction Rates, and Molecular Weights in Emulsion Polymerization of <i>n</i> -Butyl Methacrylate. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 6331-6342.	3.7	10
45	Thermophysical and transport properties of blends of an ether-derivatized imidazolium ionic liquid and a Li^+ -based solvate ionic liquid. <i>Journal of Materials Science</i> , 2017, 52, 3719-3740.	3.7	10
46	Molecular Simulations and Experimental Characterization of Fluorinated Nitrile Butadiene Elastomers with Low H_2S Permeability. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 14823-14838.	3.7	10
47	Kinetics of nutrient change and color retention during low-temperature microwave-assisted drying of bitter melon (<i>Momordica charantia</i> L.). <i>Journal of Food Processing and Preservation</i> , 2019, 43, e14279.	2.0	10
48	Enhanced elastomer toughness and fracture properties imparted by chemically reactive flat nanoparticles. <i>Polymer Testing</i> , 2019, 78, 105932.	4.8	9
49	Lithium coordination and diffusion coefficients of PEGylated ionic liquid and lithium salt blends: A molecular dynamics simulation study. <i>Journal of Molecular Liquids</i> , 2021, 331, 115694.	4.9	9
50	Relative Importance of the Effects of Seed and Feed Stage Agitations on Latex Properties in Semibatch Emulsion Copolymerization of <i>n</i> -Butyl Methacrylate and <i>N</i> -Methylol Acrylamide. <i>Polymer-Plastics Technology and Engineering</i> , 2003, 11, 359-378.	0.7	8
51	Thermogravimetric study of the kinetics of formation of poly(<i>para</i> -phenylene vinylene) by thermal conversion of a sulfonium precursor. <i>Polymer Testing</i> , 2014, 37, 170-178.	4.8	8
52	Biofilm Formation on Medical Devices and Infection: Preventive Approaches. , 2015, , 93-108.		7
53	Ultracentrifugation Method to Measure Water-Soluble Monomer Incorporation in Latex. <i>Colloid and Polymer Science</i> , 2005, 283, 836-844.	2.1	3
54	Polyetheretherketone, hexagonal boron nitride, and tungsten carbide cobalt chromium composite coatings: Mechanical and tribological properties. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50504.	2.6	3

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55	Inspection, Characterization and Classification of Defects for Improved CMP of III-V Materials. ECS Journal of Solid State Science and Technology, 2015, 4, P5073-P5077.	1.8	2
56	Experimental Analysis and Modeling of Closed-Loop Redox Flow Desalination. Journal of the Electrochemical Society, 2022, 169, 063521.	2.9	2
57	Cover Image, Volume 138, Issue 21. Journal of Applied Polymer Science, 2021, 138, 50670.	2.6	1
58	X-Ray Scattering Investigation of Carbon-Nanotube-Based Polymer Composites. , 2021, , 1-37.		1
59	Preface to the Mohamed El-Aasser Festschrift. Industrial & Engineering Chemistry Research, 2019, 58, 20859-20862.	3.7	0
60	Solar Desalination Using Dye-Sensitized Photoanode in a Redox Flow Desalination Cell. ECS Meeting Abstracts, 2020, MA2020-01, 2834-2834.	0.0	0
61	The Use of an Iron-Based Redox Couple for Brackish Water Desalination. ECS Meeting Abstracts, 2021, MA2021-02, 771-771.	0.0	0
62	Design and Characterization of Porous Graphite Bipolar Plates for Water Management in PEM Fuel Cells. ECS Meeting Abstracts, 2020, MA2020-02, 2202-2202.	0.0	0