Anatoli Serghei

List of Publications by Year
in descending order

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86	3,698	136885	133188
papers	citations	32 h-index	59 g-index

89	89	89	3699
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Reprocessing and Recycling of Highly Cross-Linked Ion-Conducting Networks through Transalkylation Exchanges of Câ€“N Bonds. Journal of the American Chemical Society, 2015, 137, 6078-6083.	6.6	407
2	Electrode polarization and charge transport at solid interfaces. Physical Review B, 2009, 80, .	1.1	233
3	Electrode polarization vs. Maxwell-Wagner-Sillars interfacial polarization in dielectric spectra of materials: Characteristic frequencies and scaling laws. Journal of Chemical Physics, 2015, 142, 194703.	1.2	224
4	Glassy Dynamics and Glass Transition in Nanometric Thin Layers of Polystyrene. Macromolecules, 2010, 43, 9937-9944.	2.2	203
5	Confinement Effects on Crystallization and Curie Transitions of Poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 582 Td (f	2.2	147
6	Glassy Dynamics in Thin Polymer Layers Having a Free Upper Interface. Macromolecules, 2008, 41, 3636-3639.	2.2	141
7	1,2,3-Triazolium-Based Poly(ionic liquid)s with Enhanced Ion Conducting Properties Obtained through a Click Chemistry Polyaddition Strategy. Chemistry of Materials, 2014, 26, 1720-1726.	3.2	121
8	Electrical conductivity and translational diffusion in the 1-butyl-3-methylimidazolium tetrafluoroborate ionic liquid. Journal of Chemical Physics, 2008, 128, 214509.	1.2	115
9	Glassy Dynamics and Glass Transition in Thin Polymer Layers of PMMA Deposited on Different Substrates. Macromolecules, 2010, 43, 7729-7733.	2.2	94
10	Universal scaling of charge transport in glass-forming ionic liquids. Physical Chemistry Chemical Physics, 2009, 11, 913-916.	1.3	91
11	Metastable States of Glassy Dynamics, Possibly Mimicking Confinementâ€Effects in Thin Polymer Films. Macromolecular Chemistry and Physics, 2008, 209, 810-817.	1.1	85
12	Mainâ€chain 1,2,3â€triazoliumâ€based poly(ionic liquid)s issued from AB + AB click chemistry polyaddition. Journal of Polymer Science Part A, 2013, 51, 34-38.	2.5	79
13	Confinement Effects on the Relaxation Time Distribution of the Dynamic Glass Transition in Ultrathin Polymer Films. Macromolecules, 2006, 39, 9385-9387.	2.2	75
14	Enhanced Ionic Conductivity of a 1,2,3-Triazolium-Based Poly(siloxane ionic liquid) Homopolymer. ACS Macro Letters, 2016, 5, 1283-1286.	2.3	70
15	Polypropylene/carbon nanotubes composite materials with enhanced electromagnetic interference shielding performance: Properties and modeling. Composites Part B: Engineering, 2020, 189, 107866.	5.9	65
16	Charge transport and glassy dynamics in imidazole-based liquids. Journal of Chemical Physics, 2008, 129, 234511.	1.2	59
17	The glass transition of thin polymer films in relation to the interfacial dynamics. Journal of Chemical Physics, 2009, 131, 154904.	1.2	58
18	Electrical and thermal properties of polyethylene/silver nanoparticle composites. Polymer Composites, 2013, 34, 778-786.	2.3	55

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19	Confinement-Induced Relaxation Process in Thin Films of Cis-Polyisoprene. Physical Review Letters, 2003, 91, 165702.	2.9	54
20	Fluorinated Poly(ionic liquid) Diblock Copolymers Obtained by Cobalt-Mediated Radical Polymerization-Induced Self-Assembly. ACS Macro Letters, 2017, 6, 121-126.	2.3	54
21	Enhancing Properties of Anionic Poly(ionic liquid)s with 1,2,3-Triazolium Counter Cations. ACS Macro Letters, 2014, 3, 658-662.	2.3	52
22	Poly(vinyl ester 1,2,3-triazolium)s: a new member of the poly(ionic liquid)s family. Chemical Communications, 2015, 51, 3332-3335.	2.2	47
23	Accelerated Solventâ€•and Catalystâ€Free Synthesis of 1,2,3â€Triazoliumâ€Based Poly(Ionic Liquid)s. Macromolecular Rapid Communications, 2014, 35, 794-800.	2.0	46
24	Unconventional poly(ionic liquid)s combining motionless main chain 1,2,3-triazolium cations and high ionic conductivity. Polymer Chemistry, 2015, 6, 4299-4308.	1.9	44
25	Pattern formation in thin polystyrene films induced by an enhanced mobility in ambient air. Physical Review E, 2005, 71, 061801.	0.8	42
26	Triethylene glycol-based poly(1,2,3-triazolium acrylate)s with enhanced ionic conductivity. Polymer Chemistry, 2015, 6, 3521-3528.	1.9	40
27	Broadband dielectric studies on the interfacial dynamics enabled by use of nanostructured electrodes. Review of Scientific Instruments, 2008, 79, 026101.	0.6	38
28	1,2,3â€Triazoliumâ€Based Poly(ionic liquid)s Obtained Through Click Chemistry Polyaddition. Macromolecular Chemistry and Physics, 2014, 215, 2229-2236.	1.1	38
29	Segmental dynamics of polymers during capillary flow into nanopores. Soft Matter, 2010, 6, 1111.	1.2	37
30	1,2,3-Triazolium-based poly(acrylate ionic liquid)s. Polymer, 2014, 55, 3314-3319.	1.8	37
31	Highly cross-linked polyether-based 1,2,3-triazolium ion conducting membranes with enhanced gas separation properties. European Polymer Journal, 2016, 84, 65-76.	2.6	35
32	Fully Biosourced Materials from Combination of Choline Chloride-Based Deep Eutectic Solvents and Guar Gum. ACS Sustainable Chemistry and Engineering, 2019, 7, 16747-16756.	3.2	34
33	The impact of imidazolium ionic liquids on the properties of nitrile rubber composites. European Polymer Journal, 2014, 53, 139-146.	2.6	32
34	Density Fluctuations and Phase Transitions of Ferroelectric Polymer Nanowires. Small, 2010, 6, 1822-1826.	5.2	31
35	1,2,3â€Triazoliumâ€Based Epoxyâ€“Amine Networks: Ionâ€Conducting Polymer Electrolytes. Macromolecular Rapid Communications, 2016, 37, 1168-1174.	2.0	31
36	Molecular dynamics of hyperbranched polyesters in the confinement of thin films. European Physical Journal E, 2005, 17, 199-202.	0.7	30

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37	Challenges in Glassy Dynamics of Polymers. Macromolecular Chemistry and Physics, 2008, 209, 1415-1423.	1.1	30
38	The universal usefulness of stearic acid as surface modifier: applications to the polymer formulations and composite processing. Journal of Industrial and Engineering Chemistry, 2021, 96, 1-33.	2.9	28
39	Nanofluidics Approach to Separate between Static and Kinetic Nanoconfinement Effects on the Crystallization of Polymers. Nano Letters, 2015, 15, 4311-4316.	4.5	27
40	Effect of imidazolium ionic liquid type on the properties of nitrile rubber composites. Polymer International, 2013, 62, 1575-1582.	1.6	26
41	Universal behavior for electromagnetic interference shielding effectiveness of polymer based composite materials. Composites Science and Technology, 2022, 221, 109351.	3.8	25
42	Polymer bilayers with enhanced dielectric permittivity and low dielectric losses by Maxwellâ€“Wagnerâ€“Sillars interfacial polarization: Characteristic frequencies and scaling laws. Journal of Applied Polymer Science, 2019, 136, 47551.	1.3	24
43	Discrepancies in the characterization of the glass transition in thin films of hyperbranched polyesters. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 3006-3010.	2.4	23
44	Guar gum as biosourced building block to generate highly conductive and elastic ionogels with poly(ionic liquid) and ionic liquid. Carbohydrate Polymers, 2017, 157, 586-595.	5.1	23
45	Expanding the structural variety of poly(1,2,3-triazolium)s obtained by simultaneous 1,3-dipolar Huisgen polyaddition and N-alkylation. Polymer, 2015, 79, 309-315.	1.8	22
46	Cationic and dicationic 1,2,3-triazolium-based poly(ethylene glycol ionic liquid)s. Polymer Chemistry, 2017, 8, 910-917.	1.9	22
47	Broadband dielectric spectroscopy on ultrathin organic layers having one free (upper) interface. Review of Scientific Instruments, 2006, 77, 116108.	0.6	21
48	Probing the effect of anion structure on the physical properties of cationic 1,2,3â€triazoliumâ€based poly(ionic liquid)s. Journal of Polymer Science Part A, 2016, 54, 2191-2199.	2.5	21
49	Interfacial polarization in composite materials with spherical fillers: characteristic frequencies and scaling laws. Colloid and Polymer Science, 2014, 292, 1977-1988.	1.0	20
50	Curie Transitions for Attograms of Ferroelectric Polymers. Nano Letters, 2013, 13, 577-580.	4.5	19
51	Pentadecane functionalized graphite oxide sheets as a tool for the preparation of electrical conductive polyethylene/graphite oxide composites. Polymer, 2014, 55, 22-28.	1.8	19
52	Maxwell-Wagner-Sillars interfacial polarization in dielectric spectra of composite materials: Scaling laws and applications. Journal of Composite Materials, 2022, 56, 3197-3217.	1.2	19
53	Properties of Carboxylated Nitrile Rubber/Hydrotalcite Composites Containing Imidazolium Ionic Liquids. Macromolecular Symposia, 2014, 341, 7-17.	0.4	17
54	Biosourced 1,2,3-triazolium ionic liquids derived from isosorbide. New Journal of Chemistry, 2016, 40, 740-747.	1.4	17

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55	Partially Biosourced Poly(1,2,3-triazolium)-Based Diblock Copolymers Derived from Levulinic Acid. Macromolecules, 2018, 51, 5820-5830.	2.2	17
56	Molecular dynamics in thin films of isotactic poly(methylmethacrylate) â€“ revisited. Journal of Non-Crystalline Solids, 2007, 353, 4330-4333.	1.5	16
57	Two-step formation mechanism of Acetobacter cellulosic biofilm: synthesis of sparse and compact cellulose. Cellulose, 2016, 23, 1087-1100.	2.4	14
58	1,2,3-Triazolium-based linear ionic polyurethanes. Polymer Chemistry, 2017, 8, 5148-5156.	1.9	14
59	Unveiling the Effects of In Situ Layerâ€“Layer Interfacial Reaction in Multilayer Polymer Films via Multilayered Assembly: From Microlayers to Nanolayers. Macromolecular Materials and Engineering, 2020, 305, 2000076.	1.7	12
60	Investigations of Nitrile Rubber Composites Containing Imidazolium Ionic Liquids. Macromolecular Symposia, 2014, 341, 18-25.	0.4	11
61	Study on Weather Aging of Nitrile Rubber Composites Containing Imidazolium Ionic Liquids. Macromolecular Symposia, 2014, 342, 25-34.	0.4	11
62	Mainâ€chain poly(1,2,3â€triazolium hydroxide)s obtained through AA+BB click polyaddition as anion exchange membranes. Polymer International, 2019, 68, 1591-1598.	1.6	11
63	Experimental Protein Molecular Dynamics: Broadband Dielectric Spectroscopy coupled with nanoconfinement. Scientific Reports, 2019, 9, 17988.	1.6	11
64	Voronoi Tessellations in Thin Polymer Blend Films. Macromolecules, 2004, 37, 1691-1692.	2.2	10
65	Chitosan-dithiooxamide-grafted rGO sheets decorated with Au nanoparticles: Synthesis, characterization and properties. European Polymer Journal, 2016, 78, 153-162.	2.6	9
66	Comparison of poly(ethylene glycol)-based networks obtained by cationic ring opening polymerization of neutral and 1,2,3-triazolium diepoxy monomers. Polymer Chemistry, 2020, 11, 1894-1905.	1.9	9
67	In-situ coupled mechanical/electrical investigations of EPDM/CB composite materials: The electrical signature of the mechanical Mullins effect. Composites Science and Technology, 2022, 218, 109144.	3.8	9
68	A 1,2,3-triazolate lithium salt with ionic liquid properties at room temperature. Chemical Communications, 2018, 54, 9035-9038.	2.2	8
69	Chain conformation in thin polymer layers as revealed by simulations of ideal random walks. European Physical Journal E, 2003, 12, 143-146.	0.7	7
70	Synthesis and characterization of Au-immobilized nanoparticles onto cellulose-ethylenediamine-grafted reduced graphite oxide sheets. Materials Chemistry and Physics, 2016, 171, 303-311.	2.0	7
71	Molecular dynamics in thin (grafted) polymer layers. Colloid and Polymer Science, 2004, 282, 946-954.	1.0	6
72	Nanofluidics with phase separated block-copolymers: Glassy dynamics during capillary flow. European Physical Journal: Special Topics, 2010, 189, 95-101.	1.2	6

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73	Imidazolium-based poly(ionic liquid)/ionic liquid solutions: Rheology, structuration and ionic transport properties. Polymer, 2021, 237, 124305.	1.8	6
74	Enhanced electromagnetic interference shielding effectiveness of polypropylene/hybrid metallic fillers composite materials by coalescence-driven guided electrical percolation. Polymer, 2022, 246, 124740.	1.8	6
75	Improving the Ionic Conductivity of Carboxylated Nitrile Rubber/LDH Composites by Adding Imidazolium Bis(trifluoromethylsulfonyl)imide Ionic Liquids. Macromolecular Symposia, 2014, 342, 35-45.	0.4	5
76	Exchange Process in the Dielectric Loss of Molecular and Macromolecular Ionic Conductors in the Interfacial Layers Formed by Electrode Polarization Effects. Journal of Physical Chemistry B, 2019, 123, 8532-8542.	1.2	5
77	Viscoelastic behaviour of highly filled polypropylene with solid and liquid Tin microparticles: influence of the stearic acid additive. Rheologica Acta, 2021, 60, 661-673.	1.1	5
78	In-situ coupled mechanical/electrical investigations on conductive TPU/CB composites: Impact of thermo-mechanically induced structural reorganizations of soft and hard TPU domains on the coupled electro-mechanical properties. Polymer, 2022, 256, 125147.	1.8	5
79	Nanoporous Polycyanurates Created by Chemicallyâ€Induced Phase Separation: Structureâ€Property Relationships. Macromolecular Symposia, 2014, 341, 57-66.	0.4	4
80	Experimental diagnostic of sequence-variant dynamic perturbations revealed by broadband dielectric spectroscopy. Structure, 2021, 29, 1419-1429.e3.	1.6	4
81	Ionic Liquid Driven Enhancement in the Electromagnetic Interference Shielding Effectiveness of poly(methylâ€methacrylate) Based Composite Materials Filled with Hybrid Silverâ€coated Glass Microfibers. Macromolecular Materials and Engineering, 0, , 2100759.	1.7	4
82	Electrical conductivity under shear flow of molten polyethylene filled with carbon nanotubes: Experimental and modeling. Polymer Engineering and Science, 2021, 61, 1129-1138.	1.5	3
83	Analysis of Nanoconfined Protein Dielectric Signals Using Charged Amino Acid Network Models. Australian Journal of Chemistry, 2020, 73, 803.	0.5	3
84	Synthesis and Structure/Properties Correlations of Fluorinated Poly(1,2,3-triazolium)s. Chemistry Africa, 2020, 3, 759-768.	1.2	2
85	Droplet relaxation of molten metals in polypropylene matrix: Measurement of the interfacial tension. Journal of Rheology, 2021, 65, 391-404.	1.3	1
86	A protocol to measure slow protein dynamics of the cholera toxin B pentamers using broadband dielectric spectroscopy. STAR Protocols, 2022, 3, 101561.	0.5	0