Elena Yu Kramarenko

List of Publications by Year
in descending order

84 papers	2,703 citations	147726 31 h-index	197736 49 g-index
86 all docs	86 docs citations	86 times ranked	1704 citing authors

#	Article	IF	Citations
1	New Composite Elastomers with Giant Magnetic Response. Macromolecular Materials and Engineering, 2010, 295, 336-341.	1.7	159
2	Experimental study of the magnetic field enhanced Payne effect in magnetorheological elastomers. Soft Matter, 2014, 10, 8765-8776.	1.2	141
3	Weakly Charged Polyelectrolytes:â€‰ Collapse Induced by Extra Ionization. Macromolecules, 1996, 29, 681-685.	2.2	136
4	Polyelectrolyte/Ionomer behavior in polymer gel collapse. Macromolecular Theory and Simulations, 1994, 3, 45-59.	0.6	113
5	Hysteresis of the viscoelastic properties and the normal force in magnetically and mechanically soft magnetoactive elastomers: Effects of filler composition, strain amplitude and magnetic field. Polymer, 2015, 76, 191-202.	1.8	108
6	Magnetic and viscoelastic response of elastomers with hard magnetic filler. Smart Materials and Structures, 2015, 24, 035002.	1.8	107
7	Strong magnetodielectric effects in magnetorheological elastomers. Soft Matter, 2013, 9, 11318.	1.2	90
8	Collapse of polyelectrolyte networks induced by their interaction with an oppositely charged surfactant. Theory. Die Makromolekulare Chemie Theory and Simulations, 1992, 1, 105-118.	1.0	89
9	Collapse of Polyelectrolyte Macromolecules Revisited. Macromolecules, 1997, 30, 3383-3388.	2.2	85
10	Molecular dynamics simulation study of adsorption of polymer chains with variable degree of rigidity. I. Static properties. Journal of Chemical Physics, 1996, 104, 4806-4813.	1.2	73
11	Effect of a homogeneous magnetic field on the mechanical behavior of soft magnetic elastomers under compression. Polymer Science - Series A, 2006, 48, 138-145.	0.4	67
12	Stoichiometric polyelectrolyte complexes of ionic block copolymers and oppositely charged polyions. Journal of Chemical Physics, 2006, 125, 194902.	1.2	54
13	Photosensitive microgels containing azobenzene surfactants of different charges. Physical Chemistry Chemical Physics, 2017, 19, 108-117.	1.3	52
14	Polyelectrolyte networks as highly sensitive polymers. Polymer Science - Series C, 2006, 48, 1-20.	0.8	51
15	Fractional rheological models of dynamic mechanical behavior of magnetoactive elastomers in magnetic fields. Polymer, 2018, 142, 316-329.	1.8	51
16	Polyelectrolyte Gel Swelling and Conductivity vs Counterion Type, Cross-Linking Density, and Solvent Polarity. Macromolecules, 2016, 49, 6630-6643.	2.2	50
17	pH-Induced Amphiphilicity-Reversing Schizophrenic Aggregation by Alternating Copolymers. Macromolecules, 2019, 52, 8346-8358.	2.2	50
18	Magnetodielectric effect in magnetoactive elastomers: Transient response and hysteresis. Polymer, 2017, 127, 119-128.	1.8	49

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19	A threeâ€state model for counterions in a dilute solution of weakly charged polyelectrolytes. Macromolecular Theory and Simulations, 2000, 9, 249-256.	0.6	43
20	The Influence of Ion Pair Formation on the Phase Behavior of Polyelectrolyte Solutions. Macromolecular Theory and Simulations, 2002, 11, 462.	0.6	43
21	Magnetoactive elastomer based on magnetically hard filler: Synthesis and study of viscoelastic and damping properties. Polymer Science - Series A, 2014, 56, 603-613.	0.4	43
22	Conformational Behavior of a Single Polyelectrolyte Chain with Bulky Counterions. Macromolecules, 2016, 49, 1103-1110.	2.2	40
23	Transient magnetorheological response of magnetoactive elastomers to step and pyramid excitations. Soft Matter, 2016, 12, 2901-2913.	1.2	38
24	A fractional calculus approach to modeling rheological behavior of soft magnetic elastomers. Polymer, 2016, 92, 179-188.	1.8	37
25	Controllable hydrophobicity of magnetoactive elastomer coatings. Journal of Magnetism and Magnetic Materials, 2018, 459, 268-271.	1.0	36
26	Microphase Separation in Complex Coacervate Due to Incompatibility between Polyanion and Polycation. Macromolecules, 2018, 51, 6587-6601.	2.2	36
27	Surface relief of magnetoactive elastomeric films in a homogeneous magnetic field: molecular dynamics simulations. Soft Matter, 2019, 15, 175-189.	1.2	36
28	Magnetorheological response of highly filled magnetoactive elastomers from perspective of mechanical energy density: Fractal aggregates above the nanometer scale?. Physical Review E, 2017, 95, 062501.	0.8	35
29	New Type of Swelling Behavior upon Gel Ionization: Theory vs Experiment. Macromolecules, 2013, 46, 9359-9367.	2.2	34
30	An unprecedented jump in the viscosity of high-generation carbosilane dendrimer melts. Polymer, 2018, 146, 1-5.	1.8	33
31	Dissipative particle dynamics for systems with high density of charges: Implementation of electrostatic interactions. Journal of Chemical Physics, 2016, 145, 174101.	1.2	32
32	Formation of Salt Bonds in Polyampholyte Chains. Macromolecular Theory and Simulations, 2001, 10, 780-788.	0.6	31
33	Viscoelastic Properties of Magnetorheological Elastomers for Damping Applications. Macromolecular Materials and Engineering, 2014, 299, 1116-1125.	1.7	31
34	Giant Extensional Strain of Magnetoactive Elastomeric Cylinders in Uniform Magnetic Fields. Materials, 2020, 13, 3297.	1.3	31
35	Magnetodeformational effect of the magnetoactive elastomer and its possible applications. Journal of Physics: Conference Series, 2013, 412, 012031.	0.3	30
36	Highly Responsive Magnetoactive Elastomers. , 2018, , 221-245.		30

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37	Stoichiometric polyelectrolyte complexes as comb copolymers. Journal of Chemical Physics, 2005, 122, 084902.	1.2	28
38	An interplay of electrostatic and excluded volume interactions in the conformational behavior of a dipolar chain: theory and computer simulations. Soft Matter, 2018, 14, 3232-3235.	1.2	27
39	Micelle formation in a dilute solution of block copolymers with a polyelectrolyte block complexed with oppositely charged linear chains. Journal of Chemical Physics, 2003, 119, 4945-4952.	1.2	26
40	Insight into the Structure of Polybutylcarbosilane Dendrimer Melts via Extensive Molecular Dynamics Simulations. Macromolecules, 2017, 50, 432-445.	2.2	25
41	Communication: Light driven remote control of microgelsâ€™ size in the presence of photosensitive surfactant: Complete phase diagram. Journal of Chemical Physics, 2017, 147, 031101.	1.2	22
42	Magnetoactive elastomer as an element of a magnetic retina fixator. Smart Materials and Structures, 2017, 26, 095054.	1.8	22
43	Development of magnetoactive elastomers for sealing eye retina detachments. Journal of Applied Polymer Science, 2019, 136, 47425.	1.3	22
44	Low-frequency rheology of magnetically controlled elastomers with isotropic structure. Polymer Science - Series A, 2010, 52, 1344-1354.	0.4	21
45	Two regions of microphase separation in ion-containing polymer solutions. Soft Matter, 2017, 13, 6831-6844.	1.2	21
46	Effect of counterion excluded volume on the conformational behavior of polyelectrolyte chains. Soft Matter, 2018, 14, 1474-1481.	1.2	21
47	Tuning the Volume Phase Transition Temperature of Microgels by Light. Advanced Functional Materials, 2022, 32, 2107946.	7.8	21
48	Electrostatically Stabilized Microphase Separation in Blends of Oppositely Charged Polyelectrolytes. Macromolecules, 2019, 52, 7167-7174.	2.2	18
49	Magnetodielectric Response of Soft Magnetoactive Elastomers: Effects of Filler Concentration and Measurement Frequency. International Journal of Molecular Sciences, 2019, 20, 2230.	1.8	18
50	Hybrid Polycarbosilane-Siloxane Dendrimers: Synthesis and Properties. Polymers, 2021, 13, 606.	2.0	17
51	Magnetically Active Silicone Elastomers: Twenty Years of Development. Ineos Open, 2020, 2, 178-184.	0.7	16
52	Effect of formation of ion pairs on the stability of stoichiometric block ionomer complexes. Polymer Science - Series A, 2007, 49, 1053-1063.	0.4	14
53	Field-induced surface deformation of magnetoactive elastomers with anisometric fillers: a single-particle model. Soft Matter, 2019, 15, 9507-9519.	1.2	13
54	Magnetic-field-induced stress in confined magnetoactive elastomers. Soft Matter, 2020, 16, 9047-9058.	1.2	13

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55	Molecular dynamics simulations of single siloxane dendrimers: Molecular structure and intramolecular mobility of terminal groups. Journal of Chemical Physics, 2018, 148, 014902.	1.2	12
56	Modification of carbonyl iron particles by carboxyl-containing polydimethylsiloxanes. Russian Chemical Bulletin, 2018, 67, 1639-1647.	0.4	12
57	Magnetoactive elastomers with controllable radio-absorbing properties. Materials Today Communications, 2019, 21, 100610.	0.9	12
58	A Comparative Study of Intramolecular Mobility of Single Siloxane and Carbosilane Dendrimers via Molecular Dynamics Simulations. Polymers, 2018, 10, 838.	2.0	11
59	Collapse of a polymer gel induced by complex formation with linear polymers. Die Makromolekulare Chemie Theory and Simulations, 1993, 2, 169-177.	1.0	10
60	Effects of generation number, spacer length and temperature on the structure and intramolecular dynamics of siloxane dendrimer melts: molecular dynamics simulations. Soft Matter, 2020, 16, 3792-3805.	1.2	10
61	Microphase Separation Induced by Complexation of Ionicâ˜Non-Ionic Diblock Copolymers with Oppositely Charged Linear Chains. Macromolecules, 2010, 43, 2622-2629.	2.2	8
62	Effect of Counterion Size on the Structure of a Flexible Polyelectrolyte Chain in Low-Polar Solvents. Polymer Science - Series C, 2018, 60, 37-48.	0.8	8
63	Conformational behavior of a semiflexible dipolar chain with a variable relative size of charged groups via molecular dynamics simulations. Soft Matter, 2019, 15, 6073-6085.	1.2	8
64	Unusual Nanostructured Morphologies Enabled by Interpolyelectrolyte Complexation of Polyions Bearing Incompatible Nonionic Segments. Macromolecules, 2020, 53, 10754-10764.	2.2	7
65	Low-Modulus Elastomeric Matrices for Magnetoactive Composites with a High Magnetic Field Response. Polymer Science - Series A, 2020, 62, 383-391.	0.4	7
66	Dielectric Spectroscopy of Hybrid Magnetoactive Elastomers. Polymers, 2021, 13, 2002.	2.0	7
67	Polymerization-Induced Self-Assembly (PISA) Generated Cholesterol-Based Block Copolymer Nano-Objects in a Nonpolar Solvent: Combined Experimental and Simulation Study. Macromolecules, 2022, 55, 1139-1152.	2.2	7
68	Rheological properties of nonfunctional derivatives of hyperbranched polycarbosilanes. Russian Chemical Bulletin, 2015, 64, 2145-2151.	0.4	6
69	Polymer gels with associating side chains and their interaction with surfactants. Journal of Chemical Physics, 2016, 144, 184902.	1.2	6
70	Regulating Tissue-Mimetic Mechanical Properties of Bottlebrush Elastomers by Magnetic Field. ACS Applied Materials & Interfaces, 2021, 13, 38783-38791.	4.0	6
71	Effect of iron particles on dielectric properties of polydimethylsiloxane near crystallization and glass transition temperatures. Polymer Science - Series B, 2006, 48, 267-270.	0.3	5
72	Influence of the geometry on magnetic interactions in a retina fixator based on a magnetoactive elastomer seal. Journal of Physics: Conference Series, 2018, 994, 012002.	0.3	5

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73	Comb macromolecules with attracting functional groups in side chains. Polymer Science - Series A, 2007, 49, 1233-1241.	0.4	4
74	Electrophysical and acoustic properties of magnetic elastomers structured by an external magnetic field. Bulletin of the Russian Academy of Sciences: Physics, 2017, 81, 945-949.	0.1	4
75	Adsorption of Silicon-Containing Dendrimers: Effects of Chemical Composition, Structure, and Generation Number. Polymers, 2021, 13, 552.	2.0	4
76	Two contributions to the dielectric response of polar liquids. Journal of Chemical Physics, 2021, 154, 116101.	1.2	4
77	Effect of the Fraction and Size of Polar Groups on the Formation of Compact Conformations of a Polymer Chain with Variable Stiffness in Low-Polar Media. Polymer Science - Series B, 2019, 61, 704-714.	0.3	2
78	pH-Dependent Structure of Block Copolymer Micelles Featuring a Polyampholyte Corona: A Combined Experimental and Theoretical Approach. Macromolecules, 2021, 54, 1976-1991.	2.2	2
79	Interaction of two polyelectrolyte gels in solution of an oppositely charged surfactant. Polymer Science - Series A, 2007, 49, 1129-1136.	0.4	1
80	AB-Block Copolymer with Moving B Blocks as a Model for Interpolymer Complexes. Macromolecular Theory and Simulations, 2010, 19, 240-248.	0.6	1
81	Conformational transitions and helical structures of a dipolar chain in external electric fields. Soft Matter, 2021, 17, 1376-1387.	1.2	1
82	The Effect of Explicit Polarity on Conformational Behavior of a Single Polyelectrolyte Chain. Physical Chemistry Chemical Physics, 2021, 23, 26296-26305.	1.3	1
83	Tuning the Volume Phase Transition Temperature of Microgels by Light (Adv. Funct. Mater. 2/2022). Advanced Functional Materials, 2022, 32, .	7.8	1
84	Magnetorheological Fluids Based on Star-Shaped and Linear Polydimethylsiloxanes. Polymer Science - Series A, 2021, 63, 296-306.	0.4	0