

Igor Luzinov

List of Publications by Year in descending order

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118
papers

9,595
citations

136950

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122
times ranked

13357
citing authors

#	ARTICLE	IF	CITATIONS
1	Toward the Replacement of Long-Chain Perfluoroalkyl Compounds: Perfluoropolyether-Based Low Surface Energy Grafted Nanocoatings. <i>ACS Applied Polymer Materials</i> , 2022, 4, 980-986.	4.4	1
2	Photolithographic Fabrication of P3HT Based Organic Thin-Film Transistors with High Mobility. <i>ECS Journal of Solid State Science and Technology</i> , 2022, 11, 025008.	1.8	2
3	Mesoscale Modeling of Agglomeration of Molecular Bottlebrushes: Focus on Conformations and Clustering Criteria. <i>Polymers</i> , 2022, 14, 2339.	4.5	4
4	Biomimetic Cellulosomes Assembled on Molecular Brush Scaffolds: Random Complexes vs Enzyme Mixtures. <i>ACS Applied Polymer Materials</i> , 2021, 3, 1840-1853.	4.4	5
5	Perfluoropolyether-based oleophobic additives: Influence of molecular weight distribution on wettability of polyethylene terephthalate films. <i>Journal of Fluorine Chemistry</i> , 2021, 244, 109747.	1.7	4
6	Fabrication of Porous Carbon Films and Their Impact on Carbon/Polypropylene Interfacial Bonding. <i>Journal of Composites Science</i> , 2021, 5, 108.	3.0	4
7	Reliability and Failure Mode in Solid Tantalum Capacitors. <i>ECS Journal of Solid State Science and Technology</i> , 2021, 10, 045007.	1.8	4
8	Towards a Long-Chain Perfluoroalkyl Replacement: Water and Oil Repellent Perfluoropolyether-Based Polyurethane Oligomers. <i>Polymers</i> , 2021, 13, 1128.	4.5	1
9	Depolymerization of polystyrene under ambient conditions. <i>New Journal of Chemistry</i> , 2021, 45, 2935-2938.	2.8	37
10	Zinc oxide: reduced graphene oxide nanocomposite film for heterogeneous photocatalysis. <i>Optical and Quantum Electronics</i> , 2020, 52, 1.	3.3	11
11	Highly Oil-Repellent Thermoplastic Boundaries via Surface Delivery of CF ₃ Groups by Molecular Bottlebrush Additives. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 38626-38637.	8.0	14
12	Adhesion and Stability of Nanocellulose Coatings on Flat Polymer Films and Textiles. <i>Molecules</i> , 2020, 25, 3238.	3.8	19
13	Effect of number of "CF ₃ groups in tails of polyester on surface wettability of coatings: synthesis and characterization of PFPE based polyesters with three -CF ₃ groups in tails. <i>Journal of Polymer Research</i> , 2020, 27, 1.	2.4	3
14	Environmental Stability of Polymer Tantalum Capacitors. <i>ECS Journal of Solid State Science and Technology</i> , 2020, 9, 083005.	1.8	2
15	Towards sensor applications of a polymer/Ag nanoparticle nanocomposite film. <i>RSC Advances</i> , 2019, 9, 8498-8506.	3.6	7
16	Recent advances towards applications of molecular bottlebrushes and their conjugates. <i>Current Opinion in Solid State and Materials Science</i> , 2019, 23, 50-61.	11.5	31
17	Surface modification of polypropylene surgical meshes for improving adhesion with poloxamine hydrogel adhesive. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2019, 107, 1047-1055.	3.4	10
18	Magnetic Submicron Mullite Coatings with Oriented SiC Whiskers. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 11907-11919.	8.0	1

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19	Highly Conductive and Transparent Reduced Graphene Oxide Nanoscale Films via Thermal Conversion of Polymer-Encapsulated Graphene Oxide Sheets. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 3975-3985.	8.0	53
20	En Route to Practicality of the Polymer Grafting Technology: One-Step Interfacial Modification with Amphiphilic Molecular Brushes. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 13941-13952.	8.0	15
21	Designing Highly Thermostable Lysozyme-Copolymer Conjugates: Focus on Effect of Polymer Concentration. <i>Biomacromolecules</i> , 2018, 19, 1175-1188.	5.4	7
22	Polymer/Ag Nanoparticles Composite for Chloroform Detection. , 2018, , .		0
23	Attainment of Water and Oil Repellency for Engineering Thermoplastics without Long-Chain Perfluoroalkyls: Perfluoropolyether-Based Triblock Polyester Additives. <i>Langmuir</i> , 2018, 34, 12934-12946.	3.5	9
24	Dense and crack-free mullite films obtained from a hybrid sol-gel/dip-coating approach. <i>Journal of Materials Research</i> , 2017, 32, 1665-1673.	2.6	9
25	Capacitance Stability in Polymer Tantalum Capacitors with PEDOT Counter Electrodes. <i>ECS Journal of Solid State Science and Technology</i> , 2017, 6, N104-N110.	1.8	14
26	Enhancing Mechanical and Thermal Properties of Epoxy Nanocomposites via Alignment of Magnetized SiC Whiskers. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 22927-22940.	8.0	23
27	Multi-Frequency Measurement of Volatile Organic Compounds With a Radio-Frequency Interferometer. <i>IEEE Sensors Journal</i> , 2017, 17, 3323-3331.	4.7	13
28	Thermal Stabilization of Enzymes with Molecular Brushes. <i>ACS Catalysis</i> , 2017, 7, 8675-8684.	11.2	20
29	Toward a Long-Chain Perfluoroalkyl Replacement: Water and Oil Repellency of Polyethylene Terephthalate (PET) Films Modified with Perfluoropolyether-Based Polyesters. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 24318-24330.	8.0	19
30	On-Chip Infrared Spectroscopic Sensing: Redefining the Benefits of Scaling. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2017, 23, 340-349.	2.9	49
31	Laser-Driven Hybridization of a Surface Plasmon Resonance Collective Mode in a Monolayer of Silver Nanoparticles. <i>Plasmonics</i> , 2017, 12, 1571-1580.	3.4	6
32	Mullite-Nickel Magnetic Nanocomposite Fibers Obtained from Electrospinning Followed by Thermal Reduction. <i>Journal of the American Ceramic Society</i> , 2016, 99, 1504-1511.	3.8	9
33	Dose-Dependent Therapeutic Distinction between Active and Passive Targeting Revealed Using Transferrin-Coated PGMA Nanoparticles. <i>Small</i> , 2016, 12, 351-359.	10.0	51
34	Effect of Gamma Exposure on Chalcogenide Glass Films for Microphotonic Devices. , 2016, , .		1
35	The effect of polymer additives on the critical thicknesses of mullite thin films obtained from the monophasic sol-gel precursors. <i>Journal of Sol-Gel Science and Technology</i> , 2016, 80, 285-296.	2.4	10
36	Influence of Binders, Carbons, and Solvents on the Stability of Phosphorus Anodes for Li-ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 25991-26001.	8.0	41

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37	Gradient Polymer Nanofoams for Encrypted Recording of Chemical Events. ACS Nano, 2016, 10, 10716-10725.	14.6	11
38	Functional Reactive Polymer Electrospun Matrix. ACS Applied Materials & Interfaces, 2016, 8, 4934-4939.	8.0	24
39	Towards scalable fabrication of ultrasmooth and porous thin carbon films. Carbon, 2016, 96, 184-195.	10.3	10
40	Electrospray Deposition of Uniform Thickness Ge₂₃Sb₇S₇₀ and As₄₀S₆₀ Chalcogenide Glass Films. Journal of Visualized Experiments, 2016, . .	0.3	6
41	Phosphonium polyelectrolytes: influence of diphosphine spacer on layer-by-layer assembly with anionic conjugated polymers. Polymer International, 2015, 64, 1381-1388.	3.1	8
42	Electrospun mullite fibers from the sol-gel precursor. Journal of Sol-Gel Science and Technology, 2015, 74, 208-219.	2.4	31
43	RNA Interference Using <i>c-Myc</i> -Conjugated Nanoparticles Suppresses Breast and Colorectal Cancer Models. Molecular Cancer Therapeutics, 2015, 14, 1259-1269.	4.1	26
44	Label-Free Water Sensors Using Hybrid Polymer-Dielectric Mid-Infrared Optical Waveguides. ACS Applied Materials & Interfaces, 2015, 7, 11189-11194.	8.0	19
45	Synthesis and characterization of nanorods for magnetic rotational spectroscopy. Journal of Applied Physics, 2015, 118, .	2.5	23
46	Measuring flexural rigidity of mullite microfibers using magnetic droplets. Journal of Applied Physics, 2015, 117, 214304.	2.5	3
47	Stability of Grafted Polymer Nanoscale Films toward Gamma Irradiation. ACS Applied Materials & Interfaces, 2015, 7, 19455-19465.	8.0	16
48	Tetraarylophosphonium polyelectrolyte chromophores: synthesis, stability, photophysics, film morphology and critical surface energy. Polymer Chemistry, 2015, 6, 900-908.	3.9	18
49	Surface Plasmon Modes of Sandwich-Like Metal-Dielectric Nanostructures. Plasmonics, 2015, 10, 655-665.	3.4	15
50	A gradient field defeats the inherent repulsion between magnetic nanorods. Royal Society Open Science, 2014, 1, 140271.	2.4	9
51	Kinetics of Evaporation and Gel Formation in Thin Films of Ceramic Precursors. Langmuir, 2014, 30, 14638-14647.	3.5	16
52	Reconfigurable Anisotropic Coatings via Magnetic Field-Directed Assembly and Translocation of Locking Magnetic Chains. Advanced Functional Materials, 2014, 24, 4738-4745.	14.9	28
53	UV-induced self-repairing polydimethylsiloxane-polyurethane (PDMS-PUR) and polyethylene glycol-polyurethane (PEG-PUR) Cu-catalyzed networks. Journal of Materials Chemistry A, 2014, 2, 15527.	10.3	67
54	Temperature controlled shape change of grafted nanofoams. Soft Matter, 2014, 10, 2567.	2.7	10

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55	Electrical conductivity of insulating polymer nanoscale layers: environmental effects. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 1977-1986.	2.8	13
56	Mid-infrared materials and devices on a Si platform for optical sensing. <i>Science and Technology of Advanced Materials</i> , 2014, 15, 014603.	6.1	143
57	Collective alignment of nanorods in thin Newtonian films. <i>Soft Matter</i> , 2013, 9, 8532.	2.7	18
58	Colloidal Occlusion Template Method for Micromanufacturing of Omniphobic Surfaces. <i>Advanced Functional Materials</i> , 2013, 23, 870-877.	14.9	20
59	Anomalous Currents in Low Voltage Polymer Tantalum Capacitors. <i>ECS Journal of Solid State Science and Technology</i> , 2013, 2, N197-N204.	1.8	16
60	Water Aided Fabrication of Whey and Albumin Plastics. <i>Journal of Polymers and the Environment</i> , 2012, 20, 681-689.	5.0	17
61	In Situ Trace Analysis of Oil in Water with Mid-Infrared Fiberoptic Chemical Sensors. <i>Analytical Chemistry</i> , 2012, 84, 1274-1280.	6.5	25
62	Toward Fabric-Based Flexible Microfluidic Devices: Pointed Surface Modification for pH Sensitive Liquid Transport. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 4541-4548.	8.0	40
63	Magnetic Rotational Spectroscopy with Nanorods to Probe Time-Dependent Rheology of Microdroplets. <i>Langmuir</i> , 2012, 28, 10064-10071.	3.5	37
64	Tuning Fluorescent Response of Nanoscale Film With Polymer Grafting. <i>Macromolecular Rapid Communications</i> , 2012, 33, 237-241.	3.9	3
65	Towards universal enrichment nanocoating for IR-ATR waveguides. <i>Chemical Communications</i> , 2011, 47, 9104.	4.1	11
66	Surface grafting of thermoresponsive microgel nanoparticles. <i>Soft Matter</i> , 2011, 7, 9962.	2.7	31
67	Reversible submergence of nanoparticles into ultrathin block copolymer films. <i>Soft Matter</i> , 2011, 7, 2538.	2.7	15
68	Visible light trimming of coupled ring-resonator filters in As_2S_3 chalcogenide glass technology. , 2011, , .		0
69	Fabrication and characterization of GaP/polymer nanocomposites for advanced light emissive device structures. <i>Journal of Nanoparticle Research</i> , 2011, 13, 5565-5570.	1.9	8
70	Polymer Brushes by the "Grafting to" Method. <i>Macromolecular Rapid Communications</i> , 2011, 32, 859-869.	3.9	270
71	Ultrasonic curing of one-part epoxy system. <i>Journal of Composite Materials</i> , 2011, 45, 2217-2224.	2.4	19
72	Synthetic Hydrophilic Materials with Tunable Strength and a Range of Hydrophobic Interactions. <i>Advanced Functional Materials</i> , 2010, 20, 2240-2247.	14.9	69

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73	In-situ IR synchrotron mapping ellipsometry on stimuli-responsive PAA-b-PS/PEG mixed polymer brushes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010, 7, 197-199.	0.8	18
74	Emerging applications of stimuli-responsive polymer materials. <i>Nature Materials</i> , 2010, 9, 101-113.	27.5	5,007
75	A probabilistic model for the permeation of gases through microporous membranes. <i>Journal of the Textile Institute</i> , 2010, 101, 583-594.	1.9	0
76	Extraction of metals from aqueous systems employing capillary-channeled polymer (C-CP) fibers modified with poly(acrylic acid) (PAA). <i>Analytical Methods</i> , 2010, 2, 461.	2.7	15
77	PROGRESS ON THE FABRICATION OF ON-CHIP, INTEGRATED CHALCOGENIDE GLASS (CHG)-BASED SENSORS. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2010, 19, 75-99.	1.8	43
78	Coatings via Self-Assembly of Smart Nanoparticles. <i>ACS Symposium Series</i> , 2009, , 145-157.	0.5	3
79	Segregated Polymer Brushes via "Grafting to" and ATRP "Grafting from" Chain Anchoring. <i>ACS Symposium Series</i> , 2009, , 215-230.	0.5	7
80	Polymer brushes as active nanolayers for tunable bacteria adhesion. <i>Materials Science and Engineering C</i> , 2009, 29, 680-684.	7.3	54
81	Polymeric Membranes: Surface Modification by "Grafting to" Method and Fabrication of Multilayered Assemblies. <i>ACS Symposium Series</i> , 2009, , 289-305.	0.5	8
82	Biodegradable plastics from animal protein coproducts: Feathermeal. <i>Journal of Applied Polymer Science</i> , 2008, 110, 459-467.	2.6	23
83	Nano-patterning with polymer brushes via solvent-assisted polymer grafting. <i>Soft Matter</i> , 2008, 4, 2213.	2.7	32
84	Fluorescent Reactive Core-Shell Composite Nanoparticles with A High Surface Concentration of Epoxy Functionalities. <i>Chemistry of Materials</i> , 2008, 20, 317-325.	6.7	65
85	Responsive brush layers: from tailored gradients to reversibly assembled nanoparticles. <i>Soft Matter</i> , 2008, 4, 714.	2.7	234
86	Fabrication of optically active flexible polymer films with embedded chain-like arrays of silver nanoparticles. <i>Chemical Communications</i> , 2008, , 1284.	4.1	17
87	Synthesis of poly(styrene-block-ethylene oxide) copolymers by anionic polymerization and acid cleavage into its constituent homopolymers for the formation of ordered nanoporous thin films. <i>E-Polymers</i> , 2008, 8, .	3.0	1
88	Ultrahydrophobic Textiles Using Nanoparticles: Lotus Approach. <i>Journal of Engineered Fibers and Fabrics</i> , 2008, 3, 155892500800300.	1.0	19
89	Measurement of Interactions between Abrasive Silica Particles and Copper, Titanium, Tungsten and Tantalum. <i>Materials Research Society Symposia Proceedings</i> , 2007, 991, 1.	0.1	0
90	Composite polymer core-ceria shell abrasive particles during silicon oxide CMP. <i>Materials Research Society Symposia Proceedings</i> , 2007, 991, 1.	0.1	1

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91	Ultrahydrophobic textile surface via decorating fibers with monolayer of reactive nanoparticles and non-fluorinated polymer. <i>Chemical Communications</i> , 2007, , 4510.	4.1	80
92	Polymer Anchoring Layer for Atomic Force Microscopy Studies of Nanoparticle-Substrate Interactions. <i>Journal of Macromolecular Science - Physics</i> , 2007, 46, 231-244.	1.0	2
93	Hydrophobic Modification of Polymer Surfaces via Grafting to Approach. <i>Journal of Macromolecular Science - Physics</i> , 2007, 46, 137-154.	1.0	31
94	Stimuli-Responsive Colloidal Systems from Mixed Brush-Coated Nanoparticles. <i>Advanced Functional Materials</i> , 2007, 17, 2307-2314.	14.9	149
95	To Patterned Binary Polymer Brushes via Capillary Force Lithography and Surface-Initiated Polymerization. <i>Journal of the American Chemical Society</i> , 2006, 128, 8106-8107.	13.7	74
96	Macromolecular anchoring layers for polymer grafting: comparative study. <i>Polymer</i> , 2006, 47, 272-279.	3.8	91
97	Block Copolymer Nanocomposite Films Containing Silver Nanoparticles. <i>ACS Symposium Series</i> , 2006, , 149-166.	0.5	2
98	AFM Measurements of Adhesion between CMP Slurry Particles and Copper. <i>Materials Research Society Symposia Proceedings</i> , 2006, 914, 1.	0.1	1
99	Gradient Stimuli-Responsive Polymer Grafted Layers. <i>ACS Symposium Series</i> , 2005, , 68-83.	0.5	4
100	Surface modification of microporous PVDF membranes by ATRP. <i>Journal of Membrane Science</i> , 2005, 262, 81-90.	8.2	175
101	Low-Temperature Growth of Thick Polystyrene Brushes via ATRP. <i>Macromolecular Rapid Communications</i> , 2005, 26, 1829-1834.	3.9	47
102	Synthesis of High-Density Grafted Polymer Layers with Thickness and Grafting Density Gradients. <i>Langmuir</i> , 2005, 21, 11806-11813.	3.5	68
103	AFM Measurements of Adhesion between Actual CMP Slurry Particles and Various Substrates. <i>Materials Research Society Symposia Proceedings</i> , 2005, 867, 251.	0.1	1
104	Polymer Brushes by Atom Transfer Radical Polymerization Initiated from Macroinitiator Synthesized on the Surface. , 2005, , 69-86.		4
105	Gradient Polymer Layers by Grafting To Approach. <i>Macromolecular Rapid Communications</i> , 2004, 25, 360-365.	3.9	100
106	Adaptive and responsive surfaces through controlled reorganization of interfacial polymer layers. <i>Progress in Polymer Science</i> , 2004, 29, 635-698.	24.7	544
107	Effect of Macromolecular Anchoring Layer Thickness and Molecular Weight on Polymer Grafting. <i>Macromolecules</i> , 2004, 37, 9538-9545.	4.8	86
108	Synthesis and Surface Morphology of High-Density Poly(ethylene glycol) Grafted Layers. <i>Langmuir</i> , 2003, 19, 10179-10187.	3.5	158

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109	Polystyrene Layers Grafted to Macromolecular Anchoring Layer. <i>Macromolecules</i> , 2003, 36, 6519-6526.	4.8	134
110	Surface Morphology of Mechanically Heterogeneous Ultrathin Polymer Films. <i>Langmuir</i> , 2003, 19, 118-124.	3.5	16
111	Poly(Vinyl Pyridine) as a Universal Surface Modifier for Immobilization of Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2002, 106, 1280-1285.	2.6	290
112	Bilayer nanocomposite molecular coatings from elastomeric/rigid polymers: fabrication, morphology, and micromechanical properties. <i>Macromolecular Symposia</i> , 2001, 167, 227-242.	0.7	14
113	Intralayer reorganization of photochromic molecular films. <i>Journal of Materials Science Letters</i> , 2001, 20, 873-876.	0.5	20
114	Bilayer nanocomposite molecular coatings from elastomeric/rigid polymers: fabrication, morphology, and micromechanical properties. , 2001, 167, 227.		1
115	Microthermomechanical Probing of Thin Composite Polymer Films. <i>ACS Symposium Series</i> , 2000, , 254-273.	0.5	2
116	Thermoplastic Elastomer Monolayers Grafted to a Functionalized Silicon Surface. <i>Macromolecules</i> , 2000, 33, 7629-7638.	4.8	55
117	Epoxy-Terminated Self-Assembled Monolayers: Molecular Glues for Polymer Layers. <i>Langmuir</i> , 2000, 16, 504-516.	3.5	187
118	Composition effect on the core-shell morphology and mechanical properties of ternary polystyrene/styrene-butadiene rubber/polyethylene blends. <i>Polymer</i> , 1999, 40, 2511-2520.	3.8	107