

Roman Pogreb

List of Publications by Year in descending order

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106
papers

3,627
citations

136885

32
h-index

133188

59
g-index

111
all docs

111
docs citations

111
times ranked

3202
citing authors

#	ARTICLE	IF	CITATIONS
1	Vibrational spectrum of PVDF and its interpretation. <i>Polymer Testing</i> , 2004, 23, 791-796.	2.3	370
2	Cassie-Wenzel Wetting Transition in Vibrating Drops Deposited on Rough Surfaces: Is the Dynamic Cassie-Wenzel Wetting Transition a 2D or 1D Affair?. <i>Langmuir</i> , 2007, 23, 6501-6503.	1.6	258
3	Wetting Properties of the Multiscaled Nanostructured Polymer and Metallic Superhydrophobic Surfaces. <i>Langmuir</i> , 2006, 22, 9982-9985.	1.6	219
4	New Investigations on Ferrofluidics: Ferrofluidic Marbles and Magnetic-Field-Driven Drops on Superhydrophobic Surfaces. <i>Langmuir</i> , 2008, 24, 12119-12122.	1.6	187
5	“Petal Effect” on Surfaces Based on Lycopodium: High-Stick Surfaces Demonstrating High Apparent Contact Angles. <i>Journal of Physical Chemistry C</i> , 2009, 113, 5568-5572.	1.5	152
6	Vibration-induced Cassie-Wenzel wetting transition on rough surfaces. <i>Applied Physics Letters</i> , 2007, 90, 201917.	1.5	148
7	Characterization of rough surfaces with vibrated drops. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 4056.	1.3	120
8	Resonance Cassie-Wenzel Wetting Transition for Horizontally Vibrated Drops Deposited on a Rough Surface. <i>Langmuir</i> , 2007, 23, 12217-12221.	1.6	115
9	Surface tension of liquid marbles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2009, 351, 78-82.	2.3	114
10	Janus Droplets: Liquid Marbles Coated with Dielectric/Semiconductor Particles. <i>Langmuir</i> , 2011, 27, 7-10.	1.6	107
11	Contact Angle Hysteresis on Polymer Substrates Established with Various Experimental Techniques, Its Interpretation, and Quantitative Characterization. <i>Langmuir</i> , 2008, 24, 4020-4025.	1.6	101
12	Shape, Vibrations, and Effective Surface Tension of Water Marbles. <i>Langmuir</i> , 2009, 25, 1893-1896.	1.6	100
13	Interfacial and conductive properties of liquid marbles coated with carbon black. <i>Powder Technology</i> , 2010, 203, 529-533.	2.1	82
14	Micrometrically scaled textured metallic hydrophobic interfaces validate the Cassie-Baxter wetting hypothesis. <i>Journal of Colloid and Interface Science</i> , 2006, 302, 308-311.	5.0	74
15	Environmental Scanning Electron Microscopy Study of the Fine Structure of the Triple Line and Cassie-Wenzel Wetting Transition for Sessile Drops Deposited on Rough Polymer Substrates. <i>Langmuir</i> , 2007, 23, 4378-4382.	1.6	70
16	Composite non-stick droplets and their actuation with electric field. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	65
17	Self-assembly in evaporated polymer solutions: Influence of the solution concentration. <i>Journal of Colloid and Interface Science</i> , 2006, 297, 534-540.	5.0	56
18	Mesoscopic Patterning in Thin Polymer Films Formed under the Fast Dip-Coating Process. <i>Macromolecular Materials and Engineering</i> , 2005, 290, 114-121.	1.7	55

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19	Formation of honeycomb patterns in evaporated polymer solutions: Influence of the molecular weight. <i>Materials Letters</i> , 2005, 59, 3553-3557.	1.3	51
20	Mesoscopic Patterning in Evaporated Polymer Solutions: A New Experimental Data and Physical Mechanisms. <i>Langmuir</i> , 2005, 21, 9604-9609.	1.6	51
21	Mesoscopic and submicroscopic patterning in thin polymer films: Impact of the solvent. <i>Materials Letters</i> , 2005, 59, 2461-2464.	1.3	47
22	Elastic properties of liquid marbles. <i>Colloid and Polymer Science</i> , 2015, 293, 2157-2164.	1.0	47
23	Surface Plasmon Resonance Characterization of Photoswitchable Antigen-Antibody Interactions. <i>Langmuir</i> , 1999, 15, 3920-3923.	1.6	41
24	Self-assembled honeycomb polycarbonate films deposited on polymer piezoelectric substrates and their applications. <i>Polymers for Advanced Technologies</i> , 2005, 16, 299-304.	1.6	41
25	Electrically Deformable Liquid Marbles. <i>Journal of Adhesion Science and Technology</i> , 2011, 25, 1371-1377.	1.4	38
26	Stable water and glycerol marbles immersed in organic liquids: From liquid marbles to Pickering-like emulsions. <i>Journal of Colloid and Interface Science</i> , 2012, 366, 196-199.	5.0	38
27	On the mechanism of patterning in rapidly evaporated polymer solutions: Is temperature-gradient-driven Marangoni instability responsible for the large-scale patterning?. <i>Journal of Colloid and Interface Science</i> , 2010, 343, 602-607.	5.0	36
28	Superhydrophobic Metallic Surfaces and Their Wetting Properties. <i>Journal of Adhesion Science and Technology</i> , 2008, 22, 379-385.	1.4	35
29	Transient uv electroluminescence from poly(p-phenylenevinylene) conjugated polymer induced by strong voltage pulses. <i>Physical Review B</i> , 1997, 56, R12702-R12705.	1.1	34
30	Spatial light modulator based on a deformed-helix ferroelectric liquid crystal and a thin a-Si:H amorphous photoconductor. <i>Applied Optics</i> , 1997, 36, 455.	2.1	34
31	Low voltage reversible electrowetting exploiting lubricated polymer honeycomb substrates. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	34
32	The Reversible Giant Change in the Contact Angle on the Polysulfone and Polyethersulfone Films Exposed to UV Irradiation. <i>Langmuir</i> , 2008, 24, 5977-5980.	1.6	33
33	Superoleophobic Surfaces Obtained via Hierarchical Metallic Meshes. <i>Langmuir</i> , 2016, 32, 4134-4140.	1.6	31
34	Low-density polyethylene films doped with europium(III) complex: their properties and applications. <i>Polymers for Advanced Technologies</i> , 2004, 15, 414-418.	1.6	29
35	Polyvinylidene fluoride piezoelectric polymer for integrated infrared optics applications. <i>Optical Materials</i> , 2004, 27, 429-434.	1.7	26
36	Free-standing, Thermostable, Micrometer-scale Honeycomb Polymer Films and their Properties. <i>Macromolecular Materials and Engineering</i> , 2008, 293, 872-877.	1.7	26

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37	Formation of Films on Water Droplets Floating on a Polymer Solution Surface. <i>Macromolecular Chemistry and Physics</i> , 2007, 208, 702-709.	1.1	25
38	Progress in low voltage reversible electrowetting with lubricated polymer honeycomb substrates. <i>RSC Advances</i> , 2015, 5, 32491-32496.	1.7	23
39	Surface-plasmon resonance with infrared excitation: Studies of phospholipid membrane growth. <i>Journal of Applied Physics</i> , 2005, 98, 093506.	1.1	22
40	Droplet behavior on flat and textured surfaces: Co-occurrence of Deegan outward flow with Marangoni solute instability. <i>Journal of Colloid and Interface Science</i> , 2007, 306, 128-132.	5.0	22
41	Electrically Controlled Membranes Exploiting Cassie-Wenzel Wetting Transitions. <i>Scientific Reports</i> , 2013, 3, 3028.	1.6	22
42	Evolution of chemical gardens in aqueous solutions of polymers. <i>Chemical Physics Letters</i> , 2006, 417, 341-344.	1.2	21
43	The effect of controlled stretch on luminescence of Eu(III)(NO ₃) ₃ (o-Phen) ₂ complex doped into PVDF film. <i>Materials Letters</i> , 2006, 60, 1911-1914.	1.3	19
44	A reliable method of manufacturing metallic hierarchical superhydrophobic surfaces. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	19
45	IR laser radiation induced changes in the IR absorption spectra of thermoplastic and thermosetting polymers. <i>Journal of Optics</i> , 2001, 3, 229-235.	1.5	18
46	Infrared optics applications of thin polyaniline emeraldine base films. <i>Synthetic Metals</i> , 2004, 140, 49-52.	2.1	17
47	Preparation of Se-doped polyaniline emeraldine base films. <i>Synthetic Metals</i> , 2003, 139, 321-325.	2.1	16
48	Patterning in rapidly evaporated polymer solutions: Formation of annular structures under evaporation of the poor solvent. <i>Journal of Colloid and Interface Science</i> , 2006, 300, 293-297.	5.0	16
49	Electrostatically driven droplets deposited on superhydrophobic surfaces. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	16
50	Liquid marbles containing petroleum and their properties. <i>Petroleum Science</i> , 2015, 12, 340-344.	2.4	14
51	Thermal degradation of thermoplastic and thermosetting polymers induced by laser radiation and its study by FTIR spectroscopy. <i>Polymer Degradation and Stability</i> , 2001, 72, 125-131.	2.7	13
52	Self-organization in thin polycarbonate films and its optical and electro-optical applications. <i>Journal of Materials Science</i> , 2004, 39, 6639-6641.	1.7	13
53	Comment on Water Wetting Transition Parameters of Perfluorinated Substrates with Periodically Distributed Flat-Top Microscale Obstacles. <i>Langmuir</i> , 2009, 25, 13694-13695.	1.6	13
54	Relaxation spectra of polymers and phenomena of electrical and hydrophobic recovery: Interplay between bulk and surface properties of polymers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2017, 55, 198-205.	2.4	13

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55	Single-step technique allowing formation of microscaled thermally stable polymer honeycomb reliefs demonstrating reversible wettability. <i>Polymers for Advanced Technologies</i> , 2011, 22, 94-98.	1.6	12
56	Development of new near-infrared filters based on the "sandwich" polymer-chalcogenide glass-polymer composites. <i>Optical Engineering</i> , 2001, 40, 661.	0.5	10
57	Optical properties and infrared optics applications of composite films based on polyethylene and low-melting-point chalcogenide glass. <i>Optical Engineering</i> , 2002, 41, 295.	0.5	9
58	Template-assisted crystallization and colloidal self-assembly with use of the polymer micrometrically scaled honeycomb template. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2006, 290, 273-279.	2.3	9
59	Template-assisted growth of chemical gardens: Formation of dendrite structures. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2006, 289, 245-249.	2.3	9
60	Self-Assembly in Evaporated Polymer Solutions: Patterning on Two Scales. <i>Israel Journal of Chemistry</i> , 2007, 47, 319-328.	1.0	9
61	Phenomenological model of wetting charged dielectric surfaces and its testing with plasma-treated polymer films and inflatable balloons. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2015, 487, 162-168.	2.3	9
62	Study of water diffusion in polyacrylonitrile using IR fiber optic evanescent wave spectroscopy. <i>Polymers for Advanced Technologies</i> , 2002, 13, 1039-1045.	1.6	8
63	Novel method of low-melting metal micropowders fabrication. <i>Journal of Materials Processing Technology</i> , 2005, 168, 367-371.	3.1	8
64	Luminescent properties of PP and LDPE films and rods doped with the Eu(III)-La(III) complex. <i>Polymers for Advanced Technologies</i> , 2006, 17, 20-25.	1.6	8
65	Jetting liquid marbles: study of the Taylor instability in immersed marbles. <i>Colloid and Polymer Science</i> , 2013, 291, 1535-1539.	1.0	8
66	Eradication of <i>Saccharomyces cerevisiae</i> by Pulsed Electric Field Treatments. <i>Microorganisms</i> , 2020, 8, 1684.	1.6	8
67	Fiber optic evanescent wave spectroscopy (FEWS) for blood diagnosis: the use of polymer-coated AgClBr fibers and neural network analysis. , 1999, , .		7
68	Self-assembled patterns obtained with evaporated polymer solutions and pre-stretched polymer substrates. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2007, 303, 253-256.	2.3	7
69	Wetting Transitions on Post-Built and Porous Reliefs. <i>Journal of Adhesion Science and Technology</i> , 2012, 26, 1169-1180.	1.4	7
70	<title>Investigation of water penetration in polystyrene by use of polymer-coated AgClBr fibers and development of new sensor intended for the FEWS spectroscopy of organic compounds in water</title>. , 2000, 4129, 305.		6
71	Mechanisms of mesoscopic patterning in evaporated polymer films deposited on tilted and vertical substrates. <i>Journal of Materials Science</i> , 2006, 41, 455-461.	1.7	6
72	Robust method of manufacturing rubber waste-based water repellent surfaces. <i>Polymers for Advanced Technologies</i> , 2009, 20, 650-653.	1.6	6

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73	Temporal Electret Behavior of Polymer Films Exposed to Cold Radiofrequency Plasma. <i>Advanced Engineering Materials</i> , 2015, 17, 1175-1179.	1.6	6
74	Use of polymer-coated AgClBr fibers for fiber optic evanescent wave spectroscopy (FEWS) of biological fluids. , 1999, 3570, 100.		5
75	Mechanical and thermodynamic properties of infrared transparent low melting chalcogenide glass. <i>Infrared Physics and Technology</i> , 2002, 43, 397-399.	1.3	5
76	Resonance absorption of coherent infrared radiation by thin polypropylene films and its technological applications. <i>Applied Surface Science</i> , 2003, 220, 125-135.	3.1	5
77	Submerged (Under-Liquid) Floating of Light Objects. <i>Langmuir</i> , 2013, 29, 10700-10704.	1.6	5
78	Floating of heavy objects on liquid surfaces coated with colloidal particles. <i>Colloid and Polymer Science</i> , 2015, 293, 567-572.	1.0	5
79	<title>Optical properties of polymer/chalcogenide glass composite materials</title>. , 2000, 4097, 179.		4
80	Resuscitation of Pulsed Electric Field-Treated <i>Staphylococcus aureus</i> and <i>Pseudomonas putida</i> in a Rich Nutrient Medium. <i>Foods</i> , 2021, 10, 660.	1.9	4
81	Combined interface plasmon polariton and x-ray reflectivity determination of the dielectric tensor in ultrathin liquid crystal films. <i>Journal of Applied Physics</i> , 1995, 78, 3323-3329.	1.1	3
82	<title>Transient electroluminescence under short and strong voltage pulses</title>. , 1997, , .		3
83	Infrared laser radiation induced changes in the IR absorption spectra of thin polymer films. <i>Journal of Optics</i> , 2000, 2, L38-L40.	1.5	3
84	<title>Development of a novel composite based on polyethylene and low-melting-point metal alloy</title>. , 2002, 4695, 465.		3
85	Development of a Novel Composite Based on Thermoplastic Polymers and Low Melting Point Thermoplastic Chalcogenide Glasses. <i>Journal of Thermoplastic Composite Materials</i> , 2002, 15, 511-523.	2.6	3
86	On the role of the Plateau borders in the pattern formation occurring in thin evaporated polymer layers. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2008, 312, 245-248.	2.3	3
87	Thickness of gravity-flattened water layers (‘‘puddles’’) deposited on the polymer substrates and the hysteresis of the contact angle. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2010, 372, 135-138.	2.3	3
88	The potential comb improves the efficiency of low-frequency energy harvesting. <i>Journal of Applied Physics</i> , 2011, 109, 114512.	1.1	3
89	How to grow a movable mini-garden in a droplet: Growing chemical gardens in a water and aqueous ethanol solutions droplets deposited on a superhydrophobic surface. <i>Colloids and Interface Science Communications</i> , 2015, 7, 12-15.	2.0	3
90	Under-Liquid Self-Assembly of Submerged Buoyant Polymer Particles. <i>Langmuir</i> , 2016, 32, 5714-5720.	1.6	3

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91	Development of the technology of contacting ZnSe infrared optical windows using polyethylene films. <i>Optical Engineering</i> , 2001, 40, 1754.	0.5	2
92	Polyethylene films doped with EU(III) complex: their optical properties and technological applications.. , 2004, 5351, 230.		2
93	Dielectric properties of UV-irradiated ultrathin polysulfone films revealed by surface plasmon resonance method. <i>International Journal of Polymer Analysis and Characterization</i> , 2018, 23, 396-402.	0.9	2
94	Simultaneous determination of thickness and refractive index using Cauchy or Sellmeier formulas by the example of surface plasmon resonance study on ultrathin polysulfone film. <i>International Journal of Polymer Analysis and Characterization</i> , 2021, 26, 661-667.	0.9	2
95	Frequency dispersion of HTSC-film impedance in the MHz range. <i>Journal of Superconductivity and Novel Magnetism</i> , 1994, 7, 471-473.	0.5	1
96	Direct writing of cylindrical microlenses on polymer substrates. , 0, , .		1
97	2D photonic crystals deposited on polymer piezoelectric substrates - new kind of MOEMS. , 0, , .		1
98	On the Mechanisms of Colloidal Particle and Vapor Bubble Aggregation in Liquid Flows. <i>Israel Journal of Chemistry</i> , 2007, 47, 381-384.	1.0	1
99	What Can We Learn From The Vibration Of Drops Deposited On Rough Surfaces? Wetting Transitions Occurring On Rough Surfaces. , 0, , 33-52.		1
100	Transient Electroluminescence from PPV under Strong Voltage Pulses. <i>Materials Research Society Symposia Proceedings</i> , 1997, 488, 15.	0.1	0
101	Properties of Se-based infrared chalcogenide glasses using dynamical mechanical analysis. , 2003, , .		0
102	Infrared optics applications of thin polyaniline emeraldine base films. , 2003, , .		0
103	Optical properties of the Eu(III)-La(III)-complex-doped polyolefine film and rod samples. , 2005, , .		0
104	Luminescence and absorption spectra of Eu-complex-doped PVDF film: influence of controlled stretch. , 2006, 6116, 86.		0
105	Influence of UV irradiation in nitrogen and air environment on dielectric properties of ultrathin polysulfone films revealed using surface plasmon resonance method. <i>International Journal of Polymer Analysis and Characterization</i> , 2018, 23, 669-674.	0.9	0
106	Fiberoptic evanescent wave spectroscopy and its chemical, environmental and medical applications. , 2000, , .		0