Jürgen Rühe

List of Publications by Year in descending order

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258 papers 10,999 citations

28736 57 h-index 96 g-index

267 all docs

267 docs citations

times ranked

267

11023 citing authors

#	Article	IF	CITATIONS
1	Synthesis of Poly(styrene) Monolayers Attached to High Surface Area Silica Gels through Self-Assembled Monolayers of Azo Initiators. Macromolecules, 1998, 31, 592-601.	2.2	612
2	Mechanism of Radical Chain Polymerizations Initiated by Azo Compounds Covalently Bound to the Surface of Spherical Particles. Macromolecules, 1998, 31, 602-613.	2.2	416
3	Photochemical Attachment of Polymer Films to Solid Surfaces via Monolayers of Benzophenone Derivatives. Journal of the American Chemical Society, 1999, 121, 8766-8770.	6.6	387
4	Polyelectrolyte Brushes. Advances in Polymer Science, 2004, , 79-150.	0.4	351
5	Some thoughts on superhydrophobic wetting. Soft Matter, 2009, 5, 51-61.	1.2	341
6	Swelling Behavior of Thin, Surface-Attached Polymer Networks. Macromolecules, 2004, 37, 882-887.	2.2	332
7	Polymer Layers through Self-Assembled Monolayers of Initiators. Langmuir, 1998, 14, 6893-6898.	1.6	262
8	Wetting of Silicon Nanograss: From Superhydrophilic to Superhydrophobic Surfaces. Advanced Materials, 2008, 20, 159-163.	11.1	227
9	Steric Forces Measured with the Atomic Force Microscope at Various Temperatures. Langmuir, 1999, 15, 2559-2565.	1.6	220
10	Condensation and Wetting Transitions on Microstructured Ultrahydrophobic Surfaces. Langmuir, 2007, 23, 3820-3824.	1.6	217
11	The Polymer-Supported Phospholipid Bilayer:Â Tethering as a New Approach to Substrateâ^'Membrane Stabilization. Biomacromolecules, 2002, 3, 27-35.	2.6	186
12	Low Ice Adhesion on Nano-Textured Superhydrophobic Surfaces under Supersaturated Conditions. ACS Applied Materials & D. Interfaces, 2016, 8, 12583-12587.	4.0	179
13	Advancing and Receding Motion of Droplets on Ultrahydrophobic Post Surfaces. Langmuir, 2006, 22, 7652-7657.	1.6	164
14	On the glass transition in ultrathin polymer films of different molecular architecture. Macromolecular Chemistry and Physics, 1998, 199, 1435-1444.	1.1	159
15	Swelling of a polymer brush probed with a quartz crystal resonator. Physical Review E, 1997, 56, 680-689.	0.8	158
16	Mimicking the Stenocara Beetle—Dewetting of Drops from a Patterned Superhydrophobic Surface. Langmuir, 2008, 24, 6154-6158.	1.6	158
17	Magnetically-actuated artificial cilia for microfluidic propulsion. Lab on A Chip, 2011, 11, 2002.	3.1	147
18	Nanopore-Based Single-Molecule Mass Spectrometry on a Lipid Membrane Microarray. ACS Nano, 2011, 5, 8080-8088.	7.3	140

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19	Domain Registration in Raft-Mimicking Lipid Mixtures Studied Using Polymer-Tethered Lipid Bilayers. Biophysical Journal, 2007, 92, 1263-1270.	0.2	121
20	Interaction of Poly(methacrylic acid) Brushes with Metal Ions:Â Swelling Properties. Macromolecules, 2005, 38, 4345-4354.	2.2	117
21	Protein-resistant polymer surfaces. Journal of Materials Chemistry, 2012, 22, 19547.	6.7	112
22	Polymer Brushes via ATRP: Role of Activator and Deactivator in the Surface-Initiated ATRP of Styrene on Planar Substrates. Macromolecular Rapid Communications, 2002, 23, 277-281.	2.0	108
23	Toward a New Generation of Smart Biomimetic Actuators for Architecture. Advanced Materials, 2018, 30, e1703653.	11.1	108
24	Microstructuring of Molecularly Thin Polymer Layers by Photolithography. Advanced Materials, 1998, 10, 1073-1077.	11.1	107
25	Controlled Growth of PMMA Brushes on Silicon Surfaces at Room Temperature. Macromolecular Rapid Communications, 2002, 23, 612.	2.0	106
26	Swelling of Thick Polymer Brushes Investigated with Ellipsometry. Langmuir, 1999, 15, 2460-2465.	1.6	101
27	Planar microelectrode-cavity array for high-resolution and parallel electrical recording of membrane ionic currents. Lab on A Chip, 2008, 8, 938.	3.1	100
28	Motion of nano-objects on polymer brushes. Polymer, 2004, 45, 8279-8297.	1.8	97
29	Swelling of Poly(methacrylic acid) Brushes:Â Influence of Monovalent Salts in the Environment. Macromolecules, 2005, 38, 4855-4860.	2.2	93
30	Microcones and Nanograss: Toward Mechanically Robust Superhydrophobic Surfaces. Langmuir, 2014, 30, 4342-4350.	1.6	87
31	Surfaces with Combined Microscale and Nanoscale Structures: A Route to Mechanically Stable Superhydrophobic Surfaces?. Langmuir, 2013, 29, 3765-3772.	1.6	84
32	Surface Attached Polymer Networks through Thermally Induced Cross-Linking of Sulfonyl Azide Group Containing Polymers. Macromolecules, 2008, 41, 9284-9289.	2.2	83
33	"Grafting Through― Mechanistic Aspects of Radical Polymerization Reactions with Surface-Attached Monomers. Macromolecules, 2014, 47, 2929-2937.	2.2	82
34	Interaction of Poly(methacrylic acid) Brushes with Metal Ions:Â An Infrared Investigation. Macromolecules, 2004, 37, 6954-6961.	2.2	79
35	Repulsive Forces and Relaxation on Compression of Entangled, Polydisperse Polystyrene Brushes. Macromolecules, 2000, 33, 3860-3870.	2.2	77
36	A Facile Photochemical Surface Modification Technique for the Generation of Microstructured Fluorinated Surfaces. Langmuir, 2004, 20, 10080-10085.	1.6	76

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37	Artificial Cilia: Generation of Magnetic Actuators in Microfluidic Systems. Advanced Functional Materials, 2011, 21, 3314-3320.	7.8	76
38	Formation and Distribution of Silver Nanoparticles in a Functional Plasma Polymer Matrix and Related Ag ⁺ Release Properties. Plasma Processes and Polymers, 2010, 7, 619-625.	1.6	74
39	Segment density profiles of polyelectrolyte brushes determined by Fourier transform ellipsometry. Journal of Chemical Physics, 1999, 111, 7029-7037.	1.2	72
40	Surface-attached hydrogel coatings via C,H-insertion crosslinking for biomedical and bioanalytical applications (Review). Biointerphases, 2018, 13, 010801.	0.6	71
41	Electrochemically Controlled Drug Release from a Conducting Polymer Hydrogel (PDMAAp/PEDOT) for Local Therapy and Bioelectronics. Advanced Healthcare Materials, 2019, 8, e1801488.	3.9	71
42	An interpenetrating, microstructurable and covalently attached conducting polymer hydrogel for neural interfaces. Acta Biomaterialia, 2017, 58, 365-375.	4.1	70
43	Polymer Brushes with Liquid Crystalline Side Chains. Macromolecules, 1999, 32, 6759-6766.	2.2	69
44	Perfluorinated Polymer Monolayers on Porous Silica for Materials with Super Liquid Repellent Properties. Langmuir, 2002, 18, 6133-6139.	1.6	69
45	Polymeric coatings for biomedical devices. Surface Science, 2004, 570, 111-118.	0.8	65
46	FUNCTIONAL POLYMER BRUSHES*. Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics, 2002, 42, 91-138.	2.2	64
47	Synthesis of Functionalized Polymer Monolayers from Active Ester Brushes. Macromolecules, 2007, 40, 5497-5503.	2.2	64
48	Memory of Surface Patterns in Mixed Polymer Brushes:  Simulation and Experiment. Langmuir, 2007, 23, 279-285.	1.6	64
49	Light-Induced Switching of Surfaces at Wetting Transitions through Photoisomerization of Polymer Monolayers. Langmuir, 2012, 28, 15038-15046.	1.6	64
50	The structural background of charge-carrier motion in conducting polymers. Faraday Discussions of the Chemical Society, 1989, 88, 333-349.	2.2	62
51	Contact Line Shape on Ultrahydrophobic Post Surfaces. Langmuir, 2007, 23, 3179-3183.	1.6	62
52	Experimental investigation of the flow induced by artificial cilia. Lab on A Chip, 2011, 11, 2017.	3.1	62
53	Influence of the Molecular Structure of Surface-Attached Poly(<i>N</i> -alkyl Acrylamide) Coatings on the Interaction of Surfaces with Proteins, Cells and Blood Platelets. Macromolecular Bioscience, 2013, 13, 873-884.	2.1	62
54	Single-step centrifugal hematocrit determination on a 10-\$ processing device. Biomedical Microdevices, 2007, 9, 795-799.	1.4	61

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55	A Versatile Preparation Route for Thin Free-Standing Liquid Single Crystal Elastomers. Macromolecular Rapid Communications, 2005, 26, 813-818.	2.0	60
56	Drops on Microstructured Surfaces Coated with Hydrophilic Polymers:  Wenzel's Model and Beyond. Langmuir, 2008, 24, 1959-1964.	1.6	59
57	Simple One-Step Process for Immobilization of Biomolecules on Polymer Substrates Based on Surface-Attached Polymer Networks. Langmuir, 2011, 27, 6116-6123.	1.6	59
58	Interaction of Strong Polyelectrolytes with Surface-Attached Polyelectrolyte Brushesâ^'Polymer Brushes as Substrates for the Layer-by-Layer Deposition of Polyelectrolytes. Macromolecules, 2003, 36, 6593-6598.	2.2	56
59	Polymer Brushes with Nanometerâ€Scale Gradients. Advanced Materials, 2009, 21, 4706-4710.	11.1	56
60	Enzyme Containing Redox Polymer Networks for Biosensors or Biofuel Cells: A Photochemical Approach. Langmuir, 2010, 26, 6019-6027.	1.6	55
61	Local Composition of Nanophase-Separated Mixed Polymer Brushes. Macromolecules, 2006, 39, 3056-3064.	2.2	54
62	Attachment of Polymer Films to Aluminium Surfaces by Photochemically Active Monolayers of Phosphonic Acids. Macromolecular Rapid Communications, 2004, 25, 1396-1401.	2.0	53
63	Grafting of polymers to solid surfaces by using immobilized methacrylates. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 198-200, 543-549.	2.3	51
64	Kinetics of the Generation of Surface-Attached Polymer Networks through C, H-Insertion Reactions. Macromolecules, 2016, 49, 2438-2447.	2.2	51
65	Surface-Attached PDMAAâ^'GRGDSP Hybrid Polymer Monolayers that Promote the Adhesion of Living Cells. Biomacromolecules, 2008, 9, 543-552.	2.6	49
66	Binding of Oppositely Charged Surfactants to Poly(methacrylic acid) Brushes. Macromolecules, 2005, 38, 6140-6151.	2.2	47
67	Growth of poly(methyl methacrylate) brushes on silicon surfaces by atom transfer radical polymerization. Journal of Polymer Science Part A, 2006, 44, 1758-1769.	2.5	45
68	Photomechanical Degrafting of Azo-Functionalized Poly(methacrylic acid) (PMAA) Brushes. Journal of Physical Chemistry B, 2011, 115, 10431-10438.	1.2	45
69	Ring-Closure Metathesis in Supercritical Carbon Dioxide as Sole Solvent with Use of Covalently Immobilized Ruthenium Catalysts. European Journal of Organic Chemistry, 2006, 2006, 577-581.	1.2	43
70	A polymer-based DNA biochip platform for human papilloma virus genotyping. Journal of Virological Methods, 2010, 163, 40-48.	1.0	42
71	Transbilayer coupling of obstructed lipid diffusion in polymer-tethered phospholipid bilayers. Soft Matter, 2008, 4, 1899.	1.2	41
72	Collapse of Polyelectrolyte Brushes Probed by Noise Analysis of a Scanning Force Microscope Cantilever. Langmuir, 2000, 16, 5774-5784.	1.6	40

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73	Static and dynamic profiles of tethered polymer layers probed by analyzing the noise of an atomic force microscope. Physical Review E, 1997, 56, 3256-3264.	0.8	39
74	Photolithographic structuring of surface-attached polymer monolayers. Materials Science and Engineering C, 1999, 8-9, 291-297.	3.8	39
75	Thickness Dependence of the Solvent-Induced Glass Transition in Polymer Brushes. Macromolecules, 1999, 32, 1244-1251.	2.2	39
76	Grafting of PMMA brushes on titania nanoparticulate surface via surface-initiated conventional radical and "controlled―radical polymerization (ATRP). Journal of Nanoparticle Research, 2008, 10, 415-427.	0.8	39
77	Towards ultrahydrophobic surfaces: a biomimetic approach. Journal of Physics Condensed Matter, 2005, 17, S639-S648.	0.7	38
78	Tunable Bragg filters based on polymer swelling. Applied Optics, 2006, 45, 4284.	2.1	38
79	Surface-attached polymer monolayers for the control of endothelial cell adhesion. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 198-200, 519-526.	2.3	37
80	A Robust Method for the Immobilization of Polymer Molecules on SiO ₂ Surfaces. Macromolecules, 2008, 41, 873-878.	2.2	37
81	Neuronal cells cultured on modified microelectronic device surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1995, 13, 2606-2612.	0.9	35
82	Ultralow Friction of Steel Surfaces Using a 1,3-Diketone Lubricant in the Thin Film Lubrication Regime. Langmuir, 2015, 31, 11033-11039.	1.6	35
83	Tailoring of surfaces with ultrathin polymer films for survival and growth of neurons in culture. Journal of Biomaterials Science, Polymer Edition, 1999, 10, 859-874.	1.9	33
84	The activity of covalently immobilized Grubbs–Hoveyda type catalyst is highly dependent on the nature of the support material. Journal of Organometallic Chemistry, 2006, 691, 5172-5180.	0.8	33
85	Collapse of a Polymer Brush in a Poor Solvent Probed by Noise Analysis of a Scanning Force Microscope Cantilever. Langmuir, 1998, 14, 3999-4004.	1.6	31
86	Drop impact on chemically structured arrays. Journal of Physics Condensed Matter, 2005, 17, S595-S605.	0.7	31
87	Printed protein microarrays on unmodified plastic substrates. Analytica Chimica Acta, 2010, 671, 92-98.	2.6	31
88	Tailorâ€Made Polymer Multilayers. Advanced Functional Materials, 2013, 23, 6019-6023.	7.8	31
89	On the mechanism of deposit formation during thermal oxidation of mineral diesel and diesel/biodiesel blends under accelerated conditions. Fuel, 2014, 133, 245-252.	3.4	31
90	Maßgeschneiderte OberflÃ e hen. Nachrichten Aus Der Chemie, 1994, 42, 1237-1246.	0.0	30

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91	Ultralow Friction Induced by Tribochemical Reactions: A Novel Mechanism of Lubrication on Steel Surfaces. Langmuir, 2013, 29, 5207-5213.	1.6	30
92	Galvanically induced potentials to enable minimal tribochemical wear of stainless steel lubricated with sodium chloride and ionic liquid aqueous solution. Friction, 2018, 6, 230-242.	3.4	30
93	Programming sequential motion steps in 4D-printed hygromorphs by architected mesostructure and differential hygro-responsiveness. Bioinspiration and Biomimetics, 2021, 16, 055002.	1.5	30
94	Synthesis of a Poly(p-styrenesulfonate) Brush via Surface-Initiated Polymerization. Macromolecules, 2003, 36, 1222-1227.	2.2	29
95	Fabrication of Chemically Microstructured Polymer Brushes. Langmuir, 2006, 22, 8571-8575.	1.6	29
96	Superaerophobicity: Repellence of Air Bubbles from Submerged, Surface-Engineered Silicon Substrates. Langmuir, 2012, 28, 14968-14973.	1.6	29
97	Preparation of Surface-Attached Polymer Layers by Thermal or Photochemical Activation of α-Diazoester Moieties. Langmuir, 2013, 29, 10932-10939.	1.6	29
98	Highly Selective Capture Surfaces on Medical Wires for Fishing Tumor Cells in Whole Blood. Analytical Chemistry, 2017, 89, 1846-1854.	3.2	29
99	Polyethyloxazoline monolayers for polymer supported biomembrane models. Macromolecular Symposia, 1999, 142, 1-12.	0.4	28
100	Sensitivity of microarray based immunoassays using surface-attached hydrogels. Analytica Chimica Acta, 2013, 781, 72-79.	2.6	28
101	Polymerizable Biomimetic Vesicles with Controlled Local Presentation of Adhesive Functional DOPA Groups. Langmuir, 2010, 26, 8573-8581.	1.6	27
102	Domain Memory of Mixed Polymer Brushes. Langmuir, 2006, 22, 4660-4667.	1.6	26
103	And There Was Light: Prospects for the Creation of Micro- and Nanostructures through Maskless Photolithography. ACS Nano, 2017, 11, 8537-8541.	7.3	26
104	Tailoring of Surfaces with Ultrathin Layers for Controlled Binding of Biopolymers and Adhesion and Guidance of Cells. Israel Journal of Chemistry, 1996, 36, 357-369.	1.0	25
105	The Surface Science of Microarray Generation–A Critical Inventory. ACS Applied Materials & Samp; Interfaces, 2019, 11, 39397-39409.	4.0	25
106	Actomyosin, vimentin and LINC complex pull on osteosarcoma nuclei to deform on micropillar topography. Biomaterials, 2020, 234, 119746.	5.7	25
107	Monolayers of Amphiphilic Block Copolymers via Physisorbed Macroinitiators. Macromolecules, 2000, 33, 4501-4511.	2.2	23
108	On the Lubrication Mechanism of Surfaces Covered with Surfaceâ€Attached Hydrogels. Macromolecular Chemistry and Physics, 2016, 217, 526-536.	1.1	23

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109	Composite material consisting of microporous \hat{l}^2 -TCP ceramic and alginate for delayed release of antibiotics. Acta Biomaterialia, 2017, 51, 433-446.	4.1	23
110	The Structural and Mechanical Basis for Passiveâ€Hydraulic Pine Cone Actuation. Advanced Science, 2022, 9, e2200458.	5.6	23
111	Weak Polyelectrolyte Brushes as Substrates for the Formation of Surface-Attached Polyelectrolyteâ^'Polyelectrolyte Complexes and Polyelectrolyte Multilayers. Macromolecules, 2005, 38, 10743-10749.	2.2	22
112	Photochemical Generation of Ferroceneâ€Based Redoxâ€Polymer Networks. Macromolecular Rapid Communications, 2009, 30, 1817-1822.	2.0	22
113	Surface topography, morphology and functionality of silver containing plasma polymer nanocomposites. Surface and Coatings Technology, 2011, 205, 2978-2984.	2.2	22
114	Polymer Microstructures through Twoâ€Photon Crosslinking. Advanced Materials, 2017, 29, 1703469.	11.1	22
115	Imaging of polymer monolayers attached to silica surfaces by element specific transmission electron microscopy. Polymer, 1996, 37, 1087-1093.	1.8	21
116	On the Generation of Polyetherâ€Based Coatings through Photoinduced C,H Insertion Crosslinking. Macromolecular Chemistry and Physics, 2016, 217, 1457-1466.	1.1	21
117	Polymers grafted from solid surfaces. Macromolecular Symposia, 1998, 126, 215-222.	0.4	20
118	Microarray-based amplification and detection of RNA by nucleic acid sequence based amplification. Analytical and Bioanalytical Chemistry, 2010, 397, 3533-3541.	1.9	20
119	Attachment of Polymer Films to Solid Surfaces via Thermal Activation of Self-assembled Monolayers Containing Sulphonyl Azide Group. Langmuir, 2010, 26, 769-774.	1.6	20
120	Humidity Driven Swelling of the Surface-Attached Poly(<i>N</i> -alkylacrylamide) Hydrogels. Macromolecules, 2016, 49, 8254-8264.	2.2	20
121	Malonic Acid Diazoesters for Câ^'H Insertion Crosslinking (CHic) Reactions: A Versatile Method for the Generation of Tailorâ€Made Surfaces. Angewandte Chemie - International Edition, 2017, 56, 14405-14410.	7.2	20
122	Poly(cycloalkyl[c]thiophene)s â€" syntheses, electrical properties and charge transport mechanism. Macromolecular Chemistry and Physics, 1995, 196, 225-242.	1.1	19
123	Compartmentalizing a lipid bilayer by tuning lateral stress in a physisorbed polymer-tethered membrane. Soft Matter, 2010, 6, 2723.	1.2	19
124	Platelet Repellent Properties of Hydrogel Coatings on Polyurethane-Coated Glass Surfaces. ASAIO Journal, 2014, 60, 587-593.	0.9	18
125	Analysis of Calcium Transients and Uniaxial Contraction Force in Single Human Embryonic Stem Cell-Derived Cardiomyocytes on Microstructured Elastic Substrate with Spatially Controlled Surface Chemistries. Langmuir, 2016, 32, 12190-12201.	1.6	18
126	Functional Cryogel Microstructures Prepared by Light-Induced Cross-Linking of a Photoreactive Copolymer. ACS Applied Materials & Samp; Interfaces, 2017, 9, 12165-12170.	4.0	18

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127	PDMAA Hydrogel Coated U-Bend Humidity Sensor Suited for Mass-Production. Sensors, 2017, 17, 517.	2.1	18
128	On the relationship of YAP and FAK in hMSCs and osteosarcoma cells: Discrimination of FAK modulation by nuclear YAP depletion or YAP silencing. Cellular Signalling, 2019, 63, 109382.	1.7	18
129	Surface attached ultrathin polymer monolayers for control of cell adhesion. Annals of Thoracic Surgery, 2001, 71, S437-S440.	0.7	17
130	Polymer-Tethered Bimolecular Lipid Membranes. Advances in Polymer Science, 2009, , 87-111.	0.4	17
131	Synthesis and Morphological Study of Thick Benzyl Methacrylate–Styrene Diblock Copolymer Brushes. Langmuir, 2011, 27, 13284-13292.	1.6	17
132	Polysaccharide microarrays with a CMOS based signal detection unit. Biosensors and Bioelectronics, 2011, 26, 1839-1846.	5.3	17
133	Universal nucleic acid sequence-based amplification for simultaneous amplification of messengerRNAs and microRNAs. Analytica Chimica Acta, 2012, 754, 1-7.	2.6	17
134	1,3-Diketone Fluids and Their Complexes with Iron. Journal of Physical Chemistry A, 2013, 117, 3369-3376.	1.1	17
135	Macroscopic Superlow Friction of Steel and Diamond-Like Carbon Lubricated with a Formanisotropic 1,3-Diketone. ACS Omega, 2017, 2, 8330-8342.	1.6	17
136	Effect of geometrical constraints on human pluripotent stem cell nuclei in pluripotency and differentiation. Integrative Biology (United Kingdom), 2018, 10, 278-289.	0.6	17
137	Surface-attached dual-functional hydrogel for controlled cell adhesion based on poly(N,N-dimethylacrylamide). Journal of Polymer Research, 2019, 26, 1.	1.2	17
138	Viscoelastic spectra of soft polymer interfaces obtained by noise analysis of AFM cantilevers. Surface and Interface Analysis, 1999, 27, 572-577.	0.8	16
139	Phase diagrams of phenyl benzoate side group liquid crystal polymers and similar low molecular mass liquid crystals. Liquid Crystals, 1999, 26, 1655-1661.	0.9	16
140	Cooperative Diffusion of End-Grafted Polymer Brushes in Good Solvents. Macromolecules, 2005, 38, 8960-8962.	2.2	16
141	Molting Materials: Restoring Superhydrophobicity after Severe Damage via Snakeskin-like Shedding. Langmuir, 2017, 33, 4833-4839.	1.6	16
142	Reduced Lateral Confinement and Its Effect on Stability in Patterned Strong Polyelectrolyte Brushes. Langmuir, 2017, 33, 3296-3303.	1.6	16
143	Waferâ€Scale Fabrication of Conducting Polymer Hydrogels for Microelectrodes and Flexible Bioelectronics. Advanced Biology, 2019, 3, e1900072.	3.0	16
144	Polyelectrolyte Multilayers on Weak Polyelectrolyte Brushes. Macromolecular Rapid Communications, 2003, 24, 576-579.	2.0	15

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145	Cell microâ€arrays from surfaceâ€attached peptideâ€polymer monolayers. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 468-473.	0.8	15
146	Tailormade Microfluidic Devices Through Photochemical Surface Modification. Macromolecular Chemistry and Physics, 2010, 211, 195-203.	1.1	15
147	Micro to nano: Surface size scale and superhydrophobicity. Beilstein Journal of Nanotechnology, 2011, 2, 327-332.	1.5	15
148	Capacitive humidity and dew-point sensing: Influence of wetting of surface-attached polymer monolayers on the sensor response. Sensors and Actuators B: Chemical, 2016, 222, 87-94.	4.0	15
149	Dynamic light scattering from liquid crystal polymer brushes swollen in a nematic solvent. Liquid Crystals, 2001, 28, 1353-1360.	0.9	14
150	Ambient temperature ATRP of benzyl methacrylate as a tool for the synthesis of block copolymers with styrene. Journal of Polymer Science Part A, 2006, 44, 2848-2861.	2.5	14
151	The design of thin polymer membranes filled with magnetic particles on a microstructured silicon surface. Nanotechnology, 2009, 20, 255301.	1.3	14
152	Step-and-Repeat Assembly of Molecularly Controlled Ultrathin Polyaramide Layers. Macromolecules, 2010, 43, 9056-9062.	2.2	14
153	PnBA/PDMAAâ€Based Iron‣oaded Micropillars Allow for Discrete Cell Adhesion and Analysis of Actuationâ€Related Molecular Responses. Advanced Materials Interfaces, 2020, 7, 1901806.	1.9	14
154	Macroscopic Friction Studies of Alkylglucopyranosides as Additives for Water-Based Lubricants. Lubricants, 2020, 8, 11.	1.2	14
155	Swellable Surface-Attached Polymer Microlenses with Tunable Focal Length. Advanced Materials, 2007, 19, 456-460.	11.1	13
156	Binding of Functionalized Polymers to Surface-Attached Polymer Networks Containing Reactive Groups. Macromolecules, 2014, 47, 2695-2702.	2.2	13
157	Morphology of Nanostructured Polymer Brushes Dependent on Production and Treatment. Macromolecules, 2017, 50, 4715-4724.	2.2	12
158	Surfaceâ€attached polymer networks through carbene intermediates generated from αâ€diazo esters. Journal of Polymer Science Part A, 2017, 55, 3276-3285.	2.5	12
159	Lubrication of surfaces covered by surface-attached hydrogel layers. Tribology International, 2020, 149, 105637.	3.0	12
160	Towards programmable friction: control of lubrication with ionic liquid mixtures by automated electrical regulation. Scientific Reports, 2020, 10, 17634.	1.6	12
161	Colorimetric sensing properties of catechol-functional polymerized vesicles in aqueous solution and at solid surfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 441, 242-254.	2.3	11
162	Nucleus deformation of SaOs-2 cells on rhombic $\hat{A}\mu$ -pillars. Journal of Materials Science: Materials in Medicine, 2015, 26, 108.	1.7	11

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163	Preparation of Linear Cryogel Arrays as a Microfluidic Platform for Immunochromatographic Assays. Analytical Chemistry, 2017, 89, 5697-5701.	3.2	11
164	"Nickel Nanoflowers―with Surface-Attached Fluoropolymer Networks by C,H Insertion for the Generation of Metallic Superhydrophobic Surfaces. Langmuir, 2018, 34, 5342-5351.	1.6	11
165	Tailored disorder: a self-organized photonic contact for light trapping in silicon-based tandem solar cells. Optics Express, 2020, 28, 10909.	1.7	11
166	Development of a Material Design Space for 4D-Printed Bio-Inspired Hygroscopically Actuated Bilayer Structures with Unequal Effective Layer Widths. Biomimetics, 2021, 6, 58.	1.5	11
167	Dynamics of end-grafted polystyrene brushes in theta solvents. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 3590-3597.	2.4	10
168	Self-Affine Surfaces of Polymer Brushes. Macromolecules, 2007, 40, 6361-6369.	2.2	10
169	Temperature and Time-Resolved Total Internal Reflectance Fluorescence Analysis of Reusable DNA Hydrogel Chips. Analytical Chemistry, 2010, 82, 6124-6131.	3.2	10
170	A Novel Reactive Lamination Process for the Generation of Functional Multilayer Foils for Optical Applications. Procedia Technology, 2014, 15, 147-155.	1.1	10
171	A Planar low-cost full-polymer Optical Humidity Sensor. Procedia Technology, 2016, 26, 530-536.	1.1	10
172	Photo-Crosslinking of Thioxanthone Group Containing Copolymers for Surface Modification and Bioanalytics. Macromolecules, 2020, 53, 1752-1759.	2.2	10
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