## Jürgen Rühe

## List of Publications by Year in descending order

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258 papers 10,999 citations

25034 57 h-index 96 g-index

267 all docs

267 docs citations

267 times ranked

9598 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. | 4.8  | 612       |
| 2  | Mechanism of Radical Chain Polymerizations Initiated by Azo Compounds Covalently Bound to the Surface of Spherical Particles. Macromolecules, 1998, 31, 602-613.        | 4.8  | 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. | 13.7 | 387       |
| 4  | Polyelectrolyte Brushes. Advances in Polymer Science, 2004, , 79-150.                                                                                                   | 0.8  | 351       |
| 5  | Some thoughts on superhydrophobic wetting. Soft Matter, 2009, 5, 51-61.                                                                                                 | 2.7  | 341       |
| 6  | Swelling Behavior of Thin, Surface-Attached Polymer Networks. Macromolecules, 2004, 37, 882-887.                                                                        | 4.8  | 332       |
| 7  | Polymer Layers through Self-Assembled Monolayers of Initiators. Langmuir, 1998, 14, 6893-6898.                                                                          | 3.5  | 262       |
| 8  | Wetting of Silicon Nanograss: From Superhydrophilic to Superhydrophobic Surfaces. Advanced Materials, 2008, 20, 159-163.                                                | 21.0 | 227       |
| 9  | Steric Forces Measured with the Atomic Force Microscope at Various Temperatures. Langmuir, 1999, 15, 2559-2565.                                                         | 3.5  | 220       |
| 10 | Condensation and Wetting Transitions on Microstructured Ultrahydrophobic Surfaces. Langmuir, 2007, 23, 3820-3824.                                                       | 3.5  | 217       |
| 11 | The Polymer-Supported Phospholipid Bilayer:Â Tethering as a New Approach to Substrateâ 'Membrane Stabilization. Biomacromolecules, 2002, 3, 27-35.                      | 5.4  | 186       |
| 12 | Low Ice Adhesion on Nano-Textured Superhydrophobic Surfaces under Supersaturated Conditions. ACS Applied Materials & Samp; Interfaces, 2016, 8, 12583-12587.            | 8.0  | 179       |
| 13 | Advancing and Receding Motion of Droplets on Ultrahydrophobic Post Surfaces. Langmuir, 2006, 22, 7652-7657.                                                             | 3.5  | 164       |
| 14 | On the glass transition in ultrathin polymer films of different molecular architecture. Macromolecular Chemistry and Physics, 1998, 199, 1435-1444.                     | 2.2  | 159       |
| 15 | Swelling of a polymer brush probed with a quartz crystal resonator. Physical Review E, 1997, 56, 680-689.                                                               | 2.1  | 158       |
| 16 | Mimicking the Stenocara Beetleâ€"Dewetting of Drops from a Patterned Superhydrophobic Surface. Langmuir, 2008, 24, 6154-6158.                                           | 3.5  | 158       |
| 17 | Magnetically-actuated artificial cilia for microfluidic propulsion. Lab on A Chip, 2011, 11, 2002.                                                                      | 6.0  | 147       |
| 18 | Nanopore-Based Single-Molecule Mass Spectrometry on a Lipid Membrane Microarray. ACS Nano, 2011, 5, 8080-8088.                                                          | 14.6 | 140       |

| #  | Article                                                                                                                                                                            | IF          | Citations |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|
| 19 | Domain Registration in Raft-Mimicking Lipid Mixtures Studied Using Polymer-Tethered Lipid Bilayers.<br>Biophysical Journal, 2007, 92, 1263-1270.                                   | 0.5         | 121       |
| 20 | Interaction of Poly(methacrylic acid) Brushes with Metal Ions:Â Swelling Properties. Macromolecules, 2005, 38, 4345-4354.                                                          | 4.8         | 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. | 3.9         | 108       |
| 23 | Toward a New Generation of Smart Biomimetic Actuators for Architecture. Advanced Materials, 2018, 30, e1703653.                                                                    | 21.0        | 108       |
| 24 | Microstructuring of Molecularly Thin Polymer Layers by Photolithography. Advanced Materials, 1998, 10, 1073-1077.                                                                  | 21.0        | 107       |
| 25 | Controlled Growth of PMMA Brushes on Silicon Surfaces at Room Temperature. Macromolecular Rapid Communications, 2002, 23, 612.                                                     | 3.9         | 106       |
| 26 | Swelling of Thick Polymer Brushes Investigated with Ellipsometry. Langmuir, 1999, 15, 2460-2465.                                                                                   | <b>3.</b> 5 | 101       |
| 27 | Planar microelectrode-cavity array for high-resolution and parallel electrical recording of membrane ionic currents. Lab on A Chip, 2008, 8, 938.                                  | 6.0         | 100       |
| 28 | Motion of nano-objects on polymer brushes. Polymer, 2004, 45, 8279-8297.                                                                                                           | 3.8         | 97        |
| 29 | Swelling of Poly(methacrylic acid) Brushes:Â Influence of Monovalent Salts in the Environment.<br>Macromolecules, 2005, 38, 4855-4860.                                             | 4.8         | 93        |
| 30 | Microcones and Nanograss: Toward Mechanically Robust Superhydrophobic Surfaces. Langmuir, 2014, 30, 4342-4350.                                                                     | 3.5         | 87        |
| 31 | Surfaces with Combined Microscale and Nanoscale Structures: A Route to Mechanically Stable Superhydrophobic Surfaces?. Langmuir, 2013, 29, 3765-3772.                              | 3.5         | 84        |
| 32 | Surface Attached Polymer Networks through Thermally Induced Cross-Linking of Sulfonyl Azide Group Containing Polymers. Macromolecules, 2008, 41, 9284-9289.                        | 4.8         | 83        |
| 33 | "Grafting Through― Mechanistic Aspects of Radical Polymerization Reactions with Surface-Attached Monomers. Macromolecules, 2014, 47, 2929-2937.                                    | 4.8         | 82        |
| 34 | Interaction of Poly(methacrylic acid) Brushes with Metal Ions:Â An Infrared Investigation.<br>Macromolecules, 2004, 37, 6954-6961.                                                 | 4.8         | 79        |
| 35 | Repulsive Forces and Relaxation on Compression of Entangled, Polydisperse Polystyrene Brushes.<br>Macromolecules, 2000, 33, 3860-3870.                                             | 4.8         | 77        |
| 36 | A Facile Photochemical Surface Modification Technique for the Generation of Microstructured Fluorinated Surfaces. Langmuir, 2004, 20, 10080-10085.                                 | 3.5         | 76        |

| #  | Article                                                                                                                                                                                                                                                   | IF   | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 37 | Artificial Cilia: Generation of Magnetic Actuators in Microfluidic Systems. Advanced Functional Materials, 2011, 21, 3314-3320.                                                                                                                           | 14.9 | 76        |
| 38 | Formation and Distribution of Silver Nanoparticles in a Functional Plasma Polymer Matrix and Related Ag <sup>+</sup> Release Properties. Plasma Processes and Polymers, 2010, 7, 619-625.                                                                 | 3.0  | 74        |
| 39 | Segment density profiles of polyelectrolyte brushes determined by Fourier transform ellipsometry. Journal of Chemical Physics, 1999, 111, 7029-7037.                                                                                                      | 3.0  | 72        |
| 40 | Surface-attached hydrogel coatings via C,H-insertion crosslinking for biomedical and bioanalytical applications (Review). Biointerphases, 2018, 13, 010801.                                                                                               | 1.6  | 71        |
| 41 | Electrochemically Controlled Drug Release from a Conducting Polymer Hydrogel (PDMAAp/PEDOT) for Local Therapy and Bioelectronics. Advanced Healthcare Materials, 2019, 8, e1801488.                                                                       | 7.6  | 71        |
| 42 | An interpenetrating, microstructurable and covalently attached conducting polymer hydrogel for neural interfaces. Acta Biomaterialia, 2017, 58, 365-375.                                                                                                  | 8.3  | 70        |
| 43 | Polymer Brushes with Liquid Crystalline Side Chains. Macromolecules, 1999, 32, 6759-6766.                                                                                                                                                                 | 4.8  | 69        |
| 44 | Perfluorinated Polymer Monolayers on Porous Silica for Materials with Super Liquid Repellent Properties. Langmuir, 2002, 18, 6133-6139.                                                                                                                   | 3.5  | 69        |
| 45 | Polymeric coatings for biomedical devices. Surface Science, 2004, 570, 111-118.                                                                                                                                                                           | 1.9  | 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.                                                                                                                                            | 4.8  | 64        |
| 48 | Memory of Surface Patterns in Mixed Polymer Brushes:  Simulation and Experiment. Langmuir, 2007, 23, 279-285.                                                                                                                                             | 3.5  | 64        |
| 49 | Light-Induced Switching of Surfaces at Wetting Transitions through Photoisomerization of Polymer Monolayers. Langmuir, 2012, 28, 15038-15046.                                                                                                             | 3.5  | 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.                                                                                                                                                                      | 3.5  | 62        |
| 52 | Experimental investigation of the flow induced by artificial cilia. Lab on A Chip, 2011, 11, 2017.                                                                                                                                                        | 6.0  | 62        |
| 53 | Influence of the Molecular Structure of Surface-Attached Poly( $\langle i \rangle N \langle i \rangle$ -alkyl Acrylamide) Coatings on the Interaction of Surfaces with Proteins, Cells and Blood Platelets. Macromolecular Bioscience, 2013, 13, 873-884. | 4.1  | 62        |
| 54 | Single-step centrifugal hematocrit determination on a 10-\$ processing device. Biomedical Microdevices, 2007, 9, 795-799.                                                                                                                                 | 2.8  | 61        |

| #  | Article                                                                                                                                                                                                                | IF   | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 55 | A Versatile Preparation Route for Thin Free-Standing Liquid Single Crystal Elastomers.<br>Macromolecular Rapid Communications, 2005, 26, 813-818.                                                                      | 3.9  | 60        |
| 56 | Drops on Microstructured Surfaces Coated with Hydrophilic Polymers:  Wenzel's Model and Beyond. Langmuir, 2008, 24, 1959-1964.                                                                                         | 3.5  | 59        |
| 57 | Simple One-Step Process for Immobilization of Biomolecules on Polymer Substrates Based on Surface-Attached Polymer Networks. Langmuir, 2011, 27, 6116-6123.                                                            | 3.5  | 59        |
| 58 | Interaction of Strong Polyelectrolytes with Surface-Attached Polyelectrolyte Brushesâ^'Polymer<br>Brushes as Substrates for the Layer-by-Layer Deposition of Polyelectrolytes. Macromolecules, 2003, 36,<br>6593-6598. | 4.8  | 56        |
| 59 | Polymer Brushes with Nanometerâ€Scale Gradients. Advanced Materials, 2009, 21, 4706-4710.                                                                                                                              | 21.0 | 56        |
| 60 | Enzyme Containing Redox Polymer Networks for Biosensors or Biofuel Cells: A Photochemical Approach. Langmuir, 2010, 26, 6019-6027.                                                                                     | 3.5  | 55        |
| 61 | Local Composition of Nanophase-Separated Mixed Polymer Brushes. Macromolecules, 2006, 39, 3056-3064.                                                                                                                   | 4.8  | 54        |
| 62 | Attachment of Polymer Films to Aluminium Surfaces by Photochemically Active Monolayers of Phosphonic Acids. Macromolecular Rapid Communications, 2004, 25, 1396-1401.                                                  | 3.9  | 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.                                                   | 4.7  | 51        |
| 64 | Kinetics of the Generation of Surface-Attached Polymer Networks through C, H-Insertion Reactions. Macromolecules, 2016, 49, 2438-2447.                                                                                 | 4.8  | 51        |
| 65 | Surface-Attached PDMAAâ^'GRGDSP Hybrid Polymer Monolayers that Promote the Adhesion of Living Cells. Biomacromolecules, 2008, 9, 543-552.                                                                              | 5.4  | 49        |
| 66 | Binding of Oppositely Charged Surfactants to Poly(methacrylic acid) Brushes. Macromolecules, 2005, 38, 6140-6151.                                                                                                      | 4.8  | 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.                                                       | 2.3  | 45        |
| 68 | Photomechanical Degrafting of Azo-Functionalized Poly(methacrylic acid) (PMAA) Brushes. Journal of Physical Chemistry B, 2011, 115, 10431-10438.                                                                       | 2.6  | 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.                            | 2.4  | 43        |
| 70 | A polymer-based DNA biochip platform for human papilloma virus genotyping. Journal of Virological Methods, 2010, 163, 40-48.                                                                                           | 2.1  | 42        |
| 71 | Transbilayer coupling of obstructed lipid diffusion in polymer-tethered phospholipid bilayers. Soft<br>Matter, 2008, 4, 1899.                                                                                          | 2.7  | 41        |
| 72 | Collapse of Polyelectrolyte Brushes Probed by Noise Analysis of a Scanning Force Microscope Cantilever. Langmuir, 2000, 16, 5774-5784.                                                                                 | 3.5  | 40        |

| #  | Article                                                                                                                                                                                                    | IF   | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 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.                                                | 2.1  | 39        |
| 74 | Photolithographic structuring of surface-attached polymer monolayers. Materials Science and Engineering C, 1999, 8-9, 291-297.                                                                             | 7.3  | 39        |
| 75 | Thickness Dependence of the Solvent-Induced Glass Transition in Polymer Brushes. Macromolecules, 1999, 32, 1244-1251.                                                                                      | 4.8  | 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. | 1.9  | 39        |
| 77 | Towards ultrahydrophobic surfaces: a biomimetic approach. Journal of Physics Condensed Matter, 2005, 17, S639-S648.                                                                                        | 1.8  | 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.                                | 4.7  | 37        |
| 80 | A Robust Method for the Immobilization of Polymer Molecules on SiO <sub>2</sub> Surfaces. Macromolecules, 2008, 41, 873-878.                                                                               | 4.8  | 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.                                          | 2.1  | 35        |
| 82 | Ultralow Friction of Steel Surfaces Using a 1,3-Diketone Lubricant in the Thin Film Lubrication Regime. Langmuir, 2015, 31, 11033-11039.                                                                   | 3.5  | 35        |
| 83 | Tailoring of surfaces with ultrathin polymer films for survival and growth of neurons in culture.<br>Journal of Biomaterials Science, Polymer Edition, 1999, 10, 859-874.                                  | 3.5  | 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.                  | 1.8  | 33        |
| 85 | Collapse of a Polymer Brush in a Poor Solvent Probed by Noise Analysis of a Scanning Force<br>Microscope Cantilever. Langmuir, 1998, 14, 3999-4004.                                                        | 3.5  | 31        |
| 86 | Drop impact on chemically structured arrays. Journal of Physics Condensed Matter, 2005, 17, S595-S605.                                                                                                     | 1.8  | 31        |
| 87 | Printed protein microarrays on unmodified plastic substrates. Analytica Chimica Acta, 2010, 671, 92-98.                                                                                                    | 5.4  | 31        |
| 88 | Tailorâ€Made Polymer Multilayers. Advanced Functional Materials, 2013, 23, 6019-6023.                                                                                                                      | 14.9 | 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.                                       | 6.4  | 31        |
| 90 | Maßgeschneiderte OberflÃ <b>e</b> hen. Nachrichten Aus Der Chemie, 1994, 42, 1237-1246.                                                                                                                    | 0.0  | 30        |

| #   | Article                                                                                                                                                                                | IF           | Citations |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------|
| 91  | Ultralow Friction Induced by Tribochemical Reactions: A Novel Mechanism of Lubrication on Steel Surfaces. Langmuir, 2013, 29, 5207-5213.                                               | 3.5          | 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. | 6.4          | 30        |
| 93  | Programming sequential motion steps in 4D-printed hygromorphs by architected mesostructure and differential hygro-responsiveness. Bioinspiration and Biomimetics, 2021, 16, 055002.    | 2.9          | 30        |
| 94  | Synthesis of a Poly(p-styrenesulfonate) Brush via Surface-Initiated Polymerization. Macromolecules, 2003, 36, 1222-1227.                                                               | 4.8          | 29        |
| 95  | Fabrication of Chemically Microstructured Polymer Brushes. Langmuir, 2006, 22, 8571-8575.                                                                                              | 3 <b>.</b> 5 | 29        |
| 96  | Superaerophobicity: Repellence of Air Bubbles from Submerged, Surface-Engineered Silicon Substrates. Langmuir, 2012, 28, 14968-14973.                                                  | <b>3.</b> 5  | 29        |
| 97  | Preparation of Surface-Attached Polymer Layers by Thermal or Photochemical Activation of α-Diazoester Moieties. Langmuir, 2013, 29, 10932-10939.                                       | 3 <b>.</b> 5 | 29        |
| 98  | Highly Selective Capture Surfaces on Medical Wires for Fishing Tumor Cells in Whole Blood.<br>Analytical Chemistry, 2017, 89, 1846-1854.                                               | 6.5          | 29        |
| 99  | Polyethyloxazoline monolayers for polymer supported biomembrane models. Macromolecular Symposia, 1999, 142, 1-12.                                                                      | 0.7          | 28        |
| 100 | Sensitivity of microarray based immunoassays using surface-attached hydrogels. Analytica Chimica Acta, 2013, 781, 72-79.                                                               | 5.4          | 28        |
| 101 | Polymerizable Biomimetic Vesicles with Controlled Local Presentation of Adhesive Functional DOPA Groups. Langmuir, 2010, 26, 8573-8581.                                                | 3.5          | 27        |
| 102 | Domain Memory of Mixed Polymer Brushes. Langmuir, 2006, 22, 4660-4667.                                                                                                                 | 3.5          | 26        |
| 103 | And There Was Light: Prospects for the Creation of Micro- and Nanostructures through Maskless Photolithography. ACS Nano, 2017, 11, 8537-8541.                                         | 14.6         | 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.                  | 2.3          | 25        |
| 105 | The Surface Science of Microarray Generation–A Critical Inventory. ACS Applied Materials & Description of the Surfaces, 2019, 11, 39397-39409.                                         | 8.0          | 25        |
| 106 | Actomyosin, vimentin and LINC complex pull on osteosarcoma nuclei to deform on micropillar topography. Biomaterials, 2020, 234, 119746.                                                | 11.4         | 25        |
| 107 | Monolayers of Amphiphilic Block Copolymers via Physisorbed Macroinitiators. Macromolecules, 2000, 33, 4501-4511.                                                                       | 4.8          | 23        |
| 108 | On the Lubrication Mechanism of Surfaces Covered with Surfaceâ€Attached Hydrogels. Macromolecular Chemistry and Physics, 2016, 217, 526-536.                                           | 2.2          | 23        |

| #   | Article                                                                                                                                                                                                                                       | IF   | Citations |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 109 | Composite material consisting of microporous $\hat{l}^2$ -TCP ceramic and alginate for delayed release of antibiotics. Acta Biomaterialia, 2017, 51, 433-446.                                                                                 | 8.3  | 23        |
| 110 | The Structural and Mechanical Basis for Passiveâ€Hydraulic Pine Cone Actuation. Advanced Science, 2022, 9, e2200458.                                                                                                                          | 11.2 | 23        |
| 111 | Weak Polyelectrolyte Brushes as Substrates for the Formation of Surface-Attached<br>Polyelectrolyteâ^Polyelectrolyte Complexes and Polyelectrolyte Multilayers. Macromolecules, 2005,<br>38, 10743-10749.                                     | 4.8  | 22        |
| 112 | Photochemical Generation of Ferroceneâ€Based Redoxâ€Polymer Networks. Macromolecular Rapid Communications, 2009, 30, 1817-1822.                                                                                                               | 3.9  | 22        |
| 113 | Surface topography, morphology and functionality of silver containing plasma polymer nanocomposites. Surface and Coatings Technology, 2011, 205, 2978-2984.                                                                                   | 4.8  | 22        |
| 114 | Polymer Microstructures through Twoâ€Photon Crosslinking. Advanced Materials, 2017, 29, 1703469.                                                                                                                                              | 21.0 | 22        |
| 115 | Imaging of polymer monolayers attached to silica surfaces by element specific transmission electron microscopy. Polymer, 1996, 37, 1087-1093.                                                                                                 | 3.8  | 21        |
| 116 | On the Generation of Polyetherâ€Based Coatings through Photoinduced C,H Insertion Crosslinking. Macromolecular Chemistry and Physics, 2016, 217, 1457-1466.                                                                                   | 2.2  | 21        |
| 117 | Polymers grafted from solid surfaces. Macromolecular Symposia, 1998, 126, 215-222.                                                                                                                                                            | 0.7  | 20        |
| 118 | Microarray-based amplification and detection of RNA by nucleic acid sequence based amplification. Analytical and Bioanalytical Chemistry, 2010, 397, 3533-3541.                                                                               | 3.7  | 20        |
| 119 | Attachment of Polymer Films to Solid Surfaces via Thermal Activation of Self-assembled Monolayers<br>Containing Sulphonyl Azide Group. Langmuir, 2010, 26, 769-774.                                                                           | 3.5  | 20        |
| 120 | Humidity Driven Swelling of the Surface-Attached Poly( <i>N</i> -alkylacrylamide) Hydrogels. Macromolecules, 2016, 49, 8254-8264.                                                                                                             | 4.8  | 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.                                 | 13.8 | 20        |
| 122 | Poly(cycloalkyl[c]thiophene)s â€" syntheses, electrical properties and charge transport mechanism. Macromolecular Chemistry and Physics, 1995, 196, 225-242.                                                                                  | 2.2  | 19        |
| 123 | Compartmentalizing a lipid bilayer by tuning lateral stress in a physisorbed polymer-tethered membrane. Soft Matter, 2010, 6, 2723.                                                                                                           | 2.7  | 19        |
| 124 | Platelet Repellent Properties of Hydrogel Coatings on Polyurethane-Coated Glass Surfaces. ASAIO Journal, 2014, 60, 587-593.                                                                                                                   | 1.6  | 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. | 3.5  | 18        |
| 126 | Functional Cryogel Microstructures Prepared by Light-Induced Cross-Linking of a Photoreactive Copolymer. ACS Applied Materials & Samp; Interfaces, 2017, 9, 12165-12170.                                                                      | 8.0  | 18        |

| #   | Article                                                                                                                                                                                | IF           | Citations |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------|
| 127 | PDMAA Hydrogel Coated U-Bend Humidity Sensor Suited for Mass-Production. Sensors, 2017, 17, 517.                                                                                       | 3.8          | 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. | 3.6          | 18        |
| 129 | Surface attached ultrathin polymer monolayers for control of cell adhesion. Annals of Thoracic Surgery, 2001, 71, S437-S440.                                                           | 1.3          | 17        |
| 130 | Polymer-Tethered Bimolecular Lipid Membranes. Advances in Polymer Science, 2009, , 87-111.                                                                                             | 0.8          | 17        |
| 131 | Synthesis and Morphological Study of Thick Benzyl Methacrylate–Styrene Diblock Copolymer Brushes. Langmuir, 2011, 27, 13284-13292.                                                     | 3.5          | 17        |
| 132 | Polysaccharide microarrays with a CMOS based signal detection unit. Biosensors and Bioelectronics, 2011, 26, 1839-1846.                                                                | 10.1         | 17        |
| 133 | Universal nucleic acid sequence-based amplification for simultaneous amplification of messengerRNAs and microRNAs. Analytica Chimica Acta, 2012, 754, 1-7.                             | 5 <b>.</b> 4 | 17        |
| 134 | 1,3-Diketone Fluids and Their Complexes with Iron. Journal of Physical Chemistry A, 2013, 117, 3369-3376.                                                                              | 2.5          | 17        |
| 135 | Macroscopic Superlow Friction of Steel and Diamond-Like Carbon Lubricated with a Formanisotropic 1,3-Diketone. ACS Omega, 2017, 2, 8330-8342.                                          | 3.5          | 17        |
| 136 | Effect of geometrical constraints on human pluripotent stem cell nuclei in pluripotency and differentiation. Integrative Biology (United Kingdom), 2018, 10, 278-289.                  | 1.3          | 17        |
| 137 | Surface-attached dual-functional hydrogel for controlled cell adhesion based on poly(N,N-dimethylacrylamide). Journal of Polymer Research, 2019, 26, 1.                                | 2.4          | 17        |
| 138 | Viscoelastic spectra of soft polymer interfaces obtained by noise analysis of AFM cantilevers. Surface and Interface Analysis, 1999, 27, 572-577.                                      | 1.8          | 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.                             | 2.2          | 16        |
| 140 | Cooperative Diffusion of End-Grafted Polymer Brushes in Good Solvents. Macromolecules, 2005, 38, 8960-8962.                                                                            | 4.8          | 16        |
| 141 | Molting Materials: Restoring Superhydrophobicity after Severe Damage via Snakeskin-like Shedding.<br>Langmuir, 2017, 33, 4833-4839.                                                    | 3 <b>.</b> 5 | 16        |
| 142 | Reduced Lateral Confinement and Its Effect on Stability in Patterned Strong Polyelectrolyte Brushes. Langmuir, 2017, 33, 3296-3303.                                                    | <b>3.</b> 5  | 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.                                                                   | 3.9          | 15        |

| #   | Article                                                                                                                                                                                                      | IF   | CITATIONS |
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