# Mark Geoghegan

List of Publications by Year
in descending order



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|---|---|---|---|
| 117 papers | 3,736 citations | 147566 31 h-index | 149479 56 g-index |
| 124 all docs | 124 docs citations | 124 times ranked | 4918 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Weak polyelectrolyte brushes. Soft Matter, 2022, 18, 2500-2511. | 1.2 | 12 |
| 2 | Optical Gain in Semiconducting Polymer Nano and Mesoparticles. Molecules, 2021, 26, 1138. | 1.7 | 0 |
| 3 | Lateral diffusion of single poly(ethylene oxide) chains on the surfaces of glassy and molten polymer films. Journal of Chemical Physics, 2021, 154, 164902. | 1.2 | 1 |
| 4 | Combined specular and off-specular reflectometry: elucidating the complex structure of soft buried interfaces. Journal of Applied Crystallography, 2021, 54, 924-948. | 1.9 | 11 |
| 5 | 2D reflectometry for the investigation of polymer interfaces: off-specular neutron scattering. Journal of Physics Condensed Matter, 2021, 33, 364002. | 0.7 | 3 |
| 6 | The Role of Extracellular DNA in Microbial Attachment to Oxidized Silicon Surfaces in the Presence of Ca<sup>2+</sup> and Na<sup>+</sup>. Langmuir, 2021, 37, 9838-9850. | 1.6 | 6 |
| 7 | Sustainable Team Design: A Challenge to Traditional Beliefs in Information-Intensive Service Industries. Sustainability, 2021, 13, 13552. | 1.6 | 0 |
| 8 | Adhesion of Grafted-to Polyelectrolyte Brushes Functionalized with Calix[4]resorcinarene and Deposited as a Monolayer. Langmuir, 2020, 36, 13843-13852. | 1.6 | 4 |
| 9 | Glycanâ€“glycan interactions determine Leishmania attachment to the midgut of permissive sand fly vectors. Chemical Science, 2020, 11, 10973-10983. | 3.7 | 4 |
| 10 | Adhesion between oppositely charged polyelectrolytes in salt solution. Journal of Applied Polymer Science, 2020, 137, 49130. | 1.3 | 11 |
| 11 | Distinct Binding Interactions of Î±5Î²1-Integrin and Proteoglycans with Fibronectin. Biophysical Journal, 2019, 117, 688-695. | 0.2 | 14 |
| 12 | Size-Dependent Photophysical Behavior of Low Bandgap Semiconducting Polymer Particles. Frontiers in Chemistry, 2019, 7, 409. | 1.8 | 4 |
| 13 | Application of mean-field theory to the spin casting of polystyrene and poly(methyl methacrylate) blend films from toluene. Polymer, 2019, 178, 121578. | 1.8 | 2 |
| 14 | Extracellular DNA Provides Structural Integrity to a Micrococcus luteus Biofilm. Langmuir, 2019, 35, 6468-6475. | 1.6 | 22 |
| 15 | Slow polymer diffusion on brush-patterned surfaces in aqueous solution. Nanoscale, 2019, 11, 6052-6061. | 2.8 | 3 |
| 16 | Salt Dependence of the Tribological Properties of a Surface-Grafted Weak Polycation in Aqueous Solution. Tribology Letters, 2018, 66, 11. | 1.2 | 11 |
| 17 | Temperature-dependent structure and dynamics of highly-branched poly(N-isopropylacrylamide) in aqueous solution. Soft Matter, 2018, 14, 1482-1491. | 1.2 | 6 |
| 18 | Polymers and biopolymers at interfaces. Reports on Progress in Physics, 2018, 81, 036601. | 8.1 | 26 |

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|---|---|---|---|
| 19 | Adhesion between oppositely charged polyelectrolytes. Journal of Adhesion, 2018, 94, 58-76. | 1.8 | 6 |
| 20 | Highly-ordered onion micelles made from amphiphilic highly-branched copolymers. Polymer Chemistry, 2018, 9, 5617-5629. | 1.9 | 3 |
| 21 | Blob Size Controls Diffusion of Free Polymer in a Chemically Identical Brush in Semidilute Solution. Macromolecules, 2018, 51, 6312-6317. | 2.2 | 5 |
| 22 | Nanotribological Investigation of Polymer Brushes with Lithographically Defined and Systematically Varying Grafting Densities. Langmuir, 2017, 33, 706-713. | 1.6 | 6 |
| 23 | The swelling of weak polyelectrolytes at low salt concentrations in dilute solution. Polymer, 2017, 112, 414-417. | 1.8 | 5 |
| 24 | From spin coating to rollâ€toâ€roll: investigating the challenge of upscaling lead halide perovskite solar cells. IET Renewable Power Generation, 2017, 11, 546-549. | 1.7 | 25 |
| 25 | Influence of salt on the solution dynamics of a phosphorylcholine-based polyzwitterion. European Polymer Journal, 2017, 87, 449-457. | 2.6 | 12 |
| 26 | Polymer Surfaces: Segregation. , 2016, , . | | 1 |
| 27 | Effect of Salt on Phosphorylcholine-based Zwitterionic Polymer Brushes. Langmuir, 2016, 32, 5048-5057. | 1.6 | 73 |
| 28 | Double-network hydrogels improve pH-switchable adhesion. Soft Matter, 2016, 12, 5022-5028. | 1.2 | 24 |
| 29 | The Substrate is a pH-Controlled Second Gate of Electrolyte-Gated Organic Field-Effect Transistor. ACS Applied Materials & Interfaces, 2016, 8, 31783-31790. | 4.0 | 17 |
| 30 | The pH-responsive behaviour of poly(acrylic acid) in aqueous solution is dependent on molar mass. Soft Matter, 2016, 12, 2542-2549. | 1.2 | 297 |
| 31 | Characterization of Diblock Copolymer Order-Order Transitions in Semidilute Aqueous Solution Using Fluorescence Correlation Spectroscopy. Macromolecular Rapid Communications, 2015, 36, 1572-1577. | 2.0 | 13 |
| 32 | Determination of the molar mass of surface-grafted weak polyelectrolyte brushes using force spectroscopy. Polymer, 2015, 67, 111-117. | 1.8 | 13 |
| 33 | Measurement of molecular mixing at a conjugated polymer interface by specular and off-specular neutron scattering. Soft Matter, 2015, 11, 9393-9403. | 1.2 | 8 |
| 34 | Nanoscale Contact Mechanics between Two Grafted Polyelectrolyte Surfaces. Macromolecules, 2015, 48, 6272-6279. | 2.2 | 29 |
| 35 | Effect of extracellular polymeric substances on the mechanical properties of Rhodococcus. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 518-526. | 1.4 | 25 |
| 36 | Dynamics of polymer film formation during spin coating. Journal of Applied Physics, 2014, 116, . | 1.1 | 44 |

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|---|---|---|---|
| 37 | Frictional properties of a polycationic brush. Soft Matter, 2014, 10, 2759. | 1.2 | 21 |
| 38 | Reduced curvilinear velocity of boar sperm on substrates with increased hydrophobicity. Theriogenology, 2014, 81, 764-769. | 0.9 | 0 |
| 39 | Nanoscale Contact Mechanics of Biocompatible Polyzwitterionic Brushes. Langmuir, 2013, 29, 10684-10692. | 1.6 | 32 |
| 40 | All-polymer field-effect transistors using a brush gate dielectric. Journal of Materials Chemistry C, 2013, 1, 7736. | 2.7 | 7 |
| 41 | Crystallization-Driven Enhancement in Photovoltaic Performance through Block Copolymer Incorporation into P3HT:PCBM Blends. Macromolecules, 2013, 46, 3015-3024. | 2.2 | 38 |
| 42 | Phase separation-driven stratification in conventional and inverted P3HT:PCBM organic solar cells. Organic Electronics, 2013, 14, 1249-1254. | 1.4 | 31 |
| 43 | The mechanics of nanometre-scale molecular contacts. Faraday Discussions, 2012, 156, 325. | 1.6 | 15 |
| 44 | Symmetric and asymmetric instability of buried polymer interfaces. Physical Review E, 2012, 86, 032801. | 0.8 | 8 |
| 45 | Diffusion of dextran within poly(methacrylic acid) hydrogels. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 1286-1292. | 2.4 | 10 |
| 46 | Structure of films of poly(3,4-ethylene dioxythiophene)-poly(styrene sulfonate) crosslinked with glycerol. Journal of Materials Chemistry, 2011, 21, 19324. | 6.7 | 12 |
| 47 | Effect of Brush Thickness and Solvent Composition on the Friction Force Response of Poly(2-(methacryloyloxy)ethylphosphorylcholine) Brushes. Langmuir, 2011, 27, 2514-2521. | 1.6 | 74 |
| 48 | Optimization of the Bulk Heterojunction Composition for Enhanced Photovoltaic Properties: Correlation between the Molecular Weight of the Semiconducting Polymer and Device Performance. Journal of Physical Chemistry B, 2011, 115, 12717-12727. | 1.2 | 55 |
| 49 | The influence of directed Ï€â€“Ï€ interactions in solution on the thin film organic semiconductor device properties of small molecule polymer blends. Soft Matter, 2011, 7, 7065. | 1.2 | 14 |
| 50 | Contact Mechanics of Nanometer-Scale Molecular Contacts: Correlation between Adhesion, Friction, and Hydrogen Bond Thermodynamics. Journal of the American Chemical Society, 2011, 133, 8625-8632. | 6.6 | 30 |
| 51 | Single Macromolecule Diffusion in Confined Environments. Macromolecular Rapid Communications, 2011, 32, 1411-1418. | 2.0 | 7 |
| 52 | Magnetic field dependence of the diffusion of single dextran molecules within a hydrogel containing magnetite nanoparticles. Journal of Chemical Physics, 2011, 134, 094901. | 1.2 | 14 |
| 53 | Quantitative evaluation of evaporation rate during spin-coating of polymer blend films: Control of film structure through defined-atmosphere solvent-casting. European Physical Journal E, 2010, 33, 283-289. | 0.7 | 77 |
| 54 | Adhesive and conformational behaviour of mycolic acid monolayers. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 1829-1839. | 1.4 | 14 |

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|---|---|---|---|
| 55 | Observation of the complete rupture of a buried polymer layer by off-specular neutron reflectometry. Europhysics Letters, 2009, 86, 36005. | 0.7 | 8 |
| 56 | The Impact of Interfacial Mixing on FÃ¶rster Transfer at Conjugated Polymer Heterojunctions. Advanced Functional Materials, 2009, 19, 157-163. | 7.8 | 22 |
| 57 | Synthesis, characterization and swelling behaviour of poly(methacrylic acid) brushes synthesized using atom transfer radical polymerization. Polymer, 2009, 50, 1005-1014. | 1.8 | 76 |
| 58 | Creation of dense polymer brush layers by the controlled deposition of an amphiphilic responsive comb polymer. Polymer, 2009, 50, 4829-4836. | 1.8 | 14 |
| 59 | Composition depth profiling of polystyrene/poly(vinyl ethyl ether) blend thin films by angle resolved XPS. Journal of Electron Spectroscopy and Related Phenomena, 2009, 171, 57-63. | 0.8 | 6 |
| 60 | Directed Single Molecule Diffusion Triggered by Surface Energy Gradients. ACS Nano, 2009, 3, 3235-3243. | 7.3 | 38 |
| 61 | Organic Semiconductor-Polymer Insulator Blends: a Morphological Study of the Guest-Host Interactions. E-Journal of Surface Science and Nanotechnology, 2009, 7, 455-458. | 0.1 | 3 |
| 62 | Organic Thin Film Transistors with Polymer Brush Gate Dielectrics Synthesized by Atom Transfer Radical Polymerization. Advanced Functional Materials, 2008, 18, 36-43. | 7.8 | 51 |
| 63 | The interfacial behaviour of single poly(N,N-dimethylacrylamide) chains as a function of pH. Nanotechnology, 2008, 19, 035505. | 1.3 | 12 |
| 64 | Organic field effect transistors from ambient solution processed low molar mass semiconductorâ€“insulator blends. Journal of Materials Chemistry, 2008, 18, 3230. | 6.7 | 116 |
| 65 | The polymer physics and chemistry of microbial cell attachment and adhesion. Faraday Discussions, 2008, 139, 85. | 1.6 | 59 |
| 66 | Control of roughness at interfaces and the impact on charge mobility in all-polymer field-effect transistors. Soft Matter, 2008, 4, 2220. | 1.2 | 29 |
| 67 | Conformation of Poly(methacrylic acid) Chains in Dilute Aqueous Solution. Macromolecules, 2008, 41, 2203-2211. | 2.2 | 85 |
| 68 | Switching Layer Stability in a Polymer Bilayer by Thickness Variation. Physical Review Letters, 2007, 98, 267802. | 2.9 | 70 |
| 69 | Generation of Molecular-Scale Compositional Gradients in Self-Assembled Monolayers. Nano Letters, 2007, 7, 3747-3752. | 4.5 | 22 |
| 70 | Thermally responsive polymeric hydrogel brushes: synthesis, physical properties and use for the culture of chondrocytes. Journal of the Royal Society Interface, 2007, 4, 117-126. | 1.5 | 45 |
| 71 | Controlling Networkâ€“Brush Interactions to Achieve Switchable Adhesion. Angewandte Chemie - International Edition, 2007, 46, 6460-6463. | 7.2 | 67 |
| 72 | Avantages de la rÃ©flectomÃ©trie des neutrons pour l'Ã©tude des polymÃ¨res en couches minces. Ã‰cole ThÃ©matique De La SociÃ©tÃ© FranÃ§aise De La Neutronique, 2007, 12, 103-113. | 0.2 | 1 |

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|---|---|---|---|
| 73 | The pH-induced swelling and collapse of a polybase brush synthesized by atom transfer radical polymerization. Soft Matter, 2006, 2, 1076-1080. | 1.2 | 53 |
| 74 | Interfacial Structure in Conjugated Polymers:Â Characterization and Control of the Interface between Poly(9,9-dioctylfluorene) and Poly(9,9-dioctylfluorene-alt-benzothiadiazole). Macromolecules, 2006, 39, 6699-6707. | 2.2 | 18 |
| 75 | Controlled growth of poly (2-(diethylamino)ethyl methacrylate) brushes via atom transfer radical polymerisation on planar silicon surfaces. Polymer International, 2006, 55, 808-815. | 1.6 | 24 |
| 76 | Generic Methodologies for Nanotechnology: Classification and Fabrication. , 2005, , 1-55. | | 5 |
| 77 | Processing and Properties of Inorganic Nanomaterials. , 2005, , 237-281. | | 1 |
| 78 | Macromolecules at Interfaces and Structured Organic Films. , 2005, , 377-418. | | 1 |
| 79 | Bionanotechnology. , 2005, , 419-445. | | 0 |
| 80 | The interplay between the optical and electronic properties of light-emitting-diode applicable conjugated polymer blends and their phase-separated morphology. Organic Electronics, 2005, 6, 35-45. | 1.4 | 53 |
| 81 | Block copolymer adsorption from a homopolymer melt to an amine-terminated surface. European Physical Journal E, 2005, 18, 159-166. | 0.7 | 7 |
| 82 | Thin polymer films on chemically patterned, corrugated substrates. Journal of Physics Condensed Matter, 2005, 17, S389-S402. | 0.7 | 19 |
| 83 | Surface segregation and self-stratification in blends of spin-cast polyfluorene derivatives. Journal of Physics Condensed Matter, 2005, 17, 1319-1328. | 0.7 | 51 |
| 84 | Current-induced chain migration in semiconductor polymer blends. Physical Review B, 2005, 71, . | 1.1 | 19 |
| 85 | Inorganic Semiconductor Nanostructures. , 2005, , 130-202. | | 1 |
| 86 | Nanomagnetic Materials and Devices. , 2005, , 203-236. | | 1 |
| 87 | Electronic and Electro-Optic Molecular Materials and Devices. , 2005, , 282-342. | | 4 |
| 88 | Self-Assembling Nanostructured Molecular Materials and Devices. , 2005, , 343-376. | | 2 |
| 89 | Kinetics of Surface Crystallization in Thin Films of Poly(ethylene terephthalate). Macromolecules, 2005, 38, 2315-2320. | 2.2 | 51 |
| 90 | Responsive brushes and gels as components of soft nanotechnology. Faraday Discussions, 2005, 128, 55-74. | 1.6 | 90 |

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|---|---|---|---|
| 91 | Mechanical Actuation by Responsive Polyelectrolyte Brushes and Triblock Gels. Journal of Macromolecular Science - Physics, 2005, 44, 1103-1121. | 0.4 | 28 |
| 92 | Generic Methodologies for Nanotechnology: Characterization. , 2005, , 56-129. | | 1 |
| 93 | Structural features in aligned poly(3-alkylthiophene) films revealed by grazing incidence X-ray diffraction. Polymer, 2004, 45, 4133-4138. | 1.8 | 18 |
| 94 | Controlling the Surface Composition of Poly(3,4-ethylene dioxythiophene)â€“Poly(styrene sulfonate) Blends by Heat Treatment. Advanced Materials, 2004, 16, 807-811. | 11.1 | 52 |
| 95 | Applications of grazing incidence diffraction to polymer surfaces. Radiation Physics and Chemistry, 2004, 71, 811-815. | 1.4 | 10 |
| 96 | Wetting at polymer surfaces and interfaces. Progress in Polymer Science, 2003, 28, 261-302. | 11.8 | 392 |
| 97 | Correlating structure with fluorescence emission in phase-separated conjugated-polymer blends. Nature Materials, 2003, 2, 616-621. | 13.3 | 178 |
| 98 | Block Copolymer Adsorption from a Homopolymer Melt to Silicon Oxide:â€‰ Effects of Nonadsorbing Block Length and Anchoring Blockâ^'Substrate Interaction. Macromolecules, 2003, 36, 9897-9904. | 2.2 | 28 |
| 99 | Equilibrium Swelling of Polystyrene Networks by Linear Polystyrene. Macromolecules, 2003, 36, 127-141. | 2.2 | 26 |
| 100 | Interfacial structure in semiconducting polymer devices. Journal of Materials Chemistry, 2003, 13, 2814-2818. | 6.7 | 50 |
| 101 | A neutron reflectometry study of the interface between poly(9,9-dioctylfluorene) and poly(methyl) Tj ETQq1 1 0.784314 rgBT /Overlo | 1.5 | 16 |
| 102 | Scaling model for the anomalous swelling of polymer networks in a polymer solvent. Europhysics Letters, 2002, 57, 32-38. | 0.7 | 13 |
| 103 | Dewetting at a Polymerâ^'Polymer Interface:Â Film Thickness Dependence. Langmuir, 2001, 17, 6269-6274. | 1.6 | 81 |
| 104 | Thermodynamic Suppression of Brownian Motion. Physical Review Letters, 2001, 86, 2581-2584. | 2.9 | 2 |
| 105 | Surface segregation from polystyrene networks. Journal of Physics Condensed Matter, 2000, 12, 5129-5142. | 0.7 | 12 |
| 106 | Wetting in a phase separating polymer blend film:â€ƒQuench depth dependence. Physical Review E, 2000, 62, 940-950. | 0.8 | 60 |
| 107 | Interdiffusion in blends of deuterated polystyrene and poly(Î±-methylstyrene). Polymer, 1999, 40, 2323-2329. | 1.8 | 20 |
| 108 | High resolution elastic recoil detection analysis of polystyrene depth profiles using carbon ions. Nuclear Instruments & Methods in Physics Research B, 1998, 143, 371-380. | 0.6 | 12 |

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|---|---|---|---|
| 109 | Tracer diffusion of deuterated polystyrene into polystyreneâ€“poly(Î±-methyl styrene) studied by nuclear reaction analysis. Polymer, 1998, 39, 3623-3629. | 1.8 | 7 |
| 110 | Kinetics of Surface Segregation and the Approach to Wetting in an Isotopic Polymer Blend. Macromolecules, 1997, 30, 4220-4227. | 2.2 | 34 |
| 111 | Experimental study of surface segregation and wetting in films of a partially miscible polymer blend. Physical Review E, 1996, 53, 825-837. | 0.8 | 32 |
| 112 | The morphology of as-cast films of a polymer blend: Dependence on polymer molecular weight. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 1307-1311. | 2.4 | 20 |
| 113 | Surface directed spinodal decomposition in a partially miscible polymer blend. Journal of Chemical Physics, 1995, 103, 2719-2724. | 1.2 | 60 |
| 114 | Lamellar structure in a thin polymer blend film. Polymer, 1994, 35, 2019-2027. | 1.8 | 57 |
| 115 | Linear Polymers in Networks: Swelling, Diffusion, and Interdigitation. , 0, , 29-44. | | 2 |
| 116 | The self assembly of polymer films. , 0, , 134-148. | | 0 |
| 117 | Block Copolymers at Interfaces. , 0, , 275-290. | | 0 |