

# 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	Wetting at polymer surfaces and interfaces. <i>Progress in Polymer Science</i> , 2003, 28, 261-302.	11.8	392
2	The pH-responsive behaviour of poly(acrylic acid) in aqueous solution is dependent on molar mass. <i>Soft Matter</i> , 2016, 12, 2542-2549.	1.2	297
3	Correlating structure with fluorescence emission in phase-separated conjugated-polymer blends. <i>Nature Materials</i> , 2003, 2, 616-621.	13.3	178
4	Organic field effect transistors from ambient solution processed low molar mass semiconductor-insulator blends. <i>Journal of Materials Chemistry</i> , 2008, 18, 3230.	6.7	116
5	Responsive brushes and gels as components of soft nanotechnology. <i>Faraday Discussions</i> , 2005, 128, 55-74.	1.6	90
6	Conformation of Poly(methacrylic acid) Chains in Dilute Aqueous Solution. <i>Macromolecules</i> , 2008, 41, 2203-2211.	2.2	85
7	Dewetting at a Polymer-Polymer Interface: Film Thickness Dependence. <i>Langmuir</i> , 2001, 17, 6269-6274.	1.6	81
8	Quantitative evaluation of evaporation rate during spin-coating of polymer blend films: Control of film structure through defined-atmosphere solvent-casting. <i>European Physical Journal E</i> , 2010, 33, 283-289.	0.7	77
9	Synthesis, characterization and swelling behaviour of poly(methacrylic acid) brushes synthesized using atom transfer radical polymerization. <i>Polymer</i> , 2009, 50, 1005-1014.	1.8	76
10	Effect of Brush Thickness and Solvent Composition on the Friction Force Response of Poly(2-(methacryloyloxy)ethylphosphorylcholine) Brushes. <i>Langmuir</i> , 2011, 27, 2514-2521.	1.6	74
11	Effect of Salt on Phosphorylcholine-based Zwitterionic Polymer Brushes. <i>Langmuir</i> , 2016, 32, 5048-5057.	1.6	73
12	Switching Layer Stability in a Polymer Bilayer by Thickness Variation. <i>Physical Review Letters</i> , 2007, 98, 267802.	2.9	70
13	Controlling Network-Brush Interactions to Achieve Switchable Adhesion. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 6460-6463.	7.2	67
14	Surface directed spinodal decomposition in a partially miscible polymer blend. <i>Journal of Chemical Physics</i> , 1995, 103, 2719-2724.	1.2	60
15	Wetting in a phase separating polymer blend film: Quench depth dependence. <i>Physical Review E</i> , 2000, 62, 940-950.	0.8	60
16	The polymer physics and chemistry of microbial cell attachment and adhesion. <i>Faraday Discussions</i> , 2008, 139, 85.	1.6	59
17	Lamellar structure in a thin polymer blend film. <i>Polymer</i> , 1994, 35, 2019-2027.	1.8	57
18	Optimization of the Bulk Heterojunction Composition for Enhanced Photovoltaic Properties: Correlation between the Molecular Weight of the Semiconducting Polymer and Device Performance. <i>Journal of Physical Chemistry B</i> , 2011, 115, 12717-12727.	1.2	55

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19	The interplay between the optical and electronic properties of light-emitting-diode applicable conjugated polymer blends and their phase-separated morphology. <i>Organic Electronics</i> , 2005, 6, 35-45.	1.4	53
20	The pH-induced swelling and collapse of a polybase brush synthesized by atom transfer radical polymerization. <i>Soft Matter</i> , 2006, 2, 1076-1080.	1.2	53
21	Controlling the Surface Composition of Poly(3,4-ethylene dioxythiophene)â€“Poly(styrene sulfonate) Blends by Heat Treatment. <i>Advanced Materials</i> , 2004, 16, 807-811.	11.1	52
22	Surface segregation and self-stratification in blends of spin-cast polyfluorene derivatives. <i>Journal of Physics Condensed Matter</i> , 2005, 17, 1319-1328.	0.7	51
23	Kinetics of Surface Crystallization in Thin Films of Poly(ethylene terephthalate). <i>Macromolecules</i> , 2005, 38, 2315-2320.	2.2	51
24	Organic Thin Film Transistors with Polymer Brush Gate Dielectrics Synthesized by Atom Transfer Radical Polymerization. <i>Advanced Functional Materials</i> , 2008, 18, 36-43.	7.8	51
25	Interfacial structure in semiconducting polymer devices. <i>Journal of Materials Chemistry</i> , 2003, 13, 2814-2818.	6.7	50
26	Thermally responsive polymeric hydrogel brushes: synthesis, physical properties and use for the culture of chondrocytes. <i>Journal of the Royal Society Interface</i> , 2007, 4, 117-126.	1.5	45
27	Dynamics of polymer film formation during spin coating. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	44
28	Directed Single Molecule Diffusion Triggered by Surface Energy Gradients. <i>ACS Nano</i> , 2009, 3, 3235-3243.	7.3	38
29	Crystallization-Driven Enhancement in Photovoltaic Performance through Block Copolymer Incorporation into P3HT:PCBM Blends. <i>Macromolecules</i> , 2013, 46, 3015-3024.	2.2	38
30	Kinetics of Surface Segregation and the Approach to Wetting in an Isotopic Polymer Blend. <i>Macromolecules</i> , 1997, 30, 4220-4227.	2.2	34
31	Experimental study of surface segregation and wetting in films of a partially miscible polymer blend. <i>Physical Review E</i> , 1996, 53, 825-837.	0.8	32
32	Nanoscale Contact Mechanics of Biocompatible Polyzwitterionic Brushes. <i>Langmuir</i> , 2013, 29, 10684-10692.	1.6	32
33	Phase separation-driven stratification in conventional and inverted P3HT:PCBM organic solar cells. <i>Organic Electronics</i> , 2013, 14, 1249-1254.	1.4	31
34	Contact Mechanics of Nanometer-Scale Molecular Contacts: Correlation between Adhesion, Friction, and Hydrogen Bond Thermodynamics. <i>Journal of the American Chemical Society</i> , 2011, 133, 8625-8632.	6.6	30
35	Control of roughness at interfaces and the impact on charge mobility in all-polymer field-effect transistors. <i>Soft Matter</i> , 2008, 4, 2220.	1.2	29
36	Nanoscale Contact Mechanics between Two Grafted Polyelectrolyte Surfaces. <i>Macromolecules</i> , 2015, 48, 6272-6279.	2.2	29

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37	Block Copolymer Adsorption from a Homopolymer Melt to Silicon Oxide: Effects of Nonadsorbing Block Length and Anchoring Block-Substrate Interaction. <i>Macromolecules</i> , 2003, 36, 9897-9904.	2.2	28
38	Mechanical Actuation by Responsive Polyelectrolyte Brushes and Triblock Gels. <i>Journal of Macromolecular Science - Physics</i> , 2005, 44, 1103-1121.	0.4	28
39	Equilibrium Swelling of Polystyrene Networks by Linear Polystyrene. <i>Macromolecules</i> , 2003, 36, 127-141.	2.2	26
40	Polymers and biopolymers at interfaces. <i>Reports on Progress in Physics</i> , 2018, 81, 036601.	8.1	26
41	Effect of extracellular polymeric substances on the mechanical properties of <i>Rhodococcus</i> . <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2015, 1848, 518-526.	1.4	25
42	From spin coating to roll-to-roll: investigating the challenge of upscaling lead halide perovskite solar cells. <i>IET Renewable Power Generation</i> , 2017, 11, 546-549.	1.7	25
43	Controlled growth of poly (2-(diethylamino)ethyl methacrylate) brushes via atom transfer radical polymerisation on planar silicon surfaces. <i>Polymer International</i> , 2006, 55, 808-815.	1.6	24
44	Double-network hydrogels improve pH-switchable adhesion. <i>Soft Matter</i> , 2016, 12, 5022-5028.	1.2	24
45	Generation of Molecular-Scale Compositional Gradients in Self-Assembled Monolayers. <i>Nano Letters</i> , 2007, 7, 3747-3752.	4.5	22
46	The Impact of Interfacial Mixing on Förster Transfer at Conjugated Polymer Heterojunctions. <i>Advanced Functional Materials</i> , 2009, 19, 157-163.	7.8	22
47	Extracellular DNA Provides Structural Integrity to a <i>Micrococcus luteus</i> Biofilm. <i>Langmuir</i> , 2019, 35, 6468-6475.	1.6	22
48	Frictional properties of a polycationic brush. <i>Soft Matter</i> , 2014, 10, 2759.	1.2	21
49	The morphology of as-cast films of a polymer blend: Dependence on polymer molecular weight. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1995, 33, 1307-1311.	2.4	20
50	Interdiffusion in blends of deuterated polystyrene and poly( $\beta$ -methylstyrene). <i>Polymer</i> , 1999, 40, 2323-2329.	1.8	20
51	Thin polymer films on chemically patterned, corrugated substrates. <i>Journal of Physics Condensed Matter</i> , 2005, 17, S389-S402.	0.7	19
52	Current-induced chain migration in semiconductor polymer blends. <i>Physical Review B</i> , 2005, 71, .	1.1	19
53	Structural features in aligned poly(3-alkylthiophene) films revealed by grazing incidence X-ray diffraction. <i>Polymer</i> , 2004, 45, 4133-4138.	1.8	18
54	Interfacial Structure in Conjugated Polymers: Characterization and Control of the Interface between Poly(9,9-dioctylfluorene) and Poly(9,9-dioctylfluorene-alt-benzothiadiazole). <i>Macromolecules</i> , 2006, 39, 6699-6707.	2.2	18

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55	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
56	A neutron reflectometry study of the interface between poly(9,9-dioctylfluorene) and poly(methyl methacrylate). Journal of Applied Physics, 2007, 102, 044701.	1.5	16
57	The mechanics of nanometre-scale molecular contacts. Faraday Discussions, 2012, 156, 325.	1.6	15
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	Adhesive and conformational behaviour of mycolic acid monolayers. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 1829-1839.	1.4	14
60	The influence of directed $\pi$ - $\pi$ interactions in solution on the thin film organic semiconductor device properties of small molecule polymer blends. Soft Matter, 2011, 7, 7065.	1.2	14
61	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
62	Distinct Binding Interactions of $\alpha$ 5 $\beta$ 1-Integrin and Proteoglycans with Fibronectin. Biophysical Journal, 2019, 117, 688-695.	0.2	14
63	Scaling model for the anomalous swelling of polymer networks in a polymer solvent. Europhysics Letters, 2002, 57, 32-38.	0.7	13
64	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
65	Determination of the molar mass of surface-grafted weak polyelectrolyte brushes using force spectroscopy. Polymer, 2015, 67, 111-117.	1.8	13
66	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
67	Surface segregation from polystyrene networks. Journal of Physics Condensed Matter, 2000, 12, 5129-5142.	0.7	12
68	The interfacial behaviour of single poly(N,N-dimethylacrylamide) chains as a function of pH. Nanotechnology, 2008, 19, 035505.	1.3	12
69	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
70	Influence of salt on the solution dynamics of a phosphorylcholine-based polyzwitterion. European Polymer Journal, 2017, 87, 449-457.	2.6	12
71	Weak polyelectrolyte brushes. Soft Matter, 2022, 18, 2500-2511.	1.2	12
72	Salt Dependence of the Tribological Properties of a Surface-Grafted Weak Polycation in Aqueous Solution. Tribology Letters, 2018, 66, 11.	1.2	11

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73	Adhesion between oppositely charged polyelectrolytes in salt solution. <i>Journal of Applied Polymer Science</i> , 2020, 137, 49130.	1.3	11
74	Combined specular and off-specular reflectometry: elucidating the complex structure of soft buried interfaces. <i>Journal of Applied Crystallography</i> , 2021, 54, 924-948.	1.9	11
75	Applications of grazing incidence diffraction to polymer surfaces. <i>Radiation Physics and Chemistry</i> , 2004, 71, 811-815.	1.4	10
76	Diffusion of dextran within poly(methacrylic acid) hydrogels. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012, 50, 1286-1292.	2.4	10
77	Observation of the complete rupture of a buried polymer layer by off-specular neutron reflectometry. <i>Europhysics Letters</i> , 2009, 86, 36005.	0.7	8
78	Symmetric and asymmetric instability of buried polymer interfaces. <i>Physical Review E</i> , 2012, 86, 032801.	0.8	8
79	Measurement of molecular mixing at a conjugated polymer interface by specular and off-specular neutron scattering. <i>Soft Matter</i> , 2015, 11, 9393-9403.	1.2	8
80	Tracer diffusion of deuterated polystyrene into polystyrene- $\alpha$ -poly( $\beta$ -methyl styrene) studied by nuclear reaction analysis. <i>Polymer</i> , 1998, 39, 3623-3629.	1.8	7
81	Block copolymer adsorption from a homopolymer melt to an amine-terminated surface. <i>European Physical Journal E</i> , 2005, 18, 159-166.	0.7	7
82	Single Macromolecule Diffusion in Confined Environments. <i>Macromolecular Rapid Communications</i> , 2011, 32, 1411-1418.	2.0	7
83	All-polymer field-effect transistors using a brush gate dielectric. <i>Journal of Materials Chemistry C</i> , 2013, 1, 7736.	2.7	7
84	Composition depth profiling of polystyrene/poly(vinyl ethyl ether) blend thin films by angle resolved XPS. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2009, 171, 57-63.	0.8	6
85	Nanotribological Investigation of Polymer Brushes with Lithographically Defined and Systematically Varying Grafting Densities. <i>Langmuir</i> , 2017, 33, 706-713.	1.6	6
86	Temperature-dependent structure and dynamics of highly-branched poly( <i>N</i> -isopropylacrylamide) in aqueous solution. <i>Soft Matter</i> , 2018, 14, 1482-1491.	1.2	6
87	Adhesion between oppositely charged polyelectrolytes. <i>Journal of Adhesion</i> , 2018, 94, 58-76.	1.8	6
88	The Role of Extracellular DNA in Microbial Attachment to Oxidized Silicon Surfaces in the Presence of $\text{Ca}^{2+}$ and $\text{Na}^{+}$ . <i>Langmuir</i> , 2021, 37, 9838-9850.	1.6	6
89	Generic Methodologies for Nanotechnology: Classification and Fabrication. , 2005, , 1-55.		5
90	The swelling of weak polyelectrolytes at low salt concentrations in dilute solution. <i>Polymer</i> , 2017, 112, 414-417.	1.8	5

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91	Blob Size Controls Diffusion of Free Polymer in a Chemically Identical Brush in Semidilute Solution. <i>Macromolecules</i> , 2018, 51, 6312-6317.	2.2	5
92	Electronic and Electro-Optic Molecular Materials and Devices. , 2005, , 282-342.		4
93	Size-Dependent Photophysical Behavior of Low Bandgap Semiconducting Polymer Particles. <i>Frontiers in Chemistry</i> , 2019, 7, 409.	1.8	4
94	Adhesion of Grafted-to Polyelectrolyte Brushes Functionalized with Calix[4]resorcinarene and Deposited as a Monolayer. <i>Langmuir</i> , 2020, 36, 13843-13852.	1.6	4
95	Glycan-glycan interactions determine Leishmania attachment to the midgut of permissive sand fly vectors. <i>Chemical Science</i> , 2020, 11, 10973-10983.	3.7	4
96	Highly-ordered onion micelles made from amphiphilic highly-branched copolymers. <i>Polymer Chemistry</i> , 2018, 9, 5617-5629.	1.9	3
97	Slow polymer diffusion on brush-patterned surfaces in aqueous solution. <i>Nanoscale</i> , 2019, 11, 6052-6061.	2.8	3
98	2D reflectometry for the investigation of polymer interfaces: off-specular neutron scattering. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 364002.	0.7	3
99	Organic Semiconductor-Polymer Insulator Blends: a Morphological Study of the Guest-Host Interactions. <i>E-Journal of Surface Science and Nanotechnology</i> , 2009, 7, 455-458.	0.1	3
100	Thermodynamic Suppression of Brownian Motion. <i>Physical Review Letters</i> , 2001, 86, 2581-2584.	2.9	2
101	Linear Polymers in Networks: Swelling, Diffusion, and Interdigitation. , 0, , 29-44.		2
102	Self-Assembling Nanostructured Molecular Materials and Devices. , 2005, , 343-376.		2
103	Application of mean-field theory to the spin casting of polystyrene and poly(methyl methacrylate) blend films from toluene. <i>Polymer</i> , 2019, 178, 121578.	1.8	2
104	Processing and Properties of Inorganic Nanomaterials. , 2005, , 237-281.		1
105	Macromolecules at Interfaces and Structured Organic Films. , 2005, , 377-418.		1
106	Inorganic Semiconductor Nanostructures. , 2005, , 130-202.		1
107	Nanomagnetic Materials and Devices. , 2005, , 203-236.		1
108	Generic Methodologies for Nanotechnology: Characterization. , 2005, , 56-129.		1

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109	Polymer Surfaces: Segregation. , 2016, , .		1
110	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
111	Avantages de la r�flectom�trie des neutrons pour l'�tude des polym�res en couches minces. �cole Th�matique De La Soci�t� Fran�saise De La Neutronique, 2007, 12, 103-113.	0.2	1
112	Bionanotechnology. , 2005, , 419-445.		0
113	Reduced curvilinear velocity of boar sperm on substrates with increased hydrophobicity. Theriogenology, 2014, 81, 764-769.	0.9	0
114	Optical Gain in Semiconducting Polymer Nano and Mesoparticles. Molecules, 2021, 26, 1138.	1.7	0
115	Sustainable Team Design: A Challenge to Traditional Beliefs in Information-Intensive Service Industries. Sustainability, 2021, 13, 13552.	1.6	0
116	The self assembly of polymer films. , 0, , 134-148.		0
117	Block Copolymers at Interfaces. , 0, , 275-290.		0