

# Mark D Foster

## List of Publications by Year in descending order

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110  
papers

3,243  
citations

172457

29  
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175258

52  
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110  
all docs

110  
docs citations

110  
times ranked

3204  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design of Interfacial Crowding for Elastomeric Reinforcement with Nanocrystals. ACS Applied Materials & Interfaces, 2021, 13, 10349-10358.	8.0	3
2	Influence of Silane Coupling Agents on Filler Network Structure and Stress-Induced Particle Rearrangement in Elastomer Nanocomposites. ACS Applied Materials & Interfaces, 2020, 12, 47891-47901.	8.0	15
3	Thin Plasma-Polymerized Coatings as a Primer with Polyurethane Topcoat for Improved Corrosion Resistance. Langmuir, 2020, 36, 837-843.	3.5	10
4	Proximity to Graphene Dramatically Alters Polymer Dynamics. Macromolecules, 2019, 52, 5074-5085.	4.8	11
5	Following the Morphological Disruption by an Electrolyte of a Buried Interface. ACS Applied Materials & Interfaces, 2019, 11, 3555-3564.	8.0	3
6	Detection of Surface Enrichment Driven by Molecular Weight Disparity in Virtually Monodisperse Polymers. ACS Macro Letters, 2018, 7, 487-492.	4.8	29
7	Synthesis and Characterization of Well-Defined, Tadpole-Shaped Polystyrene with a Single Atom Junction Point. Macromolecules, 2018, 51, 9509-9518.	4.8	7
8	Surface Layer Matrix-Assisted Laser Desorption Ionization Mass Spectrometry Imaging: A Surface Imaging Technique for the Molecular-Level Analysis of Synthetic Material Surfaces. Analytical Chemistry, 2018, 90, 13427-13433.	6.5	15
9	Anomalous Confinement Slows Surface Fluctuations of Star Polymer Melt Films. ACS Macro Letters, 2018, 7, 834-839.	4.8	10
10	<i>In Situ</i> Nanoscale Characterization of Water Penetration through Plasma Polymerized Coatings. Langmuir, 2018, 34, 9634-9644.	3.5	12
11	Subtle End Group Functionalization of Polymer Chains Drives Surface Depletion of Entire Polymer Chains. ACS Macro Letters, 2018, 7, 795-800.	4.8	8
12	Altering surface fluctuations by blending tethered and untethered chains. Soft Matter, 2017, 13, 8264-8270.	2.7	3
13	Tunable, Liquid Resistant Tip Enhanced Raman Spectroscopy Probes: Toward Label-Free Nano-Resolved Imaging of Biological Systems. Langmuir, 2017, 33, 7818-7825.	3.5	16
14	Evidence and Limits of Universal Topological Surface Segregation of Cyclic Polymers. Physical Review Letters, 2017, 118, 167801.	7.8	11
15	Synthesis and Isomeric Characterization of Well-Defined 8-Shaped Polystyrene Using Anionic Polymerization, Silicon Chloride Linking Chemistry, and Metathesis Ring Closure. Macromolecules, 2017, 50, 5779-5789.	4.8	10
16	Modifying Surface Fluctuations of Polymer Melt Films with Substrate Modification. ACS Macro Letters, 2017, 6, 915-919.	4.8	10
17	Extending nanoscale spectroscopy with titanium nitride probes. Journal of Raman Spectroscopy, 2016, 47, 1332-1336.	2.5	5
18	Effect of tethering on the surface dynamics of a thin polymer melt layer. Soft Matter, 2016, 12, 5372-5377.	2.7	10

#	ARTICLE	IF	CITATIONS
19	Scaling Behavior and Segment Concentration Profile of Densely Grafted Polymer Brushes Swollen in Vapor. Langmuir, 2016, 32, 5623-5628.	3.5	13
20	Efficient synthesis of well-defined cyclic polystyrenes using anionic polymerization, silicon chloride linking chemistry and metathesis ring closure. Polymer Chemistry, 2016, 7, 5840-5848.	3.9	10
21	Confinement Effects with Molten Thin Cyclic Polystyrene Films. ACS Macro Letters, 2016, 5, 999-1003.	4.8	30
22	Surface Fluctuations of Polymer Brushes Swollen in Good Solvent Vapor. Macromolecules, 2016, 49, 7308-7313.	4.8	9
23	Supramolecular Elastomers. Particulate $\hat{I}^2$ -Sheet Nanocrystal-Reinforced Synthetic Elastic Networks. Macromolecules, 2016, 49, 2688-2697.	4.8	18
24	Identification of individual isotopes in a polymer blend using tip enhanced Raman spectroscopy. Journal of Raman Spectroscopy, 2015, 46, 447-450.	2.5	9
25	Surface segregation driven by molecular architecture asymmetry in polymer blends. Physical Review Letters, 2014, 113, 225702.	7.8	24
26	Anomalous Surface Relaxations of Branched-Polymer Melts. Physical Review Letters, 2013, 111, 068303.	7.8	38
27	Manipulation of Polymer/Polymer Interface Width from Nonequilibrium Deposition. ACS Applied Materials & Interfaces, 2013, 5, 2976-2984.	8.0	7
28	Differentiation of Linear and Cyclic Polymer Architectures by MALDI Tandem Mass Spectrometry (MALDI-MS <sup>2</sup> ). Journal of the American Society for Mass Spectrometry, 2013, 24, 74-82.	2.8	38
29	The effect of fluorosurfactant, copolymer latex, and cross-linker on the surface properties of floor polishes: An investigation using AFM with adhesion mapping. Progress in Organic Coatings, 2013, 76, 1279-1287.	3.9	4
30	Protecting TERS probes from degradation: extending mechanical and chemical stability. Journal of Raman Spectroscopy, 2013, 44, 710-716.	2.5	24
31	Polymer Film Surface Fluctuation Dynamics in the Limit of Very Dense Branching. Macromolecules, 2013, 46, 3190-3197.	4.8	18
32	Probing Surface Concentration of Cyclic/Linear Blend Films Using Surface Layer MALDI-TOF Mass Spectrometry. ACS Macro Letters, 2012, 1, 1024-1027.	4.8	28
33	Dynamics of Surface Fluctuations on Macrocyclic Melts. Macromolecules, 2012, 45, 6210-6219.	4.8	22
34	Precision Synthesis of $\hat{I}$ -Branch, End-Functionalized Comb Polystyrenes Using Living Anionic Polymerization and Thiol-ene "Click" Chemistry. Macromolecules, 2012, 45, 9233-9242.	4.8	22
35	Robust probes for high resolution chemical detection and imaging. Proceedings of SPIE, 2012, , .	0.8	1
36	Synthesis of Cyclic Polystyrenes Using Living Anionic Polymerization and Metathesis Ring-Closure. Macromolecules, 2011, 44, 7538-7545.	4.8	51

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37	Prolonged Blinking with TERS Probes. <i>Journal of Physical Chemistry C</i> , 2011, 115, 8900-8905.	3.1	20
38	Control of Interface Nanoscale Structure Created by Plasma-Enhanced Chemical Vapor Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , 2011, 3, 3375-3383.	8.0	5
39	RAGE Signaling Significantly Impacts Tumorigenesis and Hepatic Tumor Growth in Murine Models of Colorectal Carcinoma. <i>Journal of Gastrointestinal Surgery</i> , 2010, 14, 1680-1690.	1.7	17
40	Structure of copolymer films created by plasma enhanced chemical vapor deposition. <i>Polymer</i> , 2010, 51, 3971-3977.	3.8	7
41	Variations in cross-link density with deposition pressure in ultrathin plasma polymerized benzene and octafluorocyclobutane films. <i>Polymer</i> , 2010, 51, 4390-4397.	3.8	9
42	Tip-induced heating in apertureless near-field optics. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 1349-1354.	2.5	23
43	Surface Dynamics of "Dry" Homopolymer Brushes. <i>Macromolecules</i> , 2009, 42, 737-741.	4.8	25
44	Highly Stable, Protected Plasmonic Nanostructures for Tip Enhanced Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2009, 113, 8158-8161.	3.1	70
45	Internal Structure of Ultrathin Diblock Copolymer Brushes. <i>Macromolecules</i> , 2009, 42, 8411-8422.	4.8	13
46	Extending lifetime of plasmonic silver structures designed for high-resolution chemical imaging or chemical and biological sensing. , 2008, , .		11
47	Self-Affine Surfaces of Polymer Brushes. <i>Macromolecules</i> , 2007, 40, 6361-6369.	4.8	10
48	High contrast scanning nano-Raman spectroscopy of silicon. <i>Journal of Raman Spectroscopy</i> , 2007, 38, 789-796.	2.5	99
49	Effect of RAGE signaling on colorectal liver metastases. <i>Journal of the American College of Surgeons</i> , 2007, 205, S88-S89.	0.5	0
50	Effects of Branch Points and Chain Ends on the Thermodynamic Interaction Parameter in Binary Blends of Regularly Branched and Linear Polymers. <i>Macromolecules</i> , 2006, 39, 5113-5121.	4.8	25
51	Nano-Raman spectroscopy with side-illumination optics. <i>Journal of Raman Spectroscopy</i> , 2005, 36, 1068-1075.	2.5	131
52	Surface fluctuations of polymer brushes probed by diffuse X-ray scattering. <i>Polymer</i> , 2005, 46, 2331-2337.	3.8	5
53	X-modulation: Instrumentation and optimization. <i>Scanning</i> , 2005, 27, 44-48.	1.5	1
54	Synthesis and Characterization of Well-Defined, Regularly Branched Polystyrenes Utilizing Multifunctional Initiators. <i>Macromolecules</i> , 2005, 38, 5381-5392.	4.8	27

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55	Thermoresponsive Behavior of Semifluorinated Polymer Brushes. <i>Macromolecules</i> , 2005, 38, 3263-3270.	4.8	59
56	Interface Roughness Correlation in Diblock Copolymer Brushes Synthesized by Atom Transfer Radical Polymerization. <i>Macromolecules</i> , 2005, 38, 8614-8616.	4.8	8
57	Synthesis and Characterization of Stimuli-Responsive Semifluorinated Polymer Brushes Prepared by Atom Transfer Radical Polymerization. <i>Macromolecules</i> , 2004, 37, 2790-2796.	4.8	120
58	Synthesis of 4-, 8-, 12-arm star-branched polybutadienes with three different chain-end functionalities using a functionalized initiator. <i>Polymer</i> , 2004, 45, 873-880.	3.8	24
59	Interface structure of photonic multilayers prepared by plasma enhanced chemical vapor deposition. <i>Polymer</i> , 2004, 45, 3175-3184.	3.8	13
60	Scanning probe microscopy study of dynamic adhesion behavior of polymer adhesive blends. <i>Polymer</i> , 2004, 45, 5951-5959.	3.8	17
61	Effect of Butadiene End-Capping of Arms in a Star Polystyrene on Solution Properties, Bulk Dynamics, and Bulk Thermodynamic Interactions in Binary Blends. <i>Macromolecules</i> , 2004, 37, 10199-10204.	4.8	12
62	A New Methodology for the Synthesis of Star Polymers Utilizing the Reaction of Living Polymers with Alkoxysilyl-Functionalized Polymers. <i>Macromolecules</i> , 2004, 37, 6385-6394.	4.8	6
63	Surfactant displacement of human serum albumin adsorbed on loosely packed self-assembled monolayers: cetyltrimethylammonium bromide versus sodium dodecyl sulfate. <i>Journal of Colloid and Interface Science</i> , 2003, 261, 273-282.	9.4	4
64	Thermodynamic interaction parameter of star-star polybutadiene blends. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2003, 41, 247-257.	2.1	12
65	Effect of Flow on Human Serum Albumin Adsorption to Self-Assembled Monolayers of Varying Packing Density. <i>Langmuir</i> , 2003, 19, 5464-5474.	3.5	24
66	Glass Transition Behavior of Polystyrene Blocks in the Cores of Collapsed Dry Micelles Tethered by Poly(Dimethylsiloxane) Coronae in a PS-b-PDMS Diblock Copolymer. <i>Chemistry of Materials</i> , 2003, 15, 2129-2135.	6.7	23
67	Synthesis, Characterization, and Properties of Polyelectrolyte Block Copolymer Brushes Prepared by Atom Transfer Radical Polymerization and Their Use in the Synthesis of Metal Nanoparticles. <i>Macromolecules</i> , 2003, 36, 9539-9548.	4.8	110
68	Nonuniversal Behavior of the Thermodynamic Interaction Parameter in Blends of Star and Linear Polybutadiene. <i>Macromolecules</i> , 2002, 35, 9763-9772.	4.8	25
69	Influence of Humidity on Surface Behavior of Pressure Sensitive Adhesives Studied Using Scanning Probe Microscopy. <i>Langmuir</i> , 2002, 18, 8108-8115.	3.5	29
70	The Role of Specific Binding in Human Serum Albumin Adsorption to Self-Assembled Monolayers. <i>Langmuir</i> , 2002, 18, 557-561.	3.5	27
71	Near Surface Nanomechanical Behavior of Pressure-Sensitive Adhesives Using Lateral Modulation Scanning Probe Microscopy. <i>Langmuir</i> , 2002, 18, 1865-1871.	3.5	17
72	Anionic Synthesis of Block Copolymer Brushes Grafted from a 1,1-Diphenylethylene Monolayer. <i>Macromolecules</i> , 2002, 35, 9964-9974.	4.8	51

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73	Resolving lateral variations in the frequency dependence of adhesive properties at the surface of a model pressure sensitive adhesive. <i>Journal of Applied Polymer Science</i> , 2002, 84, 400-404.	2.6	4
74	Architecture-driven thermodynamic interactions in blends of star-branched and linear poly(methyl Tj ETQq0 0 0 rgBT <sub>1</sub> /Overlock 10 Tf 50	2.1	16
75	Influence of molecular architecture on fast and segmental dynamics and the glass transition in polybutadiene. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2002, 40, 2431-2439.	2.1	21
76	Structure of Poly(ferrocenyldimethylsilane) in Electrospun Nanofibers. <i>Macromolecules</i> , 2001, 34, 6156-6158.	4.8	84
77	Microindentation and Nanoindentation Studies of Aging in Pressure-Sensitive Adhesives. <i>Macromolecules</i> , 2001, 34, 2269-2276.	4.8	36
78	Changes in Protein Adsorption on Self-Assembled Monolayers with Monolayer Order:Â Comparison of Human Serum Albumin and Human Gamma Globulin. <i>Langmuir</i> , 2001, 17, 7645-7651.	3.5	43
79	Effective interaction parameter between branched and linear polystyrene. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2001, 39, 2549-2561.	2.1	29
80	Aging of Model Pressure Sensitive Adhesives Studied with Scanning Probe Microscopy. <i>Journal of Adhesion</i> , 2001, 75, 145-160.	3.0	10
81	Effective $\chi$ and surface segregation in blends of star and linear polystyrene. <i>Macromolecular Symposia</i> , 2000, 149, 263-268.	0.7	34
82	Epoxy-Terminated Self-Assembled Monolayers:Â Molecular Glues for Polymer Layers. <i>Langmuir</i> , 2000, 16, 504-516.	3.5	187
83	Temperature-Dependent Behavior of Langmuir Monolayers of Octadecyl-Substituted Preformed Polyimides. <i>Langmuir</i> , 2000, 16, 9792-9796.	3.5	13
84	Study of the Surface Adhesion of Pressure-Sensitive Adhesives by Atomic Force Microscopy and Spherical Indenter Tests. <i>Macromolecules</i> , 2000, 33, 1878-1881.	4.8	59
85	Title is missing!. <i>Journal of Inorganic and Organometallic Polymers</i> , 1999, 9, 189-198.	1.5	33
86	Synthesis and Characterization of Phenol- and-Chlorophenol-Terminated Monolayers. <i>Langmuir</i> , 1999, 15, 6856-6861.	3.5	12
87	Mobility of a tackifying resin in a pressure-sensitive adhesive. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1998, 36, 373-381.	2.1	9
88	Atomic Force Microscopy and X-ray Reflectivity Studies of Albumin Adsorbed onto Self-Assembled Monolayers of Hexadecyltrichlorosilane. <i>Langmuir</i> , 1998, 14, 4535-4544.	3.5	115
89	Structural Study of Monolayers of Alkyl Side Chain Substituted Poly(ferrocenylsilane). <i>Langmuir</i> , 1998, 14, 3921-3925.	3.5	10
90	Effect of Chain Topology on Ordered Structure in Block Copolymers:Â Comparison of a Heteroarm A2B2Star with Its Linear Diblock Analog. <i>Macromolecules</i> , 1998, 31, 4372-4375.	4.8	33

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91	Competitive adsorption of human serum albumin and gamma-globulin from a binary protein mixture onto hexadecyltrichlorosilane coated glass. <i>Journal of Biomaterials Science, Polymer Edition</i> , 1998, 9, 151-161.	3.5	19
92	Ultrathin Polyimide Films from Preformed Polymers. <i>Langmuir</i> , 1997, 13, 3202-3205.	3.5	6
93	Variation in Tenacity of Protein Adsorption on Self-Assembled Monolayers with Monolayer Order As Observed by X-ray Reflectivity. <i>Langmuir</i> , 1997, 13, 1881-1883.	3.5	29
94	Structure and Stability of Two-Component Langmuir-Blodgett Multilayers Containing Cadmium Arachidate and Polyglutamate Determined by Reflectivity. <i>Langmuir</i> , 1997, 13, 1712-1717.	3.5	5
95	Grafting of Polypeptides on Solid Substrates by Initiation of N-Carboxyanhydride Polymerization by Amino-Terminated Self-Assembled Monolayers. <i>Langmuir</i> , 1997, 13, 723-728.	3.5	150
96	Neutron and X-ray Reflectivity Studies of Human Serum Albumin Adsorption onto Functionalized Surfaces of Self-Assembled Monolayers. <i>Biotechnology Progress</i> , 1997, 13, 635-639.	2.6	27
97	A Neutron Reflectometry Study of Human Serum Albumin Adsorption in Situ. <i>Langmuir</i> , 1996, 12, 2256-2262.	3.5	67
98	Photoresponsive Monolayers Containing In-Chain Azobenzene. <i>Langmuir</i> , 1996, 12, 5838-5844.	3.5	166
99	Temporal Stability of a Bilayer in a Langmuir-Blodgett Multilayer and Its Dependence on Multilayer Structure. <i>Langmuir</i> , 1996, 12, 3015-3023.	3.5	6
100	Stability of Cadmium Arachidate Langmuir-Blodgett Multilayers as Determined by Neutron and X-ray Reflectivity. <i>Langmuir</i> , 1996, 12, 5156-5164.	3.5	16
101	Self-Organization of Polymer Brush Layers in a Poor Solvent. <i>Journal De Physique II</i> , 1995, 5, 1441-1456.	0.9	31
102	Ultrathin layers and supramolecular architecture of isopentylcellulose. <i>Macromolecules</i> , 1995, 28, 1221-1228.	4.8	64
103	Self-Diffusion of "Hairy Rod" Molecules in Langmuir-Blodgett-Kuhn Multilayers Probed with Neutron and X-ray Reflectometry. <i>Langmuir</i> , 1994, 10, 3820-3826.	3.5	23
104	Structure and Thermal Stability of Langmuir-Blodgett-Kuhn Layers of Hairy-Rod Polymers Probed with Neutron and X-ray Reflectometry. <i>Macromolecules</i> , 1994, 27, 6893-6902.	4.8	38
105	Stability and Modification of Polyglutamate Langmuir-Blodgett Bilayer Films. <i>Macromolecules</i> , 1994, 27, 1274-1280.	4.8	28
106	Monolayers of Perfluoropolyethers with a Hydrophilic Head Group. <i>Langmuir</i> , 1994, 10, 4209-4218.	3.5	14
107	Structure and stability of Langmuir-Blodgett-Kuhn multilayers containing hairy-rod copolymers. <i>Macromolecular Symposia</i> , 1994, 87, 35-43.	0.7	0
108	Morphology of Langmuir-Blodgett films from polyglutamate observed by atomic force microscopy. <i>Langmuir</i> , 1993, 9, 3538-3547.	3.5	26

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109	X-Ray Scattering Methods for the Study of Polymer Interfaces. Critical Reviews in Analytical Chemistry, 1993, 24, 179-241.	3.5	60
110	Structure of symmetric polyolefin block copolymer thin films. Journal of Chemical Physics, 1992, 96, 8605-8615.	3.0	87