John F Ankner

List of Publications by Year
in descending order

73 papers	3,190 citations	186265 28 h-index	155660 55 g-index
78 all docs	78 docs citations	78 times ranked	3904 citing authors

#	Article	IF	Citations
1	Crosslinked polydimethylsiloxane exposed to oxygen plasma studied by neutron reflectometry and other surface specific techniques. Polymer, 2000, 41, 6851-6863.	3.8	437
2	Neutron Reflectivity Study of the Density Profile of a Model End-Grafted Polymer Brush: Influence of Solvent Quality. Physical Review Letters, 1994, 73, 3407-3410.	7.8	194
3	Polarized-neutron reflectometry. Journal of Magnetism and Magnetic Materials, 1999, 200, 741-754.	2.3	144
4	Noncollinear and collinear magnetic structures in exchange coupled Fe/Cr(001) superlattices. Physical Review B, 1995, 52, 16066-16085.	3.2	136
5	Surface Modification via Chain End Segregation in Polymer Blends. Macromolecules, 1996, 29, 3982-3990.	4.8	120
6	Spin-Assisted Layer-by-Layer Assembly: Variation of Stratification as Studied with Neutron Reflectivity. Langmuir, 2009, 25, 14017-14024.	3.5	97
7	Confinement-Induced Morphological Changes in Diblock Copolymer Films. Langmuir, 1996, 12, 6681-6690.	3.5	95
8	Molecular Weight Dependence of Polymer Chain Mobility within Multilayer Films. ACS Macro Letters, 2013, 2, 865-868.	4.8	93
9	Creation of Stable Poly(ethylene oxide) Surfaces on Poly(methyl methacrylate) Using Blends of Branched and Linear Polymers. Macromolecules, 1997, 30, 6947-6956.	4.8	91
10	Oscillatory exchange coupling in Co/Cu(111) superlattices. Physical Review B, 1993, 47, 15334-15337.	3.2	89
11	Homopolymer Interfaces Reinforced with Random Copolymers. Macromolecules, 1996, 29, 5493-5496.	4.8	84
12	Adsorption of Î±-Synuclein to Supported Lipid Bilayers: Positioning and Role of Electrostatics. ACS Chemical Neuroscience, 2013, 4, 1339-1351.	3.5	82
13	Linear versus Exponential Growth of Weak Polyelectrolyte Multilayers: Correlation with Polyelectrolyte Complexes. Macromolecules, 2012, 45, 3892-3901.	4.8	71
14	Direct Observation of Non-Collinear Spin Structures in Fe/Cr(001) Superlattices. Europhysics Letters, 1995, 32, 595-600.	2.0	68
15	Hydrogen-Bonded Polymer Multilayers Probed by Neutron Reflectivity. Langmuir, 2008, 24, 11346-11349.	3.5	66
16	Long-range magnetic order inFe3O4/NiO superlattices. Physical Review B, 1995, 51, 8276-8286.	3.2	62
17	‹title›Subsurface profile refinement for neutron specular reflectivity (Invited Paper)‹/title›. , 1992, , .		60
18	Steric Effects in Ionic Pairing and Polyelectrolyte Interdiffusion within Multilayered Films: A Neutron Reflectometry Study. Macromolecules, 2011, 44, 6518-6524.	4.8	55

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19	Ordering in Blends of Diblock Copolymers. Macromolecules, 1998, 31, 3498-3508.	4.8	51
20	pH-Induced Release of Polyanions from Multilayer Films. Physical Review Letters, 2008, 100, 128303.	7.8	51
21	Diffusional Response of Layer-by-Layer Assembled Polyelectrolyte Chains to Salt Annealing. Macromolecules, 2015, 48, 3983-3990.	4.8	48
22	Thin Film Phase Behavior of Bottlebrush/Linear Polymer Blends. Macromolecules, 2014, 47, 5269-5276.	4.8	47
23	Dilute Solution Properties and Surface Attachment of RAFT Polymerized 2-Vinyl-4,4-dimethyl Azlactone (VDMA). Macromolecules, 2009, 42, 9018-9026.	4.8	46
24	Versatility of Alkyne-Modified Poly(Glycidyl Methacrylate) Layers for Click Reactions. Langmuir, 2011, 27, 5986-5996.	3.5	44
25	Anisotropic Diffusion of Polyelectrolyte Chains within Multilayer Films. ACS Macro Letters, 2012, 1, 127-130.	4.8	44
26	Neutron Reflectometry and QCM-D Study of the Interaction of Cellulases with Films of Amorphous Cellulose. Biomacromolecules, 2011, 12, 2216-2224.	5.4	43
27	Manipulating Interfaces through Surface Confinement of Poly(glycidyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 427 Td (methacryl Macromolecules, 2012, 45, 6438-6449.	4.8	39
28	Nonlinear Layer-by-Layer Films: Effects of Chain Diffusivity on Film Structure and Swelling. Macromolecules, 2017, 50, 6192-6201.	4.8	33
29	Ion distribution in dry polyelectrolyte multilayers: a neutron reflectometry study. Soft Matter, 2018, 14, 1699-1708.	2.7	32
30	SMART transfer method to directly compare the mechanical response of water-supported and free-standing ultrathin polymeric films. Nature Communications, 2021, 12, 2347.	12.8	30
31	Compatibilization of Polymer Blends by Complexation. 2. Kinetics of Interfacial Mixing. Macromolecules, 1996, 29, 3918-3924.	4.8	29
32	Tailoring Architecture of Nanothin Hydrogels: Effect of Layering on pH-Triggered Swelling. ACS Macro Letters, 2013, 2, 226-229.	4.8	28
33	Monomer volume fraction profiles in pH responsive planar polyelectrolyte brushes. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 956-964.	2.1	28
34	Biocompatible Nanocoatings of Fluorinated Polyphosphazenes through Aqueous Assembly. ACS Applied Materials & Interfaces, 2018, 10, 9756-9764.	8.0	28
35	Hydration in Weak Polyelectrolyte Brushes. ACS Macro Letters, 2013, 2, 398-402.	4.8	27
36	Stratified Temperature-Responsive Multilayer Hydrogels of Poly(N-vinylpyrrolidone) and Poly(N-vinylcaprolactam): Effect of Hydrogel Architecture on Properties. Macromolecules, 2016, 49, 6953-6964.	4.8	27

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37	Thermoresponsive PNIPAM Coatings on Nanostructured Gratings for Cell Alignment and Release. ACS Applied Materials & Interfaces, 2015, 7, 11857-11862.	8.0	25
38	Petascale Simulations of the Morphology and the Molecular Interface of Bulk Heterojunctions. ACS Nano, 2016, 10, 7008-7022.	14.6	25
39	Neutron reflectivity as a tool to understand polyelectrolyte brushes. Current Opinion in Colloid and Interface Science, 2012, 17, 83-89.	7.4	23
40	Chain Conformation and Dynamics in Spin-Assisted Weak Polyelectrolyte Multilayers. Langmuir, 2015, 31, 3889-3896.	3.5	23
41	Polythiophene Thin Films by Surface-Initiated Polymerization: Mechanistic and Structural Studies. Chemistry of Materials, 2016, 28, 4787-4804.	6.7	23
42	Depletion at solid/liquid interfaces: Flowing hexadecane on functionalized surfaces. Journal of Chemical Physics, 2011, 134, 064711.	3.0	22
43	Bimorph Silk Microsheets with Programmable Actuating Behavior: Experimental Analysis and Computer Simulations. ACS Applied Materials & Interfaces, 2016, 8, 17694-17706.	8.0	21
44	Microphase separation in thin films of lamellar forming polydisperse di-block copolymers. RSC Advances, 2015, 5, 21336-21348.	3.6	19
45	Swelling Behavior and Nanomechanical Properties of (Peptide-Modified) Poly(2-hydroxyethyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 4609-4618.	4.8	19
46	Effect of a Competitive Solvent on Binding Enthalpy and Chain Intermixing in Hydrogen-Bonded Layer-by-Layer Films. Macromolecules, 2019, 52, 4432-4440.	4.8	19
47	Neutron Scattering Techniques and Applications in Structural Biology. Current Protocols in Protein Science, 2013, 72, Unit17.16.	2.8	18
48	Controlling Internal Organization of Multilayer Poly(methacrylic acid) Hydrogels with Polymer Molecular Weight. Macromolecules, 2015, 48, 8585-8593.	4.8	18
49	Tunable Compartmentalized Morphologies of Multilayered Dual Responsive Star Block Polyampholytes. Macromolecules, 2018, 51, 4800-4812.	4.8	16
50	Silk Layering As Studied with Neutron Reflectivity. Langmuir, 2012, 28, 11481-11489.	3.5	15
51	Assessing Chemical Transformation of Reactive, Interfacial Thin Films Made of End-Tethered Poly(2-vinyl-4,4-dimethyl azlactone) (PVDMA) Chains. Macromolecules, 2017, 50, 618-630.	4.8	15
52	Layer-by-Layer Hydrogen-Bonded Antioxidant Films of Linear Synthetic Polyphenols. Macromolecules, 2020, 53, 1033-1042.	4.8	15
53	Detergent-Associated Solution Conformations of Helical and Î²-Barrel Membrane Proteins. Journal of Physical Chemistry B, 2008, 112, 13349-13354.	2.6	14
54	Selective water uptake within micelle-containing layer-by-layer films of various architectures: a neutron reflectometry study. Soft Matter, 2013, 9, 410-417.	2.7	14

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55	A Monte Carlo Simulation of Asymmetric Random Copolymers at an Immiscible Interface. Macromolecules, 1996, 29, 4120-4124.	4.8	13
56	Ionically Paired Layer-by-Layer Hydrogels: Water and Polyelectrolyte Uptake Controlled by Deposition Time. Gels, 2018, 4, 7.	4.5	13
57	Assembly and Characterization of Well-Defined High-Molecular-Weight Poly(p-phenylene) Polymer Brushes. Chemistry of Materials, 2011, 23, 4367-4374.	6.7	12
58	Capacitance of thin films containing polymerized ionic liquids. Science Advances, 2020, 6, eaba7952.	10.3	12
59	Selectively Swollen Films of Triblock/Diblock Copolymer Blends:Â Dependence of Swollen Film Structure on Blend Composition. Macromolecules, 1998, 31, 4908-4914.	4.8	10
60	X-ray and Neutron Reflectivity Studies of Styrene-Maleic Acid Copolymer Interactions with Galactolipid-Containing Monolayers. Langmuir, 2020, 36, 3970-3980.	3.5	10
61	Localized entrapment of green fluorescent protein within nanostructured polymer films. Soft Matter, 2011, 7, 11453.	2.7	9
62	Time-of-flight Bragg scattering from aligned stacks of lipid bilayers using the Liquids Reflectometer at the Spallation Neutron Source. Journal of Applied Crystallography, 2012, 45, 1219-1227.	4.5	9
63	Architecture of Hydrated Multilayer Poly(methacrylic acid) Hydrogels: The Effect of Solution pH. ACS Applied Polymer Materials, 2020, 2, 2260-2273.	4.4	7
64	Applications of Neutron Reflectivity Measurements to Nanoscience: Thin Films and Interfaces. MRS Bulletin, 2003, 28, 918-922.	3.5	6
65	High-pressure cell for neutron reflectometry of supercritical and subcritical fluids at solid interfaces. Review of Scientific Instruments, 2012, 83, 045108.	1.3	6
66	Dynamics and Self-Healing of Layer-by-Layer Hydrogen-Bonded Films of Linear Synthetic Polyphenols. Macromolecules, 2021, 54, 7469-7479.	4.8	6
67	Time-Resolved High Resolution Neutron Imaging Studies at the ORNL Spallation Neutron Source. IEEE Transactions on Nuclear Science, 2009, 56, 2493-2498.	2.0	4
68	Interaction of Silica Nanoparticles with a Flat Silica Surface through Neutron Reflectometry. Environmental Science & Technology, 2012, 46, 4532-4538.	10.0	3
69	Use of advanced optics in a neutron liquids reflectometer. Physica B: Condensed Matter, 2000, 283, 253-255.	2.7	2
70	Time-dependent measurements at the SNS liquids reflectometer. Physica B: Condensed Matter, 2003, 336, 68-74.	2.7	2
71	Optical design of the SNS liquids reflectometer. , 2002, , .		1
72	SXNS-11. Synchrotron Radiation News, 2010, 23, 2-5.	0.8	0

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73	“Old wine in new wineskins:” Upgrading the liquids reflectometer instrument user control software at the Spallation Neutron Source. , 2012, , .		0