## **Andrew Nelson**

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4573055/publications.pdf

Version: 2024-02-01

104 papers 22,246 citations

32 h-index 30848 102 g-index

105 all docs 105 docs citations

105 times ranked 32457 citing authors

#	Article	IF	CITATIONS
1	Lightâ€Gated Control of Conformational Changes in Polymer Brushes. Advanced Materials Technologies, 2022, 7, 2100347.	3.0	6
2	Using refnx to Model Neutron Reflectometry Data from Phospholipid Bilayers. Methods in Molecular Biology, 2022, 2402, 179-197.	0.4	3
3	Chain Length Effects of Added Homopolymers on the Phase Behavior in Blend Films of a Symmetric, Weakly Segregated Polystyrene- <i>block</i> poly(methyl methacrylate). Macromolecules, 2022, 55, 2130-2147.	2.2	4
4	Power losses in conventional and inverted non-polymeric donor:fullerene bulk heterojunction solar cells - The role of vertical phase separation in BQR:PC71BM blends. Organic Electronics, 2022, 108, 106594.	1.4	0
5	Insect odorant receptor nanodiscs for sensitive and specific electrochemical detection of odorant compounds. Sensors and Actuators B: Chemical, 2021, 329, 129243.	4.0	7
6	Competitive specific ion effects in mixed salt solutions on a thermoresponsive polymer brush. Journal of Colloid and Interface Science, 2021, 586, 292-304.	5.0	16
7	The direction of influence of specific ion effects on a pH and temperature responsive copolymer brush is dependent on polymer charge. Polymer, 2021, 214, 123287.	1.8	11
8	Geometrical Confinement Modulates the Thermoresponse of a Poly( <i>N</i> -isopropylacrylamide) Brush. Macromolecules, 2021, 54, 2541-2550.	2.2	10
9	Quantifying the robustness of the neutron reflectometry technique for structural characterization of polymer brushes. Journal of Applied Crystallography, 2021, 54, 739-750.	1.9	17
10	Diffusion in Organic Film Stacks Containing Solution-Processed Phosphorescent Poly(dendrimer) Dopants. ACS Applied Materials & Samp; Interfaces, 2021, 13, 30910-30920.	4.0	2
11	Nanostructural Characterization of Cardiolipin-Containing Tethered Lipid Bilayers Adsorbed on Gold and Silicon Substrates for Protein Incorporation. Langmuir, 2021, 37, 8908-8923.	1.6	5
12	Distributions of Deuterated Polystyrene Chains in Perforated Layers of Blend Films of a Symmetric Polystyrene < i>-block--poly(methyl methacrylate). Langmuir, 2021, 37, 13046-13058.	1.6	5
13	Enrichment of Charged Monomers Explains Non-monotonic Polymer Volume Fraction Profiles of Multi-stimulus Responsive Copolymer Brushes. Langmuir, 2020, 36, 12460-12472.	1.6	8
14	Dispersity effects on phase behavior and structural evolution in ultrathin films of a deuterated polystyrene-block-poly(methyl methacrylate) diblock copolymer. Polymer, 2020, 210, 123027.	1.8	5
15	The Antifungal Mechanism of Amphotericin B Elucidated in Ergosterol and Cholesterol-Containing Membranes Using Neutron Reflectometry. Nanomaterials, 2020, 10, 2439.	1.9	14
16	SciPy 1.0: fundamental algorithms for scientific computing in Python. Nature Methods, 2020, 17, 261-272.	9.0	17,539
17	Structure and Hydration of Asymmetric Polyelectrolyte Multilayers as Studied by Neutron Reflectometry: Connecting Multilayer Structure to Superior Membrane Performance. Macromolecules, 2020, 53, 10644-10654.	2.2	12
18	Effects of the Density of Chemical Cross-links and Physical Entanglements of Ultraviolet-Irradiated Polystyrene Chains on Domain Orientation and Spatial Order of Polystyrene-block-Poly(methyl) Tj ETQq0 0 0 rg	gBT / <b>Dø</b> erlo	ck <b>110</b> Tf 50 57

#	Article	IF	Citations
19	Ultralow surface energy self-assembled monolayers of iodo-perfluorinated alkanes on silica driven by halogen bonding. Nanoscale, 2019, 11, 2401-2411.	2.8	8
20	Temperature dependent specific ion effects in mixed salt environments on a thermoresponsive poly(oligoethylene glycol methacrylate) brush. Physical Chemistry Chemical Physics, 2019, 21, 4650-4662.	1.3	17
21	Influence of molecular weight on PNIPAM brush modified colloidal silica particles. Soft Matter, 2019, 15, 55-64.	1.2	22
22	Time Resolved Polarised Grazing Incidence Neutron Scattering from Composite Materials. Polymers, 2019, 11, 445.	2.0	5
23	Comparisons of alumina barrier films deposited by thermal and plasma atomic layer deposition. Materials Today Chemistry, 2019, 11, 8-15.	1.7	8
24	<i>refnx</i> : neutron and X-ray reflectometry analysis in Python. Journal of Applied Crystallography, 2019, 52, 193-200.	1.9	108
25	emcee v3: A Python ensemble sampling toolkit for affine-invariant MCMC. Journal of Open Source Software, 2019, 4, 1864.	2.0	162
26	The role of copolymer composition on the specific ion and thermo-response of ethylene glycol-based brushes. Polymer, 2018, 138, 229-241.	1.8	22
27	Morphology of OLED Film Stacks Containing Solution-Processed Phosphorescent Dendrimers. ACS Applied Materials & Dendrimers. ACS Applied Ma	4.0	7
28	Influence of Dopant Concentration and Steric Bulk on Interlayer Diffusion in OLEDs. Advanced Materials Interfaces, 2018, 5, 1700872.	1.9	7
29	Long side-chain grafting imparts intrinsic adhesiveness to poly(thiophene phenylene) conjugated polymer. European Polymer Journal, 2018, 109, 237-247.	2.6	7
30	lonic Liquid Adsorption at the Silica–Oil Interface Revealed by Neutron Reflectometry. Journal of Physical Chemistry C, 2018, 122, 24077-24084.	1.5	16
31	Biomineralization of Calcium Phosphate and Calcium Carbonate within Iridescent Chitosan/lota-Carrageenan Multilayered Films. Langmuir, 2018, 34, 8994-9003.	1.6	15
32	Chain shape and thin film behaviour of poly(thiophene)- <i>graft</i> -poly(acrylate urethane). Soft Matter, 2018, 14, 6875-6882.	1.2	4
33	Comparing Surfactant Structures at "Soft―and "Hard―Hydrophobic Materials: Not All Interfaces Are Equivalent. Langmuir, 2018, 34, 9141-9152.	1.6	10
34	Self-healing polythiophene phenylenes for stretchable electronics. European Polymer Journal, 2018, 105, 331-338.	2.6	18
35	Dependence of Organic Interlayer Diffusion on Glass-Transition Temperature in OLEDs. ACS Applied Materials & Dependence of Organic Interfaces, 2017, 9, 14153-14161.	4.0	38
36	The structural impact of water sorption on device-quality melanin thin films. Soft Matter, 2017, 13, 3954-3965.	1.2	21

#	Article	IF	CITATIONS
37	77â€2: Invited Paper : Probing the Thermal Stability of OLEDs with Neutrons. Digest of Technical Papers SID International Symposium, 2017, 48, 1129-1133.	0.1	2
38	Surface engineering of poly(methylmethacrylate): Effects on fluorescence immunoassay. Biointerphases, 2017, 12, 02C415.	0.6	5
39	Using Neutron Reflectometry to Characterize Antimicrobial Protein Surface Coatings. Journal of Physical Chemistry B, 2017, 121, 5908-5916.	1.2	12
40	Enhanced specific ion effects in ethylene glycol-based thermoresponsive polymer brushes. Journal of Colloid and Interface Science, 2017, 490, 869-878.	5.0	31
41	Molecularly Engineered Intrinsically Healable and Stretchable Conducting Polymers. Chemistry of Materials, 2017, 29, 8850-8858.	3.2	49
42	In-situ ellipsometric study of calcium phosphate biomineralisation on organic thin films. International Journal of Nanotechnology, 2017, 14, 375.	0.1	0
43	Counting crystal clusters – a neutron reflectometry study of calcium phosphate nano-cluster adsorption at the air–liquid Interface. CrystEngComm, 2017, 19, 5716-5720.	1.3	1
44	Three impossible things before lunch – theÂtask of a sample environment specialist. Journal of Neutron Research, 2017, 19, 49-56.	0.4	2
45	Diffusion at Interfaces in OLEDs Containing a Doped Phosphorescent Emissive Layer. Advanced Materials Interfaces, 2016, 3, 1600184.	1.9	17
46	Influence of Anion Hydrophilicity on the Conformation of a Hydrophobic Weak Polyelectrolyte Brush. Macromolecules, 2016, 49, 9605-9617.	2.2	39
47	Specific Anion Effects on the Internal Structure of a Poly( <i>N</i> i>opropylacrylamide) Brush. Macromolecules, 2016, 49, 6050-6060.	2.2	51
48	Probing the Interfacial Structure of Bilayer Plasma Polymer Films via Neutron Reflectometry. Plasma Processes and Polymers, 2016, 13, 534-543.	1.6	0
49	Chain Collapse and Interfacial Slip of Polystyrene Films in Good/Nonsolvent Vapor Mixtures. Macromolecules, 2016, 49, 1344-1352.	2.2	12
50	Oxidative Damage to Biomimetic Membrane Systems: In Situ Fe(II)/Ascorbate Initiated Oxidation and Incorporation of Synthetic Oxidized Phospholipids. Langmuir, 2015, 31, 12679-12687.	1.6	15
51	Formation of hydrated layers in PMMA thin films in aqueous solution. Applied Surface Science, 2015, 353, 829-834.	3.1	11
52	Morphological, chemical and kinetic characterisation of zein protein-induced biomimetic calcium phosphate films. Journal of Materials Chemistry B, 2015, 3, 6213-6223.	2.9	9
53	Towards a detailed resolution smearing kernel for time-of-flight neutron reflectometers. Corrigendum. Journal of Applied Crystallography, 2014, 47, 1162-1162.	1.9	7
54	Determination of Fullerene Scattering Length Density: A Critical Parameter for Understanding the Fullerene Distribution in Bulk Heterojunction Organic Photovoltaic Devices. Langmuir, 2014, 30, 1410-1415.	1.6	19

#	Article	IF	Citations
55	Human serum albumin binding to silica nanoparticles – effect of protein fatty acid ligand. Physical Chemistry Chemical Physics, 2014, 16, 10157-10168.	1.3	14
56	Improved stability of non-ITO stacked electrodes for large area flexible organic solar cells. Solar Energy Materials and Solar Cells, 2014, 130, 182-190.	3.0	20
57	Calcium mediated interaction of calf-thymus DNA with monolayers of distearoylphosphatidylcholine: a neutron and X-ray reflectivity study. Soft Matter, 2013, 9, 7095.	1.2	11
58	Is ballistic transportation or quantum confinement responsible for changes in the electrical properties of thin polymer films?. Physical Chemistry Chemical Physics, 2013, 15, 1364-1368.	1.3	2
59	Correlation of diffusion and performance in sequentially processed P3HT/PCBM heterojunction films by time-resolved neutron reflectometry. Journal of Materials Chemistry C, 2013, 1, 2593.	2.7	33
60	Effect of Functionalized Gold Nanoparticles on Floating Lipid Bilayers. Langmuir, 2013, 29, 6606-6614.	1.6	145
61	Insights into the role of protein molecule size and structure on interfacial properties using designed sequences. Journal of the Royal Society Interface, 2013, 10, 20120987.	1.5	17
62	Towards a detailed resolution smearing kernel for time-of-flight neutron reflectometers. Journal of Applied Crystallography, 2013, 46, 1338-1346.	1.9	7
63	In situ study of the impact of acidic and neutral deposition pH on alkane phosphate film formation and stability on TiO2. RSC Advances, 2013, 3, 2581.	1.7	4
64	An X-ray and neutron reflectometry study of â€~PEG-like' plasma polymer films. Journal of the Royal Society Interface, 2012, 9, 1008-1019.	1.5	20
65	Invited Article: Polarization "Down Under†The polarized time-of-flight neutron reflectometer PLATYPUS. Review of Scientific Instruments, 2012, 83, 081301.	0.6	41
66	Near Surface Crystallization of Pluronic P123. Journal of Physics: Conference Series, 2012, 340, 012088.	0.3	1
67	Model Surfaces Produced by Atomic Layer Deposition. Chemistry Letters, 2012, 41, 1247-1249.	0.7	12
68	The effects of acid hydrolysis on protein biosurfactant molecular, interfacial, and foam properties: pH responsive protein hydrolysates. Soft Matter, 2012, 8, 5131.	1.2	19
69	Surface structure of a "non-amphiphilic―protic ionic liquid. Physical Chemistry Chemical Physics, 2012, 14, 5106.	1.3	29
70	Molecular Orientation of Tropoelastin is Determined by Surface Hydrophobicity. Biomacromolecules, 2012, 13, 379-386.	2.6	9
71	Structure of [C <sub>4</sub> mpyr][NTf <sub>2</sub> ] Room-Temperature Ionic Liquid at Charged Gold Interfaces. Langmuir, 2012, 28, 7374-7381.	1.6	104
72	Direct Measurement of van der Waals and Diffuse Double-Layer Forces between Titanium Dioxide Surfaces Produced by Atomic Layer Deposition. Journal of Physical Chemistry C, 2012, 116, 7838-7847.	1.5	39

#	Article	lF	Citations
73	A multilayered approach to polyfluorene water-based organic photovoltaics. Solar Energy Materials and Solar Cells, 2012, 102, 114-124.	3.0	65
74	Ultra-thin films based on random copolymers containing perfluoropolyether side chains. Thin Solid Films, 2012, 520, 5627-5632.	0.8	15
75	Diffusion – the Hidden Menace in Organic Optoelectronic Devices. Advanced Materials, 2012, 24, 822-826.	11.1	35
76	Probing the protic ionic liquid surface using X-ray reflectivity. Physical Chemistry Chemical Physics, 2011, 13, 20828.	1.3	41
77	A neutron reflectivity study of the interfacial and thermal behaviour of surface-attached hairpin DNA. Soft Matter, 2011, 7, 5020.	1.2	8
78	The interaction of cubosomes with supported phospholipid bilayers using neutron reflectometry and QCM-D. Soft Matter, 2011, 7, 8041.	1.2	35
79	Precise Analyses of Short-Time Relaxation at Asymmetric Polystyrene Interface in Terms of Molecular Weight by Time-Resolved Neutron Reflectivity Measurements. Macromolecules, 2011, 44, 9424-9433.	2.2	20
80	The multipurpose time-of-flight neutron reflectometer "Platypus―at Australia's OPAL reactor. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 632, 112-123.	0.7	147
81	Influence of the surface roughness on the properties of Au films measured by surface plasmon resonance and X-ray reflectometry. Thin Solid Films, 2011, 519, 2093-2097.	0.8	11
82	<i>Motofit</i> – integrating neutron reflectometry acquisition, reduction and analysis into one, easy to use, package. Journal of Physics: Conference Series, 2010, 251, 012094.	0.3	69
83	Structure of the Ethylammonium Nitrate Surface: An X-ray Reflectivity and Vibrational Sum Frequency Spectroscopy Study. Langmuir, 2010, 26, 8282-8288.	1.6	62
84	Electrical Double-Layer Capacitance in Room Temperature Ionic Liquids: Ion-Size and Specific Adsorption Effects. Journal of Physical Chemistry B, 2010, 114, 11149-11154.	1.2	79
85	Electrochemical cell for neutron reflectometry studies of the structure of ionic liquids at electrified interface. Review of Scientific Instruments, 2010, 81, 074101.	0.6	23
86	X-Ray reflectometry studies on the effect of water on the surface structure of [C4mpyr][NTf2] ionic liquid. Physical Chemistry Chemical Physics, 2009, 11, 11507.	1.3	41
87	Platypus: Even Though I'm Cute, I'm a Complex Beast. Neutron News, 2009, 20, 21-23.	0.1	2
88	Solid-State Dendrimer Sensors: Probing the Diffusion of an Explosive Analogue Using Neutron Reflectometry. Langmuir, 2009, 25, 12800-12805.	1.6	68
89	Evidence of a water layer in solid-contact polymeric ion sensors. Physical Chemistry Chemical Physics, 2008, 10, 73-76.	1.3	106
90	Elimination of Undesirable Water Layers in Solid-Contact Polymeric Ion-Selective Electrodes. Analytical Chemistry, 2008, 80, 6731-6740.	3.2	134

#	Article	IF	Citations
91	Surface Chemistry and Rheology of Polysulfobetaine-Coated Silica. Langmuir, 2007, 23, 7587-7593.	1.6	19
92	Structure of mixed DTAB/DDAB adsorbed layers on quartz. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 310, 1-8.	2.3	10
93	A Comparative X-Ray and Neutron Reflectometry Study of Plasma Polymer Films Containing Reactive Amines. Plasma Processes and Polymers, 2007, 4, 433-444.	1.6	17
94	In-situ neutron reflectometry probing competitive swelling and de-swelling of thin polystyrene films. Physica Status Solidi - Rapid Research Letters, 2007, 1, R68-R70.	1.2	13
95	X-Ray and Neutron Reflectometry Study of Glow-Discharge Plasma Polymer Films. Langmuir, 2006, 22, 453-458.	1.6	34
96	Co-refinement of multiple-contrast neutron/X-ray reflectivity data usingMOTOFIT. Journal of Applied Crystallography, 2006, 39, 273-276.	1.9	944
97	The application of neutron reflectometry and atomic force microscopy in the study of corrosion inhibitor films. Physica B: Condensed Matter, 2006, 385-386, 924-926.	1.3	12
98	Platypus: a time-of-flight neutron reflectometer at Australia's new research reactor. Journal of Neutron Research, 2006, 14, 91-108.	0.4	56
99	A new neutron reflectometer at Australia's HIFAR research reactor. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 536, 165-175.	0.7	9
100	Phase Separation in the Organic Solid State: The Influence of Quenching Protocol in Unstable <i>n</i> -Alkane Blends. Molecular Crystals and Liquid Crystals, 2005, 440, 93-105.	0.4	8
101	Small-Angle Neutron Scattering Study of Adsorbed Pluronic Tri-Block Copolymers on Laponite. Langmuir, 2005, 21, 9176-9182.	1.6	68
102	A Small-Angle Neutron Scattering Study of Adsorbed Poly(ethylene oxide) on Laponite. Langmuir, 2004, 20, 2298-2304.	1.6	139
103	Dynamic Light Scattering Studies of Poly(ethylene oxide) Adsorbed on Laponite:Â Layer Conformation and Its Effect on Particle Stability. Langmuir, 2004, 20, 10382-10388.	1.6	92
104	NMR Solvent Relaxation in Studies of Multicomponent Polymer Adsorption. Langmuir, 2002, 18, 2750-2755.	1.6	63