

Neil H Thomson

List of Publications by Year in descending order

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82
papers

6,239
citations

87888

38
h-index

66911

78
g-index

83
all docs

83
docs citations

83
times ranked

6942
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrasound-triggered therapeutic microbubbles enhance the efficacy of cytotoxic drugs by increasing circulation and tumor drug accumulation and limiting bioavailability and toxicity in normal tissues. <i>Theranostics</i> , 2020, 10, 10973-10992.	10.0	45
2	On-chip pressure measurements and channel deformation after oil absorption. <i>SN Applied Sciences</i> , 2020, 2, 1.	2.9	6
3	Sub-100 Nanometer Thick Gold Nanosheets as Highly Efficient Catalysts. <i>Advanced Science</i> , 2019, 6, 1900911.	11.2	56
4	Sub-100 Nanometer Thick Gold Nanosheets: Sub-100 Nanometer Thick Gold Nanosheets as Highly Efficient Catalysts (<i>Adv. Sci.</i> 21/2019). <i>Advanced Science</i> , 2019, 6, 1970129.	11.2	0
5	Molecular Effects of Glycerol on Lipid Monolayers at the Gas-Liquid Interface: Impact on Microbubble Physical and Mechanical Properties. <i>Langmuir</i> , 2019, 35, 10097-10105.	3.5	24
6	Effect of heparin and heparan sulphate on open promoter complex formation for a simple tandem gene model using ex situ atomic force microscopy. <i>Methods</i> , 2017, 120, 91-102.	3.8	4
7	Liquid-Liquid Interfacial Imaging Using Atomic Force Microscopy. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700203.	3.7	17
8	Influence of 4-vinylbenzylation on the rheological and swelling properties of photo-activated collagen hydrogels. <i>MRS Advances</i> , 2016, 1, 533-538.	0.9	10
9	The nature of the air-cleaved mica surface. <i>Surface Science Reports</i> , 2016, 71, 367-390.	7.2	103
10	Real Space Imaging of Nanoparticle Assembly at Liquid-Liquid Interfaces with Nanoscale Resolution. <i>Nano Letters</i> , 2016, 16, 5463-5468.	9.1	55
11	Multi-scale mechanical characterization of highly swollen photo-activated collagen hydrogels. <i>Journal of the Royal Society Interface</i> , 2015, 12, 20141079.	3.4	53
12	Poly(ethylene glycol) Lipid-Shelled Microbubbles: Abundance, Stability, and Mechanical Properties. <i>Langmuir</i> , 2014, 30, 5557-5563.	3.5	48
13	Ion Exchange and DNA Molecular Dip Sticks: Studying the Nanoscale Surface Wetting of Muscovite Mica. <i>Journal of Physical Chemistry C</i> , 2014, 118, 4695-4701.	3.1	12
14	DNA G-segment bending is not the sole determinant of topology simplification by type II DNA topoisomerases. <i>Scientific Reports</i> , 2014, 4, 6158.	3.3	19
15	Multiple RNA Polymerase Transactions on Single DNA Templates. <i>Biophysical Journal</i> , 2013, 104, 365a.	0.5	1
16	Single-stranded DNA loops as fiducial markers for exploring DNA-protein interactions in single molecule imaging. <i>Methods</i> , 2013, 60, 122-130.	3.8	5
17	Atomic Force Microscopy Imaging of Macromolecular Complexes. <i>Methods in Molecular Biology</i> , 2013, 950, 315-341.	0.9	4
18	Nanomechanics of Lipid Encapsulated Microbubbles with Functional Coatings. <i>Langmuir</i> , 2013, 29, 4096-4103.	3.5	36

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19	Side-Chain Supramolecular Polymers Employing Conformer Independent Triple Hydrogen Bonding Arrays. <i>Macromolecules</i> , 2013, 46, 9634-9641.	4.8	29
20	Stability, resolution, and ultra-low wear amplitude modulation atomic force microscopy of DNA: Small amplitude small set-point imaging. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	35
21	Single-stranded loops as end-label polarity markers for double-stranded linear DNA templates in atomic force microscopy. <i>Nucleic Acids Research</i> , 2012, 40, e99-e99.	14.5	5
22	A method to provide rapid in situ determination of tip radius in dynamic atomic force microscopy. <i>Review of Scientific Instruments</i> , 2012, 83, 043707.	1.3	81
23	Spatial horizons in amplitude and frequency modulation atomic force microscopy. <i>Nanoscale</i> , 2012, 4, 2463.	5.6	7
24	Investigation of Nanoscale Interactions by Means of Subharmonic Excitation. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 2125-2129.	4.6	9
25	Hydrophilicity of a Single DNA Molecule. <i>Journal of Physical Chemistry C</i> , 2012, 116, 2807-2818.	3.1	20
26	Energy dissipation in the presence of sub-harmonic excitation in dynamic atomic force microscopy. <i>Europhysics Letters</i> , 2012, 99, 56002.	2.0	8
27	Single-molecule studies of DNA transcription using atomic force microscopy. <i>Physical Biology</i> , 2012, 9, 021001.	1.8	26
28	Dynamic mechanical analysis of collagen fibrils at the nanoscale. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012, 5, 165-170.	3.1	60
29	Atomic Force Microscopy of Isolated Nanostructures: Biomolecular Imaging in Hydrated Environments – Status and Future Prospects. <i>Nanoscience and Technology</i> , 2012, , 99-135.	1.5	0
30	A Structural Model for Apolipoprotein C-II Amyloid Fibrils: Experimental Characterization and Molecular Dynamics Simulations. <i>Journal of Molecular Biology</i> , 2011, 405, 1246-1266.	4.2	45
31	The Intrinsic Resolution Limit in the Atomic Force Microscope: Implications for Heights of Nano-Scale Features. <i>PLoS ONE</i> , 2011, 6, e23821.	2.5	80
32	Surface characterisation and biomechanical analysis of the sclera by atomic force microscopy. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 535-540.	3.1	31
33	How localized are energy dissipation processes in nanoscale interactions?. <i>Nanotechnology</i> , 2011, 22, 345401.	2.6	28
34	Measuring the true height of water films on surfaces. <i>Nanotechnology</i> , 2011, 22, 465705.	2.6	54
35	Energy dissipation in a dynamic nanoscale contact. <i>Applied Physics Letters</i> , 2011, 98, .	3.3	25
36	High Resolution Imaging of Immunoglobulin G Antibodies and Other Biomolecules Using Amplitude Modulation Atomic Force Microscopy in Air. <i>Methods in Molecular Biology</i> , 2011, 736, 61-79.	0.9	3

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37	Bi-stability of amplitude modulation AFM in air: deterministic and stochastic outcomes for imaging biomolecular systems. <i>Nanotechnology</i> , 2010, 21, 225710.	2.6	39
38	Three-channel false colour AFM images for improved interpretation of complex surfaces: A study of filamentous cyanobacteria. <i>Ultramicroscopy</i> , 2010, 110, 718-722.	1.9	3
39	Improvement of the pore trapping method to immobilize vital coccoid bacteria for high-resolution AFM: a study of <i>Staphylococcus aureus</i> . <i>Journal of Microscopy</i> , 2010, 238, 102-110.	1.8	23
40	RepD-mediated recruitment of PcrA helicase at the <i>Staphylococcus aureus</i> pC221 plasmid replication origin, oriD. <i>Nucleic Acids Research</i> , 2010, 38, 1874-1888.	14.5	13
41	Cantilever dynamics in amplitude modulation AFM: continuous and discontinuous transitions. <i>Journal Physics D: Applied Physics</i> , 2010, 43, 275401.	2.8	17
42	Atomic force microscopy of DNA at high humidity: irreversible conformational switching of supercoiled molecules. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 14727.	2.8	21
43	Atomic Force Microscopy of DNA Structure and Interactions. , 2010, , 389-426.		0
44	Tuning the Elastic Modulus of Hydrated Collagen Fibrils. <i>Biophysical Journal</i> , 2009, 97, 2985-2992.	0.5	143
45	Second harmonic atomic force microscopy of living <i>Staphylococcus aureus</i> bacteria. <i>Applied Physics Letters</i> , 2009, 94, 043901.	3.3	24
46	Effects of hydration on the mechanical response of individual collagen fibrils. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	111
47	Atomic Force Microscopy of DNA Structure and Interactions. <i>Nanoscience and Technology</i> , 2007, , 127-164.	1.5	3
48	Investigating the structural properties of amyloid-like fibrils formed in vitro from β 2-microglobulin using limited proteolysis and electrospray ionisation mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2006, 20, 1628-1636.	1.5	58
49	Imaging RNA polymerase-amelogenin gene complexes with single molecule resolution using atomic force microscopy. <i>European Journal of Oral Sciences</i> , 2006, 114, 133-138.	1.5	8
50	Studying silane mobility on hydrated mica using ambient AFM. <i>Ultramicroscopy</i> , 2006, 106, 765-770.	1.9	9
51	Amyloid Under the Atomic Force Microscope. <i>Protein and Peptide Letters</i> , 2006, 13, 261-270.	0.9	60
52	Collision events between RNA polymerases in convergent transcription studied by atomic force microscopy. <i>Nucleic Acids Research</i> , 2006, 34, 5416-5425.	14.5	102
53	Imaging the substructure of antibodies with tapping-mode AFM in air: the importance of a water layer on mica. <i>Journal of Microscopy</i> , 2005, 217, 193-199.	1.8	59
54	Adsorption and Self-Assembly of Peptides on Mica Substrates. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 1965-1968.	13.8	112

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55	The substructure of immunoglobulin G resolved to 25kDa using amplitude modulation AFM in air. Ultramicroscopy, 2005, 105, 103-110.	1.9	48
56	Competing Pathways Determine Fibril Morphology in the Self-assembly of β 2-Microglobulin into Amyloid. Journal of Molecular Biology, 2005, 351, 850-864.	4.2	320
57	Nested genes: Biological implications and use of AFM for analysis. Gene, 2005, 350, 15-23.	2.2	27
58	Formation of Aminosilane-Functionalized Mica for Atomic Force Microscopy Imaging of DNA. Langmuir, 2005, 21, 7884-7891.	3.5	80
59	Nucleotide Binding to DNA Gyrase Causes Loss of DNA Wrap. Journal of Molecular Biology, 2004, 337, 597-610.	4.2	70
60	Large fluctuations in the disassembly rate of microtubules revealed by atomic force microscopy. Ultramicroscopy, 2003, 97, 239-247.	1.9	10
61	Hierarchical Assembly of β 2-Microglobulin Amyloid In Vitro Revealed by Atomic Force Microscopy. Journal of Molecular Biology, 2003, 330, 785-797.	4.2	213
62	The Circularization of Amyloid Fibrils Formed by Apolipoprotein C-II. Biophysical Journal, 2003, 85, 3979-3990.	0.5	62
63	The yeast prion Ure2p retains its native alpha-helical conformation upon assembly into protein fibrils in vitro. EMBO Journal, 2002, 21, 2903-2911.	7.8	137
64	β 2-microglobulin and its deamidated variant, N17D form amyloid fibrils with a range of morphologies in vitro. Journal of Molecular Biology, 2001, 313, 559-571.	4.2	186
65	Micromechanical and structural properties of a pennate diatom investigated by atomic force microscopy. Journal of Microscopy, 2001, 202, 518-532.	1.8	111
66	Setup for observing living cells using a commercial atomic force microscope. Review of Scientific Instruments, 2000, 71, 4338.	1.3	9
67	Atomic Force Microscopy of Cationic Liposomes. Langmuir, 2000, 16, 4813-4818.	3.5	33
68	Scanning probe microscopy studies of cereal seed storage protein structures. Scanning, 1999, 21, 293-298.	1.5	11
69	Methods for fabricating and characterizing a new generation of biomimetic materials. Materials Science and Engineering C, 1999, 7, 37-43.	7.3	101
70	Mechanical properties of carbon nanotubes. Applied Physics A: Materials Science and Processing, 1999, 69, 255-260.	2.3	1,283
71	Small angle X-ray scattering of wheat seed-storage proteins: β 1-, β 3- and γ -gliadins and the high molecular weight (HMW) subunits of glutenin. BBA - Proteins and Proteomics, 1999, 1430, 359-366.	2.1	65
72	Direct Observation of One-Dimensional Diffusion and Transcription by Escherichia coli RNA Polymerase. Biophysical Journal, 1999, 77, 2284-2294.	0.5	238

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73	Oriented, Active Escherichia coli RNA Polymerase: An Atomic Force Microscope Study. Biophysical Journal, 1999, 76, 1024-1033.	0.5	69
74	Phase imaging of moving DNA molecules and DNA molecules replicated in the atomic force microscope. Nucleic Acids Research, 1997, 25, 4379-4384.	14.5	95
75	Scanning Probe Microscopes Applications in Cereal Science. Cereal Chemistry, 1997, 74, 193-199.	2.2	18
76	Escherichia coli RNA Polymerase Activity Observed Using Atomic Force Microscopy. Biochemistry, 1997, 36, 461-468.	2.5	341
77	Biological applications of the AFM: From single molecules to organs. International Journal of Imaging Systems and Technology, 1997, 8, 151-161.	4.1	132
78	Protein tracking and detection of protein motion using atomic force microscopy. Biophysical Journal, 1996, 70, 2421-2431.	0.5	113
79	Short cantilevers for atomic force microscopy. Review of Scientific Instruments, 1996, 67, 3583-3590.	1.3	456
80	Reversible Binding of DNA to Mica for AFM Imaging. Langmuir, 1996, 12, 5905-5908.	3.5	122
81	Structure, Assembly and Targeting of Wheat Storage Proteins. Journal of Plant Physiology, 1995, 145, 620-625.	3.5	20
82	STM investigations of an alkane-metal-system (C32H66/In). Polymer Bulletin, 1994, 33, 687-691.	3.3	3