Jason P Killgore

List of Publications by Year
in descending order

33 papers	672 citations	623734 14 h-index	580821 25 g-index
35 all docs	35 docs citations	35 times ranked	767 citing authors

#	Article	IF	Citations
1	Quantitative Viscoelastic Mapping of Polyolefin Blends with Contact Resonance Atomic Force Microscopy. Macromolecules, 2012, 45, 4363-4370.	4.8	90
2	Quantitative subsurface contact resonance force microscopy of model polymer nanocomposites. Nanotechnology, 2011, 22, 175706.	2.6	88
3	Continuous Measurement of Atomic Force Microscope Tip Wear by Contact Resonance Force Microscopy. Small, 2011, 7, 1018-1022.	10.0	47
4	Measurement of Viscoelastic Loss Tangent with Contact Resonance Modes of Atomic Force Microscopy. Macromolecules, 2013, 46, 9396-9402.	4.8	45
5	Low-force AFM nanomechanics with higher-eigenmode contact resonance spectroscopy. Nanotechnology, 2012, 23, 055702.	2.6	43
6	Nanomechanics of cellulose deformation reveal molecular defects that facilitate natural deconstruction. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9825-9830.	7.1	40
7	Contact Resonance Force Microscopy for Viscoelastic Property Measurements: From Fundamentals to State-of-the-Art Applications. Macromolecules, 2018, 51, 6977-6996.	4.8	37
8	Quantitative Contact Resonance Force Microscopy for Viscoelastic Measurement of Soft Materials at the Solidâ€“Liquid Interface. Langmuir, 2015, 31, 11143-11149.	3.5	25
9	Liquid contact resonance atomic force microscopy via experimental reconstruction of the hydrodynamic function. Journal of Applied Physics, 2014, 115, .	2.5	23
10	Vibrational shape tracking of atomic force microscopy cantilevers for improved sensitivity and accuracy of nanomechanical measurements. Nanotechnology, 2015, 26, 045701.	2.6	20
11	Nanoscale hygromechanical behavior of lignin. Cellulose, 2018, 25, 6345-6360.	4.9	18
12	Determination of the True Lateral Grain Size in Organicâ€“Inorganic Halide Perovskite Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 33565-33570.	8.0	17
13	Hydrodynamic corrections to contact resonance atomic force microscopy measurements of viscoelastic loss tangent. Review of Scientific Instruments, 2013, 84, 073703.	1.3	16
14	Higher-eigenmode piezoresponse force microscopy: a path towards increased sensitivity and the elimination of electrostatic artifacts. Nano Futures, 2018, 2, 015005.	2.2	16
15	Tunable Mechanical Anisotropy, Crack Guiding, and Toughness Enhancement in Twoâ€Stage Reactive Polymer Networks. Advanced Engineering Materials, 2019, 21, 1900578.	3.5	16
16	Monitoring Fast, Voxelâ€Scale Cure Kinetics via Sampleâ€Coupledâ€Resonance Photorheology. Small Methods, 2019, 3, 1800275.	8.6	15
17	Microscale Photopatterning of Throughâ€Thickness Modulus in a Monolithic and Functionally Graded 3Dâ€Printed Part. Small Science, 2021, 1, 2000017.	9.9	14
18	Photothermally excited force modulation microscopy for broadband nanomechanical property measurements. Applied Physics Letters, 2015, 107, .	3.3	12

#	Article	IF	Citations
19	Characterizing the free and surface-coupled vibrations of heated-tip atomic force microscope cantilevers. Nanotechnology, 2014, 25, 345701.	2.6	11
20	Experimental reconstruction of the contact resonance shape factor for quantification and amplification of bias-induced strain in atomic force microscopy. Applied Physics Letters, 2019, 114, 133108.	3.3	11
21	Pulsed contact resonance for atomic force microscopy nanomechanical measurements. Applied Physics Letters, 2012, 100, 053104.	3.3	10
22	Electrostatically-blind quantitative piezoresponse force microscopy free of distributed-force artifacts. Nanoscale Advances, 2022, 4, 2036-2045.	4.6	7
23	Voxel-Scale Conversion Mapping Informs Intrinsic Resolution in Stereolithographic Additive Manufacturing. ACS Applied Polymer Materials, 2021, 3, 290-298.	4.4	6
24	Scanning speed phenomenon in contact-resonance atomic force microscopy. Beilstein Journal of Nanotechnology, 2018, 9, 945-952.	2.8	5
25	Digital light processing in a hybrid atomic force microscope: In Situ, nanoscale characterization of the printing process. Additive Manufacturing, 2021, 38, 101744.	3.0	5
26	Deciphering osteoconductive surface charge effects in sintered hydroxyapatite via piezoresponse force microscopy. Journal of Applied Physics, 2021, 129, .	2.5	5
27	Reconstructing the distributed force on an atomic force microscope cantilever. Nanotechnology, 2017, 28, 104002.	2.6	4
28	Error estimation and enhanced stiffness sensitivity in contact resonance force microscopy with a multiple arbitrary frequency lock-in amplifier (MAFLIA). Measurement Science and Technology, 2020, 31, 115009.	2.6	4
29	Spatially Controlled Permeability and Stiffness in Photopatterned Two-Stage Reactive Polymer Films for Enhanced CO₂ Barrier and Mechanical Toughness. Macromolecules, 2021, 54, 44-52.	4.8	4
30	Viscoelastic-mapping of cellulose nanofibrils using low-total-force contact resonance force microscopy (LTF-CRFM). Cellulose, 2022, 29, 5493-5509.	4.9	4
31	Isomorphic contact resonance force microscopy and piezoresponse force microscopy of an AlN thin film: demonstration of a new contact resonance technique. Nano Futures, 2020, 4, 025003.	2.2	3
32	Photopatterning of two stage reactive polymer networks with CO₂-philic thiolâ€“acrylate chemistry: enhanced mechanical toughness and CO₂/N₂ selectivity. Polymer Chemistry, 2022, 13, 2495-2505.	3.9	2
33	Nanomechanical Insights into Voxel-scale Photopolymer Cure. Microscopy and Microanalysis, 2020, 26, 1964-1966.	0.4	0