

William P King

List of Publications by Year in descending order

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249
papers

11,692
citations

36203

51
h-index

34900

98
g-index

250
all docs

250
docs citations

250
times ranked

15468
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanoscale thermal transport. II. 2003–2012. <i>Applied Physics Reviews</i> , 2014, 1, 011305.	5.5	1,277
2	Nanoscale Tunable Reduction of Graphene Oxide for Graphene Electronics. <i>Science</i> , 2010, 328, 1373-1376.	6.0	658
3	High-power lithium ion microbatteries from interdigitated three-dimensional bicontinuous nanoporous electrodes. <i>Nature Communications</i> , 2013, 4, 1732.	5.8	513
4	Rapid isothermal amplification and portable detection system for SARS-CoV-2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 22727-22735.	3.3	314
5	Nanoscale Joule heating, Peltier cooling and current crowding at graphene–metal contacts. <i>Nature Nanotechnology</i> , 2011, 6, 287-290.	15.6	275
6	3D printing of shape-conformable thermoelectric materials using all-inorganic Bi ₂ Te ₃ -based inks. <i>Nature Energy</i> , 2018, 3, 301-309.	19.8	237
7	Myoblast alignment and differentiation on cell culture substrates with microscale topography and model chemistries. <i>Biomaterials</i> , 2007, 28, 2202-2210.	5.7	226
8	Friction characteristics of microtextured surfaces under mixed and hydrodynamic lubrication. <i>Tribology International</i> , 2013, 57, 170-176.	3.0	206
9	Combined microscale mechanical topography and chemical patterns on polymer cell culture substrates. <i>Biomaterials</i> , 2006, 27, 2487-2494.	5.7	201
10	Electrical, Thermal, and Mechanical Characterization of Silicon Microcantilever Heaters. <i>Journal of Microelectromechanical Systems</i> , 2006, 15, 1644-1655.	1.7	187
11	Holographic patterning of high-performance on-chip 3D lithium-ion microbatteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6573-6578.	3.3	179
12	Impact of polymer film thickness and cavity size on polymer flow during embossing: toward process design rules for nanoimprint lithography. <i>Journal of Micromechanics and Microengineering</i> , 2005, 15, 2414-2425.	1.5	177
13	High power rechargeable batteries. <i>Current Opinion in Solid State and Materials Science</i> , 2012, 16, 186-198.	5.6	176
14	Using nanoscale thermocapillary flows to create arrays of purely semiconducting single-walled carbon nanotubes. <i>Nature Nanotechnology</i> , 2013, 8, 347-355.	15.6	167
15	High-Speed, Sub-15 nm Feature Size Thermochemical Nanolithography. <i>Nano Letters</i> , 2007, 7, 1064-1069.	4.5	165
16	Atomic force microscope cantilevers for combined thermomechanical data writing and reading. <i>Applied Physics Letters</i> , 2001, 78, 1300-1302.	1.5	163
17	Nanoscale deposition of solid inks via thermal dip pen nanolithography. <i>Applied Physics Letters</i> , 2004, 85, 1589-1591.	1.5	155
18	Hot embossing for micropatterned cell substrates. <i>Biomaterials</i> , 2004, 25, 4767-4775.	5.7	148

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19	Nanopatterning reconfigurable magnetic landscapes via thermally assisted scanning probe lithography. <i>Nature Nanotechnology</i> , 2016, 11, 545-551.	15.6	134
20	Water droplet impact on elastic superhydrophobic surfaces. <i>Scientific Reports</i> , 2016, 6, 30328.	1.6	128
21	Condensate droplet size distribution on lubricant-infused surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2017, 109, 187-199.	2.5	123
22	Nanoscale Thermal Analysis of an Energetic Material. <i>Nano Letters</i> , 2006, 6, 2145-2149.	4.5	116
23	Molecular Confinement Accelerates Deformation of Entangled Polymers During Squeeze Flow. <i>Science</i> , 2008, 322, 720-724.	6.0	113
24	Polymer deformation and filling modes during microembossing. <i>Journal of Micromechanics and Microengineering</i> , 2004, 14, 1625-1632.	1.5	103
25	1,3-Dipolar Cycloaddition for the Generation of Nanostructured Semiconductors by Heated Probe Tips. <i>Macromolecules</i> , 2006, 39, 6793-6795.	2.2	98
26	Nanoindentation of shape memory polymer networks. <i>Polymer</i> , 2007, 48, 3213-3225.	1.8	96
27	Surface functionalization of thin-film diamond for highly stable and selective biological interfaces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 983-988.	3.3	87
28	Grain boundary doping strengthens nanocrystalline copper alloys. <i>Scripta Materialia</i> , 2012, 67, 720-723.	2.6	85
29	Scanning Probe Microscopy. <i>Analytical Chemistry</i> , 2004, 76, 3429-3444.	3.2	80
30	Single nanoparticle detection using photonic crystal enhanced microscopy. <i>Analyst, The</i> , 2014, 139, 1007-1015.	1.7	80
31	Chemically Isolated Graphene Nanoribbons Reversibly Formed in Fluorographene Using Polymer Nanowire Masks. <i>Nano Letters</i> , 2011, 11, 5461-5464.	4.5	79
32	Evaluating Broader Impacts of Nanoscale Thermal Transport Research. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2015, 19, 127-165.	1.4	69
33	Wear-Resistant Diamond Nanoprobe Tips with Integrated Silicon Heater for Tip-Based Nanomanufacturing. <i>ACS Nano</i> , 2010, 4, 3338-3344.	7.3	68
34	Nanometer-Scale Infrared Spectroscopy of Heterogeneous Polymer Nanostructures Fabricated by Tip-Based Nanofabrication. <i>ACS Nano</i> , 2012, 6, 8015-8021.	7.3	68
35	Biophysical properties of human breast cancer cells measured using silicon MEMS resonators and atomic force microscopy. <i>Lab on A Chip</i> , 2015, 15, 839-847.	3.1	68
36	Direct Writing of a Conducting Polymer with Molecular-Level Control of Physical Dimensions and Orientation. <i>Journal of the American Chemical Society</i> , 2006, 128, 6774-6775.	6.6	64

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37	Monolayer MoS ₂ Nanoribbon Transistors Fabricated by Scanning Probe Lithography. Nano Letters, 2019, 19, 2092-2098.	4.5	64
38	Thermal conduction between a heated microcantilever and a surrounding air environment. Applied Thermal Engineering, 2009, 29, 1631-1641.	3.0	62
39	Comparison of thermal and piezoresistive sensing approaches for atomic force microscopy topography measurements. Applied Physics Letters, 2004, 85, 2086-2088.	1.5	61
40	Thermochemical Nanolithography of Multifunctional Nanotemplates for Assembling Nano-Objects. Advanced Functional Materials, 2009, 19, 3696-3702.	7.8	61
41	High-sensitivity nanometer-scale infrared spectroscopy using a contact mode microcantilever with an internal resonator paddle. Nanotechnology, 2010, 21, 185705.	1.3	60
42	High power density thermal energy storage using additively manufactured heat exchangers and phase change material. International Journal of Heat and Mass Transfer, 2020, 153, 119591.	2.5	60
43	HEATED ATOMIC FORCE MICROSCOPE CANTILEVERS AND THEIR APPLICATIONS. Annual Review of Heat Transfer, 2013, 16, 287-326.	0.3	59
44	Thermal conduction from microcantilever heaters in partial vacuum. Journal of Applied Physics, 2007, 101, 014906.	1.1	58
45	High power and energy density dynamic phase change materials using pressure-enhanced close contact melting. Nature Energy, 2022, 7, 270-280.	19.8	58
46	Maskless Nanoscale Writing of Nanoparticle-Polymer Composites and Nanoparticle Assemblies using Thermal Nanoprobes. Nano Letters, 2010, 10, 129-133.	4.5	56
47	Design analysis of heated atomic force microscope cantilevers for nanotopography measurements. Journal of Micromechanics and Microengineering, 2005, 15, 2441-2448.	1.5	55
48	Local Nanoscale Heating Modulates Single-Asperity Friction. Nano Letters, 2010, 10, 4640-4645.	4.5	54
49	Direct Measurement of Pyroelectric and Electrocaloric Effects in Thin Films. Physical Review Applied, 2017, 7, .	1.5	54
50	Cadherin-Mediated Cell-Cell Contact Regulates Keratinocyte Differentiation. Journal of Investigative Dermatology, 2009, 129, 564-572.	0.3	53
51	Rapid thermal lysis of cells using silicon-diamond microcantilever heaters. Lab on A Chip, 2010, 10, 1135.	3.1	53
52	Three-Dimensional Integration of Graphene via Swelling, Shrinking, and Adaptation. Nano Letters, 2015, 15, 4525-4531.	4.5	53
53	Controlling Nanoscale Friction through the Competition between Capillary Adsorption and Thermally Activated Sliding. ACS Nano, 2012, 6, 4305-4313.	7.3	52
54	Air Jet Impingement Cooling of Electronic Devices Using Additively Manufactured Nozzles. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 220-229.	1.4	52

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55	Microcantilever hotplates: Design, fabrication, and characterization. <i>Sensors and Actuators A: Physical</i> , 2007, 136, 291-298.	2.0	51
56	Phase change material-based thermal energy storage. <i>Cell Reports Physical Science</i> , 2021, 2, 100540.	2.8	51
57	Conformal ZnO nanocomposite coatings on micro-patterned surfaces for superhydrophobicity. <i>Thin Solid Films</i> , 2010, 518, 5426-5431.	0.8	50
58	Shape recovery of nanoscale imprints in a thermoset "shape memory" polymer. <i>Applied Physics Letters</i> , 2005, 86, 103108.	1.5	48
59	Hydrothermal Fabrication of Three-Dimensional Secondary Battery Anodes. <i>Advanced Materials</i> , 2014, 26, 7096-7101.	11.1	48
60	Direct observation of resistive heating at graphene wrinkles and grain boundaries. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	47
61	Heat transfer enhancement of internal laminar flows using additively manufactured static mixers. <i>International Journal of Heat and Mass Transfer</i> , 2019, 137, 292-300.	2.5	47
62	Room-temperature chemical vapor deposition and mass detection on a heated atomic force microscope cantilever. <i>Applied Physics Letters</i> , 2006, 88, 033107.	1.5	46
63	Nanoscale Characterisation and Imaging of Partially Amorphous Materials using Local Thermomechanical Analysis and Heated Tip AFM. <i>Pharmaceutical Research</i> , 2007, 24, 2048-2054.	1.7	46
64	Hydrophobic and oleophobic re-entrant steel microstructures fabricated using micro electrical discharge machining. <i>Journal of Micromechanics and Microengineering</i> , 2014, 24, 095020.	1.5	46
65	Frequency-Dependent Electrical and Thermal Response of Heated Atomic Force Microscope Cantilevers. <i>Journal of Microelectromechanical Systems</i> , 2007, 16, 213-222.	1.7	45
66	Experimental Investigation on the Heat Transfer Between a Heated Microcantilever and a Substrate. <i>Journal of Heat Transfer</i> , 2008, 130, .	1.2	45
67	Casting metal microstructures from a flexible and reusable mold. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 095016.	1.5	45
68	Nanometer-scale flow of molten polyethylene from a heated atomic force microscope tip. <i>Nanotechnology</i> , 2012, 23, 215301.	1.3	45
69	Leave Your Phone at the Door. , 2016, , .		45
70	Modeling and Simulation of the Interface Temperature Between a Heated Silicon Tip and a Substrate. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2008, 12, 98-115.	1.4	44
71	Millimeter-scale liquid metal droplet thermal switch. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	44
72	Geometric microenvironment directs cell morphology on topographically patterned hydrogel substrates. <i>Acta Biomaterialia</i> , 2010, 6, 3514-3523.	4.1	42

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73	Parallelization of thermochemical nanolithography. <i>Nanoscale</i> , 2014, 6, 1299-1304.	2.8	41
74	Spatial defects nanoengineering for bipolar conductivity in MoS ₂ . <i>Nature Communications</i> , 2020, 11, 3463.	5.8	41
75	Droplet impact on vibrating superhydrophobic surfaces. <i>Physical Review Fluids</i> , 2017, 2, .	1.0	41
76	Topography imaging with a heated atomic force microscope cantilever in tapping mode. <i>Review of Scientific Instruments</i> , 2007, 78, 043709.	0.6	40
77	Lorentz force actuation of a heated atomic force microscope cantilever. <i>Nanotechnology</i> , 2012, 23, 055709.	1.3	40
78	Fabricating Nanoscale Chemical Gradients with ThermoChemical NanoLithography. <i>Langmuir</i> , 2013, 29, 8675-8682.	1.6	40
79	Nanoscale Reduction of Graphene Fluoride via Thermochemical Nanolithography. <i>ACS Nano</i> , 2013, 7, 6219-6224.	7.3	39
80	Laser-Induced Nanoscale Thermocapillary Flow for Purification of Aligned Arrays of Single-Walled Carbon Nanotubes. <i>ACS Nano</i> , 2014, 8, 12641-12649.	7.3	39
81	Modeling Piezoresistive Microcantilever Sensor Response to Surface Stress for Biochemical Sensors. <i>IEEE Sensors Journal</i> , 2008, 8, 1404-1410.	2.4	38
82	Atomic force microscope infrared spectroscopy on 15 nm scale polymer nanostructures. <i>Review of Scientific Instruments</i> , 2013, 84, 023709.	0.6	37
83	High-frequency thermal-electrical cycles for pyroelectric energy conversion. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	37
84	Nanopatterning materials using area selective atomic layer deposition in conjunction with thermochemical surface modification via heated AFM cantilever probe lithography. <i>Microelectronic Engineering</i> , 2008, 85, 934-936.	1.1	36
85	High strength metallic wood from nanostructured nickel inverse opal materials. <i>Scientific Reports</i> , 2019, 9, 719.	1.6	36
86	Thermal Metrology of Silicon Microstructures Using Raman Spectroscopy. <i>IEEE Transactions on Components and Packaging Technologies</i> , 2007, 30, 200-208.	1.4	34
87	High Precision Electrohydrodynamic Printing of Polymer Onto Microcantilever Sensors. <i>IEEE Sensors Journal</i> , 2011, 11, 2246-2253.	2.4	33
88	Control of Nanoscale Environment to Improve Stability of Immobilized Proteins on Diamond Surfaces. <i>Advanced Functional Materials</i> , 2011, 21, 1040-1050.	7.8	33
89	Integration of high capacity materials into interdigitated mesostructured electrodes for high energy and high power density primary microbatteries. <i>Journal of Power Sources</i> , 2016, 315, 308-315.	4.0	32
90	Ultra-power-dense heat exchanger development through genetic algorithm design and additive manufacturing. <i>Joule</i> , 2021, 5, 3045-3056.	11.7	32

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91	Direct Fabrication of Arbitrary-Shape Ferroelectric Nanostructures on Plastic, Glass, and Silicon Substrates. <i>Advanced Materials</i> , 2011, 23, 3786-3790.	11.1	31
92	A composite phase change material thermal buffer based on porous metal foam and low-melting-temperature metal alloy. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	31
93	Heat Transfer Enhancement of Single-Phase Internal Flows using Shape Optimization and Additively Manufactured Flow Structures. <i>International Journal of Heat and Mass Transfer</i> , 2021, 177, 121510.	2.5	31
94	Differential Scanning Calorimeter Based on Suspended Membrane Single Crystal Silicon Microhotplate. <i>Journal of Microelectromechanical Systems</i> , 2008, 17, 1513-1525.	1.7	30
95	The nanopatterning of a stimulus-responsive polymer by thermal dip-pen nanolithography. <i>Soft Matter</i> , 2008, 4, 1844.	1.2	30
96	Size Effect on the Thermal Conductivity of Thin Metallic Films Investigated by Scanning Joule Expansion Microscopy. <i>Journal of Heat Transfer</i> , 2008, 130, .	1.2	30
97	Linear ripples and traveling circular ripples produced on polymers by thermal AFM probes. <i>Physical Review B</i> , 2009, 79, .	1.1	30
98	Zinc oxide inverse opal enzymatic biosensor. <i>Applied Physics Letters</i> , 2013, 102, 253103.	1.5	30
99	Direct observation of nanometer-scale Joule and Peltier effects in phase change memory devices. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	30
100	Mechanical properties of hexagonal lattice structures fabricated using continuous liquid interface production additive manufacturing. <i>Additive Manufacturing</i> , 2019, 25, 10-18.	1.7	30
101	Phase Change Material Heat Sink for Transient Cooling of High-Power Devices. <i>International Journal of Heat and Mass Transfer</i> , 2021, 170, 121033.	2.5	30
102	The impact of subcontinuum gas conduction on topography measurement sensitivity using heated atomic force microscope cantilevers. <i>Physics of Fluids</i> , 2005, 17, 100615.	1.6	29
103	Microcantilever actuation via periodic internal heating. <i>Review of Scientific Instruments</i> , 2007, 78, 126102.	0.6	29
104	Electrical and Thermal Coupling to a Single-Wall Carbon Nanotube Device Using an Electrothermal Nanoprobe. <i>Nano Letters</i> , 2009, 9, 1356-1361.	4.5	28
105	Micromechanical properties of hydrogels measured with MEMS resonant sensors. <i>Biomedical Microdevices</i> , 2013, 15, 311-319.	1.4	28
106	Spray-on omniphobic ZnO coatings. <i>RSC Advances</i> , 2015, 5, 69243-69250.	1.7	28
107	An Integrated Liquid Metal Thermal Switch for Active Thermal Management of Electronics. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2019, 9, 2341-2351.	1.4	28
108	Thermal transport in layer-by-layer assembled polycrystalline graphene films. <i>Npj 2D Materials and Applications</i> , 2019, 3, .	3.9	28

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109	Near-field infrared absorption of plasmonic semiconductor microparticles studied using atomic force microscope infrared spectroscopy. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	27
110	Improved All-Silicon Microcantilever Heaters With Integrated Piezoresistive Sensing. <i>Journal of Microelectromechanical Systems</i> , 2008, 17, 432-445.	1.7	26
111	Automated metrology and geometric analysis of additively manufactured lattice structures. <i>Additive Manufacturing</i> , 2019, 28, 535-545.	1.7	26
112	Emergency ventilator for COVID-19. <i>PLoS ONE</i> , 2020, 15, e0244963.	1.1	26
113	A Compact Approach to On-Chip Interconnect Heat Conduction Modeling Using the Finite Element Method. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , 2008, 130, .	1.2	25
114	Mechanical design for tailoring the resonance harmonics of an atomic force microscope cantilever during tip-surface contact. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 115008.	1.5	25
115	Temperature-dependence of ink transport during thermal dip-pen nanolithography. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	25
116	Microfluidic point-of-care device for detection of early strains and B.1.1.7 variant of SARS-CoV-2 virus. <i>Lab on A Chip</i> , 2022, 22, 1297-1309.	3.1	25
117	Microwave assisted patterning of vertically aligned carbon nanotubes onto polymer substrates. <i>Journal of Vacuum Science & Technology B</i> , 2006, 24, 1947.	1.3	24
118	Improved atomic force microscope infrared spectroscopy for rapid nanometer-scale chemical identification. <i>Nanotechnology</i> , 2013, 24, 444007.	1.3	24
119	Microcantilever hotplates with temperature-compensated piezoresistive strain sensors. <i>Sensors and Actuators A: Physical</i> , 2008, 143, 181-190.	2.0	23
120	Silicon microcantilever hotplates with high temperature uniformity. <i>Sensors and Actuators A: Physical</i> , 2009, 152, 160-167.	2.0	23
121	Quantitative Thermal Imaging of Single-Walled Carbon Nanotube Devices by Scanning Joule Expansion Microscopy. <i>ACS Nano</i> , 2012, 6, 10267-10275.	7.3	23
122	Tailoring Surface Properties via Functionalized Hydrofluorinated Graphene Compounds. <i>Advanced Materials</i> , 2019, 31, e1903424.	11.1	23
123	Variable temperature thin film indentation with a flat punch. <i>Review of Scientific Instruments</i> , 2008, 79, 013904.	0.6	22
124	Measuring Physical Properties of Neuronal and Glial Cells with Resonant Microsensors. <i>Analytical Chemistry</i> , 2014, 86, 4864-4872.	3.2	22
125	Performance Modeling and Design of Ultra-High Power Microbatteries. <i>Journal of the Electrochemical Society</i> , 2017, 164, E3122-E3131.	1.3	22
126	Nanomaterial transfer using hot embossing for flexible electronic devices. <i>Applied Physics Letters</i> , 2006, 88, 083112.	1.5	21

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127	Thermomechanical Formation and Recovery of Nanoindents in a Shape Memory Polymer Studied Using a Heated Tip. Scanning, 2008, 30, 197-202.	0.7	21
128	Nanofluidic channels of arbitrary shapes fabricated by tip-based nanofabrication. Nanotechnology, 2014, 25, 455301.	1.3	21
129	Parallel nanoimaging and nanolithography using a heated microcantilever array. Nanotechnology, 2014, 25, 014001.	1.3	21
130	Micro-patterning of mammalian cells on suspended MEMS resonant sensors for long-term growth measurements. Lab on A Chip, 2014, 14, 1401.	3.1	21
131	Effect of irradiation damage on the shear strength of Cu-Nb interfaces. Scripta Materialia, 2014, 90-91, 29-32.	2.6	21
132	High power density air-cooled microchannel heat exchanger. International Journal of Heat and Mass Transfer, 2018, 118, 1276-1283.	2.5	21
133	Smartphone clip-on instrument and microfluidic processor for rapid sample-to-answer detection of Zika virus in whole blood using spatial RT-LAMP. Analyst, The, 2022, 147, 3838-3853.	1.7	21
134	Direct writing and characterization of poly(p-phenylene vinylene) nanostructures. Applied Physics Letters, 2009, 95, .	1.5	20
135	Dynamic thermomechanical response of bimaterial microcantilevers to periodic heating by infrared radiation. Review of Scientific Instruments, 2012, 83, 015003.	0.6	20
136	High Power Density Pyroelectric Energy Conversion in Nanometer-Thick BaTiO ₃ Films. Nanoscale and Microscale Thermophysical Engineering, 2016, 20, 137-146.	1.4	20
137	Temperature-dependent thermomechanical noise spectra of doped silicon microcantilevers. Sensors and Actuators A: Physical, 2008, 145-146, 37-43.	2.0	19
138	Thermoelectric voltage at a nanometer-scale heated tip point contact. Nanotechnology, 2012, 23, 035401.	1.3	19
139	Characterization of Mass and Swelling of Hydrogel Microstructures using MEMS Resonant Mass Sensor Arrays. Small, 2012, 8, 2555-2562.	5.2	19
140	Fabrication of arbitrarily shaped silicon and silicon oxide nanostructures using tip-based nanofabrication. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2013, 31, 06FJ01.	0.6	19
141	In situ creep measurements on micropillar samples during heavy ion irradiation. Journal of Nuclear Materials, 2014, 451, 104-110.	1.3	19
142	A microfabrication approach for making metallic mechanical metamaterials. Materials and Design, 2018, 160, 147-168.	3.3	19
143	Microstructured metal molds fabricated via investment casting. Journal of Micromechanics and Microengineering, 2010, 20, 025025.	1.5	18
144	Multifunctional atomic force microscope cantilevers with Lorentz force actuation and self-heating capability. Nanotechnology, 2014, 25, 395501.	1.3	18

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145	Molding ceramic microstructures on flat and curved surfaces with and without embedded carbon nanotubes. <i>Journal of Micromechanics and Microengineering</i> , 2006, 16, 2554-2563.	1.5	17
146	Low temperature characterization of heated microcantilevers. <i>Journal of Applied Physics</i> , 2007, 101, 094504.	1.1	17
147	Routine Femtogram-Level Chemical Analyses Using Vibrational Spectroscopy and Self-Cleaning Scanning Probe Microscopy Tips. <i>Analytical Chemistry</i> , 2008, 80, 3221-3228.	3.2	17
148	Application of the thermal flash technique for low thermal diffusivity micro/nanofibers. <i>Review of Scientific Instruments</i> , 2009, 80, 036103.	0.6	17
149	Self-heating in piezoresistive cantilevers. <i>Applied Physics Letters</i> , 2011, 98, 223103.	1.5	17
150	Nanometer Scale Alignment of Block Copolymer Domains by Means of a Scanning Probe Tip. <i>Advanced Materials</i> , 2014, 26, 2999-3002.	11.1	17
151	Micromechanical devices with controllable stiffness fabricated from regular 3D porous materials. <i>Journal of Micromechanics and Microengineering</i> , 2014, 24, 105006.	1.5	17
152	High power density two-phase cooling in microchannel heat exchangers. <i>Applied Thermal Engineering</i> , 2019, 148, 1271-1277.	3.0	17
153	Contact potential measurement using a heated atomic force microscope tip. <i>Applied Physics Letters</i> , 2007, 91, 143111.	1.5	16
154	The mechanics of polymer swelling on microcantilever sensors. <i>Microsystem Technologies</i> , 2009, 15, 333-340.	1.2	16
155	Nano-fabrication with a flexible array of nano-apertures. <i>Nanotechnology</i> , 2012, 23, 175303.	1.3	16
156	Thermomechanical Formation of Nanoscale Polymer Indents With a Heated Silicon Tip. <i>Journal of Heat Transfer</i> , 2007, 129, 1600-1604.	1.2	15
157	Characterization of liquid and gaseous micro- and nanojets using microcantilever sensors. <i>Sensors and Actuators A: Physical</i> , 2007, 134, 128-139.	2.0	15
158	Local Thermomechanical Analysis of a Microphase-Separated Thin Lamellar PS- <i>b</i> -PEO Film. <i>Langmuir</i> , 2012, 28, 13503-13511.	1.6	15
159	A semianalytical solution for the 3D method including the effect of heater thermal conduction. <i>Journal of Applied Physics</i> , 2008, 103, 113517.	1.1	14
160	Improved Nanotopography Sensing via Temperature Control of a Heated Atomic Force Microscope Cantilever. <i>IEEE Sensors Journal</i> , 2011, 11, 2664-2670.	2.4	14
161	Temperature-dependent phase transitions in zeptoliter volumes of a complex biological membrane. <i>Nanotechnology</i> , 2011, 22, 055709.	1.3	13
162	Nanomanufacturing: Direct Fabrication of Arbitrary-Shaped Ferroelectric Nanostructures on Plastic, Glass, and Silicon Substrates (<i>Adv. Mater.</i> 33/2011). <i>Advanced Materials</i> , 2011, 23, 3740-3740.	11.1	13

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163	Ultrananocrystalline diamond tip integrated onto a heated atomic force microscope cantilever. <i>Nanotechnology</i> , 2012, 23, 495302.	1.3	13
164	Bimaterial microcantilevers with black silicon nanocone arrays. <i>Sensors and Actuators A: Physical</i> , 2013, 199, 143-148.	2.0	13
165	Silicon nano-mechanical resonators fabricated by using tip-based nanofabrication. <i>Nanotechnology</i> , 2014, 25, 275301.	1.3	13
166	Shear stress characteristics of microtextured surfaces in gap-controlled hydrodynamic lubrication. <i>Tribology International</i> , 2015, 82, 123-132.	3.0	13
167	Measuring individual carbon nanotubes and single graphene sheets using atomic force microscope infrared spectroscopy. <i>Nanotechnology</i> , 2017, 28, 355707.	1.3	13
168	Tip-Based Cleaning and Smoothing Improves Performance in Monolayer MoS ₂ Devices. <i>ACS Omega</i> , 2021, 6, 4013-4021.	1.6	13
169	Microthermogravimetry using a microcantilever hot plate with integrated temperature-compensated piezoresistive strain sensors. <i>Review of Scientific Instruments</i> , 2008, 79, 054901.	0.6	12
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