

William P King

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

232
papers

9,485
citations

45
h-index

89
g-index

250
ext. papers

10,709
ext. citations

6.6
avg, IF

6.24
L-index

#	Paper	IF	Citations
232	Hierarchical data models improve the accuracy of feature level predictions for additively manufactured parts. <i>Additive Manufacturing</i> , 2022 , 51, 102621	6.1	
231	Overcoming the limitations of COVID-19 diagnostics with nanostructures, nucleic acid engineering, and additive manufacturing. <i>Current Opinion in Solid State and Materials Science</i> , 2022 , 26, 100966	12	2
230	High power and energy density dynamic phase change materials using pressure-enhanced close contact melting. <i>Nature Energy</i> , 2022 , 7, 270-280	62.3	5
229	Large batch metrology on internal features of additively manufactured parts using X-ray computed tomography. <i>Journal of Materials Processing Technology</i> , 2022 , 306, 117605	5.3	0
228	Using machine learning to predict dimensions and qualify diverse part designs across multiple additive machines and materials. <i>Additive Manufacturing</i> , 2022 , 55, 102848	6.1	1
227	Equivalent Thermal Conductivity Prediction of Form-Wound Windings With Litz Wire Including Transposition Effects. <i>IEEE Transactions on Industry Applications</i> , 2021 , 57, 1440-1449	4.3	3
226	Analyzing part accuracy and sources of variability for additively manufactured lattice parts made on multiple printers. <i>Additive Manufacturing</i> , 2021 , 40, 101924	6.1	2
225	Nanometer-scale capillary-driven flow and molecular weight govern polymer nanostructure deposition from a heated tip. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2021 , 39, 032601	1.3	
224	Phase Change Material Heat Sink for Transient Cooling of High-Power Devices. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 170, 121033	4.9	11
223	Tip-Based Cleaning and Smoothing Improves Performance in Monolayer MoS Devices. <i>ACS Omega</i> , 2021 , 6, 4013-4021	3.9	2
222	Portable Pathogen Diagnostics Using Microfluidic Cartridges Made from Continuous Liquid Interface Production Additive Manufacturing. <i>Analytical Chemistry</i> , 2021 , 93, 10048-10055	7.8	3
221	Phase change material-based thermal energy storage. <i>Cell Reports Physical Science</i> , 2021 , 2, 100540	6.1	9
220	Ultra-power-dense heat exchanger development through genetic algorithm design and additive manufacturing. <i>Joule</i> , 2021 ,	27.8	10
219	Reduced Order Design Optimization of Liquid Cooled Heat Sinks. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , 2021 ,	2	2
218	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	4.9	7
217	High power density thermal energy storage using additively manufactured heat exchangers and phase change material. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 153, 119591	4.9	26
216	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, 071901	3.4	12

215	Emergency ventilator for COVID-19. <i>PLoS ONE</i> , 2020 , 15, e0244963	3.7	11
214	Spatial defects nanoengineering for bipolar conductivity in MoS. <i>Nature Communications</i> , 2020 , 11, 346317.4	17.4	21
213	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	11.5	164
212	. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2020 , 10, 220-229	1.7	22
211	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	1.7	14
210	High strength metallic wood from nanostructured nickel inverse opal materials. <i>Scientific Reports</i> , 2019 , 9, 719	4.9	28
209	Automated metrology and geometric analysis of additively manufactured lattice structures. <i>Additive Manufacturing</i> , 2019 , 28, 535-545	6.1	19
208	Thermal transport in layer-by-layer assembled polycrystalline graphene films. <i>Npj 2D Materials and Applications</i> , 2019 , 3,	8.8	21
207	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	4.9	24
206	Tailoring Surface Properties via Functionalized Hydrofluorinated Graphene Compounds. <i>Advanced Materials</i> , 2019 , 31, e1903424	24	9
205	Monolayer MoS Nanoribbon Transistors Fabricated by Scanning Probe Lithography. <i>Nano Letters</i> , 2019 , 19, 2092-2098	11.5	33
204	Mechanical properties of hexagonal lattice structures fabricated using continuous liquid interface production additive manufacturing. <i>Additive Manufacturing</i> , 2019 , 25, 10-18	6.1	22
203	High power density two-phase cooling in microchannel heat exchangers. <i>Applied Thermal Engineering</i> , 2019 , 148, 1271-1277	5.8	11
202	Controlling the Contact Times of Bouncing Droplets: Droplet Impact on Vibrating Surfaces. <i>Journal of Heat Transfer</i> , 2018 , 140,	1.8	2
201	Millimeter-scale liquid metal droplet thermal switch. <i>Applied Physics Letters</i> , 2018 , 112, 063505	3.4	25
200	3D printing of shape-conformable thermoelectric materials using all-inorganic Bi ₂ Te ₃ -based inks. <i>Nature Energy</i> , 2018 , 3, 301-309	62.3	157
199	High power density air-cooled microchannel heat exchanger. <i>International Journal of Heat and Mass Transfer</i> , 2018 , 118, 1276-1283	4.9	12
198	A microfabrication approach for making metallic mechanical metamaterials. <i>Materials and Design</i> , 2018 , 160, 147-168	8.1	13

197	Springboard Droplet Bouncing on Flexible Superhydrophobic Substrates. <i>Journal of Heat Transfer</i> , 2017 , 139,	1.8	4
196	Evidence of differential mass change rates between human breast cancer cell lines in culture. <i>Biomedical Microdevices</i> , 2017 , 19, 10	3.7	7
195	Condensate droplet size distribution on lubricant-infused surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 109, 187-199	4.9	96
194	Performance Modeling and Design of Ultra-High Power Microbatteries. <i>Journal of the Electrochemical Society</i> , 2017 , 164, E3122-E3131	3.9	21
193	Direct Measurement of Pyroelectric and Electrocaloric Effects in Thin Films. <i>Physical Review Applied</i> , 2017 , 7,	4.3	44
192	Micromechanical contact stiffness devices and application for calibrating contact resonance atomic force microscopy. <i>Nanotechnology</i> , 2017 , 28, 044003	3.4	3
191	Measuring individual carbon nanotubes and single graphene sheets using atomic force microscope infrared spectroscopy. <i>Nanotechnology</i> , 2017 , 28, 355707	3.4	11
190	Droplet impact on vibrating superhydrophobic surfaces. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	26
189	In situ Measurements of Irradiation-Induced Creep of Nanocrystalline Copper at Elevated Temperatures. <i>Jom</i> , 2016 , 68, 2737-2741	2.1	6
188	Leave Your Phone at the Door 2016 ,		32
187	Water droplet impact on elastic superhydrophobic surfaces. <i>Scientific Reports</i> , 2016 , 6, 30328	4.9	90
186	. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 2742-2748	2.9	5
185	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	8.9	21
184	Nanopatterning reconfigurable magnetic landscapes via thermally assisted scanning probe lithography. <i>Nature Nanotechnology</i> , 2016 , 11, 545-551	28.7	97
183	Trust Issues for Big Data about High-Value Manufactured Parts 2016 ,		4
182	High Power Density Pyroelectric Energy Conversion in Nanometer-Thick BaTiO ₃ Films. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2016 , 20, 137-146	3.7	12
181	A study of long term operation and reliability of heated atomic force microscope cantilevers. <i>Journal of Micromechanics and Microengineering</i> , 2015 , 25, 065003	2	5
180	Impact of air and water vapor environments on the hydrophobicity of surfaces. <i>Journal of Colloid and Interface Science</i> , 2015 , 453, 177-185	9.3	9

179	Three-Dimensional Integration of Graphene via Swelling, Shrinking, and Adaptation. <i>Nano Letters</i> , 2015 , 15, 4525-31	11.5	39
178	Tip-Based Nanofabrication of Arbitrary Shapes of Graphene Nanoribbons for Device Applications. <i>RSC Advances</i> , 2015 , 5, 37006-37012	3.7	9
177	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, 6573-8	11.5	144
176	Batch Fabrication of Transfer-Free Graphene-Coated Microcantilevers. <i>IEEE Sensors Journal</i> , 2015 , 1-1	4	1
175	Spray-on omniphobic ZnO coatings. <i>RSC Advances</i> , 2015 , 5, 69243-69250	3.7	22
174	Shear stress characteristics of microtextured surfaces in gap-controlled hydrodynamic lubrication. <i>Tribology International</i> , 2015 , 82, 123-132	4.9	13
173	Direct measurements of irradiation-induced creep in micropillars of amorphous Cu ₅₆ Ti ₃₈ Ag ₆ , Zr ₅₂ Ni ₄₈ , Si, and SiO ₂ . <i>Journal of Applied Physics</i> , 2015 , 117, 024310	2.5	9
172	Evaluating Broader Impacts of Nanoscale Thermal Transport Research. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2015 , 19, 127-165	3.7	60
171	Biophysical properties of human breast cancer cells measured using silicon MEMS resonators and atomic force microscopy. <i>Lab on A Chip</i> , 2015 , 15, 839-47	7.2	59
170	Nanoscale thermal transport. II. 2003-2012. <i>Applied Physics Reviews</i> , 2014 , 1, 011305	17.3	1050
169	Nanometer scale alignment of block-copolymer domains by means of a scanning probe tip. <i>Advanced Materials</i> , 2014 , 26, 2999-3002	24	16
168	Parallel nanoimaging and nanolithography using a heated microcantilever array. <i>Nanotechnology</i> , 2014 , 25, 014001	3.4	18
167	Electro-thermo-mechanical transient modeling of stress development in AlGa _N /Ga _N high electron mobility transistors (HEMTs) 2014 ,		8
166	Single nanoparticle detection using photonic crystal enhanced microscopy. <i>Analyst, The</i> , 2014 , 139, 1007-15		58
165	Parallelization of thermochemical nanolithography. <i>Nanoscale</i> , 2014 , 6, 1299-304	7.7	32
164	Micro-patterning of mammalian cells on suspended MEMS resonant sensors for long-term growth measurements. <i>Lab on A Chip</i> , 2014 , 14, 1401-4	7.2	19
163	An investigation of heat transfer between a microcantilever and a substrate for improved thermal topography imaging. <i>Nanotechnology</i> , 2014 , 25, 365501	3.4	5
162	Effect of irradiation damage on the shear strength of Cu ₃ Nb interfaces. <i>Scripta Materialia</i> , 2014 , 90-91, 29-32	5.6	18

161	Hydrophobic and oleophobic re-entrant steel microstructures fabricated using micro electrical discharge machining. <i>Journal of Micromechanics and Microengineering</i> , 2014 , 24, 095020	2	39
160	Hydrothermal fabrication of three-dimensional secondary battery anodes. <i>Advanced Materials</i> , 2014 , 26, 7096-101	24	46
159	Micromechanical devices with controllable stiffness fabricated from regular 3D porous materials. <i>Journal of Micromechanics and Microengineering</i> , 2014 , 24, 105006	2	14
158	Multifunctional atomic force microscope cantilevers with Lorentz force actuation and self-heating capability. <i>Nanotechnology</i> , 2014 , 25, 395501	3.4	15
157	Parallel nanoimaging using an array of 30 heated microcantilevers. <i>RSC Advances</i> , 2014 , 4, 24747-24754	3.7	8
156	Measuring physical properties of neuronal and glial cells with resonant microsensors. <i>Analytical Chemistry</i> , 2014 , 86, 4864-72	7.8	19
155	In situ creep measurements on micropillar samples during heavy ion irradiation. <i>Journal of Nuclear Materials</i> , 2014 , 451, 104-110	3.3	15
154	Silicon nano-mechanical resonators fabricated by using tip-based nanofabrication. <i>Nanotechnology</i> , 2014 , 25, 275301	3.4	10
153	Droplet Impingement and Vapor Layer Formation on Hot Hydrophobic Surfaces. <i>Journal of Heat Transfer</i> , 2014 , 136,	1.8	10
152	High-frequency thermal-electrical cycles for pyroelectric energy conversion. <i>Journal of Applied Physics</i> , 2014 , 116, 194509	2.5	30
151	Nanometer-scale temperature imaging for independent observation of Joule and Peltier effects in phase change memory devices. <i>Review of Scientific Instruments</i> , 2014 , 85, 094904	1.7	6
150	Laser-induced nanoscale thermocapillary flow for purification of aligned arrays of single-walled carbon nanotubes. <i>ACS Nano</i> , 2014 , 8, 12641-9	16.7	36
149	Direct observation of resistive heating at graphene wrinkles and grain boundaries. <i>Applied Physics Letters</i> , 2014 , 105, 143109	3.4	43
148	Speed dependence of thermochemical nanolithography for gray-scale patterning. <i>ChemPhysChem</i> , 2014 , 15, 2530-5	3.2	7
147	Nanofluidic channels of arbitrary shapes fabricated by tip-based nanofabrication. <i>Nanotechnology</i> , 2014 , 25, 455301	3.4	18
146	Heterogeneous nanometer-scale Joule and Peltier effects in sub-25 nm thin phase change memory devices. <i>Journal of Applied Physics</i> , 2014 , 116, 124508	2.5	11
145	Complex nonlinear dynamics in the limit of weak coupling of a system of microcantilevers connected by a geometrically nonlinear tunable nanomembrane. <i>Nanotechnology</i> , 2014 , 25, 465501	3.4	6
144	Heated atomic force cantilever closed loop temperature control and application to high speed nanotopography imaging. <i>Sensors and Actuators A: Physical</i> , 2013 , 192, 27-33	3.9	9

143	Improved atomic force microscope infrared spectroscopy for rapid nanometer-scale chemical identification. <i>Nanotechnology</i> , 2013 , 24, 444007	3.4	21
142	Bimaterial microcantilevers with black silicon nanocone arrays. <i>Sensors and Actuators A: Physical</i> , 2013 , 199, 143-148	3.9	10
141	Heterogeneity of spiral wear patterns produced by local heating on amorphous polymers. <i>Materials Chemistry and Physics</i> , 2013 , 141, 477-481	4.4	2
140	Heated atomic force microscope cantilever with high resistivity for improved temperature sensitivity. <i>Sensors and Actuators A: Physical</i> , 2013 , 201, 141-147	3.9	10
139	Atomic force microscope infrared spectroscopy on 15 nm scale polymer nanostructures. <i>Review of Scientific Instruments</i> , 2013 , 84, 023709	1.7	34
138	High-power lithium ion microbatteries from interdigitated three-dimensional bicontinuous nanoporous electrodes. <i>Nature Communications</i> , 2013 , 4, 1732	17.4	449
137	Using nanoscale thermocapillary flows to create arrays of purely semiconducting single-walled carbon nanotubes. <i>Nature Nanotechnology</i> , 2013 , 8, 347-55	28.7	144
136	Near-field infrared absorption of plasmonic semiconductor microparticles studied using atomic force microscope infrared spectroscopy. <i>Applied Physics Letters</i> , 2013 , 102, 152110	3.4	22
135	Fast nanotopography imaging using a high speed cantilever with integrated heater-thermometer. <i>Nanotechnology</i> , 2013 , 24, 135501	3.4	5
134	Pyroelectric electron emission from nanometer-thick films of PbZrxTi1-xO3. <i>Applied Physics Letters</i> , 2013 , 102, 192908	3.4	8
133	Nanoscale reduction of graphene fluoride via thermochemical nanolithography. <i>ACS Nano</i> , 2013 , 7, 6219-6247	11.4	36
132	Fabricating nanoscale chemical gradients with ThermoChemical NanoLithography. <i>Langmuir</i> , 2013 , 29, 8675-82	4	34
131	Friction characteristics of microtextured surfaces under mixed and hydrodynamic lubrication. <i>Tribology International</i> , 2013 , 57, 170-176	4.9	170
130	Micromechanical properties of hydrogels measured with MEMS resonant sensors. <i>Biomedical Microdevices</i> , 2013 , 15, 311-9	3.7	23
129	Fabrication of arbitrarily shaped silicon and silicon oxide nanostructures using tip-based nanofabrication. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2013 , 31, 06FJ01	1.3	19
128	Thermomechanical Modeling of Scanning Joule Expansion Microscopy Imaging of Single-Walled Carbon Nanotube Devices. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2013 , 80,	2.7	2
127	Thermal crosstalk in heated microcantilever arrays. <i>Journal of Micromechanics and Microengineering</i> , 2013 , 23, 025001	2	8
126	Zinc oxide inverse opal enzymatic biosensor. <i>Applied Physics Letters</i> , 2013 , 102, 253103	3.4	27

125	Temperature measurements of heated microcantilevers using scanning thermoreflectance microscopy. <i>Review of Scientific Instruments</i> , 2013 , 84, 034903	1.7	5
124	Large infrared absorptance of bimaterial microcantilevers based on silicon high contrast grating. <i>Journal of Applied Physics</i> , 2013 , 114, 153511	2.5	1
123	Direct observation of nanometer-scale Joule and Peltier effects in phase change memory devices. <i>Applied Physics Letters</i> , 2013 , 102, 193503	3.4	28
122	High power primary lithium ion microbatteries. <i>Journal of Physics: Conference Series</i> , 2013 , 476, 012087	0.3	3
121	HEATED ATOMIC FORCE MICROSCOPE CANTILEVERS AND THEIR APPLICATIONS. <i>Annual Review of Heat Transfer</i> , 2013 , 16, 287-326	2.7	49
120	Deflection Sensitivity Calibration of Heated Microcantilevers Using Pseudo-Gratings. <i>IEEE Sensors Journal</i> , 2012 , 12, 2666-2667	4	
119	Local thermomechanical analysis of a microphase-separated thin lamellar PS-b-PEO film. <i>Langmuir</i> , 2012 , 28, 13503-11	4	13
118	Quantitative thermal imaging of single-walled carbon nanotube devices by scanning Joule expansion microscopy. <i>ACS Nano</i> , 2012 , 6, 10267-75	16.7	23
117	Hydrogel Microstructures: Characterization of Mass and Swelling of Hydrogel Microstructures using MEMS Resonant Mass Sensor Arrays (Small 16/2012). <i>Small</i> , 2012 , 8, 2450-2450	11	1
116	Ultrananocrystalline diamond tip integrated onto a heated atomic force microscope cantilever. <i>Nanotechnology</i> , 2012 , 23, 495302	3.4	11
115	Nanometer-scale infrared spectroscopy of heterogeneous polymer nanostructures fabricated by tip-based nanofabrication. <i>ACS Nano</i> , 2012 , 6, 8015-21	16.7	64
114	High power rechargeable batteries. <i>Current Opinion in Solid State and Materials Science</i> , 2012 , 16, 186-198	2	145
113	Controlling nanoscale friction through the competition between capillary adsorption and thermally activated sliding. <i>ACS Nano</i> , 2012 , 6, 4305-13	16.7	41
112	Lorentz force actuation of a heated atomic force microscope cantilever. <i>Nanotechnology</i> , 2012 , 23, 055709	3.4	34
111	Impact of silicon nitride thickness on the infrared sensitivity of silicon nitride/aluminum microcantilevers. <i>Sensors and Actuators A: Physical</i> , 2012 , 185, 17-23	3.9	5
110	Grain boundary doping strengthens nanocrystalline copper alloys. <i>Scripta Materialia</i> , 2012 , 67, 720-723	5.6	61
109	Direct-write polymer nanolithography in ultra-high vacuum. <i>Beilstein Journal of Nanotechnology</i> , 2012 , 3, 52-6	3	7
108	Characterization of mass and swelling of hydrogel microstructures using MEMS resonant mass sensor arrays. <i>Small</i> , 2012 , 8, 2555-62	11	17

107	2- and 3- μ m Temperature measurement of a heated microcantilever. <i>Review of Scientific Instruments</i> , 2012 , 83, 074902	1.7	4
106	Nanometer-scale flow of molten polyethylene from a heated atomic force microscope tip. <i>Nanotechnology</i> , 2012 , 23, 215301	3.4	41
105	Thermoelectric voltage at a nanometer-scale heated tip point contact. <i>Nanotechnology</i> , 2012 , 23, 035401	3.4	17
104	Dynamic thermomechanical response of bimaterial microcantilevers to periodic heating by infrared radiation. <i>Review of Scientific Instruments</i> , 2012 , 83, 015003	1.7	18
103	Nano-fabrication with a flexible array of nano-apertures. <i>Nanotechnology</i> , 2012 , 23, 175303	3.4	15
102	Chemically isolated graphene nanoribbons reversibly formed in fluorographene using polymer nanowire masks. <i>Nano Letters</i> , 2011 , 11, 5461-4	11.5	74
101	Nanoscale Joule heating, Peltier cooling and current crowding at graphene-metal contacts. <i>Nature Nanotechnology</i> , 2011 , 6, 287-90	28.7	238
100	Control of Nanoscale Environment to Improve Stability of Immobilized Proteins on Diamond Surfaces. <i>Advanced Functional Materials</i> , 2011 , 21, 1040-1050	15.6	28
99	Direct fabrication of arbitrary-shaped ferroelectric nanostructures on plastic, glass, and silicon substrates. <i>Advanced Materials</i> , 2011 , 23, 3786-90	24	25
98	Nanomanufacturing: Direct Fabrication of Arbitrary-Shaped Ferroelectric Nanostructures on Plastic, Glass, and Silicon Substrates (Adv. Mater. 33/2011). <i>Advanced Materials</i> , 2011 , 23, 3740-3740	24	13
97	Improved Nanotopography Sensing via Temperature Control of a Heated Atomic Force Microscope Cantilever. <i>IEEE Sensors Journal</i> , 2011 , 11, 2664-2670	4	12
96	High Precision Electrohydrodynamic Printing of Polymer Onto Microcantilever Sensors. <i>IEEE Sensors Journal</i> , 2011 , 11, 2246-2253	4	29
95	Template directed assembly of dynamic micellar nanoparticles. <i>Soft Matter</i> , 2011 , 7, 10252	3.6	6
94	Temperature-dependent phase transitions in zeptoliter volumes of a complex biological membrane. <i>Nanotechnology</i> , 2011 , 22, 055709	3.4	12
93	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, 983-8	11.5	80
92	Microcantilever with integrated solid-state heater, conductive tip, and Schottky diode. <i>Sensors and Actuators A: Physical</i> , 2011 , 168, 351-357	3.9	2
91	Temperature-dependence of ink transport during thermal dip-pen nanolithography. <i>Applied Physics Letters</i> , 2011 , 99, 193101	3.4	23
90	Electrical noise characteristics of a doped silicon microcantilever heater-thermometer. <i>Applied Physics Letters</i> , 2011 , 99, 263107	3.4	4

89	Electrothermal Atomic-Force Microscope Cantilever With Integrated Heater and n-p-n Back-to-Back Diodes. <i>Journal of Microelectromechanical Systems</i> , 2011 , 20, 644-653	2.5	4
88	Self-heating in piezoresistive cantilevers. <i>Applied Physics Letters</i> , 2011 , 98, 223103	3.4	15
87	Electrical noise characteristics of a doped silicon microcantilever heater-thermometer 2010 ,		2
86	Natural advection from a microcantilever heat source. <i>Applied Physics Letters</i> , 2010 , 96, 063113	3.4	2
85	High precision polymer deposition onto microcantilever sensors using electrohydrodynamic printing 2010 ,		1
84	Microstructured metal molds fabricated via investment casting. <i>Journal of Micromechanics and Microengineering</i> , 2010 , 20, 025025	2	17
83	High-sensitivity nanometer-scale infrared spectroscopy using a contact mode microcantilever with an internal resonator paddle. <i>Nanotechnology</i> , 2010 , 21, 185705	3.4	52
82	A microcantilever heater-thermometer with a thermal isolation layer for making thermal nanotopography measurements. <i>Nanotechnology</i> , 2010 , 21, 055503	3.4	5
81	Rapid thermal lysis of cells using silicon-diamond microcantilever heaters. <i>Lab on A Chip</i> , 2010 , 10, 1135-41	4.1	45
80	Local nanoscale heating modulates single-asperity friction. <i>Nano Letters</i> , 2010 , 10, 4640-5	11.5	46
79	Maskless nanoscale writing of nanoparticle-polymer composites and nanoparticle assemblies using thermal nanoprobess. <i>Nano Letters</i> , 2010 , 10, 129-33	11.5	36
78	Wear-resistant diamond nanoprobe tips with integrated silicon heater for tip-based nanomanufacturing. <i>ACS Nano</i> , 2010 , 4, 3338-44	16.7	65
77	Nanoscale tunable reduction of graphene oxide for graphene electronics. <i>Science</i> , 2010 , 328, 1373-6	33.3	584
76	Piezoresistive Microcantilevers From Ultrananocrystalline Diamond. <i>Journal of Microelectromechanical Systems</i> , 2010 , 19, 1234-1242	2.5	9
75	Geometric microenvironment directs cell morphology on topographically patterned hydrogel substrates. <i>Acta Biomaterialia</i> , 2010 , 6, 3514-23	10.8	39
74	Conformal ZnO nanocomposite coatings on micro-patterned surfaces for superhydrophobicity. <i>Thin Solid Films</i> , 2010 , 518, 5426-5431	2.2	45
73	Linear ripples and traveling circular ripples produced on polymers by thermal AFM probes. <i>Physical Review B</i> , 2009 , 79,	3.3	27
72	Application of the thermal flash technique for low thermal diffusivity micro/nanofibers. <i>Review of Scientific Instruments</i> , 2009 , 80, 036103	1.7	16

71	Room-temperature temperature sensitivity and resolution of doped-silicon microcantilevers. <i>Applied Physics Letters</i> , 2009 , 94, 243503	3.4	7
70	Direct writing and characterization of poly(p-phenylene vinylene) nanostructures. <i>Applied Physics Letters</i> , 2009 , 95, 233108	3.4	18
69	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	2	22
68	Casting metal microstructures from a flexible and reusable mold. <i>Journal of Micromechanics and Microengineering</i> , 2009 , 19, 095016	2	40
67	Temperature dependence of nanoscale friction investigated with thermal AFM probes. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1226, 50201		2
66	Thermochemical Nanolithography of Multifunctional Nanotemplates for Assembling Nano-Objects. <i>Advanced Functional Materials</i> , 2009 , 19, 3696-3702	15.6	54
65	The mechanics of polymer swelling on microcantilever sensors. <i>Microsystem Technologies</i> , 2009 , 15, 333-340	3.4	12
64	Silicon microcantilever hotplates with high temperature uniformity. <i>Sensors and Actuators A: Physical</i> , 2009 , 152, 160-167	3.9	23
63	Cadherin-mediated cell-cell contact regulates keratinocyte differentiation. <i>Journal of Investigative Dermatology</i> , 2009 , 129, 564-72	4.3	43
62	Thermal conduction between a heated microcantilever and a surrounding air environment. <i>Applied Thermal Engineering</i> , 2009 , 29, 1631-1641	5.8	49
61	Electrical and thermal coupling to a single-wall carbon nanotube device using an electrothermal nanoprobe. <i>Nano Letters</i> , 2009 , 9, 1356-61	11.5	23
60	Rapid thermal analysis of energetic materials with microfabricated differential scanning calorimeters 2009 ,		2
59	100 Nanometer Scale Resistive Heater-Thermometer on a Silicon Cantilever 2009 ,		1
58	Modeling Piezoresistive Microcantilever Sensor Response to Surface Stress for Biochemical Sensors. <i>IEEE Sensors Journal</i> , 2008 , 8, 1404-1410	4	30
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