

David Wood

List of Publications by Year in descending order

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95
papers

1,203
citations

361413
20
h-index

434195
31
g-index

96
all docs

96
docs citations

96
times ranked

1480
citing authors

#	ARTICLE	IF	CITATIONS
1	Planar selective Leidenfrost propulsion without physically structured substrates or walls. Applied Physics Letters, 2020, 117, .	3.3	8
2	Metal-insulator-metal diodes based on alkyltrichlorosilane self-assembled monolayers. AIP Advances, 2019, 9, 065017.	1.3	8
3	Double-sided slippery liquid-infused porous materials using conformable mesh. Scientific Reports, 2019, 9, 13280.	3.3	22
4	Low-Friction Self-Centering Droplet Propulsion and Transport Using a Leidenfrost Herringbone-Ratchet Structure. Physical Review Applied, 2019, 11, .	3.8	15
5	Conduction mechanisms in metal/self-assembled monolayer/metal junctions. Micro and Nano Letters, 2019, 14, 808-811.	1.3	0
6	Hierarchical Structures: Spatially Configuring Wrinkle Pattern and Multiscale Surface Evolution with Structural Confinement (Adv. Funct. Mater. 1/2018). Advanced Functional Materials, 2018, 28, 1870005.	14.9	0
7	The Effect of Humidity on Microwave Characteristics of Screen Printed Paper-Based Electronics. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700689.	1.8	1
8	Bioinspired nanoparticle spray-coating for superhydrophobic flexible materials with oil/water separation capabilities. Bioinspiration and Biomimetics, 2018, 13, 024001.	2.9	30
9	Spatially Configuring Wrinkle Pattern and Multiscale Surface Evolution with Structural Confinement. Advanced Functional Materials, 2018, 28, 1704228.	14.9	28
10	Drop transport and positioning on lubricant-impregnated surfaces. Soft Matter, 2017, 13, 3404-3410.	2.7	48
11	Drag reduction properties of superhydrophobic mesh pipes. Surface Topography: Metrology and Properties, 2017, 5, 034001.	1.6	26
12	Soft Elastomeric Capacitive Sensor for Structural Health Monitoring. Procedia Engineering, 2016, 168, 721-724.	1.2	2
13	High-performance rectifiers fabricated on a flexible substrate. Applied Physics Letters, 2016, 109, .	3.3	11
14	Enhanced narrow-band operation of ultra-fast rectennas. , 2016, , .		2
15	Metal-insulator-metal diodes fabricated on flexible substrates. , 2016, , .		1
16	Leidenfrost transition temperature for stainless steel meshes. Materials Letters, 2016, 176, 205-208.	2.6	29
17	Low Friction Droplet Transportation on a Substrate with a Selective Leidenfrost Effect. ACS Applied Materials & Interfaces, 2016, 8, 22658-22663.	8.0	25
18	An Ultrathin Organic Insulator for Metal-Insulator-Metal Diodes. IEEE Transactions on Electron Devices, 2016, 63, 2887-2891.	3.0	7

#	ARTICLE	IF	CITATIONS
19	Novel low-cost ultra-high-speed diodes for electromagnetic energy harvesting. , 2015, , .		0
20	Fabrication of micron scale metallic structures on photo paper substrates by low temperature photolithography for device applications. Journal of Micromechanics and Microengineering, 2015, 25, 115017.	2.6	3
21	Design and performance of micro-rectenna arrays for thermal energy harvesting. , 2015, , .		1
22	Impedance matching at THz frequencies: Optimizing power transfer in rectennas. , 2015, , .		2
23	Effect of Wood's anomalies on the THz transmission spectra of free-standing metallic hole arrays. , 2015, , .		0
24	High-frequency metal-insulator-metal (MIM) diodes for thermal radiation harvesting. , 2015, , .		3
25	Improving Metal-Oxide-Metal (MOM) Diode Performance Via the Optimization of the Oxide Layer. Journal of Electronic Materials, 2015, 44, 1361-1366.	2.2	4
26	The static and dynamic response of SU-8 electrothermal microgrippers of varying thickness. Microelectronic Engineering, 2015, 145, 82-85.	2.4	14
27	Evaporation of Sessile Droplets on Slippery Liquid-Infused Porous Surfaces (SLIPS). Langmuir, 2015, 31, 11781-11789.	3.5	97
28	A New Si/TiO ₂ /Pt p-n Junction Semiconductor to Demonstrate Photoelectrochemical CO ₂ Conversion. Electrochimica Acta, 2015, 185, 117-124.	5.2	49
29	Modelling and experimental verification of heat dissipation mechanisms in an SU-8 electrothermal microgripper. Microelectronic Engineering, 2014, 124, 90-93.	2.4	10
30	Development of phase shift lithography for the production of metalâ€oxideâ€metal diodes. Micro and Nano Letters, 2014, 9, 437-440.	1.3	5
31	A microgripper sensor device capable of detecting ion efflux from whole cells. RSC Advances, 2014, 4, 50536-50541.	3.6	2
32	Controlled reactive ion etching and plasma regrowth of titanium oxides of known thickness for production of metalâ€oxideâ€metal diodes. Micro and Nano Letters, 2013, 8, 476-478.	1.3	4
33	Micromachined Devices for Use in Terahertz Applications. Advances in Science and Technology, 2012, 81, 20-27.	0.2	0
34	An in-plane cantilever for wall shear stress measurement. Journal of Micromechanics and Microengineering, 2012, 22, 074007.	2.6	0
35	Ti-TiO _x -Pt Metal-Oxide-Metal Diodes Fabricated via a Simple Oxidation Technique. Materials Research Society Symposia Proceedings, 2012, 1415, 91.	0.1	5
36	A Multifunctional Microgripper Capable of Simultaneous Single Cell Manipulation and Associated Ion Sensing. Materials Research Society Symposia Proceedings, 2012, 1463, 7.	0.1	0

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37	Manipulation of 10 μ m Diameter Cells Using a Thermally Actuated Microgripper. Materials Research Society Symposia Proceedings, 2012, 1463, 1.	0.1	2
38	Manipulation of exposure dose parameters to improve production of high aspect ratio structures using SU-8. Journal of Micromechanics and Microengineering, 2012, 22, 075016.	2.6	12
39	A thermally actuated microgripper as an electrochemical sensor with the ability to manipulate single cells. Chemical Communications, 2011, 47, 6446.	4.1	17
40	A Novel Composite Anode: The Electrooxidation of Organic Molecules via Formation of Highly Energetic Holes. Journal of Physical Chemistry C, 2011, 115, 10777-10783.	3.1	4
41	Optimizing MOM diode performance via the oxidation technique. , 2011, , .		7
42	Microelectrode arrays for electroanalytical sensing: Comparison of electroplating and electron-beam metallisation. Electrochemistry Communications, 2011, 13, 414-417.	4.7	7
43	Microelectrode Array Supported by Microfluidic Channel for High-Throughput Sensing: Fabrication and Characterization. ECS Transactions, 2010, 33, 221-227.	0.5	0
44	A robust, fine pitch probe card. Procedia Chemistry, 2009, 1, 792-795.	0.7	1
45	Porous PDMS force sensitive resistors. Procedia Chemistry, 2009, 1, 568-571.	0.7	46
46	Fabrication of an in-plane SU-8 cantilever with integrated strain gauge for wall shear stress measurements in fluid flows. Procedia Chemistry, 2009, 1, 923-926.	0.7	7
47	Negative refracting materials at THz frequencies. , 2008, , .		2
48	Poole-Frenkel conduction in single wall carbon nanotube composite films built up by electrostatic layer-by-layer deposition. Journal of Applied Physics, 2008, 104, .	2.5	31
49	Towards multifunctional microelectrode arrays. Analyst, The, 2008, 133, 1060.	3.5	4
50	Thermal and mechanical analysis of an SU8 polymeric actuator using infrared thermography. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2008, 222, 73-86.	2.1	10
51	Micromachined terahertz waveguides with embedded metal rods. , 2008, , .		0
52	Passband filters for terahertz radiation based on dual metallic photonic structures. Applied Physics Letters, 2007, 91, 161115.	3.3	36
53	Micromachining for Terahertz Artificial Materials. Materials Research Society Symposia Proceedings, 2007, 1016, 1.	0.1	2
54	The Laser MicroJet (LMJ): a multi-solution technology for high quality micro-machining. , 2007, 6459, 190.		8

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55	Artificial plasmonic materials for THz applications. , 2007, , .		1
56	Organic light-emitting diodes incorporating supported nanotemplates. Proceedings of SPIE, 2007, , .	0.8	1
57	Terahertz frequency bandpass filters. Journal of Applied Physics, 2007, 102, 023102.	2.5	49
58	Conical recessed gold microelectrode arrays produced during photolithographic methods: Characterisation and causes. Electrochemistry Communications, 2007, 9, 879-885.	4.7	22
59	Substrate independent fabrication of a non-planar probe card. Microelectronic Engineering, 2007, 84, 1207-1210.	2.4	3
60	Free-standing polymer cantilevers and bridges reinforced with carbon nanotubes. Micro and Nano Letters, 2007, 2, 54.	1.3	2
61	Design and testing of a polymeric microgripper for cell manipulation. Microelectronic Engineering, 2007, 84, 1219-1222.	2.4	79
62	Flexible MEMS probe cards for three-dimensional probing. Micro and Nano Letters, 2006, 1, 14.	1.3	3
63	Enhanced THz transmission apertures through sub-wavelength annular apertures. , 2006, , .		0
64	Development of a simple microsystems membrane probe card. Microsystem Technologies, 2006, 12, 1037-1044.	2.0	4
65	Liquid density analysis of sucrose and alcoholic beverages using polyimide guided Love-mode acoustic wave sensors. Measurement Science and Technology, 2006, 17, 257-263.	2.6	20
66	Electrical investigations of layer-by-layer films of carbon nanotubes. Journal Physics D: Applied Physics, 2006, 39, 3077-3085.	2.8	34
67	High sensitivity Love-mode liquid density sensors. Sensors and Actuators A: Physical, 2005, 123-124, 267-273.	4.1	17
68	Surface micromachined membranes for wafer level packaging. Journal of Micromechanics and Microengineering, 2005, 15, S47-S52.	2.6	9
69	Individually addressable recessed gold microelectrode arrays with monolayers of thio-cyclodextrin nanocavities. Analyst, The, 2005, 130, 1351.	3.5	10
70	Nanometer scale patterning using focused ion beam milling. Review of Scientific Instruments, 2005, 76, 026105.	1.3	26
71	Room temperature performance of submicron bismuth Hall probes. IET Science, Measurement and Technology, 2004, 151, 127-130.	0.7	10
72	Sacrificial layers for widely tunable capacitors. IET Science, Measurement and Technology, 2004, 151, 104-109.	0.7	2

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73	The role of fabrication techniques on the performance of widely tunable micromachined capacitors. Sensors and Actuators A: Physical, 2004, 110, 423-431.	4.1	12
74	The modelling and fabrication of widely tunable capacitors. Journal of Micromechanics and Microengineering, 2003, 13, S178-S182.	2.6	14
75	Oxygen drips upwards from superconductors. Nature, 2002, 415, 860-860.	27.8	0
76	Nickel electroplated widely tunable micromachined capacitor. Electronics Letters, 2002, 38, 1392.	1.0	4
77	Raman and finite-element analysis of a mechanically strained silicon microstructure. Journal of Micromechanics and Microengineering, 2001, 11, 7-12.	2.6	18
78	The structural characteristics of microengineered bridges. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2000, 214, 351-357.	2.1	0
79	The fabrication of silicon microsystems. Engineering Science and Education Journal, 2000, 9, 129-136.	0.1	2
80	Stress analysis of B doped silicon bridges and cantilever structures by Raman spectroscopy. Journal of Materials Science Letters, 2000, 19, 767-769.	0.5	4
81	Title is missing!. Journal of Materials Science Letters, 2000, 19, 771-773.	0.5	6
82	The dynamics of a vibrating silicon diaphragm microgyroscope. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2000, 214, 1379-1388.	2.1	1
83	Sensitivity of the electrical admittance of a polysiloxane film to organic vapours. Sensors and Actuators B: Chemical, 1999, 56, 37-44.	7.8	27
84	The fabrication of silicon microsystems. Electronics and Communication Engineering Journal, 1999, 11, 253-260.	0.5	1
85	Issues associated with the design, fabrication and testing of a crystalline silicon ring gyroscope with electromagnetic actuation and sensing. Journal of Micromechanics and Microengineering, 1998, 8, 284-292.	2.6	23
86	A system for the dynamic characterization of microstructures. Journal of Microelectromechanical Systems, 1997, 6, 322-328.	2.5	94
87	Raman spectroscopy as a mapping tool for localized strain in microengineered structures. Journal of Materials Science Letters, 1997, 16, 1222-1223.	0.5	2
88	Silicon membrane gyroscope with electrostatic actuation and sensing. , 1995, 2642, 74.		5
89	<title>Laser vibrometer system to examine the dynamic modal analysis of resonant micromechanical structures</title>. , 1995, , .		3
90	Vibrating silicon diaphragm micromechanical gyroscope. Electronics Letters, 1995, 31, 1567-1568.	1.0	7

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91	Empirical models in semiconductor processing: optimization and assessment as simulators. , 1994, 2091, 452.		0
92	A comparison of furnace annealing and CW laser annealing of Yb+implants in CdTe. Radiation Effects, 1987, 102, 69-82.	0.4	0
93	A comparison between the furnace annealing and ruby laser annealing of Yb ion implants in CdTe. Radiation Effects, 1987, 102, 39-52.	0.4	0
94	Self-alignment techniques for GaAs MESFET i.c.s. Journal of the Institution of Electronic and Radio Engineers, 1987, 57, S84.	0.1	2
95	Low Voltage Microgripper for Single Cell Manipulation. Advances in Science and Technology, 0, , .	0.2	4