

Roger T Howe

List of Publications by Year in descending order

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28
papers

3,071
citations

361413

20
h-index

526287

27
g-index

28
all docs

28
docs citations

28
times ranked

1934
citing authors

#	ARTICLE	IF	CITATIONS
1	Laterally Driven Polysilicon Resonant Microstructures. <i>Sensors and Actuators</i> , 1989, 20, 25-32.	1.7	725
2	Photon-enhanced thermionic emission for solar concentrator systems. <i>Nature Materials</i> , 2010, 9, 762-767.	27.5	442
3	Electrostatic-comb drive of lateral polysilicon resonators. <i>Sensors and Actuators A: Physical</i> , 1990, 21, 328-331.	4.1	376
4	Microfabricated structures for theinsitumeasurement of residual stress, Youngâ€™s modulus, and ultimate strain of thin films. <i>Applied Physics Letters</i> , 1987, 51, 241-243.	3.3	261
5	Surface micromachining for microsensors and microactuators. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1988, 6, 1809.	1.6	226
6	A review of the chemical reaction mechanism and kinetics for hydrofluoric acid etching of silicon dioxide for surface micromachining applications. <i>Thin Solid Films</i> , 1993, 232, 1-12.	1.8	127
7	Optimal emitter-collector gap for thermionic energy converters. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	118
8	Novel microstructures for theinsitumeasurement of mechanical properties of thin films. <i>Journal of Applied Physics</i> , 1987, 62, 3579-3584.	2.5	94
9	Microfabricated Thermally Isolated Low Work-Function Emitter. <i>Journal of Microelectromechanical Systems</i> , 2014, 23, 1182-1187.	2.5	83
10	Polysilicon integrated microsystems: technologies and applications. <i>Sensors and Actuators A: Physical</i> , 1996, 56, 167-177.	4.1	81
11	Engineering Ultra-Low Work Function of Graphene. <i>Nano Letters</i> , 2015, 15, 6475-6480.	9.1	75
12	Slide film damping in laterally driven microstructures. <i>Sensors and Actuators A: Physical</i> , 1994, 40, 31-39.	4.1	69
13	Back-gated graphene anode for more efficient thermionic energy converters. <i>Nano Energy</i> , 2017, 32, 67-72.	16.0	57
14	Process Integration for active polysilicon resonant microstructures. <i>Sensors and Actuators</i> , 1989, 20, 143-151.	1.7	53
15	A model for emission yield from planar photocathodes based on photon-enhanced thermionic emission or negative-electron-affinity photoemission. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	53
16	Determination of the Etching Kinetics for the Hydrofluoric Acid/Silicon Dioxide System. <i>Journal of the Electrochemical Society</i> , 1993, 140, 2339-2346.	2.9	50
17	Microbead-separated thermionic energy converter with enhanced emission current. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 14442.	2.8	35
18	An orbital-overlap model for minimal work functions of cesiated metal surfaces. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 445007.	1.8	29

#	ARTICLE	IF	CITATIONS
19	Surface Photovoltage-Induced Ultralow Work Function Material for Thermionic Energy Converters. ACS Energy Letters, 2019, 4, 2436-2443.	17.4	23
20	Micron-gap spacers with ultrahigh thermal resistance and mechanical robustness for direct energy conversion. Microsystems and Nanoengineering, 2019, 5, 31.	7.0	22
21	DFT Study of Atomically-Modified Alkali-Earth Metal Oxide Films on Tungsten. Journal of Physical Chemistry C, 2014, 118, 11303-11309.	3.1	13
22	Electromechanical Sensing of Charge Retention on Floating Electrodes. Journal of Microelectromechanical Systems, 2011, 20, 150-156.	2.5	11
23	Applications of Polysilicon Films in Microsensors and Microactuators. Materials Research Society Symposia Proceedings, 1987, 106, 213.	0.1	10
24	Effect of excimer laser annealing on the structural properties of silicon germanium films. Journal of Materials Research, 2004, 19, 3503-3511.	2.6	10
25	Smart-cut layer transfer of single-crystal SiC using spin-on-glass. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2012, 30, 042001.	1.2	10
26	Thermionic current densities from first principles. Journal of Chemical Physics, 2013, 138, 204701.	3.0	10
27	LPCVD Silicon Dioxide Sacrificial Layer Etching for Surface Micromachining. Materials Research Society Symposia Proceedings, 1992, 276, 303.	0.1	6
28	Vacuum microsystems for energy conversion and other applications. , 2011, , .		2