Harold G Craighead

List of Publications by Citations

39 papers	2,717 citations	19 h-index	42 g-index
42 ext. papers	2,982 ext. citations	9.9 avg, IF	5.42 L-index

#	Paper	IF	Citations
39	Future lab-on-a-chip technologies for interrogating individual molecules. *Nature*, **2006**, 442, 387-93	50.4	580
38	Micro- and nanomechanical sensors for environmental, chemical, and biological detection. *Lab on A Chip*, **2007**, 7, 1238-55	7.2	526
37	Powering an inorganic nanodevice with a biomolecular motor. *Science*, **2000**, 290, 1555-8	33.3	497
36	A polymeric microfluidic chip for CE/MS determination of small molecules. *Analytical Chemistry*, **2001**, 73, 1935-41	7.8	198
35	Diffraction-based cell detection using a microcontact printed antibody grating. *Analytical Chemistry* , **1998**, 70, 1108-11	7.8	126
34	Surface Engineering and Patterning Using Parylene for Biological Applications. *Materials*, **2010**, 3, 1803-1832	3.5	108
33	Revisiting the Conformation and Dynamics of DNA in Slitlike Confinement. *Macromolecules*, **2010**, 43, 7368-7377	5.5	104
32	Mast Cell Activation on Patterned Lipid Bilayers of Subcellular Dimensions *Langmuir*, **2003**, 19, 1599-1605	4	84
31	Defining NELF-E RNA binding in HIV-1 and promoter-proximal pause regions. *PLoS Genetics*, **2014**, 10, e1004090	6	48
30	RAPID-SELEX for RNA aptamers. *PLoS ONE*, **2013**, 8, e82667	3.7	48
29	Operating mechanism of light-emitting electrochemical cells. *Nature Materials*, **2008**, 7, 168-168	27	44
28	Nanomechanical systems: measuring more than mass. *Nature Nanotechnology*, **2007**, 2, 18-9	28.7	38
27	Microfabricated Plastic Devices from Silicon Using Soft Intermediates. *Biomedical Microdevices*, **2002**, 4, 277-283	3.7	34
26	Microfluidic Device for Aptamer-Based Cancer Cell Capture and Genetic Mutation Detection. *Analytical Chemistry*, **2018**, 90, 2601-2608	7.8	31
25	Applications of controlled electrospinning systems. *Polymers for Advanced Technologies*, **2011**, 22, 304-309	3.2	30
24	Interfacet mass transport and facet evolution in selective epitaxial growth of Si by gas source molecular beam epitaxy. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1996**, 14, 2381		28
23	Poly(dicyclopentadiene) Submicron Fibers Produced by Electrospinning. *Macromolecular Rapid Communications*, **2006**, 27, 511-515	4.8	25

22	Nanomanufacturing Using Electrospinning. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2009**, 131,	3.3	22
21	High-Q, in-plane modes of nanomechanical resonators operated in air. *Journal of Applied Physics*, **2009**, 105, 094315	2.5	19
20	Young\'s modulus and thermal expansion of tensioned graphene membranes. *Physical Review B*, **2018**, 98,	3.3	16
19	Observing Thermobifida fusca cellulase binding to pretreated wood particles using time-lapse confocal laser scanning microscopy. *Cellulose*, **2011**, 18, 749-758	5.5	16
18	Molecular templates for bio-specific recognition by low-energy electron beam lithography. *Nanobiotechnology*, **2005**, 1, 023-034		16
17	On-chip coupling of electrochemical pumps and an SU-8 tip for electrospray ionization mass spectrometry. *Biomedical Microdevices*, **2008**, 10, 891-897	3.7	12
16	Low-Power Photothermal Self-Oscillation of Bimetallic Nanowires. *Nano Letters*, **2017**, 17, 3995-4002	11.5	10
15	Highly Multiplexed RNA Aptamer Selection using a Microplate-based Microcolumn Device. *Scientific Reports*, **2016**, 6, 29771	4.9	10
14	Single cell on-chip whole genome amplification via micropillar arrays for reduced amplification bias. *PLoS ONE*, **2018**, 13, e0191520	3.7	9
13	Chip-based microfabricated electrospinning nozzles. *Journal of Vacuum Science & Technology B*, **2008**, 26, 2539-2542		7
12	Temperature-dependence of stress and elasticity in wet-transferred graphene membranes. *Journal of Applied Physics*, **2018**, 123, 095109	2.5	6
11	Devices and approaches for generating specific high-affinity nucleic acid aptamers. *Applied Physics Reviews*, **2014**, 1, 031103	17.3	6
10	Electrospun DNA nanofibers. *Journal of Vacuum Science & Technology B*, **2007**, 25, 2255		5
9	Forward scattering probe of edge-state coupling in the quantum Hall regime. *Physical Review B*, **2001**, 64,	3.3	4
8	High surface-area carbon microcantilevers. *Nanoscale Advances*, **2019**, 1, 1148-1154	5.1	2
7	Discovering aptamers by cell-SELEX against human soluble growth factors ectopically expressed on yeast cell surface. *PLoS ONE*, **2014**, 9, e93052	3.7	2
6	Future lab-on-a-chip technologies for interrogating individual molecules **2009**, 330-336		2
5	Synchronous imaging for rapid visualization of complex vibration profiles in electromechanical microresonators. *Journal of Applied Physics*, **2012**, 111, 023507	2.5	1

4	Micro- and Nanofabricating Lipid Patterns Using a Polymer-Based Wet Lift-Off. *Materials Research Society Symposia Proceedings*, **2001**, 705, 7181		1
3	Continuous separation of biomolecules by the laterally asymmetric diffusion array with out-of-plane sample injection **2002**, 23, 3496		1
2	The Interactions Between Central Nervous System Cells and Topographically Modified Surfaces. *Microscopy and Microanalysis*, **2003**, 9, 1280-1281	0.5	
1	Lateral Diffusion Limitations of Ingaas/Gaas for Nanostructure Fabrication. *Materials Research Society Symposia Proceedings*, **1995**, 380, 67		