

# Stephane Evoy

## List of Publications by Citations

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89  
papers

3,871  
citations

32  
h-index

61  
g-index

94  
ext. papers

4,304  
ext. citations

4.2  
avg. IF

5.25  
L-index

#	Paper	IF	Citations
89	A review of piezoelectric polymers as functional materials for electromechanical transducers. <i>Smart Materials and Structures</i> , <b>2014</b> , 23, 033001	3.4	548
88	Measurement of mechanical resonance and losses in nanometer scale silicon wires. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 920-922	3.4	254
87	Recent advances in bacteriophage based biosensors for food-borne pathogen detection. <i>Sensors</i> , <b>2013</b> , 13, 1763-86	3.8	249
86	Diameter-dependent electromechanical properties of GaN nanowires. <i>Nano Letters</i> , <b>2006</b> , 6, 153-8	11.5	239
85	Metallic NEMS components fabricated from nanocomposite AlMo films. <i>Nanotechnology</i> , <b>2006</b> , 17, 3063-3070	3.4	204
84	Parametric amplification in a torsional microresonator. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 1545-1547	3.4	143
83	Nanofabrication and electrostatic operation of single-crystal silicon paddle oscillators. <i>Journal of Applied Physics</i> , <b>1999</b> , 86, 6072-6077	2.5	143
82	Chemically immobilized T4-bacteriophage for specific Escherichia coli detection using surface plasmon resonance. <i>Analyst, The</i> , <b>2011</b> , 136, 486-92	5	130
81	Immobilization of biotinylated bacteriophages on biosensor surfaces. <i>Sensors and Actuators B: Chemical</i> , <b>2007</b> , 125, 615-621	8.5	102
80	Bacteriophage based probes for pathogen detection. <i>Analyst, The</i> , <b>2012</b> , 137, 3405-21	5	101
79	Immobilization of bacteriophages on gold surfaces for the specific capture of pathogens. <i>Biosensors and Bioelectronics</i> , <b>2009</b> , 24, 3645-51	11.8	100
78	Bacteriophage tailspike proteins as molecular probes for sensitive and selective bacterial detection. <i>Biosensors and Bioelectronics</i> , <b>2010</b> , 26, 131-8	11.8	92
77	Specific detection of proteins using photonic crystal waveguides. <i>Optics Express</i> , <b>2008</b> , 16, 15949-57	3.3	91
76	Oriented immobilization of bacteriophages for biosensor applications. <i>Applied and Environmental Microbiology</i> , <b>2010</b> , 76, 528-35	4.8	89
75	Temperature-dependent internal friction in silicon nanoelectromechanical systems. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 2397-2399	3.4	89
74	Dielectrophoretic assembly and integration of nanowire devices with functional CMOS operating circuitry. <i>Microelectronic Engineering</i> , <b>2004</b> , 75, 31-42	2.5	80
73	Specific detection of <i>Campylobacter jejuni</i> using the bacteriophage NCTC 12673 receptor binding protein as a probe. <i>Analyst, The</i> , <b>2011</b> , 136, 4780-6	5	73

72	Mechanical resonance of clamped silicon nanowires measured by optical interferometry. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 074304	2.5	65
71	Dielectrophoretically assembled polymer nanowires for gas sensing. <i>Sensors and Actuators B: Chemical</i> , <b>2007</b> , 125, 55-59	8.5	65
70	Nanomechanical resonant structures in silicon nitride: fabrication, operation and dissipation issues. <i>Sensors and Actuators A: Physical</i> , <b>2002</b> , 101, 215-219	3.9	64
69	Genome and proteome of Campylobacter jejuni bacteriophage NCTC 12673. <i>Applied and Environmental Microbiology</i> , <b>2011</b> , 77, 8265-71	4.8	44
68	Phage receptor binding protein-based magnetic enrichment method as an aid for real time PCR detection of foodborne bacteria. <i>Analyst, The</i> , <b>2013</b> , 138, 5619-26	5	42
67	A suggested classification for two groups of Campylobacter myoviruses. <i>Archives of Virology</i> , <b>2014</b> , 159, 181-90	2.6	42
66	Surface-immobilization of chromatographically purified bacteriophages for the optimized capture of bacteria. <i>Bacteriophage</i> , <b>2012</b> , 2, 15-24		42
65	A Review of Membrane-Based Biosensors for Pathogen Detection. <i>Sensors</i> , <b>2015</b> , 15, 14045-78	3.8	40
64	An Lrp-type transcriptional regulator from Agrobacterium tumefaciens condenses more than 100 nucleotides of DNA into globular nucleoprotein complexes. <i>Journal of Molecular Biology</i> , <b>1999</b> , 288, 811-24	6.5	40
63	Gas sensing properties of single conducting polymer nanowires and the effect of temperature. <i>Nanotechnology</i> , <b>2009</b> , 20, 434014	3.4	39
62	Bacteriophage receptor binding protein based assays for the simultaneous detection of Campylobacter jejuni and Campylobacter coli. <i>PLoS ONE</i> , <b>2013</b> , 8, e69770	3.7	35
61	Synthesis and Characterization of Ultra-Fine Tin Oxide Fibers Using Electrospinning. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 88, 2059-2063	3.8	34
60	Single-crystal, Si nanotubes, and their mechanical resonant properties. <i>Nano Letters</i> , <b>2009</b> , 9, 1511-6	11.5	32
59	Specific detection of proteins using nanomechanical resonators. <i>Sensors and Actuators B: Chemical</i> , <b>2008</b> , 134, 613-617	8.5	32
58	Electric tweezers: Experimental study of positive dielectrophoresis-based positioning and orientation of a nanorod. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 024913	2.5	32
57	Synthesis and characterization of tin oxide microfibrils electrospun from a simple precursor solution. <i>Semiconductor Science and Technology</i> , <b>2004</b> , 19, 1057-1060	1.8	31
56	Electronic structure, binding energy, and solvation structure of the streptavidin-biotin supramolecular complex: ONIOM and 3D-RISM study. <i>Journal of Physical Chemistry B</i> , <b>2009</b> , 113, 9958-67	3.4	25
55	Thickness dependent binary behavior of elongated single-domain cobalt nanostructures. <i>Journal of Applied Physics</i> , <b>2000</b> , 87, 404-409	2.5	25

54	Transmission-electron-microscopic studies of mechanical properties of single-walled carbon nanotube bundles. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 4328	3.4	24
53	Actuation and internal friction of torsional nanomechanical silicon resonators. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2000</b> , 18, 3549		24
52	From Bits and Pieces to Whole Phage to Nanomachines: Pathogen Detection Using Bacteriophages. <i>Annual Review of Food Science and Technology</i> , <b>2017</b> , 8, 305-329	14.7	21
51	Nanocrystalline-morphous transitions in AlMo thin films: Bulk and surface evolution. <i>Acta Materialia</i> , <b>2009</b> , 57, 4296-4303	8.4	21
50	Dielectrophoretic integration of nanodevices with CMOS VLSI circuitry. <i>IEEE Nanotechnology Magazine</i> , <b>2006</b> , 5, 101-109	2.6	20
49	Low-stress silicon carbonitride for the machining of high-frequency nanomechanical resonators. <i>Journal of Vacuum Science &amp; Technology B</i> , <b>2007</b> , 25, 33		18
48	Resonant characteristics of ultranarrow SiCN nanomechanical resonators. <i>Journal of Applied Physics</i> , <b>2010</b> , 108, 014306	2.5	17
47	Fabrication of sub-10 nm silicon carbon nitride resonators using a hydrogen silsesquioxane mask patterned by electron beam lithography. <i>Microelectronic Engineering</i> , <b>2011</b> , 88, 2338-2341	2.5	17
46	Nanomechanical resonance studies of carbon nanotube peapod bundles. <i>Journal of Applied Physics</i> , <b>2005</b> , 98, 044301	2.5	16
45	Low-temperature scanning tunneling microscope-induced luminescence of an InGaN/GaN multiquantum well. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 1457-1459	3.4	15
44	Bacteriophage tail-spike protein derivitized microresonator arrays for specific detection of pathogenic bacteria. <i>Sensors and Actuators B: Chemical</i> , <b>2013</b> , 181, 410-416	8.5	14
43	Tailoring the microstructure and surface morphology of metal thin films for nano-electro-mechanical systems applications. <i>Nanotechnology</i> , <b>2008</b> , 19, 125705	3.4	14
42	Theory of simultaneous control of orientation and translational motion of nanorods using positive dielectrophoretic forces. <i>Journal of Applied Physics</i> , <b>2005</b> , 98, 124314	2.5	12
41	Synthesis and characterization of Au@Al <sub>2</sub> O <sub>3</sub> nanocomposites for nanomechanical cantilever devices. <i>Nanotechnology</i> , <b>2007</b> , 18, 355303	3.4	11
40	Dielectrophoretic assembly of carbon nanofiber nanoelectromechanical devices. <i>IEEE Nanotechnology Magazine</i> , <b>2005</b> , 4, 570-575	2.6	11
39	Nanomachining and clamping point optimization of silicon carbon nitride resonators using low voltage electron beam lithography and cold development. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2010</b> , 28, C6P36-C6P41	1.3	10
38	Large-scale arrays of nanomechanical sensors for biomolecular fingerprinting. <i>Sensors and Actuators B: Chemical</i> , <b>2013</b> , 187, 111-117	8.5	9
37	Deflection cantilever detection of interferon gamma. <i>Sensors and Actuators B: Chemical</i> , <b>2013</b> , 176, 960-965		9

36	Resonance properties and microstructure of ultracompliant metallic nanoelectromechanical systems resonators synthesized from Al <sub>3</sub> Zr <sub>2</sub> at.%Mo amorphous-nanocrystalline metallic composites. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 123108	3.4	9
35	Sintering of Silver Nanoparticles for the Formation of High Temperature Interconnect Joints. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 942, 1		9
34	Laser induced deposition of tungsten and copper. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>1997</b> , 45, 200-207	3.1	8
33	Tuning the resonant frequency of single-walled carbon nanotube bundle oscillators through electron-beam-induced cross-link formations. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 081912	3.4	8
32	Scanning tunneling microscope induced luminescence of lithographically prepared Au dots. <i>Surface Science</i> , <b>2000</b> , 453, L299-L302	1.8	8
31	Aryl Diazonium Chemistry for the Surface Functionalization of Glassy Biosensors. <i>Biosensors</i> , <b>2016</b> , 6,	5.9	8
30	Mycobacteriophage cell binding proteins for the capture of mycobacteria. <i>Bacteriophage</i> , <b>2014</b> , 4, e960346		7
29	Synthesis and characterization of TiOx nanowires using a novel silicon oxide support layer. <i>Nanotechnology</i> , <b>2009</b> , 20, 025602	3.4	7
28	Atomic layer deposition of TiN for the fabrication of nanomechanical resonators. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2013</b> , 31, 021503	2.9	6
27	Selective scanning tunneling microscope-induced light emission from self-assembled monolayer-covered Au surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1997</b> , 15, 1438-1441	2.9	6
26	Cathodoluminescence and photoluminescence analysis of InxGa1-xAs/GaAs quantum well structures. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 1259-1261	3.4	6
25	Low Temperature Reactive Sputtering of Thin Aluminum Nitride Films on Metallic Nanocomposites. <i>PLoS ONE</i> , <b>2015</b> , 10, e0133479	3.7	5
24	. <i>IEEE Transactions on Advanced Packaging</i> , <b>1995</b> , 18, 697-703		5
23	Mycobacteriophage lysin-mediated capture of cells for the PCR detection of Mycobacterium avium subspecies paratuberculosis. <i>Analytical Methods</i> , <b>2014</b> , 6, 5682-5689	3.2	4
22	Diazonium Chemistry for the Bio-Functionalization of Glassy Nanostring Resonator Arrays. <i>Sensors</i> , <b>2015</b> , 15, 18724-41	3.8	4
21	Al-Mo nanocomposite functionalization for membrane-based resonance detection of bovine Herpesvirus-1. <i>Sensors and Actuators A: Physical</i> , <b>2019</b> , 296, 186-191	3.9	3
20	Highly compliant static microcantilevers fabricated in gold nanocomposite materials. <i>Journal of Micromechanics and Microengineering</i> , <b>2011</b> , 21, 115022	2	3
19	Fabrication of nanoresonator biosensing arrays using nanoimprint lithography. <i>Journal of Micro/Nanolithography, MEMS, and MOEMS</i> , <b>2012</b> , 11, 023013-1	0.7	3

18	Study of laser-induced self-oscillations in silicon nanomechanical resonators. <i>Journal of Applied Physics</i> , <b>2005</b> , 98, 084316	2.5	3
17	Gallium nitride nanowires: polar surface controlled growth, ohmic contact patterning by focused ion-beam-induced direct Pt deposition and disorder effects, variable range hopping, and resonant electromechanical properties <b>2006</b> ,		3
16	Helium Ion Microscope-Assisted Nanomachining of Resonant Nanostrings. <i>Sensors</i> , <b>2016</b> , 16,	3.8	3
15	Fabrication and characterization of aluminum-molybdenum nanocomposite membranes. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2014</b> , 32, 052002	1.3	2
14	Electromechanical properties of individual single-walled carbon nanotubes grown on focused-ion-beam patterned substrates. <i>Ultramicroscopy</i> , <b>2009</b> , 109, 167-71	3.1	2
13	<b>2011</b> ,		2
12	Fabrication of CMOS-compatible nanopillars for smart bio-mimetic CMOS image sensors <b>2012</b> ,		1
11	Fabrication of nanoelectromechanical resonators using a cryogenic etching technique. <i>Journal of Vacuum Science &amp; Technology B</i> , <b>2006</b> , 24, 2769		1
10	Active Photonic Crystal Devices in Self-Assembled Electro-Optic Polymeric Materials. <i>Materials Research Society Symposia Proceedings</i> , <b>2004</b> , 817, 183		1
9	Dielectrophoretic integration of nanodevices with CMOS circuitry		1
8	Nanoelectromechanical Systems. <i>Nanostructure Science and Technology</i> , <b>2004</b> , 389-416	0.9	1
7	Temperature-Dependent Internal Friction in Silicon Nanoelectromechanical Systems. <i>Materials Research Society Symposia Proceedings</i> , <b>2000</b> , 657, 131		1
6	Electrofluidic Assembly of Nanoelectromechanical Systems. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 687, 1		1
5	Scanning Tunneling Microscope-Induced Luminescence Studies of Defects in GaN Layers and Heterostructures. <i>Materials Research Society Symposia Proceedings</i> , <b>1999</b> , 588, 19		1
4	Immobilization of Intact Phage and Phage-Derived Proteins for Detection and Biocontrol Purposes. <i>Methods in Molecular Biology</i> , <b>2019</b> , 1898, 89-105	1.4	0
3	Synthesis of Silicon Carbonitride for the Machining of Resonant Nanomechanical Biosensors. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 924, 1		
2	Nano fabrication of conducting polymers for NO gas by Dip pen nanolithography. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2007</b> , 2007, 2253-6		
1	Use of uncoated magnetic beads to capture Mycobacterium smegmatis and Mycobacterium avium paratuberculosis prior detection by mycobacteriophage D29 and real-time-PCR. <i>Journal of Microbiological Methods</i> , <b>2022</b> , 197, 106490	2.8	

