Stephane Evoy

List of Publications by Year in Descending Order

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	Use of uncoated magnetic beads to capture Mycobacterium smegmatis and Mycobacterium avium paratuberculosis prior detection by mycobacteriophage D29 and real-time-PCR. *Journal of Microbiological Methods*, **2022**, 197, 106490	2.8	
88	Al-Mo nanocomposite functionalization for membrane-based resonance detection of bovine Herpesvirus-1. *Sensors and Actuators A: Physical*, **2019**, 296, 186-191	3.9	3
87	Immobilization of Intact Phage and Phage-Derived Proteins for Detection and Biocontrol Purposes. *Methods in Molecular Biology*, **2019**, 1898, 89-105	1.4	0
86	From Bits and Pieces to Whole Phage to Nanomachines: Pathogen Detection Using Bacteriophages. *Annual Review of Food Science and Technology*, **2017**, 8, 305-329	14.7	21
85	Aryl Diazonium Chemistry for the Surface Functionalization of Glassy Biosensors. *Biosensors*, **2016**, 6,	5.9	8
84	Helium Ion Microscope-Assisted Nanomachining of Resonant Nanostrings. *Sensors*, **2016**, 16,	3.8	3
83	Diazonium Chemistry for the Bio-Functionalization of Glassy Nanostring Resonator Arrays. *Sensors*, **2015**, 15, 18724-41	3.8	4
82	A Review of Membrane-Based Biosensors for Pathogen Detection. *Sensors*, **2015**, 15, 14045-78	3.8	40
81	Low Temperature Reactive Sputtering of Thin Aluminum Nitride Films on Metallic Nanocomposites. *PLoS ONE*, **2015**, 10, e0133479	3.7	5
80	A review of piezoelectric polymers as functional materials for electromechanical transducers. *Smart Materials and Structures*, **2014**, 23, 033001	3.4	548
79	Mycobacteriophage lysin-mediated capture of cells for the PCR detection of Mycobacterium avium subspecies paratuberculosis. *Analytical Methods*, **2014**, 6, 5682-5689	3.2	4
78	Mycobacteriophage cell binding proteins for the capture of mycobacteria. *Bacteriophage*, **2014**, 4, e960346		7
77	Fabrication and characterization of aluminum-molybdenum nanocomposite membranes. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2014**, 32, 052002	1.3	2
76	A suggested classification for two groups of Campylobacter myoviruses. *Archives of Virology*, **2014**, 159, 181-90	2.6	42
75	Phage receptor binding protein-based magnetic enrichment method as an aid for real time PCR detection of foodborne bacteria. *Analyst, The*, **2013**, 138, 5619-26	5	42
74	Atomic layer deposition of TiN for the fabrication of nanomechanical resonators. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2013**, 31, 021503	2.9	6
73	Large-scale arrays of nanomechanical sensors for biomolecular fingerprinting. *Sensors and Actuators B: Chemical*, **2013**, 187, 111-117	8.5	9

72	Deflection cantilever detection of interferon gamma. *Sensors and Actuators B: Chemical*, **2013**, 176, 960-965	3.5	9
71	Bacteriophage tail-spike protein derivitized microresonator arrays for specific detection of pathogenic bacteria. *Sensors and Actuators B: Chemical*, **2013**, 181, 410-416	8.5	14
70	Recent advances in bacteriophage based biosensors for food-borne pathogen detection. *Sensors*, **2013**, 13, 1763-86	3.8	249
69	Bacteriophage receptor binding protein based assays for the simultaneous detection of Campylobacter jejuni and Campylobacter coli. *PLoS ONE*, **2013**, 8, e69770	3.7	35
68	Fabrication of CMOS-compatible nanopillars for smart bio-mimetic CMOS image sensors **2012**,		1
67	Bacteriophage based probes for pathogen detection. *Analyst, The*, **2012**, 137, 3405-21	5	101
66	Fabrication of nanoresonator biosensing arrays using nanoimprint lithography. *Journal of Micro/ Nanolithography, MEMS, and MOEMS*, **2012**, 11, 023013-1	0.7	3
65	Surface-immobilization of chromatographically purified bacteriophages for the optimized capture of bacteria. *Bacteriophage*, **2012**, 2, 15-24		42
64	Highly compliant static microcantilevers fabricated in gold nanocomposite materials. *Journal of Micromechanics and Microengineering*, **2011**, 21, 115022	2	3
63	Chemically immobilized T4-bacteriophage for specific Escherichia coli detection using surface plasmon resonance. *Analyst, The*, **2011**, 136, 486-92	5	130
62	Specific detection of Campylobacter jejuni using the bacteriophage NCTC 12673 receptor binding protein as a probe. *Analyst, The*, **2011**, 136, 4780-6	5	73
61	Fabrication of sub-10 nm silicon carbon nitride resonators using a hydrogen silsesquioxane mask patterned by electron beam lithography. *Microelectronic Engineering*, **2011**, 88, 2338-2341	2.5	17
60	**2011**,		2
59	Genome and proteome of Campylobacter jejuni bacteriophage NCTC 12673. *Applied and Environmental Microbiology*, **2011**, 77, 8265-71	4.8	44
58	Oriented immobilization of bacteriophages for biosensor applications. *Applied and Environmental Microbiology*, **2010**, 76, 528-35	4.8	89
57	Nanomachining and clamping point optimization of silicon carbon nitride resonators using low voltage electron beam lithography and cold development. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, C6P36-C6P41	1.3	10
56	Resonant characteristics of ultranarrow SiCN nanomechanical resonators. *Journal of Applied Physics* , **2010**, 108, 014306	2.5	17
55	Bacteriophage tailspike proteins as molecular probes for sensitive and selective bacterial detection. *Biosensors and Bioelectronics*, **2010**, 26, 131-8	11.8	92

54	Synthesis and characterization of TiOx nanowires using a novel silicon oxide support layer. *Nanotechnology*, **2009**, 20, 025602	3.4	7
53	Electromechanical properties of individual single-walled carbon nanotubes grown on focused-ion-beam patterned substrates. *Ultramicroscopy*, **2009**, 109, 167-71	3.1	2
52	Immobilization of bacteriophages on gold surfaces for the specific capture of pathogens. *Biosensors and Bioelectronics*, **2009**, 24, 3645-51	11.8	100
51	Nanocrystalline□morphous transitions in Al□Mo thin films: Bulk and surface evolution. *Acta Materialia*, **2009**, 57, 4296-4303	8.4	21
50	Single-crystal, Si nanotubes, and their mechanical resonant properties. *Nano Letters*, **2009**, 9, 1511-6	11.5	32
49	Electronic structure, binding energy, and solvation structure of the streptavidin-biotin supramolecular complex: ONIOM and 3D-RISM study. *Journal of Physical Chemistry B*, **2009**, 113, 9958-67	3.4	25
48	Gas sensing properties of single conducting polymer nanowires and the effect of temperature. *Nanotechnology*, **2009**, 20, 434014	3.4	39
47	Specific detection of proteins using photonic crystal waveguides. *Optics Express*, **2008**, 16, 15949-57	3.3	91
46	Tailoring the microstructure and surface morphology of metal thin films for nano-electro-mechanical systems applications. *Nanotechnology*, **2008**, 19, 125705	3.4	14
45	Resonance properties and microstructure of ultracompliant metallic nanoelectromechanical systems resonators synthesized from Al□2at.%Mo amorphous-nanocrystalline metallic composites. *Applied Physics Letters*, **2008**, 92, 123108	3.4	9
44	Mechanical resonance of clamped silicon nanowires measured by optical interferometry. *Journal of Applied Physics*, **2008**, 103, 074304	2.5	65
43	Specific detection of proteins using nanomechanical resonators. *Sensors and Actuators B: Chemical*, **2008**, 134, 613-617	8.5	32
42	Dielectrophoretically assembled polymer nanowires for gas sensing. *Sensors and Actuators B: Chemical*, **2007**, 125, 55-59	8.5	65
41	Immobilization of biotinylated bacteriophages on biosensor surfaces. *Sensors and Actuators B: Chemical*, **2007**, 125, 615-621	8.5	102
40	Low-stress silicon carbonitride for the machining of high-frequency nanomechanical resonators. *Journal of Vacuum Science & Technology B*, **2007**, 25, 33		18
39	Synthesis and characterization of Au□a nanocomposites for nanomechanical cantilever devices. *Nanotechnology*, **2007**, 18, 355303	3.4	11
38	Nano fabrication of conducting polymers for NO gas by Dip pen nanolithography. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2007**, 2007, 2253-6		
37	Tuning the resonant frequency of single-walled carbon nanotube bundle oscillators through electron-beam-induced cross-link formations. *Applied Physics Letters*, **2007**, 90, 081912	3.4	8

36	Electric tweezers: Experimental study of positive dielectrophoresis-based positioning and orientation of a nanorod. *Journal of Applied Physics*, **2007**, 102, 024913	2.5	32
35	Fabrication of nanoelectromechanical resonators using a cryogenic etching technique. *Journal of Vacuum Science & Technology B*, **2006**, 24, 2769		1
34	Synthesis of Silicon Carbonitride for the Machining of Resonant Nanomechanical Biosensors. *Materials Research Society Symposia Proceedings*, **2006**, 924, 1		
33	Sintering of Silver Nanoparticles for the Formation of High Temperature Interconnect Joints. *Materials Research Society Symposia Proceedings*, **2006**, 942, 1		9
32	Metallic NEMS components fabricated from nanocomposite Al/Mo films. *Nanotechnology*, **2006**, 17, 3063-3070	3.4	204
31	Dielectrophoretic integration of nanodevices with CMOS VLSI circuitry. *IEEE Nanotechnology Magazine*, **2006**, 5, 101-109	2.6	20
30	Diameter-dependent electromechanical properties of GaN nanowires. *Nano Letters*, **2006**, 6, 153-8	11.5	239
29	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 **2006**,		3
28	Study of laser-induced self-oscillations in silicon nanomechanical resonators. *Journal of Applied Physics*, **2005**, 98, 084316	2.5	3
27	Synthesis and Characterization of Ultra-Fine Tin Oxide Fibers Using Electrospinning. *Journal of the American Ceramic Society*, **2005**, 88, 2059-2063	3.8	34
26	Theory of simultaneous control of orientation and translational motion of nanorods using positive dielectrophoretic forces. *Journal of Applied Physics*, **2005**, 98, 124314	2.5	12
25	Nanomechanical resonance studies of carbon nanotube peapod bundles. *Journal of Applied Physics*, **2005**, 98, 044301	2.5	16
24	Dielectrophoretic assembly of carbon nanofiber nanoelectromechanical devices. *IEEE Nanotechnology Magazine*, **2005**, 4, 570-575	2.6	11
23	Transmission-electron-microscopic studies of mechanical properties of single-walled carbon nanotube bundles. *Applied Physics Letters*, **2004**, 85, 4328	3.4	24
22	Active Photonic Crystal Devices in Self-Assembled Electro-Optic Polymeric Materials. *Materials Research Society Symposia Proceedings*, **2004**, 817, 183		1
21	Dielectrophoretic assembly and integration of nanowire devices with functional CMOS operating circuitry. *Microelectronic Engineering*, **2004**, 75, 31-42	2.5	80
20	Nanoelectromechanical Systems. *Nanostructure Science and Technology*, **2004**, 389-416	0.9	1
19	Synthesis and characterization of tin oxide microfibres electrospun from a simple precursor solution. *Semiconductor Science and Technology*, **2004**, 19, 1057-1060	1.8	31

18	Nanomechanical resonant structures in silicon nitride: fabrication, operation and dissipation issues. *Sensors and Actuators A: Physical*, **2002**, 101, 215-219	3.9	64
17	Electrofluidic Assembly of Nanoelectromechanical Systems. *Materials Research Society Symposia Proceedings*, **2001**, 687, 1		1
16	Temperature-Dependent Internal Friction in Silicon Nanoelectromechanical Systems. *Materials Research Society Symposia Proceedings*, **2000**, 657, 131		1
15	Thickness dependent binary behavior of elongated single-domain cobalt nanostructures. *Journal of Applied Physics*, **2000**, 87, 404-409	2.5	25
14	Scanning tunneling microscope induced luminescence of lithographically prepared Au dots. *Surface Science*, **2000**, 453, L299-L302	1.8	8
13	Parametric amplification in a torsional microresonator. *Applied Physics Letters*, **2000**, 77, 1545-1547	3.4	143
12	Temperature-dependent internal friction in silicon nanoelectromechanical systems. *Applied Physics Letters*, **2000**, 77, 2397-2399	3.4	89
11	Actuation and internal friction of torsional nanomechanical silicon resonators. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2000**, 18, 3549		24
10	Nanofabrication and electrostatic operation of single-crystal silicon paddle oscillators. *Journal of Applied Physics*, **1999**, 86, 6072-6077	2.5	143
9	Measurement of mechanical resonance and losses in nanometer scale silicon wires. *Applied Physics Letters*, **1999**, 75, 920-922	3.4	254
8	Low-temperature scanning tunneling microscope-induced luminescence of an InGaN/GaN multiquantum well. *Applied Physics Letters*, **1999**, 74, 1457-1459	3.4	15
7	An Lrp-type transcriptional regulator from Agrobacterium tumefaciens condenses more than 100 nucleotides of DNA into globular nucleoprotein complexes. *Journal of Molecular Biology*, **1999**, 288, 811-24	6.5	40
6	Scanning Tunneling Microscope-Induced Luminescence Studies of Defects in GaN Layers and Heterostructures. *Materials Research Society Symposia Proceedings*, **1999**, 588, 19		1
5	Selective scanning tunneling microscope-induced light emission from self-assembled monolayer-covered Au surfaces. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1997**, 15, 1438-1441	2.9	6
4	Laser induced deposition of tungsten and copper. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1997**, 45, 200-207	3.1	8
3	Cathodoluminescence and photoluminescence analysis of InxGa1−xAs/GaAs quantum well structures. *Applied Physics Letters*, **1996**, 68, 1259-1261	3.4	6
2	. *IEEE Transactions on Advanced Packaging*, **1995**, 18, 697-703		5
1	Dielectrophoretic integration of nanodevices with CMOS circuitry		1