

Philip X-L Feng

List of Publications by Year in descending order

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200
papers

6,260
citations

109264

35
h-index

71651

76
g-index

204
all docs

204
docs citations

204
times ranked

6281
citing authors

#	ARTICLE	IF	CITATIONS
1	Zeptogram-Scale Nanomechanical Mass Sensing. Nano Letters, 2006, 6, 583-586.	4.5	940
2	Towards single-molecule nanomechanical mass spectrometry. Nature Nanotechnology, 2009, 4, 445-450.	15.6	602
3	Very High Frequency Silicon Nanowire Electromechanical Resonators. Nano Letters, 2007, 7, 1953-1959.	4.5	381
4	Polytype control of spin qubits in silicon carbide. Nature Communications, 2013, 4, 1819.	5.8	292
5	A self-sustaining ultrahigh-frequency nanoelectromechanical oscillator. Nature Nanotechnology, 2008, 3, 342-346.	15.6	266
6	High Frequency MoS ₂ Nanomechanical Resonators. ACS Nano, 2013, 7, 6086-6091.	7.3	262
7	Self-Transducing Silicon Nanowire Electromechanical Systems at Room Temperature. Nano Letters, 2008, 8, 1756-1761.	4.5	233
8	Low Voltage Nanoelectromechanical Switches Based on Silicon Carbide Nanowires. Nano Letters, 2010, 10, 2891-2896.	4.5	163
9	Piezoelectric nanoelectromechanical resonators based on aluminum nitride thin films. Applied Physics Letters, 2009, 95, .	1.5	148
10	Black phosphorus nanoelectromechanical resonators vibrating at very high frequencies. Nanoscale, 2015, 7, 877-884.	2.8	128
11	Electrically tunable single- and few-layer MoS ₂ nanoelectromechanical systems with broad dynamic range. Science Advances, 2018, 4, eaao6653.	4.7	126
12	Multilayer MoS ₂ transistors enabled by a facile dry-transfer technique and thermal annealing. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2014, 32, .	0.6	113
13	VHF, UHF and microwave frequency nanomechanical resonators. New Journal of Physics, 2005, 7, 247-247.	1.2	106
14	Environmental Instability and Degradation of Single- and Few-Layer WTe ₂ Nanosheets in Ambient Conditions. Small, 2016, 12, 5802-5808.	5.2	96
15	Surface Adsorbate Fluctuations and Noise in Nanoelectromechanical Systems. Nano Letters, 2011, 11, 1753-1759.	4.5	93
16	Parametric Nanomechanical Amplification at Very High Frequency. Nano Letters, 2009, 9, 3116-3123.	4.5	84
17	Tuning Optical Signatures of Single- and Few-Layer MoS ₂ by Blown-Bubble Bulge Straining up to Fracture. Nano Letters, 2017, 17, 4568-4575.	4.5	79
18	Spatial mapping of multimode Brownian motions in high-frequency silicon carbide microdisk resonators. Nature Communications, 2014, 5, 5158.	5.8	75

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19	Resolving and Tuning Mechanical Anisotropy in Black Phosphorus via Nanomechanical Multimode Resonance Spectromicroscopy. <i>Nano Letters</i> , 2016, 16, 5394-5400.	4.5	75
20	Electrical breakdown of multilayer MoS ₂ field-effect transistors with thickness-dependent mobility. <i>Nanoscale</i> , 2014, 6, 12383-12390.	2.8	74
21	Air damping of atomically thin MoS ₂ nanomechanical resonators. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	70
22	Hexagonal boron nitride nanomechanical resonators with spatially visualized motion. <i>Microsystems and Nanoengineering</i> , 2017, 3, 17038.	3.4	69
23	Electrothermally Tunable Graphene Resonators Operating at Very High Temperature up to 1200 K. <i>Nano Letters</i> , 2018, 18, 1678-1685.	4.5	65
24	High Q silicon carbide microdisk resonator. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	62
25	Silicon carbide microdisk resonator. <i>Optics Letters</i> , 2013, 38, 1304.	1.7	60
26	Large-scale arrays of single- and few-layer MoS ₂ nanomechanical resonators. <i>Nanoscale</i> , 2016, 8, 10677-10685.	2.8	51
27	Atomic Layer GaSe/MoS ₂ van der Waals Heterostructure Photodiodes with Low Noise and Large Dynamic Range. <i>ACS Photonics</i> , 2018, 5, 2693-2700.	3.2	51
28	Atomic layer MoS ₂ -graphene van der Waals heterostructure nanomechanical resonators. <i>Nanoscale</i> , 2017, 9, 18208-18215.	2.8	48
29	Design of black phosphorus 2D nanomechanical resonators by exploiting the intrinsic mechanical anisotropy. <i>2D Materials</i> , 2015, 2, 021001.	2.0	46
30	Single- and few-layer WTe ₂ and their suspended nanostructures: Raman signatures and nanomechanical resonances. <i>Nanoscale</i> , 2016, 8, 7854-7860.	2.8	44
31	Effects of $\hat{\gamma}$ -ray radiation on two-dimensional molybdenum disulfide (MoS ₂) nanomechanical resonators. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	40
32	Fabrication of Electrically Conductive Metal Patterns at the Surface of Polymer Films by Microplasma-Based Direct Writing. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 3099-3104.	4.0	38
33	Embracing Structural Nonidealities and Asymmetries in Two-Dimensional Nanomechanical Resonators. <i>Scientific Reports</i> , 2015, 4, 3919.	1.6	38
34	An Ultralow Quiescent Current Power Management System With Maximum Power Point Tracking (MPPT) for Batteryless Wireless Sensor Applications. <i>IEEE Transactions on Power Electronics</i> , 2018, 33, 7326-7337.	5.4	37
35	Anisotropic Thermal Conductivity of Suspended Black Phosphorus Probed by Opto-Thermomechanical Resonance Spectromicroscopy. <i>Nano Letters</i> , 2018, 18, 7683-7691.	4.5	37
36	Hexagonal Boron Nitride Phononic Crystal Waveguides. <i>ACS Photonics</i> , 2019, 6, 3225-3232.	3.2	36

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37	Dynamic range of atomically thin vibrating nanomechanical resonators. Applied Physics Letters, 2014, 104, .	1.5	33
38	Controlling Polarity of MoTe ₂ Transistors for Monolithic Complementary Logic via Schottky Contact Engineering. ACS Nano, 2020, 14, 1457-1467.	7.3	31
39	Ultrawide Band Gap \hat{I}^2 -Ga ₂ O ₃ Nanomechanical Resonators with Spatially Visualized Multimode Motion. ACS Applied Materials & Interfaces, 2017, 9, 43090-43097.	4.0	30
40	Interferometric Motion Detection in Atomic Layer 2D Nanostructures: Visualizing Signal Transduction Efficiency and Optimization Pathways. Scientific Reports, 2016, 6, 28923.	1.6	27
41	The study of radiation effects in emerging micro and nano electro mechanical systems (M and NEMs). Semiconductor Science and Technology, 2017, 32, 013005.	1.0	27
42	Ultrawide Frequency Tuning of Atomic Layer van der Waals Heterostructure Electromechanical Resonators. Nano Letters, 2021, 21, 5508-5515.	4.5	26
43	All-dry transferred single- and few-layer MoS ₂ field effect transistor with enhanced performance by thermal annealing. Journal of Applied Physics, 2018, 123, .	1.1	23
44	Beta gallium oxide (\hat{I}^2 -Ga ₂ O ₃) nanoelectromechanical transducer for dual-modality solar-blind ultraviolet light detection. APL Materials, 2019, 7, .	2.2	23
45	Scanning electron microscopy characterization of structural features in suspended and non-suspended graphene by customized CVD growth. Diamond and Related Materials, 2015, 54, 64-73.	1.8	22
46	Very High-Frequency Silicon Carbide Microdisk Resonators With Multimode Responses in Water for Particle Sensing. Journal of Microelectromechanical Systems, 2019, 28, 941-953.	1.7	21
47	Discerning Black Phosphorus Crystal Orientation and Anisotropy by Polarized Reflectance Measurement. ACS Applied Materials & Interfaces, 2018, 10, 25629-25637.	4.0	20
48	Environmental, thermal, and electrical susceptibility of black phosphorus field effect transistors. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2015, 33, 052202.	0.6	19
49	Silicon carbide (SiC) nanoelectromechanical switches and logic gates with long cycles and robust performance in ambient air and at high temperature. , 2013, , .		18
50	Atmospheric-Pressure Plasma Reduction of Metal Cation-Containing Polymer Films to Produce Electrically Conductive Nanocomposites by an Electrodiffusion Mechanism. Plasma Chemistry and Plasma Processing, 2016, 36, 295-307.	1.1	18
51	Study of Energy Loss Mechanisms in AlN-Based Piezoelectric Length Extensional-Mode Resonators. Journal of Microelectromechanical Systems, 2019, 28, 619-627.	1.7	18
52	Tuning in to a graphene oscillator. Nature Nanotechnology, 2013, 8, 897-898.	15.6	17
53	High frequency top-down junction-less silicon nanowire resonators. Nanotechnology, 2013, 24, 435203.	1.3	17
54	Frequency Tuning of Graphene Nanoelectromechanical Resonators via Electrostatic Gating. Micromachines, 2018, 9, 312.	1.4	17

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55	Development of Dual-Frequency PMUT Arrays Based on Thin Ceramic PZT for Endoscopic Photoacoustic Imaging. <i>Journal of Microelectromechanical Systems</i> , 2021, 30, 770-782.	1.7	17
56	6H-SiC microdisk torsional resonators in a "smart-cut" technology. <i>Applied Physics Letters</i> , 2014, 104, 091906.	1.5	16
57	Effects of asymmetric Schottky contacts on photoresponse in tungsten diselenide (WSe ₂) phototransistor. <i>Journal of Applied Physics</i> , 2017, 122, .	1.1	16
58	Raman Spectroscopic Probe for Nonlinear MoS ₂ Nanoelectromechanical Resonators. <i>Nano Letters</i> , 2022, 22, 5780-5787.	4.5	16
59	Electromechanical coupling and design considerations in single-layer MoS ₂ suspended-channel transistors and resonators. <i>Nanoscale</i> , 2015, 7, 19921-19929.	2.8	15
60	Robust silicon carbide (SiC) nanoelectromechanical switches with long cycles in ambient and high temperature conditions. , 2013, , .		14
61	Young's modulus and corresponding orientation in α -Ga ₂ O ₃ thin films resolved by nanomechanical resonators. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	14
62	Thermal hysteresis controlled reconfigurable MoS ₂ nanomechanical resonators. <i>Nanoscale</i> , 2021, 13, 18089-18095.	2.8	14
63	A perspective on α -Ga ₂ O ₃ micro/nanoelectromechanical systems. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	14
64	Silicon Carbide (SiC) Nanoelectromechanical Antifuse for Ultralow-Power One-Time-Programmable (OTP) FPGA Interconnects. <i>IEEE Journal of the Electron Devices Society</i> , 2015, 3, 323-335.	1.2	13
65	All-electrical readout of atomically-thin MoS ₂ nanoelectromechanical resonators in the VHF band. , 2016, , .		13
66	MEMS/NEMS Devices and Applications. <i>Springer Handbooks</i> , 2017, , 395-429.	0.3	13
67	Straining and Tuning Atomic Layer Nanoelectromechanical Resonators via Comb-Drive MEMS Actuators. <i>Advanced Materials Technologies</i> , 2021, 6, 2000794.	3.0	13
68	Atomic Layer MoTe ₂ Field-Effect Transistors and Monolithic Logic Circuits Configured by Scanning Laser Annealing. <i>ACS Nano</i> , 2021, 15, 19733-19742.	7.3	13
69	Two-dimensional nanoelectromechanical systems (2D NEMS) via atomically-thin semiconducting crystals vibrating at radio frequencies. , 2014, , .		12
70	An ultra-low quiescent current power management ASIC with MPPT for vibrational energy harvesting. , 2017, , .		12
71	A Temperature-Compensated Single-Crystal Silicon-on-Insulator (SOI) MEMS Oscillator with a CMOS Amplifier Chip. <i>Micromachines</i> , 2018, 9, 559.	1.4	12
72	Gate-Tuned Temperature in a Hexagonal Boron Nitride-Encapsulated 2-D Semiconductor Device. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 4068-4072.	1.6	12

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73	Polarization sensitive black phosphorus nanomechanical resonators. <i>Optical Materials Express</i> , 2019, 9, 526.	1.6	12
74	AlScN ₂ /SiC Thin Film Micromachined Resonant Transducers Operating in High-Temperature Environment up to 600°C. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	12
75	Extraction of a low-current discharge from a microplasma for nanoscale patterning applications at atmospheric pressure. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2012, 30, 010603.	0.6	11
76	Standard and inverse microscale Chladni figures in liquid for dynamic patterning of microparticles on chip. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	11
77	η -Ga ₂ O ₃ NEMS Oscillator for Real-Time Middle Ultraviolet (MUV) Light Detection. <i>IEEE Electron Device Letters</i> , 2018, 39, 1230-1233.	2.2	11
78	A MEMS lens scanner based on serpentine electrothermal bimorph actuators for large axial tuning. <i>Optics Express</i> , 2020, 28, 23439.	1.7	11
79	Culturing and probing physical behavior of individual breast cancer cells on SiC microdisk resonators. , 2015, , .		10
80	Cavity quantum electrodynamics design with single photon emitters in hexagonal boron nitride. <i>Applied Physics Letters</i> , 2021, 118, 244003.	1.5	10
81	Dual-gate silicon carbide (SiC) lateral nanoelectromechanical switches. , 2013, , .		9
82	Time-domain AC characterization of silicon carbide (SiC) nanoelectromechanical switches toward high-speed operations. , 2013, , .		9
83	Synthesis and characterization of Ga ₂ O ₃ nanosheets on 3C-SiC-on-Si by low pressure chemical vapor deposition. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2017, 35, 011208.	0.6	9
84	Single-crystal 3C-SiC-on-insulator platform for integrated quantum photonics. <i>Optics Express</i> , 2021, 29, 1011.	1.7	9
85	Resolving Mechanical Properties and Morphology Evolution of Free-Standing Ferroelectric Hf _{0.5} Zr _{0.5} O ₂ . <i>Advanced Engineering Materials</i> , 2021, 23, 2101221.	1.6	9
86	Silicon carbide (SiC) membrane nanomechanical resonators with multiple vibrational modes. , 2011, , .		8
87	High frequency graphene nanomechanical resonators and transducers. , 2012, , .		8
88	Silicon nanowire and cantilever electromechanical switches with integrated piezoresistive transducers. , 2013, , .		8
89	A Programmable Sustaining Amplifier for Flexible Multimode MEMS-Referenced Oscillators. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2019, 66, 1405-1418.	3.5	8
90	Design of strongly nonlinear graphene nanoelectromechanical systems in quantum regime. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	8

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91	Silicon carbide (SiC) top-down nanowire electromechanical resonators. , 2009, , .		7
92	Smart-cut 6H-silicon carbide (SiC) microdisk torsional resonators with sensitive photon radiation detection. , 2014, , .		7
93	Interrogating contact-mode silicon carbide (SiC) nanoelectromechanical switching dynamics by ultrasensitive laser interferometry. , 2014, , .		7
94	NEMS switches: Opportunities and challenges in emerging IC technologies. , 2015, , .		7
95	mm-Scale and MEMS piezoelectric energy harvesters powering on-chip CMOS temperature sensing for IoT applications. , 2017, , .		7
96	A battery-less, 255 nA quiescent current temperature sensor with voltage regulator fully powered by harvesting ambient vibrational energy. , 2017, , .		7
97	Frequency Tuning of Two-Dimensional Nanoelectromechanical Resonators Via Comb-Drive Mems Actuators. , 2019, , .		7
98	Probing heavy ion radiation effects in silicon carbide (SiC) via 3D integrated multimode vibrating diaphragms. Applied Physics Letters, 2019, 114, .	1.5	7
99	Electromechanical coupling and motion transduction in GaN/AlN -Ga ₂ O ₃ vibrating channel transistors. Applied Physics Letters, 2020, 117, .	1.5	7
100	Thermal Response and TC of GaN/AlN Heterostructure Multimode Micro String Resonators From ~ 10 Å°C Up to 325 Å°C. Journal of Microelectromechanical Systems, 2021, 30, 521-529.	1.7	7
101	Optical contrast signatures of hexagonal boron nitride on a device platform. Optical Materials Express, 2019, 9, 1223.	1.6	7
102	Giant parametric amplification and spectral narrowing in atomically thin MoS ₂ nanomechanical resonators. Applied Physics Reviews, 2022, 9, .	5.5	7
103	Self-sustaining MoS ₂ nanomechanical oscillators and feedback cooling. Applied Physics Letters, 2021, 119, .	1.5	7
104	Phase Noise and Frequency Stability of Very-High Frequency Silicon Nanowire Nanomechanical Resonators. , 2007, , .		6
105	Amorphous Silicon Carbide (a-SiC) Thin Square Membranes for Resonant Micromechanical Devices. Materials Science Forum, 2012, 717-720, 533-536.	0.3	6
106	Calibrating temperature coefficient of frequency (TCf) and thermal expansion coefficient (α) of MoS ₂ nanomechanical resonators. , 2015, , .		6
107	Probing contact-mode characteristics of silicon nanowire electromechanical systems with embedded piezoresistive transducers. Journal of Micromechanics and Microengineering, 2015, 25, 095014.	1.5	6
108	Glowing Graphene Nanoelectromechanical Resonators at Ultra-High Temperature up to 2650K. , 2018, , .		6

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109	Electrodynamic Force, Casimir Effect, and Stiction Mitigation in Silicon Carbide Nanoelectromechanical Switches. <i>Small</i> , 2020, 16, 2005594.	5.2	6
110	Characterization of Plasma Synthesized Vertical Carbon Nanofibers for Nanoelectronics Applications. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1451, 117-122.	0.1	5
111	Nanomechanical non-volatile memory for computing at extreme. , 2013, , .		5
112	Temperature dependence of torsional and flexural modes in 6H-SiC microdisk resonators. , 2014, , .		5
113	Hexagonal boron nitride (h-BN) nanomechanical resonators with temperature-dependent multimode operations. , 2015, , .		5
114	Local-gate electrical actuation, detection, and tuning of atomic-layer MoS ₂ nanoelectromechanical resonators. , 2017, , .		5
115	Carbon nanofiber high frequency nanomechanical resonators. <i>Nanoscale</i> , 2017, 9, 11864-11870.	2.8	5
116	All-electrical transduction of black phosphorus tunable 2D nanoelectromechanical resonators. , 2018, , .		5
117	A Self-Sustained Frequency Comb Oscillator via Tapping Mode Comb-Drive Resonator Integrated with a Feedback ASIC. , 2019, , .		5
118	Pressure dependence of thin polycrystalline silicon carbide diaphragm resonators. , 2012, , .		4
119	Multimode characteristics of high-frequency CMOS-MEMS resonators. , 2014, , .		4
120	Two-dimensional MoS ₂ nanomechanical resonators freely suspended on microtrenches on flexible substrate. , 2015, , .		4
121	High frequency torsional-mode nanomechanical resonators enabled by very thin nanocrystalline diamond diaphragms. <i>Diamond and Related Materials</i> , 2015, 54, 19-25.	1.8	4
122	A wireless temperature sensor powered by a piezoelectric resonant energy harvesting system. , 2015, , .		4
123	Single- and few-layer transfer-printed CVD MoS ₂ nanomechanical resonators with enhancement by thermal annealing. , 2016, , .		4
124	A programmable CMOS feedback IC for reconfigurable MEMS-referenced oscillators. , 2016, , .		4
125	Free-Standing $\hat{\Gamma}^2$ -Ga ₂ O ₃ Thin Diaphragms. <i>Journal of Electronic Materials</i> , 2018, 47, 973-981.	1.0	4
126	Molybdenum disulfide (MoS ₂) nanoelectromechanical resonators with on-chip aluminum nitride (AlN) piezoelectric excitation. , 2018, , .		4

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127	Few-Layer Molybdenum (MoS ₂) Suspended Channel Transistors and Nanoelectromechanical Resonators. , 2019, , .		4
128	Determination of Elastic Modulus of Silicon Carbide (SiC) Thin Diaphragms via Mode-Dependent Duffing Nonlinear Resonances. Journal of Microelectromechanical Systems, 2020, 29, 783-789.	1.7	4
129	Effects of Ion-Induced Displacement Damage on GaN/AlN MEMS Resonators. IEEE Transactions on Nuclear Science, 2022, 69, 216-224.	1.2	4
130	Phononic Frequency Comb Generation via 1:1 Mode Coupling in MoS ₂ 2D Nanoelectromechanical Resonators. , 2022, , .		4
131	A piezoresistive CMOS-MEMS resonator with high Q and low TC. , 2013, , .		3
132	Multimode SiC trampoline resonators manipulate microspheres to create Chladni figures. , 2015, , .		3
133	Very-wide electrothermal tuning of graphene nanoelectromechanical resonators. , 2017, , .		3
134	3C-SiC microdisk mechanical resonators with multimode resonances at radio frequencies. Journal of Micromechanics and Microengineering, 2017, 27, 074001.	1.5	3
135	Beta Gallium Oxide (β -Ga ₂ O ₃) Vibrating Channel Transistor. , 2020, , .		3
136	MULTIMODE BLACK PHOSPHORUS NANOMECHANICAL RESONATORS WITH INTRINSIC MECHANICAL ANISOTROPY AND ELECTRICAL TUNABILITY. , 2016, , .		3
137	Quality Factors and Energy Losses of Single-Crystal Silicon Nanowire Electromechanical Resonators. , 2007, , .		2
138	Focused Ion-Beam (FIB) Nanomachining of Silicon Carbide (SiC) Stencil Masks for Nanoscale Patterning. Materials Science Forum, 0, 717-720, 889-892.	0.3	2
139	Diaphragm-based microsystems using thin film silicon carbide. , 2012, , .		2
140	Nanoelectromechanical switching devices: Scaling toward ultimate energy efficiency and longevity. , 2013, , .		2
141	Frequency scaling of molybdenum disulfide (MoS ₂) two-dimensional (2D) nanomechanical resonators. , 2013, , .		2
142	Atomically-thin MoS ₂ resonators for pressure sensing. , 2014, , .		2
143	3C-SiC Nanobeam Optomechanical Crystals. , 2014, , .		2
144	Effects of heterostructure stacking on acoustic dissipation in coupled-ring resonators. , 2017, , .		2

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145	Energetic ion radiation effects on a silicon carbide (SiC) multimode resonating diaphragm. , 2017, , .		2
146	Investigation of Electrostatic Gating in Two-Dimensional Transitional Metal Dichalcogenide (TMDC) Field Effect Transistors (FETs). , 2018, , .		2
147	Nanoelectromechanical Resonators Enabled by Si-Doped Semiconducting $\text{In}_2\text{GaIn}_2\text{O}_3$ Nanobelts. , 2018, , .		2
148	AlN Piezoelectric Nanoelectromechanical Isolator via Parametric Frequency Conversion and Amplification. , 2019, , .		2
149	GaN/AlN Heterostructure Micromechanical Self-Sustained Oscillator for Middle Ultraviolet (MUV) Light Detection. , 2019, , .		2
150	Tracing and Resolving Microparticle Aquatic Mass Motion and Distribution on Multimode Silicon Carbide Microdisk Resonators. , 2019, , .		2
151	Imaging Multimode Vibrations in High-Frequency Aluminum Nitride Piezoelectric Nanomembrane Resonators. , 2019, , .		2
152	Electronic Applications of Black Phosphorus Thin Films. ACS Symposium Series, 2019, , 179-194.	0.5	2
153	Black Phosphorus NEMS Resonant Infrared (IR) Detector. , 2020, , .		2
154	Resonant Nanoelectromechanical Systems (NEMS): Progress and Emerging Frontiers. , 2020, , .		2
155	Nanomechanical and Optomechanical Coupling in Silicon Carbide / Hexagonal Boron Nitride Hybrid Resonator. , 2021, , .		2
156	Hexagonal boron nitride (h-BN) 2D nanoscale devices for classical and quantum signal transduction. , 2019, , .		2
157	Retaining High Q Factors in Electrode-Less AlN-On-Si Bulk Mode Resonators with Non-Contact Electrical Drive. , 2022, , .		2
158	Thermal-piezoresistive pumping on double SiC layer resonator for effective quality factor tuning. Sensors and Actuators A: Physical, 2022, 343, 113678.	2.0	2
159	Ex vivo monitoring of rat heart wall motion using piezoelectric cantilevers. , 2011, , .		1
160	MEMS wireless implantable systems: historical review and perspectives. , 2013, , 401-423.		1
161	Multimode characteristics in mechanically-coupled silicon carbide (SiC) nanowire array resonators. , 2013, , .		1
162	Characterizing Piezoelectric Cantilevers for Vibration Energy Harvesting under Ambient Conditions. , 2013, , .		1

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163	Design of a 2.5-µm W 1GHz low phase noise pierce oscillator with nanowire NEMS resonator. , 2013, , .		1
164	Nano Carbon 1D and 2D Nanomechanical Resonators. Materials Research Society Symposia Proceedings, 2014, 1693, 37.	0.1	1
165	Scalable High-Frequency Silicon Carbide Optomechanical Microresonators. , 2014, , .		1
166	Exploring parametric resonance effects in bulk-mode CMOS-MEMS resonators. , 2014, , .		1
167	High-frequency SiC microdisk resonators operating in water with responses to H_2O and NH_4OH . , 2014, , .		1
168	Toward ultralow-power computing at extreme with silicon carbide (SiC) nanoelectromechanical logic. , 2014, , .		1
169	Observation of strong temperature hysteresis in molybdenum disulfide (MoS_2) vibrating nanomechanical resonators. , 2015, , .		1
170	Capacitance-voltage (C-V) characterization in very thin suspended silicon nanowires for NEMS-CMOS integration in 160nm Silicon-on-Insulator (SOI). , 2015, , .		1
171	Silicon carbide (SiC) micromechanical self-sustained Oscillator operating in liquid. , 2016, , .		1
172	Wide bandgap $\hat{I}^2-Ga_2O_3$ nanomechanical resonators for detection of middle-ultraviolet (MUV) photon radiation. , 2017, , .		1
173	Dynamic manipulation and patterning of breast cancer cells in biosolution. , 2017, , .		1
174	Mode-Dependent Anchor Loss in Silicon Carbide Micromechanical Disk Resonators. , 2019, , .		1
175	High-Frequency Hexagonal Boron Nitride (h-BN) Phononic Waveguides. , 2019, , .		1
176	Design of Integrated Photonic Devices on SiC-on-Insulator (SiCOI) Platform for Quantum Applications. , 2020, , .		1
177	Nanoelectromechanical systems for ultra-low-power computing and VLSI. , 2009, , .		0
178	Exploiting irregular MoS_2 nanostructures for very high frequency (VHF) nanomechanical resonators with mode shape engineering and frequency control. , 2013, , .		0
179	Vertical carbon nanofiber arrays and nanomechanical resonators with potential for resonant sensing. , 2013, , .		0
180	Toward ultralow-power computing at extreme with silicon carbide (SiC) nanoelectromechanical logic. , 2014, , .		0

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181	Molybdenum Disulfide (MoS ₂) Nanomechanical Resonators Integrated on Microchannels. , 2015, , .		0
182	Towards real-time methane (CH ₄) capture and detection by nanoparticle-enhanced silicon carbide trampoline oscillators. , 2015, , .		0
183	Characterization of thin film lead zirconate titanate (PZT) multimode piezoelectric cantilevers vibrating in ultrasonic band. , 2016, , .		0
184	Design considerations for optimization of pull-in stability margin in electrostatic N/MEM relays. , 2017, , .		0
185	Gallium selenide (GaSe)-molybdenum disulfide (MoS ₂) van der Waals heterojunction diodes. , 2017, , .		0
186	Manipulating and Patterning Micro/Nanoparticles in Liquid Using Multimode Membrane Resonators. , 2018, , .		0
187	Acoustic Actuation of Suspended Graphene For Linear Excitation of 2D NEMS. , 2019, , .		0
188	A Sub-1/4A Quiescent Current Power Management System with SAR-based Adaptive MPPT for Piezoelectric Energy Harvesting. , 2019, , .		0
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