

# Philip X-L Feng

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2913759/publications.pdf>

Version: 2024-02-01

200  
papers

6,260  
citations

109321

35  
h-index

71685

76  
g-index

204  
all docs

204  
docs citations

204  
times ranked

6281  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of Ion-Induced Displacement Damage on GaN/AlN MEMS Resonators. IEEE Transactions on Nuclear Science, 2022, 69, 216-224.	2.0	4
2	Design of strongly nonlinear graphene nanoelectromechanical systems in quantum regime. Applied Physics Letters, 2022, 120, .	3.3	8
3	A perspective on $\text{Ga}_2\text{O}_3$ micro/nanoelectromechanical systems. Applied Physics Letters, 2022, 120, .	3.3	14
4	Giant parametric amplification and spectral narrowing in atomically thin MoS <sub>2</sub> nanomechanical resonators. Applied Physics Reviews, 2022, 9, .	11.3	7
5	Retaining High Q Factors in Electrode-Less Aln-On-Si Bulk Mode Resonators with Non-Contact Electrical Drive. , 2022, , .		2
6	Phononic Frequency Comb Generation via 1:1 Mode Coupling in MoS <sub>2</sub> 2D Nanoelectromechanical Resonators. , 2022, , .		4
7	AlScN $\epsilon$ on $\epsilon$ SiC Thin Film Micromachined Resonant Transducers Operating in High $\hat{\epsilon}$ Temperature Environment up to 600 $\hat{\epsilon}$ C. Advanced Functional Materials, 2022, 32, .	14.9	12
8	Thermal-piezoresistive pumping on double SiC layer resonator for effective quality factor tuning. Sensors and Actuators A: Physical, 2022, 343, 113678.	4.1	2
9	Raman Spectroscopic Probe for Nonlinear MoS <sub>2</sub> Nanoelectromechanical Resonators. Nano Letters, 2022, 22, 5780-5787.	9.1	16
10	Straining and Tuning Atomic Layer Nanoelectromechanical Resonators via Comb $\hat{\epsilon}$ Drive MEMS Actuators. Advanced Materials Technologies, 2021, 6, 2000794.	5.8	13
11	Single-crystal 3C-SiC-on-insulator platform for integrated quantum photonics. Optics Express, 2021, 29, 1011.	3.4	9
12	Nanoelectromechanical Systems: Straining and Tuning Atomic Layer Nanoelectromechanical Resonators via Comb $\hat{\epsilon}$ Drive MEMS Actuators (Adv. Mater. Technol. 2/2021). Advanced Materials Technologies, 2021, 6, 2170008.	5.8	0
13	Ultrawide Frequency Tuning of Atomic Layer van der Waals Heterostructure Electromechanical Resonators. Nano Letters, 2021, 21, 5508-5515.	9.1	26
14	Nanomechanical and Optomechanical Coupling in Silicon Carbide / Hexagonal Boron Nitride Hybrid Resonator. , 2021, , .		2
15	Cavity quantum electrodynamics design with single photon emitters in hexagonal boron nitride. Applied Physics Letters, 2021, 118, 244003.	3.3	10
16	Young's modulus and corresponding orientation in $\hat{\epsilon}$ <sup>2</sup> -Ga <sub>2</sub> O <sub>3</sub> thin films resolved by nanomechanical resonators. Applied Physics Letters, 2021, 119, .	3.3	14
17	Thermal Response and TC $\hat{\epsilon}$ of GaN/AlN Heterostructure Multimode Micro String Resonators From $\hat{\epsilon}$ <sup>10</sup> $\hat{\epsilon}$ C Up to 325 $\hat{\epsilon}$ C. Journal of Microelectromechanical Systems, 2021, 30, 521-529.	2.5	7
18	Development of Dual-Frequency PMUT Arrays Based on Thin Ceramic PZT for Endoscopic Photoacoustic Imaging. Journal of Microelectromechanical Systems, 2021, 30, 770-782.	2.5	17

#	ARTICLE	IF	CITATIONS
19	Temperature Coefficient of Resonance Frequency (TCf) of $\text{In}^2\text{-Ga}_2\text{O}_3$ Nanomechanical Resonators. , 2021, , .		0
20	Hybrid Nanoelectromechanical Switch and Resistive Memory in Silicon Nanowires by VLSI NEMS. , 2021, , .		0
21	Thermal hysteresis controlled reconfigurable MoS <sub>2</sub> nanomechanical resonators. Nanoscale, 2021, 13, 18089-18095.	5.6	14
22	Resolving Mechanical Properties and Morphology Evolution of Free-Standing Ferroelectric Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> . Advanced Engineering Materials, 2021, 23, 2101221.	3.5	9
23	Self-sustaining MoS <sub>2</sub> nanomechanical oscillators and feedback cooling. Applied Physics Letters, 2021, 119, .	3.3	7
24	Atomic Layer MoTe <sub>2</sub> Field-Effect Transistors and Monolithic Logic Circuits Configured by Scanning Laser Annealing. ACS Nano, 2021, 15, 19733-19742.	14.6	13
25	Controlling Polarity of MoTe <sub>2</sub> Transistors for Monolithic Complementary Logic via Schottky Contact Engineering. ACS Nano, 2020, 14, 1457-1467.	14.6	31
26	Electrodynamic Force, Casimir Effect, and Stiction Mitigation in Silicon Carbide Nanoelectromechanical Switches. Small, 2020, 16, 2005594.	10.0	6
27	Determination of Elastic Modulus of Silicon Carbide (SiC) Thin Diaphragms via Mode-Dependent Duffing Nonlinear Resonances. Journal of Microelectromechanical Systems, 2020, 29, 783-789.	2.5	4
28	Electromechanical coupling and motion transduction in $\text{In}^2\text{-Ga}_2\text{O}_3$ vibrating channel transistors. Applied Physics Letters, 2020, 117, .	3.3	7
29	Black Phosphorus NEMS Resonant Infrared (IR) Detector. , 2020, , .		2
30	Beta Gallium Oxide ( $\beta\text{-Ga}_2\text{O}_3$ ) Vibrating Channel Transistor. , 2020, , .		3
31	Resonant Nanoelectromechanical Systems (NEMS): Progress and Emerging Frontiers. , 2020, , .		2
32	A MEMS lens scanner based on serpentine electrothermal bimorph actuators for large axial tuning. Optics Express, 2020, 28, 23439.	3.4	11
33	Design of Integrated Photonic Devices on SiC-on-Insulator (SiCOI) Platform for Quantum Applications. , 2020, , .		1
34	Hexagonal Boron Nitride Phononic Crystal Waveguides. ACS Photonics, 2019, 6, 3225-3232.	6.6	36
35	Very High-Frequency Silicon Carbide Microdisk Resonators With Multimode Responses in Water for Particle Sensing. Journal of Microelectromechanical Systems, 2019, 28, 941-953.	2.5	21
36	Mode-Dependent Anchor Loss in Silicon Carbide Micromechanical Disk Resonators. , 2019, , .		1

#	ARTICLE	IF	CITATIONS
37	Acoustic Actuation of Suspended Graphene For Linear Excitation of 2D NEMS. , 2019, , .		0
38	Few-Layer Mote<sub>2</sub> Suspended Channel Transistors and Nanoelectromechanical Resonators. , 2019, , .		4
39	AlN Piezoelectric Nanoelectromechanical Isolator via Parametric Frequency Conversion and Amplification. , 2019, , .		2
40	GaN/AlN Heterostrucutre Micromechanical Self-Sustained Oscillator for Middle Ultraviolet (MUV) Light Detection. , 2019, , .		2
41	A Self-Sustained Frequency Comb Oscillator via Tapping Mode Comb-Drive Resonator Integrated with a Feedback ASIC. , 2019, , .		5
42	Tracing and Resolving Microparticle Aquatic Mass Motion and Distribution on Multimode Silicon Carbide Microdisk Resonators. , 2019, , .		2
43	High-Frequency Hexagonal Boron Nitride (h-BN) Phononic Waveguides. , 2019, , .		1
44	Imaging Multimode Vibrations in High-Frequency Aluminum Nitride Piezoelectric Nanomembrane Resonators. , 2019, , .		2
45	Frequency Tuning of Two-Dimensional Nanoelectromechanical Resonators Via Comb-Drive Mems Actuators. , 2019, , .		7
46	Study of Energy Loss Mechanisms in AlN-Based Piezoelectric Length Extensional-Mode Resonators. Journal of Microelectromechanical Systems, 2019, 28, 619-627.	2.5	18
47	Probing heavy ion radiation effects in silicon carbide (SiC) via 3D integrated multimode vibrating diaphragms. Applied Physics Letters, 2019, 114, .	3.3	7
48	Beta gallium oxide ( $\beta$ -Ga <sub>2</sub> O <sub>3</sub> ) nanoelectromechanical transducer for dual-modality solar-blind ultraviolet light detection. APL Materials, 2019, 7, .	5.1	23
49	Electronic Applications of Black Phosphorus Thin Films. ACS Symposium Series, 2019, , 179-194.	0.5	2
50	A Sub- $\frac{1}{4}$ A Quiescent Current Power Management System with SAR-based Adaptive MPPT for Piezoelectric Energy Harvesting. , 2019, , .		0
51	A Programmable Sustaining Amplifier for Flexible Multimode MEMS-Referenced Oscillators. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 1405-1418.	5.4	8
52	Hexagonal boron nitride (h-BN) 2D nanoscale devices for classical and quantum signal transduction. , 2019, , .		2
53	Polarization sensitive black phosphorus nanomechanical resonators. Optical Materials Express, 2019, 9, 526.	3.0	12
54	Optical contrast signatures of hexagonal boron nitride on a device platform. Optical Materials Express, 2019, 9, 1223.	3.0	7

#	ARTICLE	IF	CITATIONS
55	Photophysical Characterization of Quantum Emitters in Hexagonal Boron Nitride (h-BN). , 2019, , .		0
56	A Study on Light Coupling Effects in Hexagonal Boron Nitride Crystals for Quantum Photonic Designs. , 2019, , .		0
57	Self-powering wireless sensors for temperature sensing and monitoring in power generation applications (Conference Presentation). , 2019, , .		0
58	Free-Standing $\text{In}_2\text{Ga}_2\text{O}_3$ Thin Diaphragms. Journal of Electronic Materials, 2018, 47, 973-981.	2.2	4
59	Electrothermally Tunable Graphene Resonators Operating at Very High Temperature up to 1200 K. Nano Letters, 2018, 18, 1678-1685.	9.1	65
60	All-dry transferred single- and few-layer MoS <sub>2</sub> field effect transistor with enhanced performance by thermal annealing. Journal of Applied Physics, 2018, 123, .	2.5	23
61	All-electrical transduction of black phosphorus tunable 2D nanoelectromechanical resonators. , 2018, , .		5
62	Electrically tunable single- and few-layer MoS <sub>2</sub> nanoelectromechanical systems with broad dynamic range. Science Advances, 2018, 4, eaao6653.	10.3	126
63	An Ultralow Quiescent Current Power Management System With Maximum Power Point Tracking (MPPT) for Batteryless Wireless Sensor Applications. IEEE Transactions on Power Electronics, 2018, 33, 7326-7337.	7.9	37
64	Manipulating and Patterning Micro/Nanoparticles in Liquid Using Multimode Membrane Resonators. , 2018, , .		0
65	Investigation of Electrostatic Gating in Two-Dimensional Transitional Metal Dichalcogenide (TMDC) Field Effect Transistors (FETs). , 2018, , .		2
66	A Temperature-Compensated Single-Crystal Silicon-on-Insulator (SOI) MEMS Oscillator with a CMOS Amplifier Chip. Micromachines, 2018, 9, 559.	2.9	12
67	Glowing Graphene Nanoelectromechanical Resonators at Ultra-High Temperature up to 2650K. , 2018, , .		6
68	Nanoelectromechanical Resonators Enabled by Si-Doped Semiconducting $\text{In}_2\text{GaIn}_2\text{O}_3$ Nanobelts. , 2018, , .		2
69	Standard and inverse microscale Chladni figures in liquid for dynamic patterning of microparticles on chip. Journal of Applied Physics, 2018, 124, .	2.5	11
70	Anisotropic Thermal Conductivity of Suspended Black Phosphorus Probed by Opto-Thermomechanical Resonance Spectromicroscopy. Nano Letters, 2018, 18, 7683-7691.	9.1	37
71	$\text{In}_2\text{GaIn}_2\text{O}_3$ NEMS Oscillator for Real-Time Middle Ultraviolet (MUV) Light Detection. IEEE Electron Device Letters, 2018, 39, 1230-1233.	3.9	11
72	Gate-Tuned Temperature in a Hexagonal Boron Nitride-Encapsulated 2-D Semiconductor Device. IEEE Transactions on Electron Devices, 2018, 65, 4068-4072.	3.0	12

#	ARTICLE	IF	CITATIONS
73	Discerning Black Phosphorus Crystal Orientation and Anisotropy by Polarized Reflectance Measurement. ACS Applied Materials & Interfaces, 2018, 10, 25629-25637.	8.0	20
74	Frequency Tuning of Graphene Nanoelectromechanical Resonators via Electrostatic Gating. Micromachines, 2018, 9, 312.	2.9	17
75	Molybdenum disulfide (MoS <sub>2</sub> ) nanoelectromechanical resonators with on-chip aluminum nitride (AlN) piezoelectric excitation. , 2018, , .		4
76	Atomic Layer GaSe/MoS <sub>2</sub> van der Waals Heterostructure Photodiodes with Low Noise and Large Dynamic Range. ACS Photonics, 2018, 5, 2693-2700.	6.6	51
77	Correlating Macroscopic and Microscopic Vibrations in Silicon Carbide (SiC) Micromechanical Resonators. , 2018, , .		0
78	EFFECT OF DIELECTRIC LOSS ON THE QUALITY FACTORS OF PIEZOELECTRICALLY DRIVEN LENGTH EXTENSIONAL MODE RESONATORS. , 2018, , .		0
79	Synthesis and characterization of Ga <sub>2</sub> O <sub>3</sub> nanosheets on 3C-SiC-on-Si by low pressure chemical vapor deposition. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, 011208.	1.2	9
80	Very-wide electrothermal tuning of graphene nanoelectromechanical resonators. , 2017, , .		3
81	Local-gate electrical actuation, detection, and tuning of atomic-layer MoS <sub>2</sub> nanoelectromechanical resonators. , 2017, , .		5
82	Wide bandgap $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> nanomechanical resonators for detection of middle-ultraviolet (MUV) photon radiation. , 2017, , .		1
83	Dynamic manipulation and patterning of breast cancer cells in biosolution. , 2017, , .		1
84	Effects of heterostructure stacking on acoustic dissipation in coupled-ring resonators. , 2017, , .		2
85	3C-SiC microdisk mechanical resonators with multimode resonances at radio frequencies. Journal of Micromechanics and Microengineering, 2017, 27, 074001.	2.6	3
86	Tuning Optical Signatures of Single- and Few-Layer MoS <sub>2</sub> by Blown-Bubble Bulge Straining up to Fracture. Nano Letters, 2017, 17, 4568-4575.	9.1	79
87	The study of radiation effects in emerging micro and nano electro mechanical systems (M and NEMs). Semiconductor Science and Technology, 2017, 32, 013005.	2.0	27
88	Atomic layer MoS <sub>2</sub> -graphene van der Waals heterostructure nanomechanical resonators. Nanoscale, 2017, 9, 18208-18215.	5.6	48
89	Effects of asymmetric Schottky contacts on photoresponse in tungsten diselenide (WSe <sub>2</sub> ) phototransistor. Journal of Applied Physics, 2017, 122, .	2.5	16
90	Hexagonal boron nitride nanomechanical resonators with spatially visualized motion. Microsystems and Nanoengineering, 2017, 3, 17038.	7.0	69

#	ARTICLE	IF	CITATIONS
91	Carbon nanofiber high frequency nanomechanical resonators. <i>Nanoscale</i> , 2017, 9, 11864-11870.	5.6	5
92	mm-Scale and MEMS piezoelectric energy harvesters powering on-chip CMOS temperature sensing for IoT applications. , 2017, , .		7
93	Design considerations for optimization of pull-in stability margin in electrostatic N/MEM relays. , 2017, , .		0
94	MEMS/NEMS Devices and Applications. <i>Springer Handbooks</i> , 2017, , 395-429.	0.6	13
95	Ultrawide Band Gap $\text{In}^2\text{-Ga}_{2\text{O}_3}$ Nanomechanical Resonators with Spatially Visualized Multimode Motion. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 43090-43097.	8.0	30
96	An ultra-low quiescent current power management ASIC with MPPT for vibrational energy harvesting. , 2017, , .		12
97	Energetic ion radiation effects on a silicon carbide (SiC) multimode resonating diaphragm. , 2017, , .		2
98	Gallium selenide (GaSe)-molybdenum disulfide ( $\text{MoS}_2$ ) van der Waals heterojunction diodes. , 2017, , .		0
99	A battery-less, 255 nA quiescent current temperature sensor with voltage regulator fully powered by harvesting ambient vibrational energy. , 2017, , .		7
100	Nanoelectromechanical Systems Secure FPGA and Security Primitives. , 2017, , 307-326.		0
101	Single- and few-layer transfer-printed CVD $\text{MoS}_2$ nanomechanical resonators with enhancement by thermal annealing. , 2016, , .		4
102	Characterization of thin film lead zirconate titanate (PZT) multimode piezoelectric cantilevers vibrating in ultrasonic band. , 2016, , .		0
103	Interferometric Motion Detection in Atomic Layer 2D Nanostructures: Visualizing Signal Transduction Efficiency and Optimization Pathways. <i>Scientific Reports</i> , 2016, 6, 28923.	3.3	27
104	All-electrical readout of atomically-thin $\text{MoS}_2$ nanoelectromechanical resonators in the VHF band. , 2016, , .		13
105	Silicon carbide (SiC) micromechanical self-sustained Oscillator operating in liquid. , 2016, , .		1
106	Large-scale arrays of single- and few-layer $\text{MoS}_2$ nanomechanical resonators. <i>Nanoscale</i> , 2016, 8, 10677-10685.	5.6	51
107	Environmental Instability and Degradation of Single- and Few-Layer $\text{WTe}_2$ Nanosheets in Ambient Conditions. <i>Small</i> , 2016, 12, 5802-5808.	10.0	96
108	Resolving and Tuning Mechanical Anisotropy in Black Phosphorus via Nanomechanical Multimode Resonance Spectromicroscopy. <i>Nano Letters</i> , 2016, 16, 5394-5400.	9.1	75

#	ARTICLE	IF	CITATIONS
109	A programmable CMOS feedback IC for reconfigurable MEMS-referenced oscillators. , 2016, , .		4
110	Effects of $\hat{\gamma}$ -ray radiation on two-dimensional molybdenum disulfide (MoS <sub>2</sub> ) nanomechanical resonators. Applied Physics Letters, 2016, 108, .	3.3	40
111	Single- and few-layer WTe <sub>2</sub> and their suspended nanostructures: Raman signatures and nanomechanical resonances. Nanoscale, 2016, 8, 7854-7860.	5.6	44
112	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.	2.4	18
113	Nanostructures and Characteristics of Carbon Nanofibers. , 2016, , 2747-2764.		0
114	MULTIMODE BLACK PHOSPHORUS NANOMECHANICAL RESONATORS WITH INTRINSIC MECHANICAL ANISOTROPY AND ELECTRICAL TUNABILITY. , 2016, , .		3
115	ELECTRICAL AND OPTICAL TRANSDUCTION OF SINGLE-CRYSTAL 3C-SiC COMB-DRIVE RESONATORS IN A SiC-ON-INSULATOR (SiCOI) TECHNOLOGY. , 2016, , .		0
116	Molybdenum Disulfide (MoS <sub>2</sub> ) Nanomechanical Resonators Integrated on Microchannels. , 2015, , .		0
117	Calibrating temperature coefficient of frequency (TCf) and thermal expansion coefficient (&#x03B1) of MoS <sub>2</sub> nanomechanical resonators. , 2015, , .		6
118	Two-dimensional MoS <sub>2</sub> nanomechanical resonators freely suspended on microtrenches on flexible substrate. , 2015, , .		4
119	Observation of strong temperature hysteresis in molybdenum disulfide (MoS <sub>2</sub> ) vibrating nanomechanical resonators. , 2015, , .		1
120	Silicon Carbide (SiC) Nanoelectromechanical Antifuse for Ultralow-Power One-Time-Programmable (OTP) FPGA Interconnects. IEEE Journal of the Electron Devices Society, 2015, 3, 323-335.	2.1	13
121	Probing contact-mode characteristics of silicon nanowire electromechanical systems with embedded piezoresistive transducers. Journal of Micromechanics and Microengineering, 2015, 25, 095014.	2.6	6
122	Capacitance-voltage (C-V) characterization in very thin suspended silicon nanowires for NEMS-CMOS integration in 160nm Silicon-on-Insulator (SOI). , 2015, , .		1
123	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.	3.9	22
124	Culturing and probing physical behavior of individual breast cancer cells on SiC microdisk resonators. , 2015, , .		10
125	High frequency torsional-mode nanomechanical resonators enabled by very thin nanocrystalline diamond diaphragms. Diamond and Related Materials, 2015, 54, 19-25.	3.9	4
126	Design of black phosphorus 2D nanomechanical resonators by exploiting the intrinsic mechanical anisotropy. 2D Materials, 2015, 2, 021001.	4.4	46



#	ARTICLE	IF	CITATIONS
127	Environmental, thermal, and electrical susceptibility of black phosphorus field effect transistors. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2015, 33, 052202.	1.2	19
128	Towards real-time methane (CH <sub>4</sub> ) capture and detection by nanoparticle-enhanced silicon carbide trampoline oscillators. , 2015, , .		0
129	NEMS switches: Opportunities and challenges in emerging IC technologies. , 2015, , .		7
130	A wireless temperature sensor powered by a piezoelectric resonant energy harvesting system. , 2015, , .		4
131	Multimode SiC trampoline resonators manipulate microspheres to create Chladni figures. , 2015, , .		3
132	Hexagonal boron nitride (h-BN) nanomechanical resonators with temperature-dependent multimode operations. , 2015, , .		5
133	Electromechanical coupling and design considerations in single-layer MoS <sub>2</sub> suspended-channel transistors and resonators. Nanoscale, 2015, 7, 19921-19929.	5.6	15
134	Black phosphorus nanoelectromechanical resonators vibrating at very high frequencies. Nanoscale, 2015, 7, 877-884.	5.6	128
135	Embracing Structural Nonidealities and Asymmetries in Two-Dimensional Nanomechanical Resonators. Scientific Reports, 2015, 4, 3919.	3.3	38
136	Nanostructures and Characteristics of Carbon Nanofibers. , 2015, , 1-18.		0
137	Smart-cut 6H-silicon carbide (SiC) microdisk torsional resonators with sensitive photon radiation detection. , 2014, , .		7
138	Multimode characteristics of high-frequency CMOS-MEMS resonators. , 2014, , .		4
139	Two-dimensional nanoelectromechanical systems (2D NEMS) via atomically-thin semiconducting crystals vibrating at radio frequencies. , 2014, , .		12
140	High Q silicon carbide microdisk resonator. Applied Physics Letters, 2014, 104, .	3.3	62
141	Multilayer MoS <sub>2</sub> transistors enabled by a facile dry-transfer technique and thermal annealing. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2014, 32, .	1.2	113
142	Air damping of atomically thin MoS <sub>2</sub> nanomechanical resonators. Applied Physics Letters, 2014, 105, .	3.3	70
143	Toward ultralow-power computing at extreme with silicon carbide (SiC) nanoelectromechanical logic. , 2014, , .		0
144	6H-SiC microdisk torsional resonators in a "smart-cut" technology. Applied Physics Letters, 2014, 104, 091906.	3.3	16

#	ARTICLE	IF	CITATIONS
145	Nano Carbon 1D and 2D Nanomechanical Resonators. Materials Research Society Symposia Proceedings, 2014, 1693, 37.	0.1	1
146	Temperature dependence of torsional and flexural modes in 6H-SiC microdisk resonators. , 2014, , .		5
147	Scalable High-Frequency Silicon Carbide Optomechanical Microresonators. , 2014, , .		1
148	Interrogating contact-mode silicon carbide (SiC) nanoelectromechanical switching dynamics by ultrasensitive laser interferometry. , 2014, , .		7
149	Exploring parametric resonance effects in bulk-mode CMOS-MEMS resonators. , 2014, , .		1
150	High-frequency SiC microdisk resonators operating in water with responses to $H_2O$ and $NH_4OH$ . , 2014, , .		1
151	Electrical breakdown of multilayer $MoS_2$ field-effect transistors with thickness-dependent mobility. Nanoscale, 2014, 6, 12383-12390.	5.6	74
152	Spatial mapping of multimode Brownian motions in high-frequency silicon carbide microdisk resonators. Nature Communications, 2014, 5, 5158.	12.8	75
153	Fabrication of Electrically Conductive Metal Patterns at the Surface of Polymer Films by Microplasma-Based Direct Writing. ACS Applied Materials & Interfaces, 2014, 6, 3099-3104.	8.0	38
154	Atomically-thin $MoS_2$ resonators for pressure sensing. , 2014, , .		2
155	Dynamic range of atomically thin vibrating nanomechanical resonators. Applied Physics Letters, 2014, 104, .	3.3	33
156	Toward ultralow-power computing at extreme with silicon carbide (SiC) nanoelectromechanical logic. , 2014, , .		1
157	3C-SiC Nanobeam Optomechanical Crystals. , 2014, , .		2
158	Tuning in to a graphene oscillator. Nature Nanotechnology, 2013, 8, 897-898.	31.5	17
159	Silicon nanowire and cantilever electromechanical switches with integrated piezoresistive transducers. , 2013, , .		8
160	Robust silicon carbide (SiC) nanoelectromechanical switches with long cycles in ambient and high temperature conditions. , 2013, , .		14
161	Dual-gate silicon carbide (SiC) lateral nanoelectromechanical switches. , 2013, , .		9
162	Polytype control of spin qubits in silicon carbide. Nature Communications, 2013, 4, 1819.	12.8	292

#	ARTICLE	IF	CITATIONS
163	High Frequency MoS <sub>2</sub> Nanomechanical Resonators. ACS Nano, 2013, 7, 6086-6091.	14.6	262
164	Nanoelectromechanical switching devices: Scaling toward ultimate energy efficiency and longevity. , 2013, , .		2
165	Exploiting irregular MoS <sub>2</sub> nanostructures for very high frequency (VHF) nanomechanical resonators with mode shape engineering and frequency control. , 2013, , .		0
166	MEMS wireless implantable systems: historical review and perspectives. , 2013, , 401-423.		1
167	Silicon carbide microdisk resonator. Optics Letters, 2013, 38, 1304.	3.3	60
168	Multimode characteristics in mechanically-coupled silicon carbide (SiC) nanowire array resonators. , 2013, , .		1
169	High frequency top-down junction-less silicon nanowire resonators. Nanotechnology, 2013, 24, 435203.	2.6	17
170	Time-domain AC characterization of silicon carbide (SiC) nanoelectromechanical switches toward high-speed operations. , 2013, , .		9
171	Vertical carbon nanofiber arrays and nanomechanical resonators with potential for resonant sensing. , 2013, , .		0
172	Characterizing Piezoelectric Cantilevers for Vibration Energy Harvesting under Ambient Conditions. , 2013, , .		1
173	A piezoresistive CMOS-MEMS resonator with high Q and low TC. , 2013, , .		3
174	Frequency scaling of molybdenum disulfide (MoS <sub>2</sub> ) two-dimensional (2D) nanomechanical resonators. , 2013, , .		2
175	Design of a 2.5GHz 1GHz low phase noise pierce oscillator with nanowire NEMS resonator. , 2013, , .		1
176	Nanomechanical non-volatile memory for computing at extreme. , 2013, , .		5
177	Silicon carbide (SiC) nanoelectromechanical switches and logic gates with long cycles and robust performance in ambient air and at high temperature. , 2013, , .		18
178	Amorphous Silicon Carbide (a-SiC) Thin Square Membranes for Resonant Micromechanical Devices. Materials Science Forum, 2012, 717-720, 533-536.	0.3	6
179	Characterization of Plasma Synthesized Vertical Carbon Nanofibers for Nanoelectronics Applications. Materials Research Society Symposia Proceedings, 2012, 1451, 117-122.	0.1	5
180	Extraction of a low-current discharge from a microplasma for nanoscale patterning applications at atmospheric pressure. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 010603.	1.2	11

#	ARTICLE	IF	CITATIONS
181	Diaphragm-based microsystems using thin film silicon carbide. , 2012, , .		2
182	Pressure dependence of thin polycrystalline silicon carbide diaphragm resonators. , 2012, , .		4
183	High frequency graphene nanomechanical resonators and transducers. , 2012, , .		8
184	Ex vivo monitoring of rat heart wall motion using piezoelectric cantilevers. , 2011, , .		1
185	Surface Adsorbate Fluctuations and Noise in Nanoelectromechanical Systems. Nano Letters, 2011, 11, 1753-1759.	9.1	93
186	Silicon carbide (SiC) membrane nanomechanical resonators with multiple vibrational modes. , 2011, , .		8
187	Low Voltage Nanoelectromechanical Switches Based on Silicon Carbide Nanowires. Nano Letters, 2010, 10, 2891-2896.	9.1	163
188	Silicon carbide (SiC) top-down nanowire electromechanical resonators. , 2009, , .		7
189	Piezoelectric nanoelectromechanical resonators based on aluminum nitride thin films. Applied Physics Letters, 2009, 95, .	3.3	148
190	Towards single-molecule nanomechanical mass spectrometry. Nature Nanotechnology, 2009, 4, 445-450.	31.5	602
191	Nanoelectromechanical systems for ultra-low-power computing and VLSI. , 2009, , .		0
192	Parametric Nanomechanical Amplification at Very High Frequency. Nano Letters, 2009, 9, 3116-3123.	9.1	84
193	A self-sustaining ultrahigh-frequency nanoelectromechanical oscillator. Nature Nanotechnology, 2008, 3, 342-346.	31.5	266
194	Self-Transducing Silicon Nanowire Electromechanical Systems at Room Temperature. Nano Letters, 2008, 8, 1756-1761.	9.1	233
195	Quality Factors and Energy Losses of Single-Crystal Silicon Nanowire Electromechanical Resonators. , 2007, , .		2
196	Phase Noise and Frequency Stability of Very-High Frequency Silicon Nanowire Nanomechanical Resonators. , 2007, , .		6
197	Very High Frequency Silicon Nanowire Electromechanical Resonators. Nano Letters, 2007, 7, 1953-1959.	9.1	381
198	Zeptogram-Scale Nanomechanical Mass Sensing. Nano Letters, 2006, 6, 583-586.	9.1	940

#	ARTICLE	IF	CITATIONS
199	VHF, UHF and microwave frequency nanomechanical resonators. <i>New Journal of Physics</i> , 2005, 7, 247-247.	2.9	106
200	Focused Ion-Beam (FIB) Nanomachining of Silicon Carbide (SiC) Stencil Masks for Nanoscale Patterning. <i>Materials Science Forum</i> , 0, 717-720, 889-892.	0.3	2