

# Zhenyun Qian

## List of Publications by Year in descending order

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Version: 2024-02-01

27  
papers

1,054  
citations

933447

10  
h-index

996975

15  
g-index

27  
all docs

27  
docs citations

27  
times ranked

1222  
citing authors

#	ARTICLE	IF	CITATIONS
1	Acoustically actuated ultra-compact NEMS magnetolectric antennas. Nature Communications, 2017, 8, 296.	12.8	299
2	Plasmonic piezoelectric nanomechanical resonator for spectrally selective infrared sensing. Nature Communications, 2016, 7, 11249.	12.8	132
3	Zero-power infrared digitizers based on plasmonically enhanced micromechanical photoswitches. Nature Nanotechnology, 2017, 12, 969-973.	31.5	111
4	Ultra-Narrowband Metamaterial Absorbers for High Spectral Resolution Infrared Spectroscopy. Advanced Optical Materials, 2019, 7, 1801236.	7.3	91
5	Aluminum Nitride Cross-Sectional Lamina Mode Resonators. Journal of Microelectromechanical Systems, 2016, 25, 275-285.	2.5	89
6	Ultra-sensitive NEMS magnetolectric sensor for picotesla DC magnetic field detection. Applied Physics Letters, 2017, 110, .	3.3	83
7	Graphene-aluminum nitride NEMS resonant infrared detector. Microsystems and Nanoengineering, 2016, 2, 16026.	7.0	60
8	Graphene as a Massless Electrode for Ultrahigh-Frequency Piezoelectric Nanoelectromechanical Systems. Nano Letters, 2015, 15, 4599-4604.	9.1	53
9	Zero-Power Electrically Tunable Micromechanical Photoswitches. IEEE Sensors Journal, 2018, 18, 7833-7841.	4.7	23
10	Tutorial: Piezoelectric and magnetolectric N/MEMS Materials, devices, and applications. Journal of Applied Physics, 2022, 131, .	2.5	14
11	A 2.8 GHz combined mode of vibration aluminum nitride MEMS resonator with high figure of merit exceeding 45. , 2013, , .		12
12	Ultra narrowband infrared absorbers for omni-directional and polarization insensitive multi-spectral sensing microsystems. , 2017, , .		10
13	Threshold scaling of near-zero power micromechanical photoswitches using bias voltage. , 2017, , .		10
14	High figure-of-merit NEMS thermal detectors based on 50-nm thick AlN nano-plate resonators. Applied Physics Letters, 2019, 115, .	3.3	10
15	Single transistor oscillator based on a Graphene-Aluminum Nitride nano plate resonator. , 2013, , .		9
16	Uncooled Infrared Detector Based on an Aluminum Nitride Piezoelectric Fishnet Metasurface. Journal of Microelectromechanical Systems, 2021, 30, 165-172.	2.5	9
17	Zero-power light-actuated micromechanical relay. , 2017, , .		8
18	Curvature and Stress Effects on the Performance of Contour-Mode Resonant Effect Magnetometers. Advanced Materials Technologies, 2021, 6, 2100294.	5.8	7

#	ARTICLE	IF	CITATIONS
19	A cumulative fatigue damage model of polysilicon films for MEMS resonator under repeated loadings. International Journal of Fatigue, 2021, 147, 106186.	5.7	7
20	Tunable RF band-pass filters based on NEMS magnetoelectric resonators. , 2016, , .		5
21	Spectroscopic Chemical Sensing Based on Narrowband MEMS Resonant Infrared Detectors. , 2018, , .		5
22	Aluminum Nitride cross-sectional Lamé mode resonators with 260 MHz lithographic tuning capability and high $kt^2 > 4\%$ . , 2016, , .		2
23	Effects of volume scaling in AlN nano plate resonators on quality factor. , 2016, , .		2
24	Chemical sensing based on graphene-aluminum nitride nano plate resonators. , 2015, , .		1
25	Effects of Bottom Electrode Topography in AlN Nano Plate Resonators on Quality Factor. , 2018, , .		1
26	A method for infrared sensing based on oscillating zero power microelectromechanical photoswitches. Journal of Applied Physics, 2022, 131, .	2.5	1
27	A False Alarm-Free Zero-Power Micromechanical Photoswitch. , 2018, , .		0