

# Michael Lu

## List of Publications by Year in descending order

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49  
papers

529  
citations

759233

12  
h-index

677142

22  
g-index

50  
all docs

50  
docs citations

50  
times ranked

621  
citing authors

#	ARTICLE	IF	CITATIONS
1	An Integrated Low-Noise Sensing Circuit With Efficient Bias Stabilization for CMOS MEMS Capacitive Accelerometers. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 2661-2672.	5.4	66
2	5Å–5 CMOS capacitive sensor array for detection of the neurotransmitter dopamine. Biosensors and Bioelectronics, 2010, 26, 1093-1097.	10.1	51
3	A CMOS Micromachined Capacitive Tactile Sensor With High-Frequency Output. Journal of Microelectromechanical Systems, 2006, 15, 1708-1714.	2.5	48
4	Ultrasensitive and label-free detection of pathogenic avian influenza DNA by using CMOS impedimetric sensors. Biosensors and Bioelectronics, 2012, 35, 456-460.	10.1	48
5	CMOS Open-Gate Ion-Sensitive Field-Effect Transistors for Ultrasensitive Dopamine Detection. IEEE Transactions on Electron Devices, 2010, 57, 2761-2767.	3.0	44
6	A CMOS Micromachined Capacitive Sensor Array for Fingerprint Detection. IEEE Sensors Journal, 2012, 12, 1004-1010.	4.7	34
7	A CMOS MEMS Capacitive Flow Sensor for Respiratory Monitoring. IEEE Sensors Journal, 2013, 13, 1401-1402.	4.7	30
8	A Flexible Capacitive Tactile Sensor Array With CMOS Readout Circuits for Pulse Diagnosis. IEEE Sensors Journal, 2015, 15, 1170-1177.	4.7	18
9	CMOS Capacitive Sensors With Sub- $\mu\text{m}$ Microelectrodes for Biosensing Applications. IEEE Sensors Journal, 2010, 10, 991-996.	4.7	17
10	A Closed-Loop Controlled CMOS MEMS Biaxial Scanning Mirror for Projection Displays. IEEE Sensors Journal, 2020, 20, 242-249.	4.7	16
11	CMOS Ion Sensitive Field Effect Transistors for Highly Sensitive Detection of DNA Hybridization. IEEE Sensors Journal, 2020, 20, 8930-8937.	4.7	16
12	Electrochemical Detection of the Neurotransmitter Dopamine by Nanoimprinted Interdigitated Electrodes and a CMOS Circuit With Enhanced Collection Efficiency. IEEE Sensors Journal, 2011, 11, 1826-1831.	4.7	14
13	CMOS Thermal Sensor Arrays for Enzymatic Glucose Detection. IEEE Sensors Journal, 2011, 11, 3469-3475.	4.7	11
14	Three-Dimensional Photoacoustic Imaging by a CMOS Micromachined Capacitive Ultrasonic Sensor. IEEE Electron Device Letters, 2011, 32, 1149-1151.	3.9	9
15	Highly Sensitive DNA Detection Beyond the Debye Screening Length Using CMOS Field Effect Transistors. IEEE Electron Device Letters, 2021, 42, 1220-1223.	3.9	9
16	A CMOS MEMS thermal sensor with high frequency output. , 2008, , .		8
17	Design and characterization of a CMOS MEMS capacitive resonant sensor array. Journal of Micromechanics and Microengineering, 2012, 22, 125030.	2.6	8
18	A CMOS capacitive biosensor array for highly sensitive detection of pathogenic avian influenza DNA. , 2017, , .		8

#	ARTICLE	IF	CITATIONS
19	A Large-Displacement CMOS-Micromachined Thermal Actuator with Capacitive Position Sensing. , 2005, , .		7
20	Design of low-noise CMOS MEMS accelerometer with techniques for thermal stability and stable DC biasing. , 2010, , .		7
21	A bi-axial capacitive scanning mirror with closed-loop control. , 2018, , .		7
22	CMOS Biosensors for the Detection of DNA Hybridization in High Ionic-Strength Solutions. IEEE Sensors Journal, 2021, 21, 4135-4142.	4.7	7
23	A CMOS MEMS capacitive resonant sensor array utilizing a PLL-based oscillator loop. , 2013, , .		6
24	Design and Characterization of a CMOS MEMS Capacitive Oscillator for Resonant Sensing in Liquids. IEEE Sensors Journal, 2016, 16, 1136-1142.	4.7	5
25	Development of CMOS Micromachined Capacitive Squeeze-Film Pressure Sensors. IEEE Sensors Journal, 2020, 20, 9698-9705.	4.7	5
26	Design and Characterization of Capacitively Sensed Squeeze-Film Pressure Sensors. IEEE Sensors Journal, 2019, 19, 1653-1660.	4.7	4
27	A CMOS capacitive dopamine sensor with Sub-nM detection resolution. , 2009, , .		3
28	Ultrasensitive detection of avian influenza virus by using CMOS impedimetric sensor arrays. , 2012, , .		3
29	Design and Characterization of a CMOS MEMS Capacitive Squeeze-Film Pressure Sensor. , 2019, , .		3
30	A CMOS MEMS capacitive ultrasonic sensor array for three-dimensional photoacoustic imaging. , 2013, , .		2
31	CMOS Ion Sensitive Field Effect Transistors for Detection of DNA Hybridization Under Debye Screen Effect. , 2020, , .		2
32	Design and Characterization of a CMOS MEMS Capacitive Squeeze-Film Pressure Sensor with High Sensitivity. , 2020, , .		2
33	Design and Characterization of a CMOS Electromagnetic Scanning Mirror for LiDAR Applications. , 2022, 6, 1-4.		2
34	A CMOS Micromachined Gripper Array with On-Chip Optical Detection. , 2006, , .		1
35	A Novel CMOS MEMS Accelerometer with Four Sensing Finger Arrays. , 2006, , .		1
36	CMOS open-gate ion sensitive field effect transistors for femto-molar dopamine detection. , 2010, , .		1

#	ARTICLE	IF	CITATIONS
37	An 8&#x00D7;8 CMOS microelectrode array for electrochemical dopamine detection. , 2011, , .		1
38	Towards resonant sensing in liquids by using CMOS MEMS capacitive oscillators. , 2015, , .		1
39	Automated Resonance Matching for CMOS MEMS Micro-Resonators. IEEE Sensors Journal, 2016, 16, 7685-7692.	4.7	1
40	Piezoelectrically-driven capacitively-sensed squeeze-film pressure sensors. , 2018, , .		1
41	Design and Characterization of a CMOS Capacitive Sensor Array for Fast Normal Stress Analysis. , 2022, 6, 1-4.		1
42	Detection of DNA Hybridization Beyond the Debye Screening Length by CMOS Capacitive Sensors. IEEE Electron Device Letters, 2022, 43, 1319-1322.	3.9	1
43	An Electrochemical Dopamine Sensor with CMOS Detection Circuit. , 2007, , .		0
44	CMOS micromachined capacitive cantilevers for EFM-based mass data storage. , 2008, , .		0
45	Class-based CMOS capacitive sensors for dopamine detection. , 2011, , .		0
46	An integrated micromanipulation and biosensing platform built in glass-based LTPS TFT technology. , 2012, , .		0
47	A CMOS capacitive micromechanical oscillator driven by a phase-locked loop. , 2012, , .		0
48	A CMOS micromanipulation and capacitive immunosensor array towards single magnetic microbead detection. , 2013, , .		0
49	A Closed-Loop Controlled Cmos Mems Biaxial Scanning Mirror for Projection Display. , 2019, , .		0