Zeynep Ãelik-Butler

List of Publications by Year
in descending order

70	1,153	304743	434195
papers	citations	22 h-index	31 g-index

70	70	70	992
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Identification of Channel Hot Carrier Stress-Induced Oxide Traps Leading to Random Telegraph Signals in pMOSFETs. IEEE Transactions on Electron Devices, 2021, 68, 713-719.	3.0	3
2	Self-Packaged, Flexible, Bendable MEMS Sensors and Energy Harvesters. IEEE Sensors Journal, 2021, 21, 12606-12617.	4.7	8
3	Channel hot carrier induced volatile oxide traps responsible for random telegraph signals in submicron pMOSFETs. Solid-State Electronics, 2020, 164, 107745.	1.4	6
4	A novel MEMS triboelectric energy harvester and sensor with a high vibrational operating frequency and wide bandwidth fabricated using UV-LIGA technique. Sensors and Actuators A: Physical, 2020, 313, 112175.	4.1	22
5	Smart Skin: Multifunctional Flexible Sensor Arrays. Women in Engineering and Science, 2020, , 65-78.	0.4	2
6	Investigation of Quantization Effects on RTS Due to Oxide Traps Induced by Channel Hot-Carrier-Stressing in pMOSFETs. IEEE Transactions on Device and Materials Reliability, 2020, 20, 678-685.	2.0	1
7	Guest Editorial Special Issue on Papers From the IEEE FLEPS Conference 2019. IEEE Sensors Journal, 2020, 20, 7493-7493.	4.7	1
8	Oxide Trap-Induced RTS in MOSFETs. , 2020, , 553-607.		3
9	Array of Linear and Nonlinear Electrostatic Energy Harvesters for Broadband Energy Harvesting. , 2019, , .		3
10	Design and Optimization of a MEMS Triboelectric Energy Harvester for Nano-sensor Applications. , 2019, , .		5
11	Wafer-Level Vacuum-Packaged Flexible and Bendable Micro Accelerometer. IEEE Sensors Journal, 2018, 18, 4089-4096.	4.7	8
12	Two Types of <inline-formula> <tex-math notation="LaTeX">${E}^{prime}$ </tex-math> </inline-formula> Centers as Gate Oxide Defects Responsible for Hole Trapping and Random Telegraph Signals in pMOSFETs. IEEE Transactions on Electron Devices, 2018, 65, 4527-4534.	3.0	7
13	Characterization and performance analysis of Li-doped ZnO nanowire as a nano-sensor and nano-energy harvesting element. Nano Energy, 2018, 50, 159-168.	16.0	37
14	Wafer-level packaged flexible and bendable MEMS accelerometer for robotics and prosthetics. , 2017, , .		3
15	Design, fabrication and characterization of flexible MEMS accelerometer using multi-Level UV-LIGA. Sensors and Actuators A: Physical, 2017, 263, 530-541.	4.1	31
16	ZnO nano-sensors and nano-energy harvesters. , 2017, , .		1
17	Device-level vacuum packaged uncooled microbolometer on a polyimide substrate. Infrared Physics and Technology, 2016, 79, 50-57.	2.9	6
18	An integrated piezoelectric zinc oxide nanowire micro-energy harvester. Nano Energy, 2016, 26, 456-465.	16.0	17

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19	A Stand-Alone, Physics-Based, Measurement-Driven Model and Simulation Tool for Random Telegraph Signals Originating From Experimentally Identified MOS Gate-Oxide Defects. IEEE Transactions on Electron Devices, 2016, 63, 1428-1436.	3.0	12
20	A piezoelectric micro-energy harvester for nanosensors. , 2015, , .		0
21	Design and fabrication of self-packaged, flexible MEMS accelerometer. , 2015, , .		6
22	A hybrid electrostatic micro-harvester incorporating in-plane overlap and gap closing mechanisms. Journal of Micromechanics and Microengineering, 2015, 25, 035027.	2.6	8
23	Flexible Conformal Micromachined Absolute Pressure Sensors. Journal of Microelectromechanical Systems, 2015, 24, 1400-1408.	2.5	5
24	Self-Powered Tactile Pressure Sensors Using Ordered Crystalline ZnO Nanorods on Flexible Substrates Toward Robotic Skin and Garments. IEEE Sensors Journal, 2015, 15, 63-70.	4.7	40
25	Low-profile, self-packaged uncooled microbolometer on a flexible substrate towards an infrared radiation sensitive skin. , 2014, , .		2
26	Piezoelectric ZnO nanorod carpet as a NEMS vibrational energy harvester. Nano Energy, 2014, 10, 71-82.	16.0	30
27	MEMS Force Sensor in a Flexible Substrate Using Nichrome Piezoresistors. IEEE Sensors Journal, 2013, 13, 4081-4089.	4.7	32
28	A Physics-Based Analytical $hbox{1}/f$ Noise Model for RESURF LDMOS Transistors. IEEE Transactions on Electron Devices, 2013, 60, 677-683.	3.0	10
29	Design and optimization of an electrostatic micro-harvester for sensors applications. , 2013, , .		1
30	Self-powered, tactile pressure sensing skin using crystalline ZnO nanorod arrays for robotic applications. , 2013, , .		3
31	Guest Editorial: Special issue on flexible sensors and sensing systems. IEEE Sensors Journal, 2013, 13, 3854-3856.	4.7	2
32	Micromachined force sensors using thin film nickelâ€“chromium piezoresistors. Journal of Micromechanics and Microengineering, 2012, 22, 065002.	2.6	16
33	A NEMS vibration energy harvester using ordered piezoelectric Zinc Oxide nanowire arrays. , 2012, , .		0
34	Temperature Sensor in a Flexible Substrate. IEEE Sensors Journal, 2012, 12, 864-869.	4.7	36
35	Characterization of MEMS piezoresistive pressure sensors using AFM. Ultramicroscopy, 2010, 110, 1154-1160.	1.9	25
36	Piezoresistive polysilicon film obtained by low-temperature aluminum-induced crystallization. Thin Solid Films, 2010, 519, 479-486.	1.8	27

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37	Nanocrystalline Piezoresistive Polysilicon Film by Aluminum-Induced Crystallization for Pressure-Sensing Applications. IEEE Nanotechnology Magazine, 2010, 9, 640-646.	2.0	17
38	Device-Level Vacuum Packaging for RF MEMS. Journal of Microelectromechanical Systems, 2010, 19, 911-918.	2.5	25
39	MEMS accelerometers on polyimides for failure assessment in aerospace systems. , 2010, , .		1
40	A low-frequency noise model for advanced gate-stack MOSFETs. Microelectronics Reliability, 2009, 49, 103-112.	1.7	14
41	Hot-Carrier- and Constant-Voltage-Stress-Induced Low-Frequency Noise in Nitrided High- k Dielectric MOSFETs. IEEE Transactions on Device and Materials Reliability, 2009, 9, 203-208.	2.0	3
42	Physics-based 1/f noise model for MOSFETs with nitrided high-Î¹ gate dielectrics. Solid-State Electronics, 2008, 52, 711-724.	1.4	30
43	Effect of nitrogen incorporation on 1/f noise performance of metal-oxide-semiconductor field effect transistors with HfSiON dielectric. Journal of Applied Physics, 2008, 103, 033706.	2.5	10
44	A Device-Level Vacuum-Packaging Scheme for Microbolometers on Rigid and Flexible Substrates. IEEE Sensors Journal, 2007, 7, 1012-1019.	4.7	12
45	Improved low frequency noise characteristics of sub-micron MOSFETs with TaSiN/TiN gate on ALD HfO2 dielectric. Microelectronics Reliability, 2007, 47, 1228-1232.	1.7	10
46	Micromachined bolometers on polyimide. Sensors and Actuators A: Physical, 2006, 132, 452-459.	4.1	30
47	Dependence of low frequency noise in SiGe heterojunction bipolar transistors on the dimensional and structural features of extrinsic regions. Solid-State Electronics, 2006, 50, 1430-1439.	1.4	2
48	Micromachined integrated pressureâ€"thermal sensors on flexible substrates. Journal of Micromechanics and Microengineering, 2006, 16, 1984-1992.	2.6	36
49	Flexible Sensorsâ€"A Review. Journal of Nanoelectronics and Optoelectronics, 2006, 1, 194-202.	0.5	7
50	Micromachined infrared bolometers on flexible polyimide substrates. Sensors and Actuators A: Physical, 2005, 118, 49-56.	4.1	91
51	Origin of 1/f noise in lateral PNP bipolar transistors. Microelectronics Reliability, 2004, 44, 89-94.	1.7	3
52	Model for random telegraph signals in sub-micron MOSFETS. Solid-State Electronics, 2003, 47, 1443-1449.	1.4	22
53	An improved physics-based 1/f noise model for deep sub-micron MOSFETs. Solid-State Electronics, 2001, 45, 351-357.	1.4	13
54	Extraction of oxide trap properties using temperature dependence of random telegraph signals in submicron metalâ€"oxideâ€"semiconductor field-effect transistors. Journal of Applied Physics, 2001, 89, 5526-5532.	2.5	43

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55	Complex random telegraph signals in 0.06 Î¼m2 MDD n-MOSFETs. Solid-State Electronics, 2000, 44, 1013-1019.	1.4	31
56	Characterization of oxide traps in 0.15 Î¼m2 MOSFETs using random telegraph signals. Microelectronics Reliability, 2000, 40, 1875-1881.	1.7	25
57	Effects of quantization on random telegraph signals observed in deep-submicron MOSFETs. Microelectronics Reliability, 2000, 40, 1823-1831.	1.7	18
58	Pyroelectric effect in Yâ€“Baâ€“Cuâ€“O thin films under laser illumination. Journal of Applied Physics, 1999, 85, 1075-1079.	2.5	21
59	Channel length scaling of 1/f noise in 0.18 Î¼m technology MDD n-MOSFETs. Solid-State Electronics, 1999, 43, 1695-1701.	1.4	28
60	Dielectric and pyroelectric response in Nb/semiconducting Yâ€”Baâ€”Cuâ€”O/Nb structures. Ferroelectrics, 1998, 209, 517-539.	0.6	17
61	Micromachined YBaCuO capacitor structures as uncooled pyroelectric infrared detectors. Journal of Applied Physics, 1998, 84, 1680-1687.	2.5	44
62	Hall effect in semiconducting epitaxial and amorphous Y-Ba-Cu-O thin films. Journal of Applied Physics, 1997, 81, 6866-6873.	2.5	8
63	noise and dark current components in HgCdTe MIS infrared detectors. Solid-State Electronics, 1996, 39, 127-132.	1.4	20
64	Modeling of high-Tc superconductor parametric amplifiers and mixers. Physica C: Superconductivity and Its Applications, 1994, 231, 271-276.	1.2	0
65	Two-level noise switching in YBa2Cu3O7 microbridges. Solid-State Electronics, 1993, 36, 1507-1510.	1.4	1
66	A noise model based on fluctuating defect states. Solid-State Electronics, 1993, 36, 407-410.	1.4	10
67	Prediction of electromigration failure in W/Al-Cu multilayered metallizations by noise measurements. Solid-State Electronics, 1992, 35, 1209-1212.	1.4	28
68	Characterization of electromigration parameters in VLSI metallizations by noise measurements. Solid-State Electronics, 1991, 34, 185-188.	1.4	80
69	A model for electromigration and low-frequency noise in thin metal films. Solid-State Electronics, 1991, 34, 911-916.	1.4	29
70	Spatial correlation measurements of noise in semiconductors. Solid-State Electronics, 1988, 31, 241-244.	1.4	5