Derek R Oliver

List of Publications by Year
in descending order

21 papers	234 citations	1040056 9 h-index	996975 15 g-index
21 all docs	21 docs citations	21 times ranked	230 citing authors

#	Article	IF	Citations
1	â€œZeptofaradâ€•(10â^’21â€ŠF) resolution capacitance sensor for scanning capacitance microscopy. Review of Scientific Instruments, 2001, 72, 2618-2623.	1.3	38
2	A Circular Patch Resonator for the Measurement of Microwave Permittivity of Nematic Liquid Crystal. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 1855-1862.	4.6	30
3	Comparison between the electrical junction properties of H-terminated and methyl-terminated individual Si microwire/polymer assemblies for photoelectrochemical fuel production. Energy and Environmental Science, 2012, 5, 9789.	30.8	18
4	Electrical Characteristics of the Junction between PEDOT:PSS and Thiophene-Functionalized Silicon Microwires. ACS Applied Materials & Interfaces, 2015, 7, 27160-27166.	8.0	18
5	Electrical Characterization of Si Microwires and of Si Microwire/Conducting Polymer Composite Junctions. Journal of Physical Chemistry Letters, 2011, 2, 675-680.	4.6	17
6	Characterization of the Electrical Properties of Individual p-Si Microwire/Polymer/n-Si Microwire Assemblies. Journal of Physical Chemistry C, 2011, 115, 24945-24950.	3.1	15
7	Rapid Simulation of Linear PBG Microstrip Structures Using the Rayleigh Multipole Method. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 49-55.	4.6	12
8	Microelectromechanical Resonator Characterization Using Noncontact Parametric Electrostatic Excitation and Probing. Journal of Microelectromechanical Systems, 2007, 16, 1054-1060.	2.5	11
9	Piezoresistive characterization of bottom-up, n-type silicon microwires undergoing bend deformation. Applied Physics Letters, 2015, 106, 022107.	3.3	10
10	Quantitative two-dimensional carrier profiling of a 400 nm complementary metalâ€“oxideâ€“semiconductor device by Schottky scanning capacitance microscopy. Journal of Applied Physics, 2000, 88, 6752-6757.	2.5	9
11	Capacitance sensor with sub-zeptofarad (<10[sup â^’21] F) sensitivity for scanning capacitance microscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 479.	1.6	9
12	Measurement of the Electrical Resistance of n-Type Si Microwire/p-Type Conducting Polymer Junctions for Use in Artificial Photosynthesis. Journal of Physical Chemistry C, 2014, 118, 27742-27748.	3.1	9
13	Classification of degradation in oil-impregnated cellulose insulation using texture analysis of optical microscopy images. Electric Power Systems Research, 2016, 133, 104-112.	3.6	9
14	An interpretable CNN model for classification of partial discharge waveforms in 3D-printed dielectric samples with different void sizes. Neural Computing and Applications, 2022, 34, 11739-11750.	5.6	7
15	Sensitivity analysis of a parallelâ€plate method for measuring the dielectric permittivity of highâ€voltage insulating materials. High Voltage, 2017, 2, 200-204.	4.7	6
16	Electronic transport in dielectrophoretically grown nanowires. Journal of Materials Science, 2006, 41, 8166-8172.	3.7	5
17	Heterodyne electrostatic imaging of polarization due to a surface acoustic wave. Applied Physics Letters, 2001, 79, 3729-3731.	3.3	4
18	A Spectral Transmission-Line Method for Computing Band Diagrams and Eigenmodes of Photonic-Bandgap Structures. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 627-636.	4.6	2

#	Article	IF	Citations
19	Monohydride signature as a key predictor of successful Si(110) surface functionalization. RSC Advances, 2016, 6, 88239-88243.	3.6	2
20	Direct contact four-point probe characterization of Si microwire absorbers for artificial photosynthesis. RSC Advances, 2016, 6, 110344-110348.	3.6	2
21	Correlation of microscopic textural features and degree of polymerization for thermally deteriorated cellulose insulation. , 2016, , .		1