

Anthony J Walton

List of Publications by Year in descending order

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54
papers

623
citations

623734

14
h-index

642732

23
g-index

55
all docs

55
docs citations

55
times ranked

736
citing authors

#	ARTICLE	IF	CITATIONS
1	Frequency effect on streaming phenomenon induced by Rayleigh surface acoustic wave in microdroplets. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	50
2	Streaming phenomena in microdroplets induced by Rayleigh surface acoustic wave. <i>Journal of Applied Physics</i> , 2011, 109, 114901.	2.5	48
3	Label- and amplification-free electrochemical detection of bacterial ribosomal RNA. <i>Biosensors and Bioelectronics</i> , 2016, 81, 487-494.	10.1	42
4	Development of a PCR-free electrochemical point of care test for clinical detection of methicillin resistant <i>Staphylococcus aureus</i> (MRSA). <i>Analyst, The</i> , 2013, 138, 6997.	3.5	41
5	A systematic study of the influence of nanoelectrode dimensions on electrode performance and the implications for electroanalysis and sensing. <i>Faraday Discussions</i> , 2013, 164, 295.	3.2	31
6	Real-time measurement of tumour hypoxia using an implantable microfabricated oxygen sensor. <i>Sensing and Bio-Sensing Research</i> , 2020, 30, 100375.	4.2	31
7	The development and characterisation of square microfabricated electrode systems. <i>Analyst, The</i> , 2010, 135, 1058.	3.5	29
8	Integrated Magnetic MEMS Relays: Status of the Technology. <i>Micromachines</i> , 2014, 5, 622-653.	2.9	25
9	Surface acoustic wave nebulization on nanocrystalline ZnO film. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	24
10	Nebulization of water/glycerol droplets generated by ZnO/Si surface acoustic wave devices. <i>Microfluidics and Nanofluidics</i> , 2015, 19, 273-282.	2.2	24
11	Enhanced Electroanalysis in Lithium Potassium Eutectic (LKE) Using Microfabricated Square Microelectrodes. <i>Analytical Chemistry</i> , 2014, 86, 11342-11348.	6.5	21
12	Nanoscale electrode arrays produced with microscale lithographic techniques for use in biomedical sensing applications. <i>IET Nanobiotechnology</i> , 2013, 7, 125-134.	3.8	19
13	A wafer mapping technique for residual stress in surface micromachined films. <i>Journal of Micromechanics and Microengineering</i> , 2016, 26, 095013.	2.6	19
14	Scaling effects on flow hydrodynamics of confined microdroplets induced by Rayleigh surface acoustic wave. <i>Microfluidics and Nanofluidics</i> , 2012, 13, 919-927.	2.2	18
15	Shear horizontal surface acoustic wave induced microfluidic flow. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	14
16	Development and Optimization of Durable Microelectrodes for Quantitative Electroanalysis in Molten Salt. <i>Journal of Microelectromechanical Systems</i> , 2015, 24, 1346-1354.	2.5	14
17	Fabrication and Measurement of Test Structures to Monitor Stress in SU-8 Films. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2012, 25, 346-354.	1.7	13
18	Advances in electroanalysis, sensing and monitoring in molten salts. <i>Faraday Discussions</i> , 2016, 190, 351-366.	3.2	13

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19	Test Structure for Characterizing Low Voltage Coplanar EWOD System. IEEE Transactions on Semiconductor Manufacturing, 2009, 22, 88-95.	1.7	12
20	Characterisation of electroplated NiFe films using test structures and wafer mapped measurements. , 2011, , .		11
21	Practical Implications of using Nanoelectrodes for Bioanalytical Measurements. Electrochimica Acta, 2014, 126, 98-103.	5.2	11
22	Optimization and characterization of Drop-on-Demand inkjet printing process for platinum organometallic inks. , 2011, , .		10
23	The application of fixed hydrophobic patterns for confinement of aqueous solutions in proteomic microarrays. Applied Physics Letters, 2011, 99, .	3.3	10
24	In vivo application of an implantable tri-anchored methylene blue-based electrochemical pH sensor. Biosensors and Bioelectronics, 2022, 197, 113728.	10.1	9
25	Fabrication of Electrodeposited Ni-Fe Cantilevers for Magnetic MEMS Switch Applications. Journal of Microelectromechanical Systems, 2015, 24, 870-879.	2.5	8
26	Analysis of the performance of a micromechanical test structure to measure stress in thick electroplated metal films. , 2010, , .		7
27	A Microelectrode Array with Reproducible Performance Shows Loss of Consistency Following Functionalization with a Self-Assembled 6-Mercapto-1-hexanol Layer. Sensors, 2018, 18, 1891.	3.8	7
28	Flexible, strain gated logic transducer arrays enabled by initializing surface instability on elastic bilayers. APL Materials, 2019, 7, 031509.	5.1	7
29	<title>Review of the history and technology of micromachined miniature displays using foundry-produced silicon backplanes</title>. , 1999, , .		6
30	Integration of Electrodeposited Ni-Fe in MEMS with Low-Temperature Deposition and Etch Processes. Materials, 2017, 10, 323.	2.9	5
31	Efficient critical area measurements of IC layout applied to quality and reliability enhancement. Microelectronics Reliability, 1997, 37, 1825-1833.	1.7	4
32	A three-dimensional silicon shadowmask for patterning on trenches with vertical walls. , 2009, , .		4
33	Improving the Yield and Lifetime of Microfabricated Sensors for Harsh Environments. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 192-200.	1.7	4
34	Optimization of Nafion Polymer Electrolyte Membrane Design and Microfabrication. IEEE Transactions on Semiconductor Manufacturing, 2020, 33, 196-201.	1.7	4
35	Test structures for characterising the integration of EWOD and SAW technologies for microfluidics. , 2010, , .		3
36	Electrical Test Structures for the Characterization of Optical Proximity Correction. IEEE Transactions on Semiconductor Manufacturing, 2012, 25, 162-169.	1.7	3

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37	Progress towards filling through silicon vias with conductive ink. , 2012, , .		3
38	Test Structures for Developing Packaging for Implantable Sensors. IEEE Transactions on Semiconductor Manufacturing, 2020, 33, 224-231.	1.7	3
39	Fabrication of test structures to monitor stress in SU-8 films used for MEMS applications. , 2010, , .		2
40	Test structures for seed layer optimisation of electroplated ferromagnetic films. , 2018, , .		2
41	Test Structure for Measuring the Selectivity in Vapour Etch Processes. , 2020, , .		2
42	Comparison of Conventional and Maskless Lithographic Techniques for More than Moore Post-Processing of Foundry CMOS Chips. Journal of Microelectromechanical Systems, 2020, 29, 1245-1252.	2.5	2
43	Manipulating Etch Selectivities in XeF ₄ , Vapour Etching. Journal of Microelectromechanical Systems, 2021, 30, 156-164.	2.5	2
44	Test Structure for Measuring the Selectivity in XeF ₂ and HF Vapour Etch Processes. IEEE Transactions on Semiconductor Manufacturing, 2021, 34, 241-247.	1.7	2
45	Kelvin resistor structures for the investigation of corner serif Proximity Correction. , 2010, , .		1
46	Test structures and a measurement system for characterising the lifetime of EWOD devices. , 2011, , .		1
47	The Use of Test Structures to Perform Chip Level Characterization Studies of Ni and NiFe Electrochemical Deposition. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 243-253.	1.7	1
48	10.1063/1.3604395.1. , 2011, , .		1
49	Interdigitated electrode modelling for applications in dielectrophoresis. , 2011, , .		0
50	Investigating the durability of electrochemical sensors for molten salts. , 2017, , .		0
51	Metal-Elastomer Surface Deformation Control on Super-Compressible Strain Transducer Arrays. , 2018, , .		0
52	Test structure and measurement system for characterising the electrochemical performance of nanoelectrode structures. , 2020, , .		0
53	Automated Wafer-Level Characterisation of Electrochemical Test Structures for Wafer Scanning. , 2020, , .		0
54	Microheater isolation characterisation to aid the optimisation of a MEMS Leidenfrost engine. , 2020, , .		0