Benjamin Daniel Wiltshire

List of Publications by Year
in descending order

32 papers	1,022 citations	361296 20 h-index	454834 30 g-index

32 all docs	32 docs citations	32 times ranked	1351 citing authors

#	Article	IF	Citations
1	High-Frequency TiO₂ Nanotube-Adapted Microwave Coplanar Waveguide Resonator for High-Sensitivity Ultraviolet Detection. ACS Applied Materials & Interfaces, 2022, 14, 6203-6211.	4.0	13
2	Microwave resonator array with liquid metal selection for narrow band material sensing. Scientific Reports, 2021, 11, 8598.	1.6	21
3	Oleophobic textiles with embedded liquid and vapor hazard detection using differential planar microwave resonators. Journal of Hazardous Materials, 2021, 409, 124945.	6.5	16
4	TiO2 nanotube-integrated microwave planar resonator sensor for ultraviolet transmission-based liquid characterization. Sensors and Actuators B: Chemical, 2021, 341, 130014.	4.0	22
5	Graphene oxide/polyaniline-based microwave split-ring resonator: A versatile platform towards ammonia sensing. Journal of Hazardous Materials, 2021, 418, 126283.	6.5	31
6	Passive Split Ring Resonator Tag Configuration for RFID-Based Wireless Permittivity Sensing. IEEE Sensors Journal, 2020, 20, 1904-1911.	2.4	59
7	Modified Microwave Sensor with a Patterned Ground Heater for Detection and Prevention of Ice Accumulation. ACS Applied Materials & Interfaces, 2020, 12, 55483-55492.	4.0	44
8	Gold Coplanar Waveguide Resonator Integrated With a Microfluidic Channel for Aqueous Dielectric Detection. IEEE Sensors Journal, 2020, 20, 9825-9833.	2.4	52
9	Wideband Tunable Modified Split Ring Resonator Structure Using Liquid Metal and 3-D Printing. IEEE Microwave and Wireless Components Letters, 2020, 30, 469-472.	2.0	35
10	Differential Narrow Bandpass Microstrip Filter Design for Material and Liquid Purity Interrogation. IEEE Sensors Journal, 2019, 19, 10545-10553.	2.4	15
11	3-D Printing Microfluidic Channels With Embedded Planar Microwave Resonators for RFID and Liquid Detection. IEEE Microwave and Wireless Components Letters, 2019, 29, 65-67.	2.0	69
12	High Breakdown Strength Schottky Diodes Made from Electrodeposited ZnO for Power Electronics Applications. ACS Applied Electronic Materials, 2019, 1, 13-17.	2.0	14
13	Composition-Tunable Formamidinium Lead Mixed Halide Perovskites via Solvent-Free Mechanochemical Synthesis: Decoding the Pb Environments Using Solid-State NMR Spectroscopy. Journal of Physical Chemistry Letters, 2018, 9, 2671-2677.	2.1	74
14	Top-Down Approaches Towards Single Crystal Perovskite Solar Cells. Scientific Reports, 2018, 8, 4906.	1.6	34
15	Heterojunctions of mixed phase TiO₂nanotubes with Cu, CuPt, and Pt nanoparticles: interfacial band alignment and visible light photoelectrochemical activity. Nanotechnology, 2018, 29, 014002.	1.3	22
16	Integrating 3D Printed Microfluidic Channels With Planar Resonator Sensors for Low Cost and Sensitive Liquid Detection. , 2018, , .		13
17	Distinguishing between Deep Trapping Transients of Electrons and Holes in TiO₂ Nanotube Arrays Using Planar Microwave Resonator Sensor. ACS Applied Materials & Interfaces, 2018, 10, 29857-29865.	4.0	17
18	All-solution processed, scalable superhydrophobic coatings on stainless steel surfaces based on functionalized discrete titania nanotubes. Chemical Engineering Journal, 2018, 351, 482-489.	6.6	24

#	Article	IF	Citations
19	100-fold improvement in carrier drift mobilities in alkanephosphonate-passivated monocrystalline TiO₂ nanowire arrays. Nanotechnology, 2017, 28, 144001.	1.3	23
20	Halide perovskite solar cells using monocrystalline TiO₂nanorod arrays as electron transport layers: impact of nanorod morphology. Nanotechnology, 2017, 28, 274001.	1.3	67
21	Radial Heterojunction Solar Cell Consisting of n-Type Rutile Nanowire Arrays Infiltrated by p-Type CdTe. Journal of Nanoscience and Nanotechnology, 2017, 17, 5119-5123.	0.9	4
22	Reduced Ensemble Plasmon Line Widths and Enhanced Two-Photon Luminescence in Anodically Formed High Surface Area Auâ€“TiO₂ 3D Nanocomposites. ACS Applied Materials & Interfaces, 2017, 9, 740-749.	4.0	23
23	Multinuclear Magnetic Resonance Tracking of Hydro, Thermal, and Hydrothermal Decomposition of CH₃NH₃PbI₃. Journal of Physical Chemistry C, 2017, 121, 1013-1024.	1.5	77
24	Optical anisotropy in vertically oriented TiO₂nanotube arrays. Nanotechnology, 2017, 28, 374001.	1.3	14
25	Effect of phosphonate monolayer adsorbate on the microwave photoresponse of TiO₂nanotube membranes mounted on a planar double ring resonator. Nanotechnology, 2016, 27, 375201.	1.3	37
26	Charge transport, doping and luminescence in solution-processed, phosphorescent, air-stable tellurophene thin films. Organic Electronics, 2016, 39, 153-162.	1.4	10
27	Rutile phase n- and p-type anodic titania nanotube arrays with square-shaped pore morphologies. Chemical Communications, 2015, 51, 7816-7819.	2.2	37
28	Phosphorescence within benzotellurophenes and color tunable tellurophenes under ambient conditions. Chemical Communications, 2015, 51, 5444-5447.	2.2	74
29	Electron Transport, Trapping and Recombination in Anodic TiO₂ Nanotube Arrays. Current Nanoscience, 2015, 11, 593-614.	0.7	38
30	The Wetting Behavior of TiO2 Nanotube Arrays With Perfluorinated Surface Functionalization. , 2014, , .		2
31	Majority carrier transport in single crystal rutile nanowire arrays. Physica Status Solidi - Rapid Research Letters, 2014, 8, 512-516.	1.2	16
32	Amphiphobic surfaces from functionalized TiO₂ nanotube arrays. RSC Advances, 2014, 4, 33587-33598.	1.7	25