

R Niall Tait

List of Publications by Year in descending order

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57
papers

1,260
citations

516710

16
h-index

361022

35
g-index

57
all docs

57
docs citations

57
times ranked

1291
citing authors

#	ARTICLE	IF	CITATIONS
1	Fabrication of Nanocolumns for Liquid Chromatography. <i>Analytical Chemistry</i> , 1998, 70, 3790-3797.	6.5	377
2	Surface plasmon waveguide Schottky detector. <i>Optics Express</i> , 2010, 18, 8505.	3.4	179
3	Biosensing using straight long-range surface plasmon waveguides. <i>Optics Express</i> , 2013, 21, 698.	3.4	112
4	Plasmonic Nanostructured Metalâ€“Oxideâ€“Semiconductor Reflection Modulators. <i>Nano Letters</i> , 2015, 15, 2304-2311.	9.1	56
5	Fabrication of surface plasmon waveguides and devices in Cytop with integrated microfluidic channels. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, 729-735.	1.2	49
6	Atomically flat symmetric elliptical nanohole arrays in a gold film for ultrasensitive refractive index sensing. <i>Lab on A Chip</i> , 2013, 13, 2541.	6.0	42
7	Optical selection, manipulation, trapping, and activation of a microgear structure for applications in micro-opticalâ€“electromechanical systems. <i>Applied Optics</i> , 2001, 40, 930.	2.1	37
8	Modeling electroosmotic and pressure-driven flows in porous microfluidic devices: Zeta potential and porosity changes near the channel walls. <i>Journal of Chemical Physics</i> , 2006, 125, 094714.	3.0	35
9	Single-mode surface plasmon distributed feedback lasers. <i>Nanoscale</i> , 2018, 10, 5914-5922.	5.6	34
10	Bloch Long-Range Surface Plasmon Polaritons on Metal Stripe Waveguides on a Multilayer Substrate. <i>ACS Photonics</i> , 2017, 4, 593-599.	6.6	30
11	Fabrication of surface plasmon waveguides and integrated components on Cytop. <i>Microelectronic Engineering</i> , 2010, 87, 1914-1921.	2.4	21
12	Activation of microcomponents with light for micro-electro-mechanical systems and micro-optical-electro-mechanical systems applications. <i>Applied Optics</i> , 2002, 41, 2361.	2.1	18
13	Broadside excitation of surface plasmon waveguides on Cytop. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	18
14	High-Q all-dielectric thermal emitters for mid-infrared gas-sensing applications. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2018, 35, 119.	1.5	17
15	Near infrared amplified spontaneous emission in a dye-doped polymeric waveguide for active plasmonic applications. <i>Optics Express</i> , 2014, 22, 12452.	3.4	16
16	Characterization of grating-coupled long range surface plasmon polariton membrane waveguides. <i>Optics Express</i> , 2015, 23, 17421.	3.4	16
17	Unidirectional Bragg Gratings Using Parity-Time Symmetry Breaking in Plasmonic Systems. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2016, 22, 48-59.	2.9	14
18	Fabrication of surface plasmon waveguides on thin CYTOP membranes. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2009, 27, 614-619.	2.1	12

#	ARTICLE	IF	CITATIONS
19	Long-range surface plasmon single-mode laser concepts. <i>Journal of Applied Physics</i> , 2012, 112, 063115.	2.5	12
20	Fabrication of a plasmonic modulator incorporating an overlaid grating coupler. <i>Nanotechnology</i> , 2014, 25, 495202.	2.6	12
21	Fabrication of long-range surface plasmon-polariton Bragg gratings with microfluidic channels in Cytop claddings. <i>Microelectronic Engineering</i> , 2015, 135, 38-44.	2.4	12
22	Mechanical Properties of Thin Free-Standing CYTOP Membranes. <i>Journal of Microelectromechanical Systems</i> , 2010, 19, 700-705.	2.5	11
23	Modeling and design of hydrogen gas sensors based on a membrane-supported surface plasmon waveguide. <i>Sensors and Actuators B: Chemical</i> , 2012, 161, 285-291.	7.8	11
24	Spatially nonreciprocal Bragg gratings based on surface plasmons. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	10
25	Grating couplers fabricated by e-beam lithography for long-range surface plasmon waveguides embedded in a fluoropolymer. <i>Applied Optics</i> , 2019, 58, 2994.	1.8	10
26	Using MEMS Capacitive Switches in Tunable RF Amplifiers. <i>Eurasip Journal on Wireless Communications and Networking</i> , 2006, 2006, 1.	2.4	9
27	Fabrication of long-range surface plasmon hydrogen sensors on Cytop membranes integrating grating couplers. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2015, 33, 021201.	1.2	9
28	Hot embossing of microfluidics in cyclic-olefin co-polymer using a wafer aligner-bonder. <i>Microsystem Technologies</i> , 2021, 27, 3899-3906.	2.0	8
29	Gain optimization, bleaching, and e-beam structuring of IR-140 doped PMMA and integration with plasmonic waveguides. <i>Optical Materials Express</i> , 2017, 7, 3963.	3.0	7
30	Direct thermal emission testing of aperiodic dielectric stack for narrowband thermal emission at mid-IR. <i>Journal of Applied Physics</i> , 2020, 127, .	2.5	7
31	Switchable patterned centre-conductor CPW filter using RF MEMS. <i>Microwave and Optical Technology Letters</i> , 2006, 48, 935-938.	1.4	6
32	Integrated heaters for the thermal tuning of Bragg grating filters on silicon-on-insulator rib waveguides. <i>Microwave and Optical Technology Letters</i> , 2011, 53, 672-676.	1.4	6
33	Reactive Ion Etching of Cytop and Investigation of Residual Microstructures. <i>Journal of Microelectromechanical Systems</i> , 2020, 29, 228-235.	2.5	6
34	Hafnium Silicate Gate Insulators in Field Effect Sensors Used to Detect DNA Hybridization. <i>ECS Transactions</i> , 2009, 16, 441-450.	0.5	5
35	Fabrication of surface plasmon waveguides in CYTOP. <i>Proceedings of SPIE</i> , 2012, , .	0.8	5
36	Tri-layer contact photolithography process for high-resolution lift-off. <i>Microelectronic Engineering</i> , 2021, 241, 111545.	2.4	5

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37	Surface plasmon waveguide devices with Tg-bonded Cytop claddings. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 062601.	1.2	4
38	Fabrication of metal strip waveguides for optical and microwave data transmission. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2015, 33, 061208.	1.2	4
39	Wafer-bonded surface plasmon waveguide sensors with in-plane microfluidic interfaces. Journal of Micromechanics and Microengineering, 2020, 30, 095004.	2.6	4
40	Modeling of long range surface plasmon polariton cladded membrane waveguides with integrated grating couplers as hydrogen sensors. Journal of Applied Physics, 2015, 117, 163108.	2.5	3
41	Fabrication of long range surface plasmon waveguide biosensors in a low-index fluoropolymer. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, 042601.	1.2	3
42	Long range surface plasmon polariton waveguides for hydrogen sensing. Proceedings of SPIE, 2013, , .	0.8	2
43	Nanofabrication of plasmonic structures on insulating substrates by resist-on-metal bilayer lift-off. Nanotechnology, 2019, 30, 054003.	2.6	2
44	Conductor-backed dielectric metasurface thermal emitters for mid-infrared spectroscopy. Journal of Applied Physics, 2020, 127, 033105.	2.5	2
45	Controlled sacrificial sidewall surface micromachining for the release of high length-to-thickness aspect ratio bridges. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, 1195-1201.	1.2	1
46	Parity-time symmetry-broken Bragg grating operating with long-range surface plasmon polaritons. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	1
47	Characterization of biosensing waveguides on Cytop. , 2010, , .		0
48	Fabrication and mechanical properties of surface plasmon waveguide biosensors on thin CYTOP membranes. Proceedings of SPIE, 2010, , .	0.8	0
49	Design of hydrogen gas sensors based on surface plasmon waveguides. Proceedings of SPIE, 2011, , .	0.8	0
50	Grating coupler excitation of membrane supported long range surface plasmons. , 2012, , .		0
51	Solid state long range surface plasmon polariton single mode lasers. , 2013, , .		0
52	Surface plasmon amplification and active nonreciprocal gratings. Proceedings of SPIE, 2015, , .	0.8	0
53	Active asymmetric plasmonic Bragg gratings. Proceedings of SPIE, 2016, , .	0.8	0
54	Surface plasmon distributed feedback lasers and parity-time symmetric gratings. , 2016, , .		0

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55	Active Plasmonics, Plasmonic Amplification and Lasing. World Scientific Series in Nanoscience and Nanotechnology, 2017, , 1-37.	0.1	0
56	Gain and bleaching investigation of IR-140 doped PMMA. , 2017, , .		0
57	Long-Range Surface Plasmon Lasers. , 2018, , .		0