

# David Cumming

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6146720/publications.pdf>

Version: 2024-02-01

231  
papers

7,205  
citations

70961

41  
h-index

64668

79  
g-index

237  
all docs

237  
docs citations

237  
times ranked

6907  
citing authors

#	ARTICLE	IF	CITATIONS
1	The 2017 terahertz science and technology roadmap. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 043001.	1.3	1,160
2	A terahertz polarization insensitive dual band metamaterial absorber. <i>Optics Letters</i> , 2011, 36, 945.	1.7	447
3	Polarization insensitive, broadband terahertz metamaterial absorber. <i>Optics Letters</i> , 2011, 36, 3476.	1.7	384
4	High transmission and low color cross-talk plasmonic color filters using triangular-lattice hole arrays in aluminum films. <i>Optics Express</i> , 2010, 18, 14056.	1.7	266
5	Metamaterial absorber integrated microfluidic terahertz sensors. <i>Laser and Photonics Reviews</i> , 2016, 10, 962-969.	4.4	212
6	Electromagnetic radiation from ingested sources in the human intestine between 150 MHz and 1.2 GHz. <i>IEEE Transactions on Biomedical Engineering</i> , 2003, 50, 484-492.	2.5	175
7	Polarization insensitive terahertz metamaterial absorber. <i>Optics Letters</i> , 2011, 36, 1524.	1.7	156
8	Octave-Spanning Broadband Absorption of Terahertz Light Using Metasurface Fractal-Cross Absorbers. <i>ACS Photonics</i> , 2017, 4, 2604-2612.	3.2	144
9	CMOS Photodetectors Integrated With Plasmonic Color Filters. <i>IEEE Photonics Technology Letters</i> , 2012, 24, 197-199.	1.3	120
10	A Wireless Biomedical Signal Interface System-on-Chip for Body Sensor Networks. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2010, 4, 112-117.	2.7	118
11	Implementation of Multichannel Sensors for Remote Biomedical Measurements in a Microsystems Format. <i>IEEE Transactions on Biomedical Engineering</i> , 2004, 51, 525-535.	2.5	116
12	Plasmonic Split-Ring Resonators as Dichroic Nanophotonic DNA Biosensors. <i>Journal of the American Chemical Society</i> , 2009, 131, 17615-17619.	6.6	102
13	A CMOS Image Sensor Integrated with Plasmonic Colour Filters. <i>Plasmonics</i> , 2012, 7, 695-699.	1.8	101
14	Manipulation of particles in two dimensions using phase controllable ultrasonic standing waves. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012, 468, 337-360.	1.0	91
15	Cell patterning with a heptagon acoustic tweezer application in neurite guidance. <i>Lab on A Chip</i> , 2014, 14, 2266-2275.	3.1	89
16	A monolithic resonant terahertz sensor element comprising a metamaterial absorber and microbolometer. <i>Laser and Photonics Reviews</i> , 2013, 7, 1043-1048.	4.4	85
17	Fabrication of 3 nm wires using 100 keV electron beam lithography and poly(methyl methacrylate) resist. <i>Applied Physics Letters</i> , 1996, 68, 322-324.	1.5	84
18	A Planar Gunn Diode Operating Above 100 GHz. <i>IEEE Electron Device Letters</i> , 2007, 28, 849-851.	2.2	80

#	ARTICLE	IF	CITATIONS
19	Matching the Transconductance Characteristics of CMOS ISFET Arrays by Removing Trapped Charge. IEEE Transactions on Electron Devices, 2008, 55, 1074-1079.	1.6	80
20	Nanophotonic Image Sensors. Small, 2016, 12, 4922-4935.	5.2	76
21	Negative Refraction in Time-Varying Strongly Coupled Plasmonic-Antenna "Epsilon-Near-Zero Systems. Physical Review Letters, 2020, 124, 043902.	2.9	69
22	Transmittance of a tunable filter at terahertz frequencies. Applied Physics Letters, 2004, 85, 5173-5175.	1.5	68
23	Multi-Spectral Materials: Hybridisation of Optical Plasmonic Filters and a Terahertz Metamaterial Absorber. Advanced Optical Materials, 2014, 2, 149-153.	3.6	67
24	Multiple plasmon resonances from gold nanostructures. Applied Physics Letters, 2007, 90, 143105.	1.5	59
25	Controlling acoustic streaming in an ultrasonic heptagonal tweezers with application to cell manipulation. Ultrasonics, 2014, 54, 268-274.	2.1	58
26	Terahertz Metamaterial Absorbers Implemented in CMOS Technology for Imaging Applications: Scaling to Large Format Focal Plane Arrays. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-8.	1.9	58
27	Multilevel silicon diffractive optics for terahertz waves. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 2780.	1.6	56
28	Terahertz oscillations in an In <sub>0.53</sub> Ga <sub>0.47</sub> As submicron planar Gunn diode. Journal of Applied Physics, 2014, 115, .	1.1	56
29	Multi-spectral materials: hybridisation of optical plasmonic filters, a mid infrared metamaterial absorber and a terahertz metamaterial absorber. Optics Express, 2016, 24, 3451.	1.7	55
30	Characterization of T-ray binary lenses. Optics Letters, 2002, 27, 1183.	1.7	54
31	A System-on-Chip Digital pH Meter for Use in a Wireless Diagnostic Capsule. IEEE Transactions on Biomedical Engineering, 2005, 52, 687-694.	2.5	53
32	Ultra-narrow Line Width Polarization-Insensitive Filter Using a Symmetry-Breaking Selective Plasmonic Metasurface. ACS Photonics, 2018, 5, 663-669.	3.2	52
33	Tuneable visible resonances in crescent shaped nano-split-ring resonators. Applied Physics Letters, 2007, 91, .	1.5	50
34	Metamaterial-Based Terahertz Imaging. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 892-901.	2.0	50
35	Calculated and measured transmittance of a tunable metallic photonic crystal filter for terahertz frequencies. Applied Physics Letters, 2003, 83, 5362-5364.	1.5	48
36	Uncooled CMOS terahertz imager using a metamaterial absorber and pn diode. Optics Letters, 2016, 41, 3261.	1.7	47

#	ARTICLE	IF	CITATIONS
37	Biocompatibility of a Lab-on-a-Pill Sensor in Artificial Gastrointestinal Environments. IEEE Transactions on Biomedical Engineering, 2006, 53, 2333-2340.	2.5	46
38	High-resolution real-time ion-camera system using a CMOS-based chemical sensor array for proton imaging. Sensors and Actuators B: Chemical, 2012, 171-172, 747-752.	4.0	45
39	<i>In Situ</i> Characterization of Two Wireless Transmission Schemes for Ingestible Capsules. IEEE Transactions on Biomedical Engineering, 2007, 54, 2020-2027.	2.5	43
40	A Programmable Microsystem Using System-on-Chip for Real-time Biotelemetry. IEEE Transactions on Biomedical Engineering, 2005, 52, 1251-1260.	2.5	42
41	Direct fabrication of terahertz optical devices on low-absorption polymer substrates. Optics Letters, 2009, 34, 1555.	1.7	42
42	Visible light focusing demonstrated by plasmonic lenses based on nano-slits in an aluminum film. Optics Express, 2010, 18, 14788.	1.7	42
43	$\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ Planar Gunn Diodes Operating at a Fundamental Frequency of 164 GHz. IEEE Electron Device Letters, 2013, 34, 39-41.	2.2	41
44	Interactive manipulation of microparticles in an octagonal sonotweezer. Applied Physics Letters, 2013, 102, .	1.5	41
45	Wireless fluorescence capsule for endoscopy using single photon-based detection. Scientific Reports, 2016, 5, 18591.	1.6	41
46	Unity Integration of Grating Slot Waveguide and Microfluid for Terahertz Sensing. Laser and Photonics Reviews, 2018, 12, 1800078.	4.4	39
47	CMOS compatible metamaterial absorbers for hyperspectral medium wave infrared imaging and sensing applications. Optics Express, 2018, 26, 10408.	1.7	38
48	Construction and Characterization of a Gold Nanoparticle Wire Assembled Using Mg <sup>2+</sup> -Dependent RNA~RNA Interactions. Nano Letters, 2006, 6, 445-448.	4.5	36
49	Gunn oscillations in planar heterostructure diodes. Semiconductor Science and Technology, 2008, 23, 075013.	1.0	36
50	A combined top-down bottom-up approach for introducing nanoparticle networks into nanoelectrode gaps. Nanotechnology, 2006, 17, 3333-3339.	1.3	34
51	Imprinted diffractive optics for terahertz radiation. Optics Letters, 2007, 32, 1141.	1.7	34
52	Nanophotonic split-ring resonators as dichroics for molecular spectroscopy. Applied Physics Letters, 2008, 93, 023121.	1.5	34
53	Narrowband multispectral filter set for visible band. Optics Express, 2012, 20, 21917.	1.7	34
54	An Integrated Circuit for Chip-Based Analysis of Enzyme Kinetics and Metabolite Quantification. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 721-730.	2.7	34

#	ARTICLE	IF	CITATIONS
55	Implementation of radiotelemetry in a lab-in-a-pill format. Lab on A Chip, 2006, 6, 39-45.	3.1	32
56	Low-Loss Terahertz Artificial Dielectric Birefringent Quarter-Wave Plates. IEEE Photonics Technology Letters, 2010, 22, 79-81.	1.3	31
57	Imprinted terahertz artificial dielectric quarter wave plates. Optics Express, 2010, 18, 12168.	1.7	31
58	Development of a conducting polymer cell impedance sensor. Sensors and Actuators B: Chemical, 2013, 176, 667-674.	4.0	31
59	Patterning of microspheres and microbubbles in an acoustic tweezers. Biomedical Microdevices, 2013, 15, 289-297.	1.4	30
60	Plasmonic Sensor Monolithically Integrated with a CMOS Photodiode. ACS Photonics, 2016, 3, 1926-1933.	3.2	29
61	Exploitation of Magnetic Dipole Resonances in Metal-Insulator-Metal Plasmonic Nanostructures to Selectively Filter Visible Light. ACS Photonics, 2018, 5, 1250-1261.	3.2	29
62	Ultralow-light-level color image reconstruction using high-efficiency plasmonic metasurface mosaic filters. Optica, 2020, 7, 632.	4.8	28
63	Direct patterning of mammalian cells in an ultrasonic heptagon stencil. Biomedical Microdevices, 2012, 14, 559-564.	1.4	27
64	Design, fabrication and characterization of In <sub>0.23</sub> Ga <sub>0.77</sub> As-channel planar Gunn diodes for millimeter wave applications. Solid-State Electronics, 2011, 64, 67-72.	0.8	26
65	Multispectral metamaterial absorber. Optics Letters, 2014, 39, 1227.	1.7	26
66	Multimodal Integrated Sensor Platform for Rapid Biomarker Detection. IEEE Transactions on Biomedical Engineering, 2020, 67, 614-623.	2.5	26
67	Full-color nanorouter for high-resolution imaging. Nanoscale, 2021, 13, 13024-13029.	2.8	26
68	Terahertz Frequency-Domain Spectroscopy Method for Vector Characterization of Liquid Using an Artificial Dielectric. IEEE Transactions on Terahertz Science and Technology, 2012, 2, 113-122.	2.0	25
69	High-Speed Imaging of 2-D Ionic Diffusion Using a 16 $\times$ 16 Pixel CMOS ISFET Array on the Microfluidic Scale. IEEE Sensors Journal, 2012, 12, 2744-2749.	2.4	25
70	Video-rate terahertz digital holographic imaging system. Optics Express, 2018, 26, 25805.	1.7	24
71	Two-dimensional manipulation of micro particles by acoustic radiation pressure in a heptagon cell. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 2132-2138.	1.7	23
72	Characterization and Water Content Estimation Method of Living Plant Leaves Using Terahertz Waves. Applied Sciences (Switzerland), 2019, 9, 2781.	1.3	23

#	ARTICLE	IF	CITATIONS
73	Current and future uses of breath analysis as a diagnostic tool. <i>Veterinary Record</i> , 2004, 154, 353-360.	0.2	22
74	Automated Design, Fabrication, and Characterization of Color Matching Plasmonic Filters. <i>IEEE Photonics Technology Letters</i> , 2012, 24, 602-604.	1.3	22
75	Transfer Printing of Nanoplasmonic Devices onto Flexible Polymer Substrates from a Rigid Stamp. <i>Plasmonics</i> , 2012, 7, 755-761.	1.8	22
76	Dynamic acoustic field activated cell separation (DAFACS). <i>Lab on A Chip</i> , 2015, 15, 802-810.	3.1	22
77	Hybrid localized surface plasmon resonance and quartz crystal microbalance sensor for label free biosensing. <i>Biosensors and Bioelectronics</i> , 2018, 100, 23-27.	5.3	22
78	A Colorimetric CMOS-Based Platform for Rapid Total Serum Cholesterol Quantification. <i>IEEE Sensors Journal</i> , 2017, 17, 240-247.	2.4	21
79	RC Variability of Short-Range Interconnects. , 2009, , .		20
80	Terahertz localized surface plasmon resonance of periodic silicon microring arrays. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	20
81	Hybridization of optical plasmonics with terahertz metamaterials to create multi-spectral filters. <i>Optics Express</i> , 2013, 21, 19142.	1.7	20
82	High Performance Resonant Tunneling Diode Oscillators for THz Applications. , 2015, , .		19
83	A direct-sequence spread-spectrum communication system for integrated sensor microsystems. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2005, 9, 4-12.	3.6	18
84	Design and Implementation of a Wireless Capsule Suitable for Autofluorescence Intensity Detection in Biological Tissues. <i>IEEE Transactions on Biomedical Engineering</i> , 2013, 60, 55-62.	2.5	18
85	Directed Nerve Regeneration Enabled by Wirelessly Powered Electrodes Printed on a Biodegradable Polymer. <i>Advanced Healthcare Materials</i> , 2014, 3, 1001-1006.	3.9	18
86	A 16 x 16 CMOS Amperometric Microelectrode Array for Simultaneous Electrochemical Measurements. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2018, 65, 2821-2831.	3.5	17
87	Alignment-insensitive bilayer THz metasurface absorbers exceeding 100% bandwidth. <i>Optics Express</i> , 2019, 27, 20886.	1.7	17
88	Electron transport in multiprobe quantum wires anomalous magnetoresistance effects. <i>Journal of Applied Physics</i> , 1995, 78, 330-343.	1.1	16
89	InSb Photodiodes for Monolithic Active Focal Plane Arrays on GaAs Substrates. <i>IEEE Transactions on Electron Devices</i> , 2016, 63, 3135-3142.	1.6	16
90	1D silicon nitride grating refractive index sensor suitable for integration with CMOS detectors. <i>IEEE Photonics Journal</i> , 2017, , 1-1.	1.0	16

#	ARTICLE	IF	CITATIONS
91	Multispectral mid-infrared light emitting diodes on a GaAs substrate. Applied Physics Letters, 2017, 111, .	1.5	16
92	A 64x64 SPAD Array for Portable Colorimetric Sensing, Fluorescence and X-Ray Imaging. IEEE Sensors Journal, 2019, 19, 7319-7327.	2.4	16
93	Multi-channel homodyne detection of continuous-wave terahertz radiation. Applied Physics Letters, 2005, 87, 034106.	1.5	15
94	Variability resilient low-power 7T-SRAM design for nano-scaled technologies. , 2010, , .		15
95	Application of terahertz spectroscopy to the characterization of biological samples using birefringence silicon grating. Journal of Biomedical Optics, 2012, 17, 067006.	1.4	15
96	Contactless Acoustic Manipulation and Sorting of Particles by Dynamic Acoustic Fields. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 1593-1600.	1.7	15
97	Acoustic Sensing and Ultrasonic Drug Delivery in Multimodal Theranostic Capsule Endoscopy. Sensors, 2017, 17, 1553.	2.1	15
98	Towards Portable Nanophotonic Sensors. Sensors, 2019, 19, 1715.	2.1	15
99	Polymer-based micro-sensor paired arrays for the determination of primary alcohol vapors. Sensors and Actuators B: Chemical, 2007, 125, 85-91.	4.0	14
100	Terahertz dual-band resonator on silicon. Optics Letters, 2010, 35, 469.	1.7	14
101	Terahertz single pixel imaging based on a Nipkow disk. Optics Letters, 2012, 37, 1484.	1.7	14
102	A monolithic single-chip point-of-care platform for metabolomic prostate cancer detection. Microsystems and Nanoengineering, 2021, 7, 21.	3.4	14
103	Metallic tunable photonic crystal filter for terahertz frequencies. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 2878.	1.6	13
104	Real-time Ion Flux Imaging in the Growth of Micrometer-scale Structures and Membranes. Advanced Materials, 2012, 24, 1238-1242.	11.1	13
105	A 218 GHz second harmonic multiquantum well GaAs-based planar Gunn diodes. Microwave and Optical Technology Letters, 2013, 55, 686-688.	0.9	13
106	Biodegradable pressure sensor for health-care. , 2014, , .		13
107	Monolithic Integration of an Active InSb-Based Mid-Infrared Photopixel With a GaAs MESFET. IEEE Transactions on Electron Devices, 2015, 62, 4069-4075.	1.6	13
108	Impact ionisation electroluminescence in planar GaAs-based heterostructure Gunn diodes: Spatial distribution and impact of doping non-uniformities. Journal of Applied Physics, 2013, 113, 124505.	1.1	12

#	ARTICLE	IF	CITATIONS
109	An integrated portable system for single chip simultaneous measurement of multiple disease associated metabolites. <i>Biosensors and Bioelectronics</i> , 2018, 122, 88-94.	5.3	12
110	A variable polarisation compensator using artificial dielectrics. <i>Optics Communications</i> , 1999, 163, 164-168.	1.0	11
111	A proton camera array technology for direct extracellular ion imaging. , 2008, , .		11
112	Enhancement of power and frequency in Planar Gunn diodes by introducing extra delta doping layers. <i>Microwave and Optical Technology Letters</i> , 2011, 53, 1624-1626.	0.9	10
113	Fabrication of Multilevel Silicon Diffractive Lens at Terahertz Frequency. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2013, 3, 479-485.	2.0	10
114	The UK National Quantum Technologies Hub in sensors and metrology (Keynote Paper). <i>Proceedings of SPIE</i> , 2016, , .	0.8	10
115	Low Noise and High Photodetection Probability SPAD in 180 nm Standard CMOS Technology. , 2018, , .		10
116	InSb Avalanche Photodiodes on GaAs Substrates for Mid-Infrared Detection. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 179-184.	1.6	10
117	Disposable Paper-on-CMOS Platform for Real-Time Simultaneous Detection of Metabolites. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 2417-2426.	2.5	10
118	Low-voltage coded excitation utilizing a miniaturized integrated ultrasound system employing piezoelectric 2-D arrays. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2010, 57, 353-362.	1.7	9
119	Novel composite contact design and fabrication for planar Gunn devices for millimeter-wave and terahertz frequencies. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 316-318.	0.8	9
120	Beyond Moore's law. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20130376.	1.6	9
121	Capsule Endoscopy Compatible Fluorescence Imager Demonstrated Using Bowel Cancer Tumours. <i>IEEE Sensors Journal</i> , 2020, 20, 9763-9771.	2.4	9
122	Negative longitudinal resistance in a mesoscopic wire. <i>Applied Physics Letters</i> , 1993, 62, 870-872.	1.5	8
123	Photocurrent dependent response of a SPAD biased by a charge pump. , 2011, , .		8
124	CMOS Nanophotonic Sensor With Integrated Readout System. <i>IEEE Sensors Journal</i> , 2018, 18, 9188-9194.	2.4	8
125	Anomalous magnetoresistance at a mesoscopic bend. <i>Applied Physics Letters</i> , 1992, 60, 2755-2757.	1.5	7
126	<title>Fabrication of multilevel silicon diffractive lenses for terahertz frequencies</title>. , 1999, 3879, 79.		7



#	ARTICLE	IF	CITATIONS
127	Fabrication and tuning of nanoscale metallic ring and split-ring arrays. <i>Journal of Vacuum Science &amp; Technology B</i> , 2007, 25, 2628.	1.3	7
128	Fabrication of double split metallic nanorings for Raman sensing. <i>Microelectronic Engineering</i> , 2009, 86, 1146-1149.	1.1	7
129	Cofabrication of Planar Gunn Diode and HEMT on InP Substrate. <i>IEEE Transactions on Electron Devices</i> , 2014, 61, 2779-2784.	1.6	7
130	Recent progress in plasmonic colour filters for image sensor and multispectral applications. <i>Proceedings of SPIE</i> , 2016, , .	0.8	7
131	Single-chip, mid-infrared array for room temperature video rate imaging. <i>Optica</i> , 2017, 4, 1498.	4.8	7
132	Hybrid Dual Mode Sensor for Simultaneous Detection of Two Serum Metabolites. <i>IEEE Sensors Journal</i> , 2018, 18, 484-493.	2.4	7
133	Validation of a method for collection and assay of pentane in the exhaled breath of the horse. <i>Research in Veterinary Science</i> , 2004, 76, 109-112.	0.9	6
134	A 16Å–16 CMOS Proton Camera Array for Direct Extracellular Imaging of Hydrogen-Ion Activity. , 2008, , .		6
135	Direct printing of flexible metallic millimetre-wave frequency selective surfaces. , 2010, , .		6
136	Contact shaping in planar Gunn diodes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 313-315.	0.8	6
137	Wireless capsule technology: Remotely powered improved high-sensitive barometric endoradiosonde. , 2016, , .		6
138	Thermal Profiles Within the Channel of Planar Gunn Diodes Using Micro-Particle Sensors. <i>IEEE Electron Device Letters</i> , 2017, 38, 1325-1327.	2.2	6
139	Monolithically Integrated InAsSb-Based nBnBn Heterostructure on GaAs for Infrared Detection. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2018, 24, 1-6.	1.9	6
140	Noise characteristics with CMOS sensor array scaling. <i>Measurement: Journal of the International Measurement Confederation</i> , 2020, 152, 107325.	2.5	6
141	Miniaturized spectroscopy with tunable and sensitive plasmonic structures. <i>Optics Letters</i> , 2021, 46, 4264.	1.7	6
142	Multiple plasmon resonances at terahertz frequencies from arrays of arsenic doped silicon dots. <i>Microelectronic Engineering</i> , 2009, 86, 1111-1113.	1.1	5
143	Simple e-beam air-bridge technology for mm-wave applications. <i>Microelectronic Engineering</i> , 2012, 98, 262-265.	1.1	5
144	Design and characterization of a novel diamond resonator. <i>Microwave and Optical Technology Letters</i> , 2014, 56, 1691-1693.	0.9	5

#	ARTICLE	IF	CITATIONS
145	Plasmonic gold nanodiscs using piezoelectric substrate birefringence for liquid sensing. Applied Physics Letters, 2016, 108, .	1.5	5
146	Development of InSb dry etch for mid-IR applications. Microelectronic Engineering, 2016, 153, 11-14.	1.1	5
147	The Multicorder: A Handheld Multimodal Metabolomics-on-CMOS Sensing Platform. , 2019, , .		5
148	A modular FPGA-based ultrasonic array system for applications including non-destructive testing. Insight: Non-Destructive Testing and Condition Monitoring, 2008, 50, 74-77.	0.3	4
149	Multiple and broad frequency response Gunn diodes. Semiconductor Science and Technology, 2009, 24, 105010.	1.0	4
150	A micromachined 10 GHz meander dipole antenna on high resistivity silicon substrate for remote sensing applications. , 2009, , .		4
151	THz band pass filter on plastic substrates and its application on biological sensing. , 2010, , .		4
152	Future integration of silicon electronics with miniature piezoelectric ultrasonic transducers and arrays. , 2010, , .		4
153	An analytical mismatch model of nano-CMOS device under impact of intrinsic device variability. , 2011, , .		4
154	COPLANAR RING DIVIDER WITH WIDEBAND HIGH ISOLATION PERFORMANCE. Progress in Electromagnetics Research Letters, 2011, 25, 1-10.	0.4	4
155	Simulation, Fabrication and Characterization of THz Metamaterial Absorbers. Journal of Visualized Experiments, 2012, , .	0.2	4
156	Imaging Fluorophore-Labelled Intestinal Tissue via Fluorescence Endoscope Capsule. Proceedings (mdpi), 2018, 2, 766.	0.2	4
157	Simultaneous multi-spectral, single-photon fluorescence imaging using a plasmonic colour filter array. Journal of Biophotonics, 2021, 14, e202000505.	1.1	4
158	Reliable fabrication of sub-40 nm period gratings using a nanolithography system with interferometric dynamic focus control. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 4115.	1.6	3
159	Tunable photonic crystal filter for terahertz frequency applications. , 2003, , .		3
160	Towards nano-fluidics by solvent deformation of electron beam resist. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 2793.	1.6	3
161	Gold nanoparticle wires made using RNA-based self-assembly. Journal of Vacuum Science & Technology B, 2006, 24, 3196.	1.3	3
162	11D-3 MOSAIC: An Integrated Ultrasonic 2D Array System. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	3

#	ARTICLE	IF	CITATIONS
163	An In <sub>0.23</sub> Ga <sub>0.77</sub> As-based pHEMT-like planar Gunn diode operating at 116 GHz. , 2010, , .		3
164	A Wideband CPW Ring Power Combiner With Low Insertion Loss and High Port Isolation. IEEE Microwave and Wireless Components Letters, 2012, 22, 580-582.	2.0	3
165	Monolithic fabrication of a planar Gunn diode and a pHEMT side-by-side. , 2013, , .		3
166	Wireless capsule for autofluorescence detection in biological systems. Sensors and Actuators B: Chemical, 2013, 189, 203-207.	4.0	3
167	A Nipkow disk integrated with Fresnel lenses for terahertz single pixel imaging. Optics Express, 2013, 21, 24452.	1.7	3
168	Improvements in thermionic cooling through engineering of the heterostructure interface using Monte Carlo simulations. Journal of Applied Physics, 2013, 114, .	1.1	3
169	Terahertz imaging using a monolithic metamaterial based detector. , 2014, , .		3
170	An electrical equivalent circuit to simulate the output power of an AlGaAs/GaAs planar gunn diode oscillator. Microwave and Optical Technology Letters, 2018, 60, 2144-2148.	0.9	3
171	A micro-mechanical beam-steering device for terahertz frequencies. Optics Communications, 2006, 259, 373-377.	1.0	2
172	Fabrication of terahertz holograms. Journal of Vacuum Science & Technology B, 2007, 25, 2329.	1.3	2
173	Measured and simulated performance of a ceramic micromechanical beam steering device at 94 GHz. Applied Optics, 2008, 47, 2382.	2.1	2
174	Terahertz surface plasmon resonance of periodic silicon micro-dot arrays. , 2010, , .		2
175	Investigation of Loading Effect on Power Performance for Planar Gunn Diodes Using Load-Pull Measurement Technique. IEEE Microwave and Wireless Components Letters, 2011, 21, 556-558.	2.0	2
176	Method for vector characterization of polar liquids using frequency-domain spectroscopy. Optics Letters, 2011, 36, 3329.	1.7	2
177	Active V-band modulated backscatter tag. Microwave and Optical Technology Letters, 2011, 53, 1613-1615.	0.9	2
178	A coplanar ring power divider with high isolation for V-band and W-band applications. , 2012, , .		2
179	Integrated ultrasonic particle positioning and low excitation light fluorescence imaging. Applied Physics Letters, 2013, 103, 244103.	1.5	2
180	Planar gunn diode characterisation and resonator elements to realise oscillator circuits. , 2013, , .		2

#	ARTICLE	IF	CITATIONS
181	Millimeter-wave coplanar stripline power dividers. International Journal of Microwave and Wireless Technologies, 2013, 5, 205-212.	1.5	2
182	Integration techniques of pHEMTs and planar Gunn diodes on GaAs substrates. Solid-State Electronics, 2014, 102, 87-92.	0.8	2
183	Fabrication of submicron planar Gunn diode. , 2014, , .		2
184	A new monolithic approach for mid-IR focal plane arrays. , 2016, , .		2
185	Monolithic integration of a plasmonic sensor with CMOS technology. Proceedings of SPIE, 2017, , .	0.8	2
186	Hybrid amperometric and potentiometric sensing based on a CMOS ISFET array. , 2017, , .		2
187	<title>Novel silicon bulk micromachining process for submillimeter rectangular waveguide fabrication</title>. , 2001, 4407, 372.		1
188	MOSAIC: A SCALABLE RECONFIGURABLE 2D ARRAY SYSTEM FOR NDT. AIP Conference Proceedings, 2008, , .	0.3	1
189	Imprinted quarter wave plate at terahertz frequency. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C6M83-C6M87.	0.6	1
190	Subwavelength light focusing demonstrated by plasmonic lenses based on nano-slits in an aluminium film. , 2010, , .		1
191	Terahertz frequency domain spectroscopy for polar alcohol. , 2011, , .		1
192	Imaging the Belousovâ€™Zhabotinsky reaction in real time using an ion sensitive array. Chemical Communications, 2012, 48, 5085.	2.2	1
193	On wafer thermal characterization of miniature gallium arsenide microcoolers with thermal loading from DC probes. Microwave and Optical Technology Letters, 2014, 56, 2699-2700.	0.9	1
194	Micro-cooler enhancements by barrier interface analysis. AIP Advances, 2014, 4, 027105.	0.6	1
195	Micro-coolers fabricated as a component in an integrated circuit. Semiconductor Science and Technology, 2015, 30, 015005.	1.0	1
196	MMIC resonant tunneling diode oscillators for THz applications. , 2015, , .		1
197	Monolithic fabrication of InSb-based photo-pixel for Mid-IR imaging. , 2016, , .		1
198	Metabolomics on CMOS for Personalised Medicine. , 2018, , 23-46.		1

#	ARTICLE	IF	CITATIONS
199	Silicon Diffractive Optics at THz Frequencies. , 2002, , .		1
200	Terahertz imagers based on metamaterial structures monolithically integrated in standard CMOS technologies. , 2018, , .		1
201	Assessing the Salt Constituents Characteristics in Aqueous Solutions Using Terahertz Waves. , 2020, , .		1
202	Linear Pulse-Frequency Modulator ISFET with a Wide Supply Range. , 2021, , .		1
203	A micromechanical beam-steering device for terahertz systems. , 2004, , .		0
204	CMOS combinational logic design for GaAs heterostructure MOSFET technology. , 2006, , .		0
205	CMOS IC Design and Verilog-A Modelling of 10-Gb/s PLL-Based Deserializer for Inter-Chip Communication in SOC. , 2007, , .		0
206	Design for variability in CMOS logic circuits: Uncommitted motif arrays (UMAs). , 2009, , .		0
207	Demonstration of the self-mixing effect with a planar gunn diode at millimeter-wave frequency. , 2010, , .		0
208	Fabrication of silicon quarter wave plate at Terahertz frequency. , 2010, , .		0
209	Multiple THz surface plasmon resonances of periodic split ring arrays in silicon. , 2010, , .		0
210	Source compensation scheme for reducing impact of variability on differential amplifier in 35nm CMOS. , 2010, , .		0
211	Vertical scaling of multi-stack Planar Gunn diodes. , 2010, , .		0
212	An X-band compact micromachined dipole antenna for remote sensing applications. , 2010, , .		0
213	High speed sensing using ion sensitive field effect transistors. , 2011, , .		0
214	Transfer printing of nanoplasmonic color filters onto flexible polymer substrates from a rigid stamp. , 2012, , .		0
215	Surface plasmon resonance for digital imaging. , 2012, , .		0
216	Fabry-P&#x00E9;rot resonator with nanostructures for multispectral visible filtering. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
217	Simulation and fabrication of InGaAs planar Gunn diode on InP substrate. , 2013, , .		0
218	Development of a 64x64-pixel ion camera chip for ionic imaging using an unmodified 0.35 μm CMOS technology. , 2013, , .		0
219	Wireless Sensor Microsystem Design: A Practical Perspective. , 2014, , 463-494.		0
220	Optical and near infrared plasmonic filters integrated with terahertz metamaterials. , 2014, , .		0
221	High-frequency resonant tunnelling diode oscillator with high-output power. , 2015, , .		0
222	Acoustic tweezing for patterning and discriminating particles. , 2015, , .		0
223	Towards a biodegradable, electro-active nerve repair conduit. , 2015, , .		0
224	Hybridising photonic and biotechnologies to CMOS. , 2015, , .		0
225	Metabolomics on Integrated Circuit. Procedia Technology, 2017, 27, 53-54.	1.1	0
226	CMOS terahertz metamaterial based 64 Å– 64 bolometric detector arrays. , 2017, , .		0
227	Nanotechnology in multimodal theranostic capsule endoscopy. , 2017, , .		0
228	Wireless Endoscopy: Technology and Design. Methods in Molecular Biology, 2010, 583, 221-246.	0.4	0
229	Terahertz Control. Springer Series in Optical Sciences, 2014, , 179-202.	0.5	0
230	Wireless Sensor Microsystem Design: A Practical Perspective. , 2006, , 373-397.		0
231	Numerical and Experimental Investigations of Self-mixing Effect of a Planar Gunn Diode Oscillator. , 2022, , .		0