

# David Cumming

## List of Publications by Year in descending order

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231  
papers

7,205  
citations

70961

41  
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64668

79  
g-index

237  
all docs

237  
docs citations

237  
times ranked

6907  
citing authors

#	ARTICLE	IF	CITATIONS
1	Numerical and Experimental Investigations of Self-mixing Effect of a Planar Gunn Diode Oscillator. , 2022, , .		0
2	A monolithic single-chip point-of-care platform for metabolomic prostate cancer detection. Microsystems and Nanoengineering, 2021, 7, 21.	3.4	14
3	Simultaneous multi-spectral, single-photon fluorescence imaging using a plasmonic colour filter array. Journal of Biophotonics, 2021, 14, e202000505.	1.1	4
4	Miniaturized spectroscopy with tunable and sensitive plasmonic structures. Optics Letters, 2021, 46, 4264.	1.7	6
5	Full-color nanorouter for high-resolution imaging. Nanoscale, 2021, 13, 13024-13029.	2.8	26
6	Linear Pulse-Frequency Modulator ISFET with a Wide Supply Range. , 2021, , .		1
7	Multimodal Integrated Sensor Platform for Rapid Biomarker Detection. IEEE Transactions on Biomedical Engineering, 2020, 67, 614-623.	2.5	26
8	InSb Avalanche Photodiodes on GaAs Substrates for Mid-Infrared Detection. IEEE Transactions on Electron Devices, 2020, 67, 179-184.	1.6	10
9	Noise characteristics with CMOS sensor array scaling. Measurement: Journal of the International Measurement Confederation, 2020, 152, 107325.	2.5	6
10	Disposable Paper-on-CMOS Platform for Real-Time Simultaneous Detection of Metabolites. IEEE Transactions on Biomedical Engineering, 2020, 67, 2417-2426.	2.5	10
11	Negative Refraction in Time-Varying Strongly Coupled Plasmonic-Antenna-epsilon-Near-Zero Systems. Physical Review Letters, 2020, 124, 043902.	2.9	69
12	Capsule Endoscopy Compatible Fluorescence Imager Demonstrated Using Bowel Cancer Tumours. IEEE Sensors Journal, 2020, 20, 9763-9771.	2.4	9
13	Ultralow-light-level color image reconstruction using high-efficiency plasmonic metasurface mosaic filters. Optica, 2020, 7, 632.	4.8	28
14	Assessing the Salt Constituents Characteristics in Aqueous Solutions Using Terahertz Waves. , 2020, , .		1
15	The Multicorder: A Handheld Multimodal Metabolomics-on-CMOS Sensing Platform. , 2019, , .		5
16	Characterization and Water Content Estimation Method of Living Plant Leaves Using Terahertz Waves. Applied Sciences (Switzerland), 2019, 9, 2781.	1.3	23
17	A 64x64 SPAD Array for Portable Colorimetric Sensing, Fluorescence and X-Ray Imaging. IEEE Sensors Journal, 2019, 19, 7319-7327.	2.4	16
18	Towards Portable Nanophotonic Sensors. Sensors, 2019, 19, 1715.	2.1	15

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19	Alignment-insensitive bilayer THz metasurface absorbers exceeding 100% bandwidth. Optics Express, 2019, 27, 20886.	1.7	17
20	Hybrid Dual Mode Sensor for Simultaneous Detection of Two Serum Metabolites. IEEE Sensors Journal, 2018, 18, 484-493.	2.4	7
21	A 16 x 16 CMOS Amperometric Microelectrode Array for Simultaneous Electrochemical Measurements. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 2821-2831.	3.5	17
22	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
23	Metabolomics on CMOS for Personalised Medicine. , 2018, , 23-46.		1
24	Ultra-narrow Line Width Polarization-Insensitive Filter Using a Symmetry-Breaking Selective Plasmonic Metasurface. ACS Photonics, 2018, 5, 663-669.	3.2	52
25	CMOS Nanophotonic Sensor With Integrated Readout System. IEEE Sensors Journal, 2018, 18, 9188-9194.	2.4	8
26	Video-rate terahertz digital holographic imaging system. Optics Express, 2018, 26, 25805.	1.7	24
27	Unity Integration of Grating Slot Waveguide and Microfluid for Terahertz Sensing. Laser and Photonics Reviews, 2018, 12, 1800078.	4.4	39
28	An integrated portable system for single chip simultaneous measurement of multiple disease associated metabolites. Biosensors and Bioelectronics, 2018, 122, 88-94.	5.3	12
29	Imaging Fluorophore-Labelled Intestinal Tissue via Fluorescence Endoscope Capsule. Proceedings (mdpi), 2018, 2, 766.	0.2	4
30	Low Noise and High Photodetection Probability SPAD in 180 nm Standard CMOS Technology. , 2018, , .		10
31	CMOS compatible metamaterial absorbers for hyperspectral medium wave infrared imaging and sensing applications. Optics Express, 2018, 26, 10408.	1.7	38
32	Monolithically Integrated InAsSb-Based nBnBn Heterostructure on GaAs for Infrared Detection. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-6.	1.9	6
33	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
34	Hybrid localized surface plasmon resonance and quartz crystal microbalance sensor for label free biosensing. Biosensors and Bioelectronics, 2018, 100, 23-27.	5.3	22
35	Terahertz imagers based on metamaterial structures monolithically integrated in standard CMOS technologies. , 2018, , .		1
36	1D silicon nitride grating refractive index sensor suitable for integration with CMOS detectors. IEEE Photonics Journal, 2017, , 1-1.	1.0	16

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37	Monolithic integration of a plasmonic sensor with CMOS technology. Proceedings of SPIE, 2017, , .	0.8	2
38	A Colorimetric CMOS-Based Platform for Rapid Total Serum Cholesterol Quantification. IEEE Sensors Journal, 2017, 17, 240-247.	2.4	21
39	The 2017 terahertz science and technology roadmap. Journal Physics D: Applied Physics, 2017, 50, 043001.	1.3	1,160
40	Multispectral mid-infrared light emitting diodes on a GaAs substrate. Applied Physics Letters, 2017, 111, .	1.5	16
41	Octave-Spanning Broadband Absorption of Terahertz Light Using Metasurface Fractal-Cross Absorbers. ACS Photonics, 2017, 4, 2604-2612.	3.2	144
42	Thermal Profiles Within the Channel of Planar Gunn Diodes Using Micro-Particle Sensors. IEEE Electron Device Letters, 2017, 38, 1325-1327.	2.2	6
43	Metabolomics on Integrated Circuit. Procedia Technology, 2017, 27, 53-54.	1.1	0
44	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
45	CMOS terahertz metamaterial based 64 Å— 64 bolometric detector arrays. , 2017, , .		0
46	Nanotechnology in multimodal theranostic capsule endoscopy. , 2017, , .		0
47	Hybrid amperometric and potentiometric sensing based on a CMOS ISFET array. , 2017, , .		2
48	Single-chip, mid-infrared array for room temperature video rate imaging. Optica, 2017, 4, 1498.	4.8	7
49	Acoustic Sensing and Ultrasonic Drug Delivery in Multimodal Theranostic Capsule Endoscopy. Sensors, 2017, 17, 1553.	2.1	15
50	Nanophotonic Image Sensors. Small, 2016, 12, 4922-4935.	5.2	76
51	Plasmonic gold nanodiscs using piezoelectric substrate birefringence for liquid sensing. Applied Physics Letters, 2016, 108, .	1.5	5
52	Recent progress in plasmonic colour filters for image sensor and multispectral applications. Proceedings of SPIE, 2016, , .	0.8	7
53	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
54	Metamaterial absorber integrated microfluidic terahertz sensors. Laser and Photonics Reviews, 2016, 10, 962-969.	4.4	212

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55	Monolithic fabrication of InSb-based photo-pixel for Mid-IR imaging. , 2016, , .		1
56	InSb Photodiodes for Monolithic Active Focal Plane Arrays on GaAs Substrates. IEEE Transactions on Electron Devices, 2016, 63, 3135-3142.	1.6	16
57	Plasmonic Sensor Monolithically Integrated with a CMOS Photodiode. ACS Photonics, 2016, 3, 1926-1933.	3.2	29
58	Uncooled CMOS terahertz imager using a metamaterial absorber and pn diode. Optics Letters, 2016, 41, 3261.	1.7	47
59	A new monolithic approach for mid-IR focal plane arrays. , 2016, , .		2
60	Wireless fluorescence capsule for endoscopy using single photon-based detection. Scientific Reports, 2016, 5, 18591.	1.6	41
61	Wireless capsule technology: Remotely powered improved high-sensitive barometric endoradiosonde. , 2016, , .		6
62	The UK National Quantum Technologies Hub in sensors and metrology (Keynote Paper). Proceedings of SPIE, 2016, , .	0.8	10
63	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
64	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
65	Development of InSb dry etch for mid-IR applications. Microelectronic Engineering, 2016, 153, 11-14.	1.1	5
66	Micro-coolers fabricated as a component in an integrated circuit. Semiconductor Science and Technology, 2015, 30, 015005.	1.0	1
67	High-frequency resonant tunnelling diode oscillator with high-output power. , 2015, , .		0
68	High Performance Resonant Tunneling Diode Oscillators for THz Applications. , 2015, , .		19
69	Acoustic tweezing for patterning and discriminating particles. , 2015, , .		0
70	Dynamic acoustic field activated cell separation (DAFACS). Lab on A Chip, 2015, 15, 802-810.	3.1	22
71	MMIC resonant tunneling diode oscillators for THz applications. , 2015, , .		1
72	Metamaterial-Based Terahertz Imaging. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 892-901.	2.0	50

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73	Towards a biodegradable, electro-active nerve repair conduit. , 2015, , .		0
74	Hybridising photonic and biotechnologies to CMOS. , 2015, , .		0
75	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
76	Design and characterization of a novel diamond resonator. Microwave and Optical Technology Letters, 2014, 56, 1691-1693.	0.9	5
77	Multispectral metamaterial absorber. Optics Letters, 2014, 39, 1227.	1.7	26
78	Multi-Spectral Materials: Hybridisation of Optical Plasmonic Filters and a Terahertz Metamaterial Absorber. Advanced Optical Materials, 2014, 2, 149-153.	3.6	67
79	Terahertz imaging using a monolithic metamaterial based detector. , 2014, , .		3
80	Directed Nerve Regeneration Enabled by Wirelessly Powered Electrodes Printed on a Biodegradable Polymer. Advanced Healthcare Materials, 2014, 3, 1001-1006.	3.9	18
81	Wireless Sensor Microsystem Design: A Practical Perspective. , 2014, , 463-494.		0
82	Biodegradable pressure sensor for health-care. , 2014, , .		13
83	Cofabrication of Planar Gunn Diode and HEMT on InP Substrate. IEEE Transactions on Electron Devices, 2014, 61, 2779-2784.	1.6	7
84	Controlling acoustic streaming in an ultrasonic heptagonal tweezers with application to cell manipulation. Ultrasonics, 2014, 54, 268-274.	2.1	58
85	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
86	Beyond Moore's law. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130376.	1.6	9
87	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
88	Cell patterning with a heptagon acoustic tweezer " application in neurite guidance. Lab on A Chip, 2014, 14, 2266-2275.	3.1	89
89	Integration techniques of pHEMTs and planar Gunn diodes on GaAs substrates. Solid-State Electronics, 2014, 102, 87-92.	0.8	2
90	Fabrication of submicron planar Gunn diode. , 2014, , .		2

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91	Optical and near infrared plasmonic filters integrated with terahertz metamaterials. , 2014, , .		0
92	Micro-cooler enhancements by barrier interface analysis. AIP Advances, 2014, 4, 027105.	0.6	1
93	Terahertz Control. Springer Series in Optical Sciences, 2014, , 179-202.	0.5	0
94	Fabrication of Multilevel Silicon Diffractive Lens at Terahertz Frequency. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 479-485.	2.0	10
95	$\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ Planar Gunn Diodes Operating at a Fundamental Frequency of 164 GHz. IEEE Electron Device Letters, 2013, 34, 39-41.	2.2	41
96	Integrated ultrasonic particle positioning and low excitation light fluorescence imaging. Applied Physics Letters, 2013, 103, 244103.	1.5	2
97	Monolithic fabrication of a planar Gunn diode and a pHEMT side-by-side. , 2013, , .		3
98	Development of a conducting polymer cell impedance sensor. Sensors and Actuators B: Chemical, 2013, 176, 667-674.	4.0	31
99	Wireless capsule for autofluorescence detection in biological systems. Sensors and Actuators B: Chemical, 2013, 189, 203-207.	4.0	3
100	Design and Implementation of a Wireless Capsule Suitable for Autofluorescence Intensity Detection in Biological Tissues. IEEE Transactions on Biomedical Engineering, 2013, 60, 55-62.	2.5	18
101	Interactive manipulation of microparticles in an octagonal sonotweezer. Applied Physics Letters, 2013, 102, .	1.5	41
102	Patterning of microspheres and microbubbles in an acoustic tweezers. Biomedical Microdevices, 2013, 15, 289-297.	1.4	30
103	A monolithic resonant terahertz sensor element comprising a metamaterial absorber and microbolometer. Laser and Photonics Reviews, 2013, 7, 1043-1048.	4.4	85
104	Simulation and fabrication of InGaAs planar Gunn diode on InP substrate. , 2013, , .		0
105	A Nipkow disk integrated with Fresnel lenses for terahertz single pixel imaging. Optics Express, 2013, 21, 24452.	1.7	3
106	Improvements in thermionic cooling through engineering of the heterostructure interface using Monte Carlo simulations. Journal of Applied Physics, 2013, 114, .	1.1	3
107	A 218GHz secondharmonic multiquantum well GaAsbased planar Gunn diodes. Microwave and Optical Technology Letters, 2013, 55, 686-688.	0.9	13
108	Planar gunn diode characterisation and resonator elements to realise oscillator circuits. , 2013, , .		2

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109	Development of a 64x64-pixel ion camera chip for ionic imaging using an unmodified 0.35 $\mu\text{m}$ CMOS technology. , 2013, , .		0
110	Hybridization of optical plasmonics with terahertz metamaterials to create multi-spectral filters. Optics Express, 2013, 21, 19142.	1.7	20
111	Millimeter-wave coplanar stripline power dividers. International Journal of Microwave and Wireless Technologies, 2013, 5, 205-212.	1.5	2
112	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
113	Manipulation of particles in two dimensions using phase controllable ultrasonic standing waves. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 337-360.	1.0	91
114	Application of terahertz spectroscopy to the characterization of biological samples using birefringence silicon grating. Journal of Biomedical Optics, 2012, 17, 067006.	1.4	15
115	Terahertz single pixel imaging based on a Nipkow disk. Optics Letters, 2012, 37, 1484.	1.7	14
116	Narrowband multispectral filter set for visible band. Optics Express, 2012, 20, 21917.	1.7	34
117	Automated Design, Fabrication, and Characterization of Color Matching Plasmonic Filters. IEEE Photonics Technology Letters, 2012, 24, 602-604.	1.3	22
118	Transfer printing of nanoplasmonic color filters onto flexible polymer substrates from a rigid stamp. , 2012, , .		0
119	Simulation, Fabrication and Characterization of THz Metamaterial Absorbers. Journal of Visualized Experiments, 2012, , .	0.2	4
120	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
121	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
122	Simple e-beam air-bridge technology for mm-wave applications. Microelectronic Engineering, 2012, 98, 262-265.	1.1	5
123	CMOS Photodetectors Integrated With Plasmonic Color Filters. IEEE Photonics Technology Letters, 2012, 24, 197-199.	1.3	120
124	Surface plasmon resonance for digital imaging. , 2012, , .		0
125	Fabry-Pérot resonator with nanostructures for multispectral visible filtering. , 2012, , .		0
126	Imaging the Belousov-Zhabotinsky reaction in real time using an ion sensitive array. Chemical Communications, 2012, 48, 5085.	2.2	1



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127	High-resolution real-time ion-camera system using a CMOS-based chemical sensor array for proton imaging. <i>Sensors and Actuators B: Chemical</i> , 2012, 171-172, 747-752.	4.0	45
128	High-Speed Imaging of 2-D Ionic Diffusion Using a 16 $\times$ 16 Pixel CMOS ISFET Array on the Microfluidic Scale. <i>IEEE Sensors Journal</i> , 2012, 12, 2744-2749.	2.4	25
129	A CMOS Image Sensor Integrated with Plasmonic Colour Filters. <i>Plasmonics</i> , 2012, 7, 695-699.	1.8	101
130	Transfer Printing of Nanoplasmonic Devices onto Flexible Polymer Substrates from a Rigid Stamp. <i>Plasmonics</i> , 2012, 7, 755-761.	1.8	22
131	A coplanar ring power divider with high isolation for V-band and W-band applications. , 2012, , .		2
132	Direct patterning of mammalian cells in an ultrasonic heptagon stencil. <i>Biomedical Microdevices</i> , 2012, 14, 559-564.	1.4	27
133	Real-time Ion Flux Imaging in the Growth of Micrometer-scale Structures and Membranes. <i>Advanced Materials</i> , 2012, 24, 1238-1242.	11.1	13
134	High speed sensing using ion sensitive field effect transistors. , 2011, , .		0
135	An analytical mismatch model of nano-CMOS device under impact of intrinsic device variability. , 2011, , .		4
136	Investigation of Loading Effect on Power Performance for Planar Gunn Diodes Using Load-Pull Measurement Technique. <i>IEEE Microwave and Wireless Components Letters</i> , 2011, 21, 556-558.	2.0	2
137	Terahertz frequency domain spectroscopy for polar alcohol. , 2011, , .		1
138	Two-dimensional manipulation of micro particles by acoustic radiation pressure in a heptagon cell. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2011, 58, 2132-2138.	1.7	23
139	A terahertz polarization insensitive dual band metamaterial absorber. <i>Optics Letters</i> , 2011, 36, 945.	1.7	447
140	Polarization insensitive terahertz metamaterial absorber. <i>Optics Letters</i> , 2011, 36, 1524.	1.7	156
141	Method for vector characterization of polar liquids using frequency-domain spectroscopy. <i>Optics Letters</i> , 2011, 36, 3329.	1.7	2
142	Polarization insensitive, broadband terahertz metamaterial absorber. <i>Optics Letters</i> , 2011, 36, 3476.	1.7	384
143	COPLANAR RING DIVIDER WITH WIDEBAND HIGH ISOLATION PERFORMANCE. <i>Progress in Electromagnetics Research Letters</i> , 2011, 25, 1-10.	0.4	4
144	Design, fabrication and characterization of In <sub>0.23</sub> Ga <sub>0.77</sub> As-channel planar Gunn diodes for millimeter wave applications. <i>Solid-State Electronics</i> , 2011, 64, 67-72.	0.8	26

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145	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
146	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
147	Active V-band modulated backscatter tag. <i>Microwave and Optical Technology Letters</i> , 2011, 53, 1613-1615.	0.9	2
148	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
149	Photocurrent dependent response of a SPAD biased by a charge pump. , 2011, , .		8
150	Terahertz localized surface plasmon resonance of periodic silicon microring arrays. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	20
151	Direct printing of flexible metallic millimetre-wave frequency selective surfaces. , 2010, , .		6
152	Imprinted quarter wave plate at terahertz frequency. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, C6M83-C6M87.	0.6	1
153	Terahertz surface plasmon resonance of periodic silicon micro-dot arrays. , 2010, , .		2
154	Demonstration of the self-mixing effect with a planar gunn diode at millimeter-wave frequency. , 2010, , .		0
155	Fabrication of silicon quarter wave plate at Terahertz frequency. , 2010, , .		0
156	Multiple THz surface plasmon resonances of periodic split ring arrays in silicon. , 2010, , .		0
157	An In <sub>0.23</sub> Ga <sub>0.77</sub> As-based pHEMT-like planar Gunn diode operating at 116 GHz. , 2010, , .		3
158	Low-Loss Terahertz Artificial Dielectric Birefringent Quarter-Wave Plates. <i>IEEE Photonics Technology Letters</i> , 2010, 22, 79-81.	1.3	31
159	Imprinted terahertz artificial dielectric quarter wave plates. <i>Optics Express</i> , 2010, 18, 12168.	1.7	31
160	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
161	Visible light focusing demonstrated by plasmonic lenses based on nano-slits in an aluminum film. <i>Optics Express</i> , 2010, 18, 14788.	1.7	42
162	Terahertz dual-band resonator on silicon. <i>Optics Letters</i> , 2010, 35, 469.	1.7	14

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163	A Wireless Biomedical Signal Interface System-on-Chip for Body Sensor Networks. IEEE Transactions on Biomedical Circuits and Systems, 2010, 4, 112-117.	2.7	118
164	THz band pass filter on plastic substrates and its application on biological sensing. , 2010, , .		4
165	Subwavelength light focusing demonstrated by plasmonic lenses based on nano-slits in an aluminium film. , 2010, , .		1
166	Future integration of silicon electronics with miniature piezoelectric ultrasonic transducers and arrays. , 2010, , .		4
167	Variability resilient low-power 7T-SRAM design for nano-scaled technologies. , 2010, , .		15
168	Source compensation scheme for reducing impact of variability on differential amplifier in 35nm CMOS. , 2010, , .		0
169	Vertical scaling of multi-stack Planar Gunn diodes. , 2010, , .		0
170	An X-band compact micromachined dipole antenna for remote sensing applications. , 2010, , .		0
171	Low-voltage coded excitation utilizing a miniaturized integrated ultrasound system employing piezoelectric 2-D arrays. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 353-362.	1.7	9
172	Wireless Endoscopy: Technology and Design. Methods in Molecular Biology, 2010, 583, 221-246.	0.4	0
173	RC Variability of Short-Range Interconnects. , 2009, , .		20
174	Design for variability in CMOS logic circuits: Uncommitted motif arrays (UMAs). , 2009, , .		0
175	Multiple and broad frequency response Gunn diodes. Semiconductor Science and Technology, 2009, 24, 105010.	1.0	4
176	Multiple plasmon resonances at terahertz frequencies from arrays of arsenic doped silicon dots. Microelectronic Engineering, 2009, 86, 1111-1113.	1.1	5
177	Fabrication of double split metallic nanorings for Raman sensing. Microelectronic Engineering, 2009, 86, 1146-1149.	1.1	7
178	Plasmonic Split-Ring Resonators as Dichroic Nanophotonic DNA Biosensors. Journal of the American Chemical Society, 2009, 131, 17615-17619.	6.6	102
179	Direct fabrication of terahertz optical devices on low-absorption polymer substrates. Optics Letters, 2009, 34, 1555.	1.7	42
180	A micromachined 10 GHz meander dipole antenna on high resistivity silicon substrate for remote sensing applications. , 2009, , .		4

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181	Matching the Transconductance Characteristics of CMOS ISFET Arrays by Removing Trapped Charge. IEEE Transactions on Electron Devices, 2008, 55, 1074-1079.	1.6	80
182	Gunn oscillations in planar heterostructure diodes. Semiconductor Science and Technology, 2008, 23, 075013.	1.0	36
183	Measured and simulated performance of a ceramic micromechanical beam steering device at 94 GHz. Applied Optics, 2008, 47, 2382.	2.1	2
184	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
185	A 16Å–16 CMOS Proton Camera Array for Direct Extracellular Imaging of Hydrogen-Ion Activity. , 2008, , .		6
186	A proton camera array technology for direct extracellular ion imaging. , 2008, , .		11
187	MOSAIC: A SCALABLE RECONFIGURABLE 2D ARRAY SYSTEM FOR NDT. AIP Conference Proceedings, 2008, , .	0.3	1
188	Nanophotonic split-ring resonators as dichroics for molecular spectroscopy. Applied Physics Letters, 2008, 93, 023121.	1.5	34
189	Fabrication and tuning of nanoscale metallic ring and split-ring arrays. Journal of Vacuum Science & Technology B, 2007, 25, 2628.	1.3	7
190	Fabrication of terahertz holograms. Journal of Vacuum Science & Technology B, 2007, 25, 2329.	1.3	2
191	11D-3 MOSAIC: An Integrated Ultrasonic 2D Array System. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	3
192	Tuneable visible resonances in crescent shaped nano-split-ring resonators. Applied Physics Letters, 2007, 91, .	1.5	50
193	Imprinted diffractive optics for terahertz radiation. Optics Letters, 2007, 32, 1141.	1.7	34
194	A Planar Gunn Diode Operating Above 100 GHz. IEEE Electron Device Letters, 2007, 28, 849-851.	2.2	80
195	CMOS IC Design and Verilog-A Modelling of 10-Gb/s PLL-Based Deserializer for Inter-Chip Communication in SOC. , 2007, , .		0
196	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
197	<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
198	Multiple plasmon resonances from gold nanostructures. Applied Physics Letters, 2007, 90, 143105.	1.5	59

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200	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
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