

# Edward P J Parrott

## List of Publications by Year in descending order

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71  
papers

2,578  
citations

185998

28  
h-index

243296

44  
g-index

71  
all docs

71  
docs citations

71  
times ranked

3590  
citing authors

#	ARTICLE	IF	CITATIONS
1	Low-Cost Wet-Etching Method to Fabricate a Robust THz Tri-Layer Polarizer With a High Extinction Ratio. , 2021, , .		0
2	In vivo estimation of water diffusivity in occluded human skin using terahertz reflection spectroscopy. Journal of Biophotonics, 2019, 12, e201800145.	1.1	31
3	Towards a Rapid Terahertz Liquid Crystal Phase Shifter: Terahertz In-Plane and Terahertz Out-Plane (TIP-TOP) Switching. IEEE Transactions on Terahertz Science and Technology, 2018, 8, 209-214.	2.0	28
4	Invited Article: An active terahertz polarization converter employing vanadium dioxide and a metal wire grating in total internal reflection geometry. APL Photonics, 2018, 3, .	3.0	29
5	In vivo THz imaging of human skin: Accounting for occlusion effects. Journal of Biophotonics, 2018, 11, e201700111.	1.1	44
6	Highly Sensitive Terahertz Thin-Film Total Internal Reflection Spectroscopy Reveals in Situ Photoinduced Structural Changes in Methylammonium Lead Halide Perovskites. Journal of Physical Chemistry C, 2018, 122, 17552-17558.	1.5	21
7	Robust and accurate terahertz time-domain spectroscopic ellipsometry. Photonics Research, 2018, 6, 768.	3.4	20
8	Adaptive Sampling for Terahertz Time-Domain Spectroscopy and Imaging. IEEE Transactions on Terahertz Science and Technology, 2017, 7, 118-123.	2.0	15
9	Graphene Based Terahertz Light Modulator in Total Internal Reflection Geometry. Advanced Optical Materials, 2017, 5, 1600697.	3.6	41
10	Tailoring Metamaterial Microstructures to Realize Broadband Polarization Modulation of Terahertz Waves. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-6.	1.9	18
11	Broadband modulation of terahertz waves through electrically driven hybrid bowtie antenna-VO2 devices. Scientific Reports, 2017, 7, 12725.	1.6	34
12	Determination of terahertz permittivity of dehydrated biological samples. Physics in Medicine and Biology, 2017, 62, 8882-8893.	1.6	17
13	A Robust Baseline and Reference Modification and Acquisition Algorithm for Accurate THz Imaging. IEEE Transactions on Terahertz Science and Technology, 2017, 7, 493-501.	2.0	31
14	<i>In vivo</i> terahertz reflection imaging of human scars during and after the healing process. Journal of Biophotonics, 2017, 10, 1143-1151.	1.1	57
15	Exploiting a metal wire grating in total internal reflection geometry to achieve achromatic polarization conversion. Photonics Research, 2017, 5, 299.	3.4	13
16	Recent advances in terahertz technology for biomedical applications. Quantitative Imaging in Medicine and Surgery, 2017, 7, 345-355.	1.1	186
17	The effects of the slow freeze and thaw process on the THz properties of biological samples. , 2016, , .		0
18	Freeze-thaw hysteresis effects in terahertz imaging of biomedical tissues. Biomedical Optics Express, 2016, 7, 4711.	1.5	23

#	ARTICLE	IF	CITATIONS
19	Vanadium dioxide devices for terahertz wave modulation: a study of wire grid structures. <i>Nanotechnology</i> , 2016, 27, 205206.	1.3	31
20	Exploiting total internal reflection geometry for efficient optical modulation of terahertz light. <i>APL Photonics</i> , 2016, 1, .	3.0	29
21	In vivo THz imaging of human skin: Accounting for occlusion effects. , 2016, , .		0
22	Broadband terahertz plasmonic wave retarders. , 2016, , .		0
23	Terahertz near field imaging of metal hole arrays. , 2016, , .		0
24	Calibration method to improve the accuracy of THz imaging and spectroscopy in reflection geometry. <i>Photonics Research</i> , 2016, 4, A29.	3.4	41
25	Switchable terahertz metamaterials: Using the insulator-metal transition of vanadium dioxide to activate metamaterial properties. , 2015, , .		2
26	Terahertz Time-Domain and Low-Frequency Raman Spectroscopy of Organic Materials. <i>Applied Spectroscopy</i> , 2015, 69, 1-25.	1.2	153
27	Solvent Doping of PEDOT/PSS: Effect on Terahertz Optoelectronic Properties and Utilization in Terahertz Devices. <i>Journal of Physical Chemistry C</i> , 2015, 119, 6813-6818.	1.5	63
28	Gelatin embedding: a novel way to preserve biological samples for terahertz imaging and spectroscopy. <i>Physics in Medicine and Biology</i> , 2015, 60, 2703-2713.	1.6	46
29	Low-cost and broadband terahertz antireflection coatings based on DMSO-doped PEDOT/PSS. <i>Optics Letters</i> , 2015, 40, 2886.	1.7	20
30	Probing solid-state reaction mechanisms with THz-TDS. , 2014, , .		0
31	Improved acquisition time via adaptive sampling for THz-TDS. , 2014, , .		0
32	High extinction ratio and low transmission loss thin-film terahertz polarizer with a tunable bilayer metal wire-grid structure. <i>Optics Letters</i> , 2014, 39, 793.	1.7	49
33	A variable step THz neutral density filter based on PEDOT/PSS doped with dimethylformamide. , 2014, , .		0
34	Terahertz in plane and terahertz out of plane (TIP-TOP) switching of a liquid crystal spatial light modulator. , 2014, , .		2
35	Direct evidence to support the restriction of intramolecular rotation hypothesis for the mechanism of aggregation-induced emission: temperature resolved terahertz spectra of tetraphenylethene. <i>Materials Horizons</i> , 2014, 1, 251-258.	6.4	117
36	Advances in Polarizer Technology for Terahertz Frequency Applications. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2013, 34, 489-499.	1.2	62

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37	Large birefringence liquid crystal in terahertz range with temperature tuning. , 2013, , .		1
38	Robust Thin-Film Wire-Grid THz Polarizer Fabricated Via a Low-Cost Approach. IEEE Photonics Technology Letters, 2013, 25, 81-84.	1.3	48
39	Terahertz time domain spectroscopy of rat skin tissues. , 2013, , .		0
40	Structural evolution of tetraphenylethene with temperature observed using THz-TDS. , 2013, , .		0
41	Tailoring liquid crystals to become fast and efficient terahertz devices. , 2012, , .		0
42	Evaluating liquid crystal properties for use in terahertz devices. Optics Express, 2012, 20, 11899.	1.7	90
43	Accurate photoconductive antenna characterization using a thin film polarizer. Applied Physics Letters, 2012, 101, 121108.	1.5	9
44	Compensating for fibre-coupled power drift in THz-TDS systems. , 2012, , .		0
45	Removing the &#x2018;double-pulse&#x2019; problem in polarization maintaining fiber delivery of femtosecond laser in terahertz systems. , 2012, , .		0
46	Terahertz Spectroscopy of Crystalline and Non-Crystalline Solids. Springer Series in Optical Sciences, 2012, , 191-227.	0.5	5
47	Novel wire grid polarizer for accurate antenna characterization. , 2012, , .		0
48	Fabrication of a metal wire-grid THz polarizer with a low-cost manufacturing approach. , 2012, , .		0
49	Probing biological systems with terahertz spectroscopy. Proceedings of SPIE, 2012, , .	0.8	0
50	Using THz-TDS of ethyl lactate/water mixtures to gain insight into solvent dynamics. , 2011, , .		0
51	Terahertz spectroscopy: Its future role in medical diagnoses. Journal of Molecular Structure, 2011, 1006, 66-76.	1.8	101
52	Terahertz pulsed imaging in vivo: measurements and processing methods. Journal of Biomedical Optics, 2011, 16, 106010.	1.4	47
53	Terahertz spectroscopy of inorganic glasses and carbon nanotubes. Spectroscopic Properties of Inorganic and Organometallic Compounds, 2011, , 157-183.	0.4	2
54	Tuning the Acid/Base Properties of Nanocarbons by Functionalization via Amination. Journal of the American Chemical Society, 2010, 132, 9616-9630.	6.6	590

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55	Active coke: Carbonaceous materials as catalysts for alkane dehydrogenation. <i>Journal of Catalysis</i> , 2010, 269, 329-339.	3.1	74
56	A study into the effect of subtle structural details and disorder on the terahertz spectrum of crystalline benzoic acid. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 5329.	1.3	78
57	Atomic charge distribution in sodosilicate glasses from terahertz time-domain spectroscopy. <i>Physical Review B</i> , 2010, 82, .	1.1	25
58	Untangling the electronic properties in highly similar multi-walled carbon nanotubes by terahertz spectroscopy. , 2009, , .		1
59	Extraction of accurate optical constants in THz-TDS. , 2009, , .		0
60	The Use of Terahertz Spectroscopy as a Sensitive Probe in Discriminating the Electronic Properties of Structurally Similar Multi-Walled Carbon Nanotubes. <i>Advanced Materials</i> , 2009, 21, 3953-3957.	11.1	32
61	Testing the Sensitivity of Terahertz Spectroscopy to Changes in Molecular and Supramolecular Structure: A Study of Structurally Similar Cocrystals. <i>Crystal Growth and Design</i> , 2009, 9, 1452-1460.	1.4	99
62	Extracting accurate optical parameters from glasses using terahertz time-domain spectroscopy. <i>Journal of Non-Crystalline Solids</i> , 2009, 355, 1824-1827.	1.5	20
63	Accurate determination of optical coefficients from chemical samples using terahertz time-domain spectroscopy and effective medium theory. <i>Optics Letters</i> , 2009, 34, 3722.	1.7	36
64	Understanding the Dielectric Properties of Heat-Treated Carbon Nanofibers at Terahertz Frequencies: a New Perspective on the Catalytic Activity of Structured Carbonaceous Materials. <i>Journal of Physical Chemistry C</i> , 2009, 113, 10554-10559.	1.5	33
65	Terahertz pulsed spectroscopic imaging using optimized binary masks. <i>Applied Physics Letters</i> , 2009, 95, 231112.	1.5	31
66	Modelling the effect of hydrogen positions on the lattice dynamics calculations of terahertz spectra of benzoic acid. , 2008, , .		0
67	Using terahertz time-domain-spectroscopy to follow the kinetics and mechanism of cocrystal formation. , 2008, , .		0
68	Probing solids through THz spectroscopy: Differentiation of chiral and racemic forms of isostructural and non-isostructural cocrystals. , 2008, , .		0
69	Terahertz spectroscopy of carbon nanotubes embedded in a deformable rubber. <i>Journal of Applied Physics</i> , 2008, 103, .	1.1	30
70	Understanding the catalytic activity of heat treated carbon nanofibres: Investigation of their dielectric properties at THz frequencies. , 2008, , .		1
71	Using terahertz time-domain spectroscopy to identify pharmaceutical cocrystals. , 2007, , .		2