Paul Dawson

List of Publications by Year
in descending order

101	1,978	331642 21	276858 41
papers	citations	h-index	g-index

101	101	101	2464
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	One-step synthesis of ZnO nanosheets: a blue-white fluorophore. Nanoscale Research Letters, 2012, 7, 470.	5.7	317
2	Imaging of surface plasmon propagation and edge interaction using a photon scanning tunneling microscope. Physical Review Letters, 1994, 72, 2927-2930.	7.8	149
3	Barrier characteristics of Schottky diodes as determined from I-V-T measurements. Solid-State Electronics, 1996, 39, 583-592.	1.4	118
4	Combined Antenna and Localized Plasmon Resonance in Raman Scattering from Random Arrays of Silver-Coated, Vertically Aligned Multiwalled Carbon Nanotubes. Nano Letters, 2011, 11, 365-371.	9.1	84
5	Observation and explanation of light-emission spectra from statistically rough Cu, Ag, and Au tunnel junctions. Physical Review B, 1984, 30, 3164-3178.	3.2	76
6	Wavelength Dependence of Raman Enhancement from Gold Nanorod Arrays: Quantitative Experiment and Modeling of a Hot Spot Dominated System. Journal of Physical Chemistry C, 2010, 114, 19913-19919.	3.1	75
7	Photoluminescence decay time measurements from self-organized InAs/GaAs quantum dots. Journal of Applied Physics, 1999, 86, 2555-2561.	2.5	73
8	Unusual photoresponse of indium doped ZnO/organic thin film heterojunction. Applied Physics Letters, 2012, 100, .	3.3	62
9	Electrical conduction and rheological behaviour of composites ofÂpoly(Îµ-caprolactone) and MWCNTs. Polymer, 2015, 58, 209-221.	3.8	62
10	Chemical etching of optical fibre tips â€" experiment and model. Ultramicroscopy, 2000, 85, 235-248.	1.9	52
11	Surface plasmon polariton propagation length:â€ƒA direct comparison using photon scanning tunneling microscopy and attenuated total reflection. Physical Review B, 2001, 63, .	3.2	48
12	Solution-based synthesis of cobalt-doped ZnO thin films. Thin Solid Films, 2012, 524, 137-143.	1.8	45
13	Influence of metal grain size on surface-enhanced Raman scattering. Physical Review B, 1991, 44, 6372-6381.	3.2	32
14	Safe fabrication of sharp gold tips for light emission in scanning tunnelling microscopy. Ultramicroscopy, 2008, 108, 558-566.	1.9	30
15	Cobalt-doped ZnO nanowires on quartz: Synthesis by simple chemical method and characterization. Journal of Crystal Growth, 2012, 343, 7-12.	1.5	30
16	Non-linear electronic transport in Pt nanowires deposited by focused ion beam. Nanotechnology, 2007, 18, 215203.	2.6	28
17	Surface-Enhanced Raman Scattering from Metallic Nanostructures: Bridging the Gap between the Near-Field and Far-Field Responses. Physical Review X, 2013, 3, .	8.9	28
18	Theory of SERS enhancement: general discussion. Faraday Discussions, 2017, 205, 173-211.	3.2	27

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19	The tipâ€“sample water bridge and light emission from scanning tunnelling microscopy. Nanotechnology, 2009, 20, 335202.	2.6	24
20	Fabrication of nano-scale optical patterns in amorphous silicon carbide with focused ion beam writing. Vacuum, 2005, 79, 100-105.	3.5	23
21	Infrared emission from tunneling electrons: The end of the rainbow in scanning tunneling microscopy. Applied Physics Letters, 2009, 94, .	3.3	22
22	Measurement and interpretation of the mid-infrared properties of single crystal and polycrystalline gold. Surface Science, 2005, 577, 95-111.	1.9	21
23	Imaging of surface plasmon launch and propagation using a photon scanning tunneling microscope. Ultramicroscopy, 1995, 57, 287-292.	1.9	20
24	Light emission from scanning tunnelling microscope on polycrystalline Au filmsâ€”what is happening at the single-grain level?. Journal of Optics, 2006, 8, S219-S226.	1.5	20
25	Near-field optical mapping of the ion-implanted patterns fabricated in amorphous silicon carbide. Vacuum, 2005, 79, 94-99.	3.5	18
26	Optical contrast in ion-implanted amorphous silicon carbide nanostructures. Journal Physics D: Applied Physics, 2007, 40, 7492-7496.	2.8	18
27	Composites of poly(Îµâ€²caprolactone) and Mo₆S₃I₆ Nanowires. Polymers for Advanced Technologies, 2012, 23, 149-160.	3.2	17
28	Detection of Low-Concentration Contaminants in Solution by Exploiting Chemical Derivatization in Surface-Enhanced Raman Spectroscopy. Analytical Chemistry, 2014, 86, 9006-9012.	6.5	17
29	Plasmonic and new plasmonic materials: general discussion. Faraday Discussions, 2015, 178, 123-149.	3.2	16
30	Photosignal enhancement in Alâ€GaAs diodes due to surface plasmons and guided wave modes. Journal of Applied Physics, 1993, 74, 7481-7487.	2.5	14
31	Scanning tunneling microscope light emission: Effect of the strong dc field on junction plasmons. Physical Review B, 2016, 94, .	3.2	14
32	Analytical SERS: general discussion. Faraday Discussions, 2017, 205, 561-600.	3.2	14
33	Scanning tunnelling microscope light emission: Finite temperature current noise and over cut-off emission. Scientific Reports, 2017, 7, 3530.	3.3	14
34	Image of the Electron Energy-Loss Function in Light Emitted from Tunnel Junctions. Physical Review Letters, 1982, 49, 892-895.	7.8	13
35	Spectral dependence of light output from LEIT devices on electrode morphology. Journal of Physics Condensed Matter, 1989, 1, 7931-7940.	1.8	13
36	Analysis of surface plasmon polariton enhancement in photodetection by Alâ€”GaAs Schottky diodes. Solid-State Electronics, 1993, 36, 1417-1427.	1.4	13

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37	Prism coupler with variable coupling gap. Review of Scientific Instruments, 2000, 71, 4208.	1.3	13
38	Quantum efficiency in GaAs Schottky photodetectors with enhancement due to surface plasmon excitations. Solid-State Electronics, 2002, 46, 29-33.	1.4	13
39	Electromagnetic interaction between a metallic nanoparticle and surface in tunnelling proximityâ€"modelling and experiment. Journal Physics D: Applied Physics, 2009, 42, 215101.	2.8	13
40	Light emission from gold and silver thin films in a scanning tunneling microscope: role of contamination and interpretation of grain structure in photon maps. Surface Science, 2004, 572, 497-520.	1.9	12
41	Ultraâ€broadband Polarisers Based on Metastable Freeâ€Standing Aligned Carbon Nanotube Membranes. Advanced Optical Materials, 2014, 2, 929-937.	7.3	12
42	Surface enhanced Raman scattering from mildly roughened surfaces: variation of signal with metal grain size. Surface Science, 1991, 250, L383-L388.	1.9	11
43	Ultrasensitive and towards single molecule SERS: general discussion. Faraday Discussions, 2017, 205, 291-330.	3.2	11
44	Solvothermal synthesis of graphene oxide and its composites with poly(Îµ-caprolactone). Nanoscale, 2019, 11, 18672-18682.	5.6	11
45	Optimization of the slowâ€mode plasmon polariton in lightâ€emitting tunnel junctions. Journal of Applied Physics, 1995, 78, 5522-5533.	2.5	10
46	Effect of temperature and inhomogeneity on the yield of PtSiâ€"nâ€"Si photodetectors. Journal of Crystal Growth, 2006, 288, 166-170.	1.5	10
47	Light emission from nominally smooth Ag tunnel junctions. Surface Science, 1986, 171, 135-145.	1.9	9
48	Characterization of the Au surface structure of Alâ€"Iâ€"Au light-emitting tunnel junctions. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1991, 9, 879.	1.6	9
49	Rear leit observation. Solid State Communications, 1982, 44, 1127-1129.	1.9	8
50	Light emission from statistically rough Ag tunnel junctions. Surface Science, 1986, 171, 146-156.	1.9	8
51	Characterization of Surface Plasmons on Metal-oxide-semiconductor Structures. Journal of Modern Optics, 1991, 38, 1593-1598.	1.3	8
52	Monte Carlo calculations of quantum yield in inhomogeneous PtSi/p-Si Schottky barriers. Semiconductor Science and Technology, 1998, 13, 700-704.	2.0	8
53	The mechanism of light emission from statistically rough tunnel junctions. Solid State Communications, 1984, 50, 383-388.	1.9	7
54	Optical detection of surface plasmons on tunnel-junction structures. Journal Physics D: Applied Physics, 1987, 20, 776-784.	2.8	7

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55	Surface Plasmon Enhanced Laser Ablation of Thin Metal Films. Journal of Modern Optics, 1994, 41, 1287-1294.	1.3	7
56	Temperature dependence of the mid-infrared dielectric function of YBCO in the ab plane. Physica C: Superconductivity and Its Applications, 1996, 271, 298-310.	1.2	7
57	The interaction of surface plasmon polaritons with a silver film edge. Journal of Microscopy, 1999, 194, 578-583.	1.8	7
58	Surface plasmon polariton propagation across a gentle silver step. Surface Science, 2001, 490, 85-98.	1.9	7
59	Yield in inhomogeneous PtSiâ€“n-Si Schottky photodetectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 567, 372-375.	1.6	7
60	Fast mode surface plasmon damping on tunnel junction structures. Surface Science, 1991, 245, 225-231.	1.9	6
61	Temperature dependence of the mid-infrared dielectric function of YBCO in the aâ€“b plane: a re-evaluation. Physica C: Superconductivity and Its Applications, 2000, 340, 1-15.	1.2	6
62	An alternative methodology in Schottky diode physics. Journal of Applied Physics, 2015, 117, .	2.5	6
63	Origin of enhancement in Raman scattering from Ag-dressed carbon-nanotube antennas: experiment and modelling. Physical Chemistry Chemical Physics, 2018, 20, 5827-5840.	2.8	6
64	Calculation of slow mode surface plasmon polariton properties related to experimental observations. Applied Physics Letters, 1992, 61, 2776-2778.	3.3	5
65	Characterizing wear processes on orthopaedic materials using scanning probe microscopy. Applied Physics A: Materials Science and Processing, 1998, 66, S867-S871.	2.3	5
66	Application of surface plasmon polaritons in the laser ablation and characterisation of thin aluminium films. Surface Science, 1999, 429, 117-126.	1.9	5
67	Variable temperature, variable-gap Otto prism coupler for use in a vacuum environment. Review of Scientific Instruments, 2000, 71, 4213.	1.3	5
68	Imaging tip formation in single-mode optical fibres. Ultramicroscopy, 2001, 86, 233-239.	1.9	5
69	Mid-infrared aâ€“b plane response of YBa2Cu3O7â^'Î´ as a function of doping and temperature determined by attenuated total reflection. Physica C: Superconductivity and Its Applications, 2004, 403, 67-85.	1.2	5
70	Photon Emission at Step Edges of Single Crystalline Gold Surfaces Investigated by Scanning Tunnelling Microscopy. Japanese Journal of Applied Physics, 2006, 45, 2119-2123.	1.5	5
71	Design and fabrication of plasmonic cavities for magneto-optical sensing. AIP Advances, 2018, 8, .	1.3	5
72	Infra-red surface plasmons on platinum silicide. Electronics Letters, 1992, 28, 164.	1.0	4

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73	Contrasting damage characteristics in direct incidence and surface plasmon mediated single-shot laser ablation of aluminium films. Applied Surface Science, 1998, 127-129, 46-52.	6.1	4
74	BARRIER HEIGHT VARIATIONS AND INTERFACE PROPERTIES OF PtSi/Si STRUCTURES. Surface Review and Letters, 2006, 13, 273-278.	1.1	4
75	Optical transmission through single subwavelength apertures using prism coupled input of laser light of annular intensity profile. Optics Express, 2007, 15, 17863.	3.4	4
76	Novel routes to electromagnetic enhancement and its characterisation in surface- and tip-enhanced Raman scattering. Faraday Discussions, 2017, 205, 121-148.	3.2	4
77	Grazing-incidence optical magnetic recording with super-resolution. Beilstein Journal of Nanotechnology, 2017, 8, 28-37.	2.8	4
78	<title>Surface-plasmon-enhanced Schottky barrier sensors</title>. , 1992, 1637, 216.		3
79	Direct observation of surface plasmons in YBCO by attenuated total reflection of light in the infrared. Physica B: Condensed Matter, 1994, 194-196, 2333-2334.	2.7	3
80	Broadband Excitation and Emission of Surface Plasmons. Journal of Modern Optics, 1994, 41, 1279-1286.	1.3	3
81	Optical, topographical, and compositional characterization of PtSi/Si Schottky diodes. , 1994, 2274, 55.		3
82	The electrical characterization and response to hydrogen of Schottky diodes with a resistive metal electrodeâ€"rectifying an oversight in Schottky diode investigation. Journal Physics D: Applied Physics, 2011, 44, 125101.	2.8	3
83	Surface plasmon enhanced spectroscopies and time and space resolved methods: general discussion. Faraday Discussions, 2015, 178, 253-279.	3.2	3
84	Possible observation of the direct emission of radiation from tunnel junctions. Journal of Physics Condensed Matter, 1989, 1, 9021-9026.	1.8	2
85	Scheme for enhancing efficiency in resonant-cavity Schottky photodetectors. Microelectronics Journal, 2001, 32, 779-782.	2.0	2
86	High sensitivity (1 ppm) hydrogen detection using an unconventional Pd/n-InP Schottky device. Journal of Physics Condensed Matter, 2011, 23, 422201.	1.8	2
87	Surface plasmons on PtSi for visible and infrared Schottky-barrier-enhanced detection. , 1992, 1735, 240.		1
88	Anisotropy of optical constants of YBCO. Journal of Superconductivity and Novel Magnetism, 1994, 7, 943-946.	0.5	1
89	<title>Modeling the optical response of grating-profiled PtSi/Si infrared detectors</title>. , 1997, , .		1
90	Characterization of optical properties of PtSi at 3.392 Î¼m from 300 K to 85 K and the relation of morphological effects. , 1999, , .		1

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91	Surface enhanced Raman scattering from mildly roughened surfaces: variation of signal with metal grain size. Surface Science Letters, 1991, 250, L383-L388.	0.1	0
92	<title>Influence of surface topography on light emission from tunnel junctions</title>. , 1992, , .		0
93	Surface-enhanced Raman scattering from mildly roughened surfaces: influence of metal grain size on signal. , 1992, , .		0
94	Interplay of CaF2. Journal of Modern Optics, 1993, 40, 1725-1730.	1.3	0
95	Dependence of light output from nominally smooth Al-Ox-Au tunnel junctions on electrode morphology. Journal of Physics Condensed Matter, 1993, 5, L419-L424.	1.8	0
96	<title>Temperature dependence of the dielectric function of laser deposited YBCO thin films at 3392 nm</title>. , 1996, 2696, 597.		0
97	DC resistance and dielectric function at 3392nm of YBCO films from 300K to 80K. European Physical Journal D, 1996, 46, 1395-1396.	0.4	0
98	Dielectric function of YBCO in the mid-infrared: temperature and doping dependence at 3.392Î¼m. Physica C: Superconductivity and Its Applications, 2000, 341-348, 2273-2274.	1.2	0
99	The mid-infrared dielectric function of NBCO in thea-bplane from 85 K to 300 K. Superconductor Science and Technology, 2001, 14, 130-138.	3.5	0
100	Dielectric function of YBCO determined by attenuated total reflection in the mid-infrared (3,392 nm). Physica C: Superconductivity and Its Applications, 2004, 408-410, 799-800.	1.2	0
101	MISE EN Ã‰VIDENCE DU RÃ”LE DOMINANT DES PLASMONS POLARITONS RAPIDES LORS DE L'Ã‰MISSION DE LUMIÃˆRE PAR DES JONCTIONS TUNNEL A RUGOSITÃ‰ STATISTIQUE. Journal De Physique Colloque, 1984, 45, C5-269-C5-274.	0.2	0