

# Ian Hooper

## List of Publications by Year in descending order

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78  
papers

2,482  
citations

257450

24  
h-index

197818

49  
g-index

78  
all docs

78  
docs citations

78  
times ranked

3295  
citing authors

#	ARTICLE	IF	CITATIONS
1	Plasmonic meta-atoms and metasurfaces. Nature Photonics, 2014, 8, 889-898.	31.4	802
2	Directionally Controlled Fluorescence Emission in Butterflies. Science, 2005, 310, 1151-1151.	12.6	141
3	Dispersion of surface plasmon polaritons on short-pitch metal gratings. Physical Review B, 2002, 65, .	3.2	88
4	Experimental method for reliably establishing the refractive index of buprestid beetle exocuticle. Optics Express, 2007, 15, 4351.	3.4	80
5	Coupled surface plasmon polaritons on thin metal slabs corrugated on both surfaces. Physical Review B, 2004, 70, .	3.2	77
6	Making Tunnel Barriers (Including Metals) Transparent. Physical Review Letters, 2006, 97, 053902.	7.8	75
7	Waveguide Arrays as Plasmonic Metamaterials: Transmission below Cutoff. Physical Review Letters, 2006, 96, 073904.	7.8	73
8	Microwave Transmission of a Compound Metal Grating. Physical Review Letters, 2006, 96, 257402.	7.8	71
9	Detailed optical study of the transparent wing membranes of the dragonfly Aeshna cyanea. Optics Express, 2006, 14, 4891.	3.4	66
10	Surface plasmon polaritons on thin-slab metal gratings. Physical Review B, 2003, 67, .	3.2	56
11	Light emission through a corrugated metal film: The role of cross-coupled surface plasmon polaritons. Physical Review B, 2004, 69, .	3.2	50
12	Transmission of light through thin silver films via surface plasmon-polaritons. Optics Express, 2004, 12, 5881.	3.4	41
13	Sensing using differential surface plasmon ellipsometry. Journal of Applied Physics, 2004, 96, 3004-3011.	2.5	40
14	Strongly coupled surface plasmons on thin shallow metallic gratings. Physical Review B, 2008, 77, .	3.2	40
15	Broadband polarization-converting mirror for the visible region of the spectrum. Optics Letters, 2002, 27, 2152.	3.3	39
16	Removing singular refractive indices with sculpted surfaces. Scientific Reports, 2014, 4, 4876.	3.3	38
17	Massively Sub-wavelength Guiding of Electromagnetic Waves. Scientific Reports, 2014, 4, 7495.	3.3	37
18	Differential ellipsometric surface plasmon resonance sensors with liquid crystal polarization modulators. Applied Physics Letters, 2004, 85, 3017-3019.	3.3	36

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19	Field profiles of coupled surface plasmon-polaritons. <i>Journal of Modern Optics</i> , 2008, 55, 2929-2943.	1.3	32
20	Surface plasmon polaritons on narrow-ridged short-pitch metal gratings in the conical mount. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2003, 20, 836.	1.5	30
21	Magneto-optic behaviour in the presence of surface plasmons. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 345230.	1.8	28
22	Surface plasmon polaritons on narrow-ridged short-pitch metal gratings. <i>Physical Review B</i> , 2002, 66, .	3.2	27
23	Dependence on surface profile in grating-assisted coupling of light to surface plasmon-polaritons. <i>Optics Communications</i> , 2006, 261, 291-295.	2.1	25
24	One dimensional electromagnetic waves on flat surfaces. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 435103.	2.8	25
25	Dual-channel differential surface plasmon ellipsometry for bio-chemical sensing. <i>Biosensors and Bioelectronics</i> , 2009, 25, 411-417.	10.1	23
26	Some considerations on the transmissivity of thin metal films. <i>Optics Express</i> , 2008, 16, 17258.	3.4	22
27	Surface plasmon differential ellipsometry of aqueous solutions for bio-chemical sensing. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 105408.	2.8	22
28	Direct observation of negative-index microwave surface waves. <i>Scientific Reports</i> , 2016, 6, 22018.	3.3	22
29	Light localization, photon sorting, and enhanced absorption in subwavelength cavity arrays. <i>Optics Express</i> , 2012, 20, 24226.	3.4	21
30	Electromagnetic interactions in a pair of coupled split-ring resonators. <i>Physical Review B</i> , 2017, 96, .	3.2	21
31	Surface plasmon polaritons on deep, narrow-ridged rectangular gratings. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2009, 26, 1228.	2.1	20
32	High efficiency photomodulators for millimeter wave and THz radiation. <i>Scientific Reports</i> , 2019, 9, 18304.	3.3	20
33	Optical resonances on sub-wavelength silver lamellar gratings. <i>Optics Express</i> , 2008, 16, 22003.	3.4	18
34	Coupled surface plasmons on thin silver gratings. <i>Journal of Optics</i> , 2008, 10, 015007.	1.5	17
35	Broad-band polarization conversion from a finite periodic structure in the microwave regime. <i>Applied Physics Letters</i> , 2004, 84, 849-851.	3.3	13
36	Phase sensitive array detection with polarisation modulated differential sensing. <i>Sensors and Actuators B: Chemical</i> , 2006, 119, 651-655.	7.8	13

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37	Covert Images Using Surface Plasmon-Mediated Optical Polarization Conversion. <i>Advanced Optical Materials</i> , 2018, 6, 1700843.	7.3	13
38	Metamaterial tunnel barrier gives broadband microwave transmission. <i>Journal of Applied Physics</i> , 2011, 109, 013104.	2.5	12
39	Investigation of the coupling between tunable split-ring resonators. <i>Physical Review B</i> , 2018, 98, .	3.2	12
40	Super-resolution imaging for sub-IR frequencies based on total internal reflection. <i>Optica</i> , 2021, 8, 88.	9.3	12
41	Interactions between Fabry-Pérot and nanohole resonances in metallo-dielectric plasmonic nanostructures. <i>Journal of Modern Optics</i> , 2009, 56, 1199-1204.	1.3	10
42	Broadband and low loss high refractive index metamaterials in the microwave regime. <i>Applied Physics Letters</i> , 2013, 102, 091108.	3.3	10
43	Metamaterial Analogues of Molecular Aggregates. <i>ACS Photonics</i> , 2019, 6, 3003-3009.	6.6	10
44	Broadband, slow sound on a glide-symmetric meander-channel surface. <i>Journal of the Acoustical Society of America</i> , 2019, 145, 3190-3194.	1.1	10
45	Grating-coupled surface plasmon polaritons and waveguide modes in a silver-dielectric-silver structure. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2007, 24, 3547.	1.5	9
46	Heavily loaded ferrite-polymer composites to produce high refractive index materials at centimetre wavelengths. <i>APL Materials</i> , 2013, 1, .	5.1	9
47	Gap-Corrected Thin-Film Permittivity and Permeability Measurement With a Broadband Coaxial Line Technique. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2016, , 1-7.	4.6	9
48	Gapless states in microwave artificial graphene. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	9
49	Investigating the nature of chiral near-field interactions. <i>Physical Review B</i> , 2018, 97, .	3.2	9
50	Independently controlling permittivity and diamagnetism in broadband, low-loss, isotropic metamaterials at microwave frequencies. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	8
51	Absence of Anderson localization in certain random lattices. <i>Physical Review E</i> , 2017, 96, 022122.	2.1	8
52	Low dispersion surface plasmon-polaritons on deep silver gratings. <i>Journal of Modern Optics</i> , 2006, 53, 1569-1576.	1.3	7
53	The transverse magnetic reflectivity minimum of metals. <i>Optics Express</i> , 2008, 16, 7580.	3.4	7
54	Topological modes in one-dimensional solids and photonic crystals. <i>Physical Review B</i> , 2016, 93, .	3.2	7

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55	Photonic bandgaps for grating-coupled waveguide modes with a silver tunnel barrier. <i>New Journal of Physics</i> , 2007, 9, 251-251.	2.9	6
56	Structurally dictated anisotropic "designer surface plasmons". <i>Applied Physics Letters</i> , 2011, 99, 181107.	3.3	6
57	The Basics of Plasmonics. <i>Handbook of Surface Science</i> , 2014, , 37-74.	0.3	6
58	Transmutation of singularities and zeros in graded index optical instruments: a methodology for designing practical devices. <i>Optics Express</i> , 2013, 21, 32313.	3.4	5
59	Scalable polymer-based ferrite composites with matching permeability and permittivity for high-frequency applications. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 120, 609-614.	2.3	5
60	Realizing an ultra-wideband backward-wave metamaterial waveguide. <i>Physical Review B</i> , 2018, 98, .	3.2	4
61	Isotropic Backward Waves Supported by a Spiral Array Metasurface. <i>Scientific Reports</i> , 2018, 8, 7098.	3.3	4
62	Exploring microwave absorption by non-periodic metasurfaces. <i>Advanced Electromagnetics</i> , 2021, 10, 1-6.	1.0	4
63	Effective-periodicity effects in Fibonacci slot arrays. <i>Physical Review B</i> , 2021, 104, .	3.2	4
64	Light harvesting with metasurfaces: applications to sensors and energy generation. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 731-737.	2.3	3
65	Broadband metasurface for surface wave lenses. , 2016, , .		3
66	Space squeezing optics: Performance limits and implementation at microwave frequencies. <i>APL Photonics</i> , 2022, 7, .	5.7	3
67	Measurement of Photon Sorting at Microwave Frequencies in a Cavity Array Metasurface. <i>IEEE Transactions on Antennas and Propagation</i> , 2015, 63, 4521-4524.	5.1	2
68	Absorption modes of Möbius strip resonators. <i>Scientific Reports</i> , 2021, 11, 9045.	3.3	2
69	Multi-scale bullseye antennas. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2022, 380, .	3.4	2
70	A Ferrite-Filled Cavity Resonator for Electronic Article Surveillance on Metallic Packaging. <i>IEEE Transactions on Magnetics</i> , 2019, 55, 1-10.	2.1	1
71	Metamaterial Analogues of Strongly Coupled Molecular Ensembles. <i>ACS Photonics</i> , 2021, 8, 2997-3003.	6.6	1
72	Direct observation of defect modes in molecular aggregate analogs. <i>Physical Review B</i> , 2020, 102, .	3.2	1

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73	The optical response of single-interface and thin slab dielectric gratings. Journal of Optics, 2006, 8, S250-S263.	1.5	0
74	Mimicking graphene physics with a plane hexagonal wire mesh. Applied Physics Letters, 2018, 112, .	3.3	0
75	Engineered Silicon for Efficient mm-Wave and THz Modulators. , 2019, , .		0
76	Efficient mm-wave photomodulation via coupled Fabry-Perot cavities. Journal of Applied Physics, 2021, 129, 033102.	2.5	0
77	Total internal reflection geometry for near-field imaging. , 2020, , .		0
78	Waveguide-Mode-Enhanced Millimeter-Wave Photomodulators. Physical Review Applied, 2022, 17, .	3.8	0