Thomas Folland

List of Publications by Year
in descending order

48 papers	1,183 citations	471509 17 h-index	377865 34 g-index
50 all docs	50 docs citations	50 times ranked	1179 citing authors

#	Article	IF	Citations
1	Surface phonon polaritons for infrared optoelectronics. Journal of Applied Physics, 2022, 131, .	2.5	18
2	Hyperbolic shear polaritons in low-symmetry crystals. Nature, 2022, 602, 595-600.	27.8	78
3	Anisotropy and Modal Hybridization in Infrared Nanophotonics Using Low-Symmetry Materials. ACS Photonics, 2022, 9, 1078-1095.	6.6	18
4	Collective Phononâ€“Polaritonic Modes in Silicon Carbide Subarrays. ACS Nano, 2022, 16, 963-973.	14.6	6
5	Nanoscale Spectroscopy of Dielectric Properties of Mica. ACS Photonics, 2021, 8, 175-181.	6.6	16
6	Filterless Nondispersive Infrared Sensing using Narrowband Infrared Emitting Metamaterials. ACS Photonics, 2021, 8, 472-480.	6.6	20
7	Guided Midâ€IR and Nearâ€IR Light within a Hybrid Hyperbolicâ€Material/Silicon Waveguide Heterostructure. Advanced Materials, 2021, 33, e2004305.	21.0	20
8	Engineering the Spectral and Spatial Dispersion of Thermal Emission via Polaritonâ€“Phonon Strong Coupling. Nano Letters, 2021, 21, 1831-1838.	9.1	44
9	Hybrid Waveguides: Guided Midâ€IR and Nearâ€IR Light within a Hybrid Hyperbolicâ€Material/Silicon Waveguide Heterostructure (Adv. Mater. 11/2021). Advanced Materials, 2021, 33, 2170079.	21.0	0
10	Multi-frequency coherent emission from superstructure thermal emitters. Applied Physics Letters, 2021, 118, .	3.3	7
11	Van der Waals Phonon Polariton Microstructures for Configurable Infrared Electromagnetic Field Localizations. Advanced Science, 2021, 8, 2004872.	11.2	20
12	Ultrahigh-Resolution, Label-Free Hyperlens Imaging in the Mid-IR. Nano Letters, 2021, 21, 7921-7928.	9.1	17
13	Experimental confirmation of long hyperbolic polariton lifetimes in monoisotopic (10B) hexagonal boron nitride at room temperature. APL Materials, 2021, 9, .	5.1	16
14	Enhanced Absorption with Graphene-Coated Silicon Carbide Nanowires for Mid-Infrared Nanophotonics. Nanomaterials, 2021, 11, 2339.	4.1	7
15	Deterministic inverse design of Tamm plasmon thermal emitters with multi-resonant control. Nature Materials, 2021, 20, 1663-1669.	27.5	46
16	Microtubules regulate pancreatic Î²-cell heterogeneity via spatiotemporal control of insulin secretion hot spots. ELife, 2021, 10, .	6.0	11
17	Phonon engineering of boron nitride via isotopic enrichment. Journal of Materials Research, 2021, 36, 4394-4403.	2.6	8
18	Van der Waals Semiconductors: Infrared Permittivity of the Biaxial van der Waals Semiconductor Î±â€MoO‹sub›3‹/sub› from Nearâ€and Farâ€Field Correlative Studies (Adv. Mater. 29/2020). Advanced Materials, 2020, 32, 2070220.	21.0	5

#	ARTICLE	IF	CITATIONS
19	Lithography-free IR polarization converters via orthogonal in-plane phonons in Î±-MoO3 flakes. Nature Communications, 2020, 11, 5771.	12.8	54
20	Understanding and supporting the needs of early-career materials scientists. MRS Bulletin, 2020, 45, 969-971.	3.5	1
21	Narrowband Polaritonic Thermal Emitters Driven by Waste Heat. ACS Omega, 2020, 5, 10900-10908.	3.5	34
22	Towards low- loss on-chip nanophotonics with coupled graphene and silicon carbide: a review. JPhys Materials, 2020, 3, 032005.	4.2	15
23	Infrared Permittivity of the Biaxial van der Waals Semiconductor Î±â€MoO₃ from Nearâ€and Farâ€Field Correlative Studies. Advanced Materials, 2020, 32, e1908176.	21.0	99
24	Vibrational Coupling to Epsilon-Near-Zero Waveguide Modes. ACS Photonics, 2020, 7, 614-621.	6.6	35
25	Ultraviolet to far-infrared dielectric function of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>n</mml:mi></mml:mrow></mml:math -doped cadmium oxide thin films. Physical Review Materials, 2020, 4, .	2.4	16
26	High-Q dark hyperbolic phonon-polaritons in hexagonal boron nitride nanostructures. Nanophotonics, 2020, 9, 1457-1467.	6.0	13
27	Refractive Index-Based Control of Hyperbolic Phonon-Polariton Propagation. Nano Letters, 2019, 19, 7725-7734.	9.1	69
28	Ultralow Loss Polaritons in Isotopically Pure Hexagonal Boron Nitride. , 2019, , .		0
29	Probing polaritons in the mid- to far-infrared. Journal of Applied Physics, 2019, 125, .	2.5	48
30	Polaritonic Hybrid-Epsilon-near-Zero Modes: Beating the Plasmonic Confinement vs Propagation-Length Trade-Off with Doped Cadmium Oxide Bilayers. Nano Letters, 2019, 19, 948-957.	9.1	61
31	Implementation of plasmonic band structure to understand polariton hybridization within metamaterials. Optics Express, 2018, 26, 29363.	3.4	4
32	Probing hyperbolic polaritons using infrared attenuated total reflectance micro-spectroscopy. MRS Communications, 2018, 8, 1418-1425.	1.8	17
33	Precise control of infrared polarization using crystal vibrations. Nature, 2018, 562, 499-501.	27.8	24
34	Reconfigurable infrared hyperbolic metasurfaces using phase change materials. Nature Communications, 2018, 9, 4371.	12.8	148
35	Chapter 12 Semiconductor Nanophotonics Using Surface Polaritons. NATO Science for Peace and Security Series B: Physics and Biophysics, 2018, , 235-254.	0.3	1
36	Strong Coupling of Epsilon-Near-Zero Phonon Polaritons in Polar Dielectric Heterostructures. Nano Letters, 2018, 18, 4285-4292.	9.1	71

#	Article	IF	Citations
37	Interactions of Hexagonal Boron Nitride with the Insulator-Metal Phase Transition of Vanadium Dioxide. , 2018, , .		0
38	Optical side-band generation in THz Fabry-Perot laser cavities. Applied Physics Letters, 2017, 111, .	3.3	1
39	Coherent detection of THz laser signals in optical fiber systems. Optics Express, 2017, 25, 25566.	3.4	2
40	Threshold gain in aperiodic lattice lasers. Optics Express, 2016, 24, 30024.	3.4	3
41	Dual-Frequency Defect-Mode Lasing in Aperiodic Distributed Feedback Cavities. IEEE Photonics Technology Letters, 2016, 28, 1617-1620.	2.5	3
42	Gain modulation by graphene plasmons in aperiodic lattice lasers. Science, 2016, 351, 246-248.	12.6	95
43	Gain Control using Graphene Plasmons in Aperiodic DFB lasers. , 2016, , .		0
44	Graphene Plasmon-modified THz Laser Waveguides. , 2016, , .		0
45	Time-resolved THz Laser spectra using a Fiber-interfaced Optical Heterodyne system. , 2015, , .		1
46	High-accuracy heterodyne detection of THz radiation exploiting telecommunication technologies. , 2015, , .		0
47	Electronic switching mechanism in Aperiodic DFB Lasers. , 2014, , .		0
48	Electronically tunable aperiodic distributed feedback terahertz lasers. Journal of Applied Physics, 2013, 113, .	2.5	8