Alexander Mcleod

List of Publications by Citations

49 papers	4,894 citations	22 h-index	58 g-index
58 ext. papers	5,885 ext. citations	14.8 avg, IF	4.98 L-index

#	Paper	IF	Citations
49	Gate-tuning of graphene plasmons revealed by infrared nano-imaging. *Nature*, **2012**, 487, 82-5	50.4	1451
48	Tunable phonon polaritons in atomically thin van der Waals crystals of boron nitride. *Science*, **2014**, 343, 1125-9	33.3	695
47	Infrared nanoscopy of dirac plasmons at the graphene-SiO interface. *Nano Letters*, **2011**, 11, 4701-5	11.5	431
46	Fundamental limits to graphene plasmonics. *Nature*, **2018**, 557, 530-533	50.4	280
45	Subdiffractional focusing and guiding of polaritonic rays in a natural hyperbolic material. *Nature Communications*, **2015**, 6, 6963	17.4	255
44	Ultrafast optical switching of infrared plasmon polaritons in high-mobility graphene. *Nature Photonics*, **2016**, 10, 244-247	33.9	252
43	Electronic and plasmonic phenomena at graphene grain boundaries. *Nature Nanotechnology*, **2013**, 8, 821-5	28.7	191
42	Photonic crystals for nano-light in moir graphene superlattices. *Science*, **2018**, 362, 1153-1156	33.3	164
41	Active Optical Metasurfaces Based on Defect-Engineered Phase-Transition Materials. *Nano Letters*, **2016**, 16, 1050-5	11.5	147
40	Edge and Surface Plasmons in Graphene Nanoribbons. *Nano Letters*, **2015**, 15, 8271-6	11.5	128
39	Nanotextured phase coexistence in the correlated insulator V2O3. *Nature Physics*, **2017**, 13, 80-86	16.2	123
38	Model for quantitative tip-enhanced spectroscopy and the extraction of nanoscale-resolved optical constants. *Physical Review B*, **2014**, 90,	3.3	111
37	Phase transition in bulk single crystals and thin films of VO2 by nanoscale infrared spectroscopy and imaging. *Physical Review B*, **2015**, 91,	3.3	73
36	Near-field spectroscopy of silicon dioxide thin films. *Physical Review B*, **2012**, 85,	3.3	68
35	Imaging the nanoscale phase separation in vanadium dioxide thin films at terahertz frequencies. *Nature Communications*, **2018**, 9, 3604	17.4	46
34	Coexisting first- and second-order electronic phase transitions in a correlated oxide. *Nature Physics*, **2018**, 14, 1056-1061	16.2	43
33	Nanoscale infrared spectroscopy as a non-destructive probe of extraterrestrial samples. *Nature Communications*, **2014**, 5, 5445	17.4	42

32	Multi-messenger nanoprobes of hidden magnetism in a strained manganite. *Nature Materials*, **2020**, 19, 397-404	27	33
31	Symmetry breaking and geometric confinement in VO2: Results from a three-dimensional infrared nano-imaging. *Applied Physics Letters*, **2014**, 104, 121905	3.4	31
30	Photonic crystal for graphene plasmons. *Nature Communications*, **2019**, 10, 4780	17.4	30
29	Infrared nanospectroscopy and imaging of collective superfluid excitations in anisotropic superconductors. *Physical Review B*, **2014**, 90,	3.3	28
28	Artifact free time resolved near-field spectroscopy. *Optics Express*, **2017**, 25, 28589	3.3	22
27	Moir metrology of energy landscapes in van der Waals heterostructures. *Nature Communications*, **2021**, 12, 242	17.4	22
26	Nano-Resolved Current-Induced Insulator-Metal Transition in the Mott Insulator Ca2RuO4. *Physical Review X*, **2019**, 9,	9.1	21
25	Internal strain tunes electronic correlations on the nanoscale. *Science Advances*, **2018**, 4, eaau9123	14.3	21
24	Nano-photocurrent Mapping of Local Electronic Structure in Twisted Bilayer Graphene. *Nano Letters*, **2020**, 20, 2958-2964	11.5	20
23	Fizeau drag in graphene plasmonics. *Nature*, **2021**, 594, 513-516	50.4	20
22	Moir engineering of electronic phenomena in correlated oxides. *Nature Physics*, **2020**, 16, 631-635	16.2	19
21	Charge-Transfer Plasmon Polaritons at Graphene/RuCl Interfaces. *Nano Letters*, **2020**, 20, 8438-8445	11.5	17
20	Hyperbolic enhancement of photocurrent patterns in minimally twisted bilayer graphene. *Nature Communications*, **2021**, 12, 1641	17.4	13
19	Quantitative Nanoinfrared Spectroscopy of Anisotropic van der Waals Materials. *Nano Letters*, **2020**, 20, 7933-7940	11.5	12
18	Long-Lived Phonon Polaritons in Hyperbolic Materials. *Nano Letters*, **2021**, 21, 5767-5773	11.5	11
17	Hyperbolic Cooper-Pair Polaritons in Planar Graphene/Cuprate Plasmonic Cavities. *Nano Letters*, **2021**, 21, 308-316	11.5	8
16	Hybrid Machine Learning for Scanning Near-Field Optical Spectroscopy. *ACS Photonics*,	6.3	8
15	Terahertz response of monolayer and few-layer WTe at the nanoscale. *Nature Communications*, **2021**, 12, 5594	17.4	8

14	Infrared nanoimaging of the metal-insulator transition in the charge-density-wave van der Waals material 1T□aS2. *Physical Review B*, **2018**, 97,	3.3	7
13	Dual-Gated Graphene Devices for Near-Field Nano-imaging. *Nano Letters*, **2021**, 21, 1688-1693	11.5	5
12	Deep Learning Analysis of Polaritonic Wave Images. *ACS Nano*, **2021**,	16.7	4
11	Probing subwavelength in-plane anisotropy with antenna-assisted infrared nano-spectroscopy. *Nature Communications*, **2021**, 12, 2649	17.4	4
10	Nano-imaging of strain-tuned stripe textures in a Mott crystal. *Npj Quantum Materials*, **2021**, 6,	5	4
9	Intertwined magnetic, structural, and electronic transitions in V2O3. *Physical Review B*, **2019**, 100,	3.3	4
8	Nanoscale Infrared Spectroscopy and Imaging of Catalytic Reactions in Cu2O Crystals. *ACS Photonics*, **2020**, 7, 576-580	6.3	3
7	Nano-spectroscopy of excitons in atomically thin transition metal dichalcogenides.. *Nature Communications*, **2022**, 13, 542	17.4	3
6	Nanotextured Dynamics of a Light-Induced Phase Transition in VO. *Nano Letters*, **2021**, 21, 9052-9060	11.5	3
5	Active control of micrometer plasmon propagation in suspended graphene.. *Nature Communications*, **2022**, 13, 1465	17.4	2
4	Visualizing Atomically-Layered Magnetism in CrSBr.. *Advanced Materials*, **2022**, e2201000	24	2
3	Programmable Bloch polaritons in graphene. *Science Advances*, **2021**, 7,	14.3	1
2	Infrared Pump-Probe Spectroscopy of Plasmons in Graphene and Semiconductors. *Microscopy and Microanalysis*, **2015**, 21, 1415-1416	0.5	0
1	Nanoscale Infrared Spectroscopy:A non-Destructive Probe of Formation History in Extraterrestrial Samples. *Microscopy and Microanalysis*, **2014**, 20, 1668-1669	0.5	