

Alexander Mcleod

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4900724/publications.pdf>

Version: 2024-02-01

54
papers

6,759
citations

159358

30
h-index

168136

53
g-index

58
all docs

58
docs citations

58
times ranked

6793
citing authors

#	ARTICLE	IF	CITATIONS
1	Gate-tuning of graphene plasmons revealed by infrared nano-imaging. Nature, 2012, 487, 82-85.	13.7	1,780
2	Tunable Phonon Polaritons in Atomically Thin van der Waals Crystals of Boron Nitride. Science, 2014, 343, 1125-1129.	6.0	957
3	Infrared Nanoscopy of Dirac Plasmons at the Graphene-SiO ₂ Interface. Nano Letters, 2011, 11, 4701-4705.	4.5	500
4	Fundamental limits to graphene plasmonics. Nature, 2018, 557, 530-533.	13.7	401
5	Subdiffractional focusing and guiding of polaritonic rays in a natural hyperbolic material. Nature Communications, 2015, 6, 6963.	5.8	340
6	Ultrafast optical switching of infrared plasmon polaritons in high-mobility graphene. Nature Photonics, 2016, 10, 244-247.	15.6	312
7	Photonic crystals for nano-light in moiré graphene superlattices. Science, 2018, 362, 1153-1156.	6.0	273
8	Electronic and plasmonic phenomena at graphene grain boundaries. Nature Nanotechnology, 2013, 8, 821-825.	15.6	226
9	Active Optical Metasurfaces Based on Defect-Engineered Phase-Transition Materials. Nano Letters, 2016, 16, 1050-1055.	4.5	186
10	Nanotextured phase coexistence in the correlated insulator V ₂ O ₃ . Nature Physics, 2017, 13, 80-86.	6.5	172
11	Edge and Surface Plasmons in Graphene Nanoribbons. Nano Letters, 2015, 15, 8271-8276.	4.5	162
12	Model for quantitative tip-enhanced spectroscopy and the extraction of nanoscale-resolved optical constants. Physical Review B, 2014, 90, .	1.1	140
13	Phase transition in bulk single crystals and thin films of $\sqrt{VO_2}$ by nanoscale infrared spectroscopy and imaging. Physical Review B, 2015, 91, .	1.1	88
14	Near-field spectroscopy of silicon dioxide thin films. Physical Review B, 2012, 85, .	1.1	80
15	Imaging the nanoscale phase separation in vanadium dioxide thin films at terahertz frequencies. Nature Communications, 2018, 9, 3604.	5.8	79
16	Photonic crystal for graphene plasmons. Nature Communications, 2019, 10, 4780.	5.8	69
17	Coexisting first- and second-order electronic phase transitions in a correlated oxide. Nature Physics, 2018, 14, 1056-1061.	6.5	66
18	Moiré metrology of energy landscapes in van der Waals heterostructures. Nature Communications, 2021, 12, 242.	5.8	60

#	ARTICLE	IF	CITATIONS
19	Multi-messenger nanoprobe of hidden magnetism in a strained manganite. <i>Nature Materials</i> , 2020, 19, 397-404.	13.3	59
20	Fizeau drag in graphene plasmonics. <i>Nature</i> , 2021, 594, 513-516.	13.7	57
21	Charge-Transfer Plasmon Polaritons at Graphene/ RuCl_3 Interfaces. <i>Nano Letters</i> , 2020, 20, 8438-8445.	4.5	53
22	Nanoscale infrared spectroscopy as a non-destructive probe of extraterrestrial samples. <i>Nature Communications</i> , 2014, 5, 5445.	5.8	52
23	Nano-Resolved Current-Induced Insulator-Metal Transition in the Mott Insulator $\text{CaMn}_2\text{P}_2\text{O}_{14}$. <i>Physical Review X</i> , 2019, 9, .	2.8	40
24	Moiré engineering of electronic phenomena in correlated oxides. <i>Nature Physics</i> , 2020, 16, 631-635.	6.5	40
25	Long-Lived Phonon Polaritons in Hyperbolic Materials. <i>Nano Letters</i> , 2021, 21, 5767-5773.	4.5	38
26	Symmetry breaking and geometric confinement in VO ₂ : Results from a three-dimensional infrared nano-imaging. <i>Applied Physics Letters</i> , 2014, 104, 121905.	1.5	36
27	Nano-photocurrent Mapping of Local Electronic Structure in Twisted Bilayer Graphene. <i>Nano Letters</i> , 2020, 20, 2958-2964.	4.5	34
28	Hyperbolic enhancement of photocurrent patterns in minimally twisted bilayer graphene. <i>Nature Communications</i> , 2021, 12, 1641.	5.8	34
29	Infrared nanospectroscopy and imaging of collective superfluid excitations in anisotropic superconductors. <i>Physical Review B</i> , 2014, 90, .	1.1	31
30	Active control of micrometer plasmon propagation in suspended graphene. <i>Nature Communications</i> , 2022, 13, 1465.	5.8	31
31	Artifact free time resolved near-field spectroscopy. <i>Optics Express</i> , 2017, 25, 28589.	1.7	30
32	Surface plasmons induce topological transition in graphene/ MoO_3 heterostructures. <i>Nature Communications</i> , 2022, 13, .	5.8	30
33	Terahertz response of monolayer and few-layer WTe ₂ at the nanoscale. <i>Nature Communications</i> , 2021, 12, 5594.	5.8	29
34	Nanometer-Scale Lateral p-n Junctions in Graphene/ RuCl_3 Heterostructures. <i>Nano Letters</i> , 2022, 22, 1946-1953.	4.5	25
35	Internal strain tunes electronic correlations on the nanoscale. <i>Science Advances</i> , 2018, 4, eaau9123.	4.7	24
36	Nano-spectroscopy of excitons in atomically thin transition metal dichalcogenides. <i>Nature Communications</i> , 2022, 13, 542.	5.8	23

#	ARTICLE	IF	CITATIONS
37	Hybrid Machine Learning for Scanning Near-Field Optical Spectroscopy. ACS Photonics, 2021, 8, 2987-2996.	3.2	22
38	Visualizing Atomically Layered Magnetism in CrSBr. Advanced Materials, 2022, 34, e2201000.	11.1	22
39	Quantitative Nanoinfrared Spectroscopy of Anisotropic van der Waals Materials. Nano Letters, 2020, 20, 7933-7940.	4.5	16
40	Nonlinear nanoelectrodynamics of a Weyl metal. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	15
41	Intertwined magnetic, structural, and electronic transitions in V2O3. Physical Review B, 2019, 100, .	1.1	14
42	Nanotextured Dynamics of a Light-Induced Phase Transition in VO ₂ . Nano Letters, 2021, 21, 9052-9060.	4.5	14
43	Hyperbolic Cooper-Pair Polaritons in Planar Graphene/Cuprate Plasmonic Cavities. Nano Letters, 2021, 21, 308-316.	4.5	13
44	Dual-Gated Graphene Devices for Near-Field Nano-imaging. Nano Letters, 2021, 21, 1688-1693.	4.5	13
45	Programmable Bloch polaritons in graphene. Science Advances, 2021, 7, .	4.7	12
46	Nano-imaging of strain-tuned stripe textures in a Mott crystal. Npj Quantum Materials, 2021, 6, .	1.8	12
47	Nanoscale Infrared Spectroscopy and Imaging of Catalytic Reactions in Cu ₂ O Crystals. ACS Photonics, 2020, 7, 576-580.	3.2	11
48	Deep Learning Analysis of Polaritonic Wave Images. ACS Nano, 2021, 15, 18182-18191.	7.3	10
49	Infrared nanoimaging of the metal-insulator transition in the charge-density-wave van der Waals material 1T ⁺ TaS ₂ . Physical Review B, 2018, 97, .	1.1	9
50	Probing subwavelength in-plane anisotropy with antenna-assisted infrared nano-spectroscopy. Nature Communications, 2021, 12, 2649.	5.8	9
51	Nanoscale Femtosecond Dynamics of Mott Insulator (Ca _{0.99} Sr _{0.01}) ₂ RuO ₄ . Nano Letters, 2022, 22, 5689-5697.	4.5	5
52	A near-field study of VO ₂ /(100)TiO ₂ film and its crack-induced strain relief. Applied Physics Letters, 2022, 121, .	1.5	3
53	Infrared Pump-Probe Spectroscopy of Plasmons in Graphene and Semiconductors. Microscopy and Microanalysis, 2015, 21, 1415-1416.	0.2	1
54	Nanoscale Infrared Spectroscopy: A non-Destructive Probe of Formation History in Extraterrestrial Samples. Microscopy and Microanalysis, 2014, 20, 1668-1669.	0.2	0