

Mo Li

List of Publications by Year in descending order

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114
papers

8,038
citations

57631

44
h-index

46693

89
g-index

118
all docs

118
docs citations

118
times ranked

9328
citing authors

#	ARTICLE	IF	CITATIONS
1	Harnessing optoelectronic noises in a photonic generative network. <i>Science Advances</i> , 2022, 8, eabm2956.	4.7	24
2	Long-range transport of 2D excitons with acoustic waves. <i>Nature Communications</i> , 2022, 13, 1334.	5.8	23
3	Programmable black phosphorus image sensor for broadband optoelectronic edge computing. <i>Nature Communications</i> , 2022, 13, 1485.	5.8	67
4	Waveguide-Integrated van der Waals Heterostructure Mid-Infrared Photodetector with High Performance. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 24856-24863.	4.0	16
5	Tolerating Noise Effects in Processingâ€”Memory Systems for Neural Networks: A Hardwareâ€”Software Codesign Perspective. <i>Advanced Intelligent Systems</i> , 2022, 4, .	3.3	9
6	Programmable phase-change metasurfaces on waveguides for multimode photonic convolutional neural network. <i>Nature Communications</i> , 2021, 12, 96.	5.8	186
7	Surface Modification of Black Phosphorus with Group 13 Lewis Acids for Ambient Protection and Electronic Tuning. <i>Angewandte Chemie</i> , 2021, 133, 8410-8417.	1.6	5
8	Surface Modification of Black Phosphorus with Group 13 Lewis Acids for Ambient Protection and Electronic Tuning. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 8329-8336.	7.2	25
9	Myths and truths about optical phase change materials: A perspective. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	76
10	Direct Visualization of Gigahertz Acoustic Wave Propagation in Suspended Phononic Circuits. <i>Physical Review Applied</i> , 2021, 16, .	1.5	10
11	Photonic Platforms Using Inâ€”Plane Optical Anisotropy of Tin (II) Selenide and Black Phosphorus. <i>Advanced Photonics Research</i> , 2021, 2, 2100176.	1.7	4
12	Structural evolution and phase transition mechanism of MoSe_2 under high pressure. <i>Scientific Reports</i> , 2021, 11, 22090.	1.6	3
13	On-the-fly closed-loop materials discovery via Bayesian active learning. <i>Nature Communications</i> , 2020, 11, 5966.	5.8	167
14	Black Phosphorus Mid-Infrared Light-Emitting Diodes Integrated with Silicon Photonic Waveguides. <i>Nano Letters</i> , 2020, 20, 6824-6830.	4.5	40
15	Refractive Uses of Layered and Two-Dimensional Materials for Integrated Photonics. <i>ACS Photonics</i> , 2020, 7, 3270-3285.	3.2	23
16	Separation of the valley exciton-polariton in two-dimensional semiconductors with an anisotropic photonic crystal. <i>Physical Review B</i> , 2020, 101, .	1.1	7
17	Nonvolatile Electrically Reconfigurable Integrated Photonic Switch Enabled by a Silicon PIN Diode Heater. <i>Advanced Materials</i> , 2020, 32, e2001218.	11.1	152
18	Coupled-mode theory for plasmonic resonators integrated with silicon waveguides towards mid-infrared spectroscopic sensing. <i>Optics Express</i> , 2020, 28, 2020.	1.7	30

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19	Real-time, in situ probing of gamma radiation damage with packaged integrated photonic chips. <i>Photonics Research</i> , 2020, 8, 186.	3.4	15
20	Broadband, Waveguide-integrated Mid-Infrared Black Phosphorus Modulator with High Modulation Depth. , 2020, , .		0
21	Dynamic Phonon Manipulation by Optomechanically Induced Strong Coupling between Two Distinct Mechanical Resonators. <i>ACS Photonics</i> , 2019, 6, 1855-1862.	3.2	4
22	Electromechanical Brillouin scattering in integrated planar photonics. <i>APL Photonics</i> , 2019, 4, .	3.0	24
23	Writing magnetic memory with ultrashort light pulses. <i>Nature Reviews Materials</i> , 2019, 4, 189-200.	23.3	176
24	Low-Loss Integrated Photonic Switch Using Subwavelength Patterned Phase Change Material. <i>ACS Photonics</i> , 2019, 6, 87-92.	3.2	124
25	Strong Pockels materials. <i>Nature Materials</i> , 2019, 18, 9-11.	13.3	33
26	Thermal annealing study of the mid-infrared aluminum nitride on insulator (AlNOI) photonics platform. <i>Optics Express</i> , 2019, 27, 19815.	1.7	19
27	Aluminum nitride on insulator (AlNOI) platform for mid-infrared photonics. <i>Optics Letters</i> , 2019, 44, 73.	1.7	41
28	Electromechanical Brillouin scattering in integrated optomechanical waveguides. <i>Optica</i> , 2019, 6, 778.	4.8	55
29	A nanofabricated optoelectronic probe for manipulating and recording neural dynamics. <i>Journal of Neural Engineering</i> , 2018, 15, 046008.	1.8	16
30	Chiral Interaction Between Spin-Momentum Locked Photons and Surface Electrons in Topological Insulators. , 2018, , .		0
31	Waveguide-integrated mid-infrared plasmonics with high-efficiency coupling for ultracompact surface-enhanced infrared absorption spectroscopy. <i>Optics Express</i> , 2018, 26, 23540.	1.7	15
32	Waveguide-Integrated Compact Plasmonic Resonators for On-Chip Mid-Infrared Laser Spectroscopy. <i>Nano Letters</i> , 2018, 18, 7601-7608.	4.5	56
33	Room-temperature high spin-orbit torque due to quantum confinement in sputtered BixSe(1-x) films. <i>Nature Materials</i> , 2018, 17, 800-807.	13.3	344
34	Coupling Photon Spin with Electron Spin in Integrated Photonic Chips. , 2018, , .		0
35	Three-Dimensional Integration of Black Phosphorus Photodetector with Silicon Photonics and Nanoplasmonics. <i>Nano Letters</i> , 2017, 17, 985-991.	4.5	111
36	High Performance MgO-barrier Magnetic Tunnel Junctions for Flexible and Wearable Spintronic Applications. <i>Scientific Reports</i> , 2017, 7, 42001.	1.6	70

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37	All-Optical Switching of Magnetic Tunnel Junctions with Single Subpicosecond Laser Pulses. <i>Physical Review Applied</i> , 2017, 7, .	1.5	76
38	Ultrafast photocurrent measurements of a black phosphorus photodetector. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	44
39	Black phosphorus mid-infrared photodetectors. <i>Applied Physics B: Lasers and Optics</i> , 2017, 123, 1.	1.1	36
40	The study of radiation effects in emerging micro and nano electro mechanical systems (M and NEMs). <i>Semiconductor Science and Technology</i> , 2017, 32, 013005.	1.0	27
41	Layer-Tunable Third-Harmonic Generation in Multilayer Black Phosphorus. <i>ACS Photonics</i> , 2017, 4, 8-14.	3.2	125
42	Midinfrared Electro-optic Modulation in Few-Layer Black Phosphorus. <i>Nano Letters</i> , 2017, 17, 6315-6320.	4.5	96
43	Field-free spin-orbit torque switching of composite perpendicular CoFeB/Cd/CoFeB layers utilized for three-terminal magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	34
44	Spin-momentum locked interaction between guided photons and surface electrons in topological insulators. <i>Nature Communications</i> , 2017, 8, 2141.	5.8	22
45	Integrated Two-Dimensional Free-Space Acousto-Optics on Suspended Membranes. , 2017, , .		0
46	On-chip Eletromechanically Induced Brillouin Scattering on Suspended Aluminum Nitride Waveguides. , 2017, , .		0
47	Revealing the Origins of 3D Anisotropic Thermal Conductivities of Black Phosphorus. <i>Advanced Electronic Materials</i> , 2016, 2, 1600040.	2.6	85
48	Multisite silicon neural probes with integrated silicon nitride waveguides and gratings for optogenetic applications. <i>Scientific Reports</i> , 2016, 6, 22693.	1.6	61
49	Integration of 2D materials on a silicon photonics platform for optoelectronics applications. <i>Nanophotonics</i> , 2016, 6, 1205-1218.	2.9	87
50	Laser-initiated magnetization reversal and correlated morphological effects visualized with <i>in situ</i> Fresnel transmission electron microscopy. <i>Physical Review B</i> , 2016, 94, .	1.1	2
51	Optomechanical measurement of photon spin angular momentum and optical torque in integrated photonic devices. <i>Science Advances</i> , 2016, 2, e1600485.	4.7	31
52	GHz integrated acousto-optics. , 2016, , .		1
53	Black Phosphorus: Revealing the Origins of 3D Anisotropic Thermal Conductivities of Black Phosphorus (<i>Adv. Electron. Mater.</i> 5/2016). <i>Advanced Electronic Materials</i> , 2016, 2, .	2.6	4
54	Time-Resolved Magneto-Optical Kerr Effect of Magnetic Thin Films for Ultrafast Thermal Characterization. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 2328-2332.	2.1	29

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55	Black Phosphorus Photodetector on Silicon Photonic and Plasmonic Hybrid Platform. , 2016, , .		1
56	Nano-optomechanical Systems (NOMS). , 2016, , 2539-2546.		0
57	Ultrafast Photocurrent Spectroscopy in a Black Phosphorus Van der Waals Heterostructure. , 2016, , .		0
58	All-optical switching of magnetoresistive devices using telecom-band femtosecond laser. Applied Physics Letters, 2015, 107, .	1.5	20
59	Acousto-optic modulation of a photonic crystal nanocavity with Lamb waves in microwave K band. Applied Physics Letters, 2015, 107, .	1.5	37
60	Microwave Frequency Traveling Surface Acoustic Wave Induced Transparency. , 2015, , .		0
61	Study of black phosphorus anisotropy on silicon photonic waveguide. , 2015, , .		2
62	Waveguide-integrated black phosphorus photodetector with high responsivity and low dark current. Nature Photonics, 2015, 9, 247-252.	15.6	778
63	Nanophotonic cavity optomechanics with propagating acoustic waves at frequencies up to 12 GHz. Optica, 2015, 2, 826.	4.8	72
64	Surface Acoustic Wave Modulation of Optical Cavities on a Suspended Membrane. , 2015, , .		0
65	Nano-Optomechanical Systems (NOMS). , 2015, , 1-8.		0
66	Torsional Cavity Optomechanical Nano-Seesaw System. , 2014, , .		0
67	Integrated silicon and silicon nitride photonic circuits on flexible substrates. Optics Letters, 2014, 39, 3449.	1.7	13
68	Waveguide-Coupled Graphene Optoelectronics. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 84-94.	1.9	64
69	Ultrasensitive Gas-Phase Chemical Sensing Based on Functionalized Photonic Crystal Nanobeam Cavities. ACS Nano, 2014, 8, 522-527.	7.3	69
70	On-chip synthesis of circularly polarized emission of light with integrated photonic circuits. Optics Letters, 2014, 39, 2553.	1.7	14
71	Multifunctional Graphene Optical Modulator and Photodetector Integrated on Silicon Waveguides. Nano Letters, 2014, 14, 2741-2746.	4.5	217
72	Sub-optical wavelength acoustic wave modulation of integrated photonic resonators at microwave frequencies. Nature Communications, 2014, 5, 5402.	5.8	131

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73	Optomechanical photon shuttling between photonic cavities. Nature Nanotechnology, 2014, 9, 913-919.	15.6	26
74	Heterogeneously Integrated Silicon Photonics for the Mid-Infrared and Spectroscopic Sensing. ACS Nano, 2014, 8, 6955-6961.	7.3	148
75	Matrix of Integrated Superconducting Single-Photon Detectors With High Timing Resolution. IEEE Transactions on Applied Superconductivity, 2013, 23, 2201007-2201007.	1.1	15
76	Enhanced optical forces in integrated hybrid plasmonic waveguides. Optics Express, 2013, 21, 11839.	1.7	41
77	Flexible and tunable silicon photonic circuits on plastic substrates. Scientific Reports, 2012, 2, 622.	1.6	85
78	Switching energy limits of waveguide-coupled graphene-on-graphene optical modulators. Optics Express, 2012, 20, 20330.	1.7	59
79	Optical absorption in graphene integrated on silicon waveguides. Applied Physics Letters, 2012, 101, .	1.5	169
80	Enhancing gradient optical force in silicon photonic devices. Proceedings of SPIE, 2012, , .	0.8	0
81	High-speed and high-efficiency travelling wave single-photon detectors embedded in nanophotonic circuits. Nature Communications, 2012, 3, 1325.	5.8	366
82	Multichannel cavity optomechanics for all-optical amplification of radio frequency signals. Nature Communications, 2012, 3, 1091.	5.8	46
83	High-speed waveguide-coupled graphene-on-graphene optical modulators. Applied Physics Letters, 2012, 100, .	1.5	149
84	A Cavity Optomechanical System Exhibiting Optically Induced Tunable Mechanical Nonlinearity. , 2012, , .		0
85	Carrier and thermal dynamics of silicon photonic resonators at cryogenic temperatures. Optics Express, 2011, 19, 3290.	1.7	21
86	Tunable optical coupler controlled by optical gradient forces. Optics Express, 2011, 19, 15098.	1.7	45
87	Dynamic manipulation of nanomechanical resonators in the high-amplitude regime and non-volatile mechanical memory operation. Nature Nanotechnology, 2011, 6, 726-732.	15.6	216
88	Active microcantilevers based on piezoresistive ferromagnetic thin films. Applied Physics Letters, 2011, 98, .	1.5	19
89	High Q optomechanical resonators in silicon nitride nanophotonic circuits. , 2011, , .		0
90	Nano-optomechanical System. , 2011, , .		0

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91	Photonic Integration of nano-electro-mechanical systems. , 2010, , .		0
92	Adiabatic embedment of nanomechanical resonators in photonic microring cavities. Applied Physics Letters, 2010, 96, 263101.	1.5	7
93	High Q optomechanical resonators in silicon nitride nanophotonic circuits. Applied Physics Letters, 2010, 97, .	1.5	47
94	Optical forces between a high-Q micro-disk resonator and an integrated waveguide. , 2010, , .		0
95	Analysis of short range forces in opto-mechanical devices with a nanogap. Optics Express, 2010, 18, 12615.	1.7	21
96	Time-domain measurement of optical transport in silicon micro-ring resonators. Optics Express, 2010, 18, 18438.	1.7	50
97	High performance nanophotonic circuits based on partially buried horizontal slot waveguides. Optics Express, 2010, 18, 20690.	1.7	20
98	Nanoelectromechanical Resonator Arrays for Ultrafast, Gas-Phase Chromatographic Chemical Analysis. Nano Letters, 2010, 10, 3899-3903.	4.5	151
99	Ultrahigh-frequency nano-optomechanical resonators in slot waveguide ring cavities. Applied Physics Letters, 2010, 97, 183110.	1.5	52
100	Adiabatic embedment of nanomechanical resonators in photonic microring cavities. , 2010, , .		0
101	Tunable optical forces and mode beating in coupled nano-mechanical beam waveguides. , 2010, , .		0
102	Photothermal actuation in nanomechanical waveguide devices. Journal of Applied Physics, 2009, 105, 014508.	1.1	7
103	Broadband all-photonic transduction of nanocantilevers. Nature Nanotechnology, 2009, 4, 377-382.	15.6	117
104	Tunable bipolar optical interactions between guided lightwaves. Nature Photonics, 2009, 3, 464-468.	15.6	232
105	Theoretical investigation of the transverse optical force between a silicon nanowire waveguide and a substrate. Optics Express, 2009, 17, 1806.	1.7	66
106	Optomechanical coupling in photonic crystal supported nanomechanical waveguides. Optics Express, 2009, 17, 12424.	1.7	28
107	Modeling of the optical force between propagating lightwaves in parallel 3D waveguides. Optics Express, 2009, 17, 16032.	1.7	26
108	Reactive Cavity Optical Force on Microdisk-Coupled Nanomechanical Beam Waveguides. Physical Review Letters, 2009, 103, 223901.	2.9	164

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109	A mechanical Kerr effect in deformable photonic media. Applied Physics Letters, 2009, 95, .	1.5	25
110	Harnessing optical forces in integrated photonic circuits. Nature, 2008, 456, 480-484.	13.7	492
111	Gigahertz photothermal effect in silicon waveguides. Applied Physics Letters, 2008, 93, 213106.	1.5	4
112	Ultra-sensitive NEMS-based cantilevers for sensing, scanned probe and very high-frequency applications. Nature Nanotechnology, 2007, 2, 114-120.	15.6	926
113	Nanomechanical Measurement of Magnetostriction and Magnetic Anisotropy in (Ga,Mn)As. Physical Review Letters, 2005, 95, 187206.	2.9	48
114	Optical Properties and Optoelectronic Applications of Black Phosphorus. , 0, , 435-457.		0