Lei Bi

List of Publications by Year
in descending order

85 papers	3,189 citations	172457 29 h-index	161849 54 g-index
87 all docs	87 docs citations	87 times ranked	4330 citing authors

#	Article	IF	Citations
1	Mid-infrared active metasurface based on Si/VO₂ hybrid meta-atoms. Photonics Research, 2022, 10, 373.	7.0	12
2	On-Chip Nonreciprocal Photonic Devices Based on Hybrid Integration of Magneto-Optical Garnet Thin Films on Silicon. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-15.	2.9	7
3	The 50 nm-thick yttrium iron garnet films with perpendicular magnetic anisotropy. Chinese Physics B, 2022, 31, 048503.	1.4	6
4	Nanophotonic devices based on magneto-optical materials: recent developments and applications. Nanophotonics, 2022, 11, 2639-2659.	6.0	35
5	Enhancement of the Faraday Effect and Magneto-optical Figure of Merit in All-Dielectric Metasurfaces. ACS Photonics, 2022, 9, 1240-1247.	6.6	18
6	Dysprosium Substituted Ce:YIG Thin Films for Temperature Insensitive Integrated Optical Isolator Applications. Materials, 2022, 15, 1691.	2.9	4
7	Observation of optical gyromagnetic properties in a magneto-plasmonic metamaterial. Nature Communications, 2022, 13, 1719.	12.8	22
8	Singleâ€Photon Nonreciprocity with an Integrated Magnetoâ€Optical Isolator. Laser and Photonics Reviews, 2022, 16, .	8.7	7
9	Modern Magnetophotonic Materials and their Applications: introduction to special issue. Optical Materials Express, 2022, 12, 2087.	3.0	1
10	Circular Displacement Current Induced Anomalous Magnetoâ€Optical Effects in High Index Mie Resonators. Laser and Photonics Reviews, 2022, 16, .	8.7	13
11	Enhanced chiral sensing in achiral nanostructures with linearly polarized light. Optics Express, 2022, 30, 26306.	3.4	6
12	Ultra-sensitive nanometric flat laser prints for binocular stereoscopic image. Nature Communications, 2021, 12, 1154.	12.8	15
13	Optical characterization of Y₃Al₅O₁₂ and Lu₃Al₅O₁₂ single crystals. Optical Materials Express, 2021, 11, 1218.	3.0	16
14	Design for a TE Mode Magneto-Optical Circulator Based on Asymmetric Silicon Slot Waveguides. , 2021, , .		1
15	Recent advances in development of magnetic garnet thin films for applications in spintronics and photonics. Journal of Alloys and Compounds, 2021, 860, 158235.	5.5	45
16	Silicon-Based All-Dielectric Metasurface on an Iron Garnet Film for Efficient Magneto-Optical Light Modulation in Near IR Range. Nanomaterials, 2021, 11, 2926.	4.1	5
17	On-chip Integrated Magneto-Optical Nonreciprocal Photonic Devices. , 2021, , .		0
18	Layer dependence of stacking order in nonencapsulated few-layer CrI3. Science China Materials, 2020, 63, 413-420.	6.3	27

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19	Photonic amorphous topological insulator. Light: Science and Applications, 2020, 9, 133.	16.6	58
20	Electrically Tunable Four-Wave-Mixing in Graphene Heterogeneous Fiber for Individual Gas Molecule Detection. Nano Letters, 2020, 20, 6473-6480.	9.1	42
21	Observation of nonreciprocal magnetophonon effect in nonencapsulated few-layered CrI ₃. Science Advances, 2020, 6, .	10.3	37
22	Magnetic-brightening and control of dark exciton in CsPbBr3 perovskite. Science China Materials, 2020, 63, 1503-1509.	6.3	8
23	Spin-Valley Locking Effect in Defect States of Monolayer MoS₂. Nano Letters, 2020, 20, 2129-2136.	9.1	61
24	Switching the Optical Chirality in Magnetoplasmonic Metasurfaces Using Applied Magnetic Fields. ACS Nano, 2020, 14, 2808-2816.	14.6	57
25	Observation of an unpaired photonic Dirac point. Nature Communications, 2020, 11, 1873.	12.8	51
26	Waveguide-integrated high-performance magneto-optical isolators and circulators on silicon nitride platforms. Optica, 2020, 7, 1555.	9.3	66
27	Large-scale, power-efficient Au/VO₂ active metasurfaces for ultrafast optical modulation. Nanophotonics, 2020, 10, 909-918.	6.0	28
28	Waveguide Integrated Magneto-Optical Isolators on Silicon Nitride Platforms. , 2020, , .		0
29	A Reconfigurable All-Dielectric Metasurface Based on Vanadium Dioxide for Independent Control of the Mie Resonances. , 2020, , .		0
30	Dysprosium substituted Ce:YIG thin films with perpendicular magnetic anisotropy for silicon integrated optical isolator applications. APL Materials, 2019, 7, .	5.1	30
31	Spin wave propagation in ultrathin magnetic insulators with perpendicular magnetic anisotropy. Applied Physics Letters, 2019, 114, .	3.3	29
32	Biochemical sensing in graphene-enhanced microfiber resonators with individual molecule sensitivity and selectivity. Light: Science and Applications, 2019, 8, 107.	16.6	70
33	Graphene enhanced intra-resonator biochemical detection with individual molecule sensitivity and selectivity. , 2019, , .		1
34	Enhanced Second Harmonic Generation from Ferroelectric HfO₂-Based Hybrid Metasurfaces. ACS Nano, 2019, 13, 1213-1222.	14.6	29
35	Broadband switching of mid-infrared atmospheric windows by VO₂-based thermal emitter. Optics Express, 2019, 27, 11537.	3.4	30
36	Weak measurement of magneto-optical Goos-HÃnchen effect. Optics Express, 2019, 27, 17638.	3.4	21

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37	Effect of oxygen stoichiometry on the structure, optical and epsilon-near-zero properties of indium tin oxide films. Optics Express, 2019, 27, 28618.	3.4	26
38	Monolithic integration of broadband optical isolators for polarization-diverse silicon photonics. Optica, 2019, 6, 473.	9.3	132
39	Weak measurement of the magneto-optical spin Hall effect of light. Photonics Research, 2019, 7, 1014.	7.0	21
40	Enhanced Faraday rotation and magneto-optical figure of merit in gold grating/graphene/silicon hybrid magneto-plasmonic devices. APL Photonics, 2018, 3, .	5.7	22
41	Strain tunable magnetic properties of 3d transition-metal ion doped monolayer MoS2: A first-principles study. AIP Advances, 2018, 8, 055917.	1.3	12
42	Imbert-Fedorov Effect in Kretschmann Configuration with Anisotropic Metamaterial. Plasmonics, 2018, 13, 1425-1432.	3.4	4
43	Monolithic On-chip Magneto-optical Isolator with 3 dB Insertion Loss and 40 dB Isolation Ratio. ACS Photonics, 2018, 5, 5010-5016.	6.6	52
44	Magnetic Proximity Effect and Anomalous Hall Effect in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Pt</mml:mi><mml:mo>/</mml:mo><mml:msub><mml:mrow><mml:mrow><mml:mi mathvariant="normal">Y</mml:mi></mml:mrow></mml:mrow><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi>Fe</mml:mi> Physical Review Applied, 2018, 10, .	3.8	12
45	Active macroscale visible plasmonic nanorod self-assembled monolayer. Photonics Research, 2018, 6, 409.	7.0	9
46	Proximity-Induced Magnetic Order in a Transferred Topological Insulator Thin Film on a Magnetic Insulator. ACS Nano, 2018, 12, 5042-5050.	14.6	41
47	Materials for nonreciprocal photonics. MRS Bulletin, 2018, 43, 408-412.	3.5	6
48	Proton Radiation Effects on Y-Doped HfO₂-Based Ferroelectric Memory. IEEE Electron Device Letters, 2018, 39, 823-826.	3.9	28
49	Enhanced magneto-optical effect in Y1.5Ce1.5Fe5O12 thin films deposited on silicon by pulsed laser deposition. Journal of Alloys and Compounds, 2017, 703, 591-599.	5.5	35
50	HfO₂-Based Highly Stable Radiation-Immune Ferroelectric Memory. IEEE Electron Device Letters, 2017, 38, 330-333.	3.9	39
51	Ultrahigh Figure-of-Merit in Metalâ€“Insulatorâ€“Metal Magnetoplasmonic Sensors Using Low Loss Magneto-optical Oxide Thin Films. ACS Photonics, 2017, 4, 1403-1412.	6.6	45
52	The magnetic proximity effect and electrical field tunable valley degeneracy in MoS₂/EuS van der Waals heterojunctions. Nanoscale, 2017, 9, 9502-9509.	5.6	64
53	Boseâ€“Einstein oscillators and the excitation mechanism of free excitons in 2D layered organicâ€“inorganic perovskites. RSC Advances, 2017, 7, 18366-18373.	3.6	9
54	Controlling the magnetic anisotropy in epitaxial <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Y</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi mathvariant="normal">F</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>5</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>12</mml:mn></mml:msub></mml:mrow></mml:math> films	3.2	31

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55	Valley Polarization of Trions and Magnetoresistance in Heterostructures of MoS₂ and Yttrium Iron Garnet. ACS Nano, 2017, 11, 12257-12265.	14.6	35
56	Fatigue mechanism of yttrium-doped hafnium oxide ferroelectric thin films fabricated by pulsed laser deposition. Physical Chemistry Chemical Physics, 2017, 19, 3486-3497.	2.8	84
57	Broadband thermal tunable infrared absorber based on the coupling between standing wave and magnetic resonance. Optical Materials Express, 2017, 7, 2767.	3.0	33
58	Magneto-Optical Imbertâ€“Fedorov Effect in Prism Coupling Configuration. IEEE Photonics Journal, 2017, 9, 1-7.	2.0	3
59	Study of the phase evolution, metal-insulator transition, and optical properties of vanadium oxide thin films. Optical Materials Express, 2016, 6, 3609.	3.0	24
60	Silicon integrated nonreciprocal photonic devices using monolithically integrated magnetic oxides. , 2016, , .		1
61	Ultrafast charge transfer in MoS ₂ /WSe ₂ pâ€“n Heterojunction. 2D Materials, 2016, 3, 025020.	4.4	179
62	Design of a compact waveguide optical isolator based on multimode interferometers using magneto-optical oxide thin films grown on silicon-on-insulator substrates. Optics Express, 2016, 24, 12856.	3.4	13
63	Magneto-optical enhancement in highly Poly-crystallized Ce substituted YIG thin films by PLD. , 2016, , .		1
64	Short-Wavelength Spin Waves in Yttrium Iron Garnet Micro-Channels on Silicon. IEEE Magnetics Letters, 2016, 7, 1-4.	1.1	13
65	Influence of Interface Structure on Magnetic Proximity Effect in Pt/Y₃Fe₅O₁₂ Heterostructures. ACS Applied Materials & Interfaces, 2016, 8, 8175-8183.	8.0	36
66	Growth of Phase Pure Yttrium Iron Garnet Thin Films on Silicon: The Effect of Substrate and Postdeposition Annealing Temperatures. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	15
67	Highly sensitive sensors based on magneto-optical surface plasmon resonance in Ag/CeYIG heterostructures. AIP Advances, 2015, 5, .	1.3	20
68	High-frequency magnetic properties of [FeCo/FeCo-SiO2]n multilayered films deposited on flexible substrate. Journal of Applied Physics, 2015, 117, 17C110.	2.5	9
69	First principles calculation on the magnetic, optical properties and oxygen vacancy effect of CexY3â^'xFe5O12. Applied Physics Letters, 2015, 106, .	3.3	27
70	Magneto-optical Goos-HÃnchen effect in a prism-waveguide coupling structure. Optics Express, 2014, 22, 27042.	3.4	42
71	Generic model of superexchange effects in magnetoelastic oxides. Journal of Applied Physics, 2013, 113, 17A927.	2.5	2
72	Magneto-Optical Thin Films for On-Chip Monolithic Integration of Non-Reciprocal Photonic Devices. Materials, 2013, 6, 5094-5117.	2.9	82

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73	The Effect of A-Site Substitution of Ce and La on the Magnetic and Electronic Properties of Sr(Ti_{0.6}Fe_{0.4})O_{3â^'Î´} Films. Inorganic Chemistry, 2012, 51, 13245-13253.	4.0	14
74	On-chip optical isolation in monolithically integrated non-reciprocal optical resonators. Nature Photonics, 2011, 5, 758-762.	31.4	766
75	Compositional dependence of Youngâ€™s moduli for amorphous FeCoâ€“SiO₂ thin films. Journal of Applied Physics, 2011, 109, 07A929.	2.5	2
76	Enhancement of the magneto-optical performance of Sr(Ti0.6â^'xGaxFe0.4)O3 perovskite films by Ga substitution. Applied Physics Letters, 2011, 98, 231909.	3.3	10
77	Monolithic integration of chalcogenide glass/iron garnet waveguides and resonators for on-chip nonreciprocal photonic devices. Proceedings of SPIE, 2011, , .	0.8	26
78	Spectral origins of high Faraday rotation at 1.5-Î¼m wavelength from Fe and Co in SrTiO₃ films. Journal of Applied Physics, 2011, 109, 07B761.	2.5	5
79	Fabrication and characterization of As 2 S 3 /Y 3 Fe 5 O 12 and Y 3 Fe 5 O 12 /SOI strip-loaded waveguides for integrated optical isolator applications. , 2010, , .		11
80	Structure, magnetic properties and magnetoelastic anisotropy in epitaxial Sr(Ti_{1â^'x}Co_x)O₃films. New Journal of Physics, 2010, 12, 043044.	2.9	44
81	Self-Assembled Single-Phase Perovskite Nanocomposite Thin Films. Nano Letters, 2010, 10, 597-602.	9.1	29
82	Orientation control and self-assembled nanopyramid structure of LaFeO3 films epitaxially grown on SrTiO3(001) substrates. Applied Physics Letters, 2009, 95, 121908.	3.3	14
83	Structural, magnetic, and optical properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>BiFeO</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>/<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Bi</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>Fe₄O₉ multilayers. Physical Review B, 2008, 78, .	3.2	158
84	Structural, magnetic, and magneto-optical properties of Co-doped CeO2â^'Î´ films. Journal of Applied Physics, 2008, 103, 07D138.	2.5	35
85	Nickel-induced enhancement of photoluminescence from Si-rich silica films. Applied Physics Letters, 2006, 88, 031905.	3.3	9