

# Lei Bi

## List of Publications by Year in descending order

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85

papers

3,189

citations

172457

29

h-index

161849

54

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87

all docs

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docs citations

87

times ranked

4330

citing authors

#	ARTICLE	IF	CITATIONS
1	On-chip optical isolation in monolithically integrated non-reciprocal optical resonators. <i>Nature Photonics</i> , 2011, 5, 758-762.	31.4	766
2	Ultrafast charge transfer in MoS <sub>2</sub> /WSe <sub>2</sub> p-n Heterojunction. <i>2D Materials</i> , 2016, 3, 025020.	4.4	179
3	Structural, magnetic, and optical properties of BiFeO <sub>3</sub> . Physical Review B, 2008, 78, 155101.	3.2	158
4	Monolithic integration of broadband optical isolators for polarization-diverse silicon photonics. <i>Optica</i> , 2019, 6, 473.	9.3	132
5	Fatigue mechanism of yttrium-doped hafnium oxide ferroelectric thin films fabricated by pulsed laser deposition. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 3486-3497.	2.8	84
6	Magneto-Optical Thin Films for On-Chip Monolithic Integration of Non-Reciprocal Photonic Devices. <i>Materials</i> , 2013, 6, 5094-5117.	2.9	82
7	Biochemical sensing in graphene-enhanced microfiber resonators with individual molecule sensitivity and selectivity. <i>Light: Science and Applications</i> , 2019, 8, 107.	16.6	70
8	Waveguide-integrated high-performance magneto-optical isolators and circulators on silicon nitride platforms. <i>Optica</i> , 2020, 7, 1555.	9.3	66
9	The magnetic proximity effect and electrical field tunable valley degeneracy in MoS <sub>2</sub> /Eu van der Waals heterojunctions. <i>Nanoscale</i> , 2017, 9, 9502-9509.	5.6	64
10	Spin-Valley Locking Effect in Defect States of Monolayer MoS <sub>2</sub> . <i>Nano Letters</i> , 2020, 20, 2129-2136.	9.1	61
11	Photonic amorphous topological insulator. <i>Light: Science and Applications</i> , 2020, 9, 133.	16.6	58
12	Switching the Optical Chirality in Magnetoplasmonic Metasurfaces Using Applied Magnetic Fields. <i>ACS Nano</i> , 2020, 14, 2808-2816.	14.6	57
13	Monolithic On-chip Magneto-optical Isolator with 3 dB Insertion Loss and 40 dB Isolation Ratio. <i>ACS Photonics</i> , 2018, 5, 5010-5016.	6.6	52
14	Observation of an unpaired photonic Dirac point. <i>Nature Communications</i> , 2020, 11, 1873.	12.8	51
15	Ultrahigh Figure-of-Merit in Metal-Insulator-Metal Magnetoplasmonic Sensors Using Low Loss Magneto-optical Oxide Thin Films. <i>ACS Photonics</i> , 2017, 4, 1403-1412.	6.6	45
16	Recent advances in development of magnetic garnet thin films for applications in spintronics and photonics. <i>Journal of Alloys and Compounds</i> , 2021, 860, 158235.	5.5	45
17	Structure, magnetic properties and magnetoelastic anisotropy in epitaxial Sr(Ti <sub>1-x</sub> Co <sub>x</sub> O <sub>3</sub> ) <sub>3</sub> films. <i>New Journal of Physics</i> , 2010, 12, 043044.	2.9	44
18	Magneto-optical Goos-Hänchen effect in a prism-waveguide coupling structure. <i>Optics Express</i> , 2014, 22, 27042.	3.4	42

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19	Electrically Tunable Four-Wave-Mixing in Graphene Heterogeneous Fiber for Individual Gas Molecule Detection. <i>Nano Letters</i> , 2020, 20, 6473-6480.	9.1	42
20	Proximity-Induced Magnetic Order in a Transferred Topological Insulator Thin Film on a Magnetic Insulator. <i>ACS Nano</i> , 2018, 12, 5042-5050.	14.6	41
21	HfO <sub>2</sub> -Based Highly Stable Radiation-Immune Ferroelectric Memory. <i>IEEE Electron Device Letters</i> , 2017, 38, 330-333.	3.9	39
22	Observation of nonreciprocal magnetophonon effect in nonencapsulated few-layered CrI <sub>3</sub> . <i>Science Advances</i> , 2020, 6, .	10.3	37
23	Influence of Interface Structure on Magnetic Proximity Effect in Pt/Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> Heterostructures. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 8175-8183.	8.0	36
24	Structural, magnetic, and magneto-optical properties of Co-doped CeO <sub>2</sub> films. <i>Journal of Applied Physics</i> , 2008, 103, 07D138.	2.5	35
25	Enhanced magneto-optical effect in Y <sub>1.5</sub> Ce <sub>1.5</sub> Fe <sub>5</sub> O <sub>12</sub> thin films deposited on silicon by pulsed laser deposition. <i>Journal of Alloys and Compounds</i> , 2017, 703, 591-599.	5.5	35
26	Valley Polarization of Trions and Magnetoresistance in Heterostructures of MoS <sub>2</sub> and Yttrium Iron Garnet. <i>ACS Nano</i> , 2017, 11, 12257-12265.	14.6	35
27	Nanophotonic devices based on magneto-optical materials: recent developments and applications. <i>Nanophotonics</i> , 2022, 11, 2639-2659.	6.0	35
28	Broadband thermal tunable infrared absorber based on the coupling between standing wave and magnetic resonance. <i>Optical Materials Express</i> , 2017, 7, 2767.	3.0	33
29	Controlling the magnetic anisotropy in epitaxial $\text{Y}_{3}\text{Fe}_{5}\text{O}_{12}$ films xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Y</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi>F</mml:mi><mml:msub><mml:mi>e</mml:mi><mml:mn>5</mml:mn></mml:msub><mml:msub><mml:mi>O</mml:mi><mml:mn>12</mml:mn></mml:msub></mml:mrow></mml:math> films	3.2	31
30	Dysprosium substituted Ce:YIG thin films with perpendicular magnetic anisotropy for silicon integrated optical isolator applications. <i>APL Materials</i> , 2019, 7, .	5.1	30
31	Broadband switching of mid-infrared atmospheric windows by VO <sub>2</sub> -based thermal emitter. <i>Optics Express</i> , 2019, 27, 11537.	3.4	30
32	Self-Assembled Single-Phase Perovskite Nanocomposite Thin Films. <i>Nano Letters</i> , 2010, 10, 597-602.	9.1	29
33	Spin wave propagation in ultrathin magnetic insulators with perpendicular magnetic anisotropy. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	29
34	Enhanced Second Harmonic Generation from Ferroelectric HfO <sub>2</sub> -Based Hybrid Metasurfaces. <i>ACS Nano</i> , 2019, 13, 1213-1222.	14.6	29
35	Proton Radiation Effects on Y-Doped HfO <sub>2</sub> -Based Ferroelectric Memory. <i>IEEE Electron Device Letters</i> , 2018, 39, 823-826.	3.9	28
36	Large-scale, power-efficient Au/VO <sub>2</sub> active metasurfaces for ultrafast optical modulation. <i>Nanophotonics</i> , 2020, 10, 909-918.	6.0	28

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37	First principles calculation on the magnetic, optical properties and oxygen vacancy effect of Ce <sub>x</sub> Y <sub>3-x</sub> Fe <sub>5</sub> O <sub>12</sub> . <i>Applied Physics Letters</i> , 2015, 106, .		3.3	27
38	Layer dependence of stacking order in nonencapsulated few-layer CrI <sub>3</sub> . <i>Science China Materials</i> , 2020, 63, 413-420.		6.3	27
39	Monolithic integration of chalcogenide glass/iron garnet waveguides and resonators for on-chip nonreciprocal photonic devices. <i>Proceedings of SPIE</i> , 2011, , .		0.8	26
40	Effect of oxygen stoichiometry on the structure, optical and epsilon-near-zero properties of indium tin oxide films. <i>Optics Express</i> , 2019, 27, 28618.		3.4	26
41	Study of the phase evolution, metal-insulator transition, and optical properties of vanadium oxide thin films. <i>Optical Materials Express</i> , 2016, 6, 3609.		3.0	24
42	Enhanced Faraday rotation and magneto-optical figure of merit in gold grating/graphene/silicon hybrid magneto-plasmonic devices. <i>APL Photonics</i> , 2018, 3, .		5.7	22
43	Observation of optical gyromagnetic properties in a magneto-plasmonic metamaterial. <i>Nature Communications</i> , 2022, 13, 1719.		12.8	22
44	Weak measurement of magneto-optical Goos-Hänchen effect. <i>Optics Express</i> , 2019, 27, 17638.		3.4	21
45	Weak measurement of the magneto-optical spin Hall effect of light. <i>Photonics Research</i> , 2019, 7, 1014.		7.0	21
46	Highly sensitive sensors based on magneto-optical surface plasmon resonance in Ag/CeYIG heterostructures. <i>AIP Advances</i> , 2015, 5, .		1.3	20
47	Enhancement of the Faraday Effect and Magneto-optical Figure of Merit in All-Dielectric Metasurfaces. <i>ACS Photonics</i> , 2022, 9, 1240-1247.		6.6	18
48	Optical characterization of Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> and Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> single crystals. <i>Optical Materials Express</i> , 2021, 11, 1218.		3.0	16
49	Growth of Phase Pure Yttrium Iron Garnet Thin Films on Silicon: The Effect of Substrate and Postdeposition Annealing Temperatures. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.		2.1	15
50	Ultra-sensitive nanometric flat laser prints for binocular stereoscopic image. <i>Nature Communications</i> , 2021, 12, 1154.		12.8	15
51	Orientation control and self-assembled nanopyramid structure of LaFeO <sub>3</sub> films epitaxially grown on SrTiO <sub>3</sub> (001) substrates. <i>Applied Physics Letters</i> , 2009, 95, 121908.		3.3	14
52	The Effect of A-Site Substitution of Ce and La on the Magnetic and Electronic Properties of Sr(Ti <sub>0.6</sub> Fe <sub>0.4</sub> )O <sub>3</sub> Films. <i>Inorganic Chemistry</i> , 2012, 51, 13245-13253.		4.0	14
53	Design of a compact waveguide optical isolator based on multimode interferometers using magneto-optical oxide thin films grown on silicon-on-insulator substrates. <i>Optics Express</i> , 2016, 24, 12856.		3.4	13
54	Short-Wavelength Spin Waves in Yttrium Iron Garnet Micro-Channels on Silicon. <i>IEEE Magnetics Letters</i> , 2016, 7, 1-4.		1.1	13

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55	Circular Displacement Current Induced Anomalous Magneto-Optical Effects in High Index Mie Resonators. <i>Laser and Photonics Reviews</i> , 2022, 16, .	8.7	13
56	Strain tunable magnetic properties of 3d transition-metal ion doped monolayer MoS <sub>2</sub> : A first-principles study. <i>AIP Advances</i> , 2018, 8, 055917.	1.3	12
57	Magnetic Proximity Effect and Anomalous Hall Effect in $\text{Y}_{3-\text{x}}\text{Fe}_5\text{O}_{12}$ . <i>Physical Review Applied</i> , 2016, 10, .	3.8	12
58	Mid-infrared active metasurface based on Si/VO <sub>2</sub> hybrid meta-atoms. <i>Photonics Research</i> , 2022, 10, 373.	7.0	12
59	Fabrication and characterization of As <sub>2</sub> S <sub>3</sub> /Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> and Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> /SOI strip-loaded waveguides for integrated optical isolator applications. , 2010, .		11
60	Enhancement of the magneto-optical performance of Sr(Ti <sub>0.6</sub> $\sim$ xGa <sub>x</sub> Fe <sub>0.4</sub> )O <sub>3</sub> perovskite films by Ga substitution. <i>Applied Physics Letters</i> , 2011, 98, 231909.	3.3	10
61	Nickel-induced enhancement of photoluminescence from Si-rich silica films. <i>Applied Physics Letters</i> , 2006, 88, 031905.	3.3	9
62	High-frequency magnetic properties of [FeCo/FeCo-SiO <sub>2</sub> ] <sub>n</sub> multilayered films deposited on flexible substrate. <i>Journal of Applied Physics</i> , 2015, 117, 17C110.	2.5	9
63	Bose-Einstein oscillators and the excitation mechanism of free excitons in 2D layered organic-inorganic perovskites. <i>RSC Advances</i> , 2017, 7, 18366-18373.	3.6	9
64	Active macroscale visible plasmonic nanorod self-assembled monolayer. <i>Photonics Research</i> , 2018, 6, 409.	7.0	9
65	Magnetic-brightening and control of dark exciton in CsPbBr <sub>3</sub> perovskite. <i>Science China Materials</i> , 2020, 63, 1503-1509.	6.3	8
66	On-Chip Nonreciprocal Photonic Devices Based on Hybrid Integration of Magneto-Optical Garnet Thin Films on Silicon. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2022, 28, 1-15.	2.9	7
67	Single-photon Nonreciprocity with an Integrated Magneto-Optical Isolator. <i>Laser and Photonics Reviews</i> , 2022, 16, .	8.7	7
68	Materials for nonreciprocal photonics. <i>MRS Bulletin</i> , 2018, 43, 408-412.	3.5	6
69	The 50 nm-thick yttrium iron garnet films with perpendicular magnetic anisotropy. <i>Chinese Physics B</i> , 2022, 31, 048503.	1.4	6
70	Enhanced chiral sensing in achiral nanostructures with linearly polarized light. <i>Optics Express</i> , 2022, 30, 26306.	3.4	6
71	Spectral origins of high Faraday rotation at 1.5-1/4 m wavelength from Fe and Co in SrTiO <sub>3</sub> films. <i>Journal of Applied Physics</i> , 2011, 109, 07B761.	2.5	5
72	Silicon-Based All-Dielectric Metasurface on an Iron Garnet Film for Efficient Magneto-Optical Light Modulation in Near IR Range. <i>Nanomaterials</i> , 2021, 11, 2926.	4.1	5

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73	Imbert-Fedorov Effect in Kretschmann Configuration with Anisotropic Metamaterial. <i>Plasmonics</i> , 2018, 13, 1425-1432.	3.4	4
74	Dysprosium Substituted Ce:YIG Thin Films for Temperature Insensitive Integrated Optical Isolator Applications. <i>Materials</i> , 2022, 15, 1691.	2.9	4
75	Magneto-Optical Imbert-Fedorov Effect in Prism Coupling Configuration. <i>IEEE Photonics Journal</i> , 2017, 9, 1-7.	2.0	3
76	Compositional dependence of Young's moduli for amorphous FeCo-SiO <sub>2</sub> thin films. <i>Journal of Applied Physics</i> , 2011, 109, 07A929.	2.5	2
77	Generic model of superexchange effects in magnetoelastic oxides. <i>Journal of Applied Physics</i> , 2013, 113, 17A927.	2.5	2
78	Silicon integrated nonreciprocal photonic devices using monolithically integrated magnetic oxides. , 2016, , .		1
79	Magneto-optical enhancement in highly Poly-crystallized Ce substituted YIG thin films by PLD. , 2016, , .		1
80	Graphene enhanced intra-resonator biochemical detection with individual molecule sensitivity and selectivity. , 2019, , .		1
81	Design for a TE Mode Magneto-Optical Circulator Based on Asymmetric Silicon Slot Waveguides. , 2021, , .		1
82	Modern Magnetophotonic Materials and their Applications: introduction to special issue. <i>Optical Materials Express</i> , 2022, 12, 2087.	3.0	1
83	On-chip Integrated Magneto-Optical Nonreciprocal Photonic Devices. , 2021, , .		0
84	Waveguide Integrated Magneto-Optical Isolators on Silicon Nitride Platforms. , 2020, , .		0
85	A Reconfigurable All-Dielectric Metasurface Based on Vanadium Dioxide for Independent Control of the Mie Resonances. , 2020, , .		0