Leiming Wu

List of Publications by Year
in descending order

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72 papers	5,277 citations	94269 37 h-index	85405 71 g-index
72 all docs	72 docs citations	72 times ranked	4556 citing authors

#	Article	IF	Citations
1	Enhancement of Sensitivity with Highâ^'Reflectiveâ^'Index Guidedâ^'Wave Nanomaterials for a Longâ^'Range Surface Plasmon Resonance Sensor. Nanomaterials, 2022, 12, 168.	1.9	6
2	All-optical logic devices based on black arsenicâ€“phosphorus with strong nonlinear optical response and high stability. Opto-Electronic Advances, 2022, 5, 200046-200046.	6.4	25
3	Tunable Nonlinearity in 2D Graphdiyne Oxide for Highâ€Performance Allâ€Optical Modulation. Advanced Optical Materials, 2022, 10, .	3.6	3
4	2D BP/InSe Heterostructures as a Nonlinear Optical Material for Ultrafast Photonics. Nanomaterials, 2022, 12, 1809.	1.9	11
5	Double Perovskite Ba2LaTaO6 for Ultrafast Fiber Lasers in Anomalous and Normal Net Dispersion Regime. Nanomaterials, 2022, 12, 2112.	1.9	3
6	Lossy-mode-resonance sensor based on perovskite nanomaterial with high sensitivity. Optics Express, 2021, 29, 17602.	1.7	10
7	CH3NH3PbBr3 Thin Film Served as Guided-Wave Layer for Enhancing the Angular Sensitivity of Plasmon Biosensor. Biosensors, 2021, 11, 415.	2.3	5
8	GeSe nanosheets modified surface plasmon resonance sensors for enhancing sensitivity. Nanophotonics, 2020, 9, 327-336.	2.9	24
9	Ultrasensitive Multiple Guided-Mode Biosensor With Few-Layer Black Phosphorus. Journal of Lightwave Technology, 2020, 38, 1564-1571.	2.7	11
10	Two-Dimensional Black Arsenic Phosphorus for Ultrafast Photonics in Near- and Mid-Infrared Regimes. ACS Applied Materials & Interfaces, 2020, 12, 46509-46518.	4.0	47
11	Recent Advances of Spatial Selfâ€Phase Modulation in 2D Materials and Passive Photonic Device Applications. Small, 2020, 16, e2002252.	5.2	35
12	Photodetectors: Graphdiyneâ€Based Flexible Photodetectors with High Responsivity and Detectivity (Adv. Mater. 23/2020). Advanced Materials, 2020, 32, 2070175.	11.1	5
13	Liquidâ€Exfoliated Fewâ€Layer InSe Nanosheets for Broadband Nonlinear Allâ€Optical Applications. Advanced Optical Materials, 2020, 8, 1901862.	3.6	20
14	1D@0D hybrid dimensional heterojunction-based photonics logical gate and isolator. Applied Materials Today, 2020, 19, 100589.	2.3	19
15	Synthesis and optoelectronics of mixed-dimensional Bi/Te binary heterostructures. Nanoscale Horizons, 2020, 5, 847-856.	4.1	28
16	A self-powered photodetector based on two-dimensional boron nanosheets. Nanoscale, 2020, 12, 5313-5323.	2.8	60
17	Refractive Index Sensors Based on Ti₃C₂T_x MXene Fibers. ACS Applied Nano Materials, 2020, 3, 303-311.	2.4	74
18	Topological insulator overlayer to enhance the sensitivity and detection limit of surface plasmon resonance sensor. Nanophotonics, 2020, 9, 1941-1951.	2.9	18

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19	Ultrathin boron nanosheets as an emerging two-dimensional photoluminescence material for bioimaging. Nanoscale Horizons, 2020, 5, 705-713.	4.1	33
20	Multifunctional VIâ€“VI binary heterostructure-based self-powered pH-sensitive photo-detector. Journal of Materials Chemistry C, 2020, 8, 5991-6000.	2.7	8
21	Graphdiyneâ€Based Flexible Photodetectors with High Responsivity and Detectivity. Advanced Materials, 2020, 32, e2001082.	11.1	171
22	Epitaxial Growth of Topological Insulators on Semiconductors (Bi₂Se₃/Te@Se) toward Highâ€Performance Photodetectors. Small Methods, 2019, 3, 1900349.	4.6	45
23	Selfâ€Healable Black Phosphorus Photodetectors. Advanced Functional Materials, 2019, 29, 1906610.	7.8	48
24	Van der Waals Integration of Bismuth Quantum Dotsâ€“Decorated Tellurium Nanotubes (Te@Bi) Heterojunctions and Plasmaâ€Enhanced Optoelectronic Applications. Small, 2019, 15, e1903233.	5.2	45
25	Giant tunable Goosâ€“HÃnchen shifts based on surface plasmon resonance with Dirac semimetal films. Journal Physics D: Applied Physics, 2019, 53, 015107.	1.3	14
26	Theoretical Investigation of Multilayer Ti₃C₂T_x MXene as the Plasmonic Material for Surface Plasmon Resonance Sensors in Near Infrared Region. IEEE Sensors Journal, 2019, 19, 11834-11838.	2.4	34
27	Engineering ultrafast charge transfer in a bismuthene/perovskite nanohybrid. Nanoscale, 2019, 11, 2637-2643.	2.8	51
28	Enhanced Photodetection Properties of Tellurium@Selenium Rollâ€toâ€Roll Nanotube Heterojunctions. Small, 2019, 15, e1900902.	5.2	120
29	Tunable polaritonic metasurface absorbers in mid-IR based on hexagonal boron nitride and vanadium dioxide layers. Journal Physics D: Applied Physics, 2019, 52, 164002.	1.3	30
30	Application of Few-Layer Transition Metal Dichalcogenides to Detect the Refractive Index Variation in Lossy-Mode Resonance Sensors With High Figure of Merit. IEEE Sensors Journal, 2019, 19, 5030-5034.	2.4	14
31	Broadband nonlinear optical response in Bi2Se3-Bi2Te3 heterostructure and its application in all-optical switching. AIP Advances, 2019, 9, .	0.6	19
32	Kerr Nonlinearity in 2D Graphdiyne for Passive Photonic Diodes. Advanced Materials, 2019, 31, e1807981.	11.1	187
33	A promising nonlinear optical material and its applications for all-optical switching and information converters based on the spatial self-phase modulation (SSPM) effect of TaSe₂ nanosheets. Journal of Materials Chemistry C, 2019, 7, 3811-3816.	2.7	41
34	Nonlinear optical response, all optical switching, and all optical information conversion in NbSe₂nanosheets based on spatial self-phase modulation. Nanoscale, 2019, 11, 4515-4522.	2.8	61
35	Spatial self-phase modulation and all-optical switching of graphene oxide dispersions. Journal of Alloys and Compounds, 2019, 771, 900-904.	2.8	35
36	Ultrasensitive detection of miRNA with an antimonene-based surface plasmon resonance sensor. Nature Communications, 2019, 10, 28.	5.8	475

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37	Enhancement of photonic spin Hall effect via bound states in the continuum. Journal Physics D: Applied Physics, 2019, 52, 045401.	1.3	23
38	High Figure of Merit Lossy Mode Resonance Sensor with Graphene. Plasmonics, 2019, 14, 929-934.	1.8	13
39	MXeneâ€Enabled Electrochemical Microfluidic Biosensor: Applications toward Multicomponent Continuous Monitoring in Whole Blood. Advanced Functional Materials, 2019, 29, 1807326.	7.8	301
40	MZIâ€Based Allâ€Optical Modulator Using MXene Ti₃C₂T_x (T =) Tj ETQq0 0 0 rgBT /Overl	3.0	87
41	High Sensitivity Intensity-Interrogated Bloch Surface Wave Biosensor With Graphene. IEEE Sensors Journal, 2018, 18, 106-110.	2.4	19
42	Nonlinear Fewâ€Layer Antimoneneâ€Based Allâ€Optical Signal Processing: Ultrafast Optical Switching and Highâ€Speed Wavelength Conversion. Advanced Optical Materials, 2018, 6, 1701287.	3.6	97
43	Allâ€Optical Phosphorene Phase Modulator with Enhanced Stability Under Ambient Conditions. Laser and Photonics Reviews, 2018, 12, 1800016.	4.4	155
44	Highly Sensitive Terahertz Gas Sensor Based on Surface Plasmon Resonance With Graphene. IEEE Photonics Journal, 2018, 10, 1-7.	1.0	46
45	Fewâ€Layer Tin Sulfide: A Promising Blackâ€Phosphorusâ€Analogue 2D Material with Exceptionally Large Nonlinear Optical Response, High Stability, and Applications in Allâ€Optical Switching and Wavelength Conversion. Advanced Optical Materials, 2018, 6, 1700985.	3.6	212
46	Facile fabrication and characterization of two-dimensional bismuth(<scp>iii</scp>) sulfide nanosheets for high-performance photodetector applications under ambient conditions. Nanoscale, 2018, 10, 2404-2412.	2.8	166
47	High-Performance Lossy-Mode Resonance Sensor Based on Few-Layer Black Phosphorus. Journal of Physical Chemistry C, 2018, 122, 7368-7373.	1.5	47
48	Sensitivity Enhanced by MoS2â€“Graphene Hybrid Structure in Guided-Wave Surface Plasmon Resonance Biosensor. Plasmonics, 2018, 13, 281-285.	1.8	46
49	Fewâ€layer Bismuthene: Sonochemical Exfoliation, Nonlinear Optics and Applications for Ultrafast Photonics with Enhanced Stability. Laser and Photonics Reviews, 2018, 12, 1700221.	4.4	311
50	Two-dimensional beta-lead oxide quantum dots. Nanoscale, 2018, 10, 20540-20547.	2.8	49
51	Fano Resonance in Waveguide Coupled Surface Exciton Polaritons: Theory and Application in Biosensor. Sensors, 2018, 18, 4437.	2.1	3
52	Ultrasensitive Terahertz Imaging Sensors Based on the Strong Coupling of Surface Phonon Polariton and Graphene Surface Plasmon Polariton. IEEE Photonics Journal, 2018, 10, 1-9.	1.0	2
53	MXeneâ€Based Nonlinear Optical Information Converter for Allâ€Optical Modulator and Switcher. Laser and Photonics Reviews, 2018, 12, 1800215.	4.4	117
54	Few-layer Ti3C2Tx MXene: A promising surface plasmon resonance biosensing material to enhance the sensitivity. Sensors and Actuators B: Chemical, 2018, 277, 210-215.	4.0	163

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55	Perovskite CsPbX₃: A Promising Nonlinear Optical Material and Its Applications for Ambient Allâ€Optical Switching with Enhanced Stability. Advanced Optical Materials, 2018, 6, 1800400.	3.6	90
56	Tunable terahertz/infrared coherent perfect absorption in a monolayer black phosphorus. Optics Express, 2018, 26, 5488.	1.7	44
57	Fano resonance in double waveguides with graphene for ultrasensitive biosensor. Optics Express, 2018, 26, 16884.	1.7	40
58	Terahertz Biochemical Sensor Based on Strong Coupling Between Waveguide Mode and Surface Plasmons of Double-Layer Graphene. IEEE Sensors Journal, 2018, 18, 7436-7441.	2.4	18
59	Improving the Performance of an SPR Biosensor Using Long-Range Surface Plasmon of Ga-Doped Zinc Oxide. Sensors, 2018, 18, 2098.	2.1	31
60	Broadband nonlinear optical resonance and all-optical switching of liquid phase exfoliated tungsten diselenide. Photonics Research, 2018, 6, 1040.	3.4	52
61	Absorption enhancement and total absorption in a graphene-waveguide hybrid structure. AIP Advances, 2017, 7, .	0.6	33
62	Sensitivity enhancement by using few-layer black phosphorus-graphene/TMDCs heterostructure in surface plasmon resonance biochemical sensor. Sensors and Actuators B: Chemical, 2017, 249, 542-548.	4.0	322
63	All-Optical Switching of Two Continuous Waves in Few Layer Bismuthene Based on Spatial Cross-Phase Modulation. ACS Photonics, 2017, 4, 2852-2861.	3.2	164
64	Quantum Dots: Broadband Nonlinear Optical Response in Fewâ€Layer Antimonene and Antimonene Quantum Dots: A Promising Optical Kerr Media with Enhanced Stability (Advanced Optical Materials) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.6	4
65	Sensitivity Improved SPR Biosensor Based on the MoS2/Grapheneâ€“Aluminum Hybrid Structure. Journal of Lightwave Technology, 2017, 35, 82-87.	2.7	165
66	Ultrasensitive Terahertz Biosensors Based on Fano Resonance of a Graphene/Waveguide Hybrid Structure. Sensors, 2017, 17, 1924.	2.1	52
67	Broadband Nonlinear Optical Response in Fewâ€Layer Antimonene and Antimonene Quantum Dots: A Promising Optical Kerr Media with Enhanced Stability. Advanced Optical Materials, 2017, 5, 1700301.	3.6	269
68	Ultrasensitive biosensors based on long-range surface plasmon polariton and dielectric waveguide modes. Photonics Research, 2016, 4, 262.	3.4	93
69	An ultra-high sensitivity surface plasmon resonance sensor based on graphene-aluminum-graphene sandwich-like structure. Journal of Applied Physics, 2016, 120, .	1.1	50
70	Tuning and Sensitivity Enhancement of Surface Plasmon Resonance Biosensor With Graphene Covered Au-MoS 2-Au Films. IEEE Photonics Journal, 2016, 8, 1-8.	1.0	85
71	Long-Range Surface Plasmon With Graphene for Enhancing the Sensitivity and Detection Accuracy of Biosensor. IEEE Photonics Journal, 2016, 8, 1-9.	1.0	41
72	Manipulating the optical bistability at terahertz frequency in the Fabry-Perot cavity with graphene. Optics Express, 2015, 23, 31181.	1.7	32