

# Chao Liu

## List of Publications by Year in descending order

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90  
papers

2,434  
citations

236612

25  
h-index

223531

46  
g-index

90  
all docs

90  
docs citations

90  
times ranked

990  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mid-infrared surface plasmon resonance sensor based on photonic crystal fibers. Optics Express, 2017, 25, 14227.	1.7	222
2	Symmetrical dual D-shape photonic crystal fibers for surface plasmon resonance sensing. Optics Express, 2018, 26, 9039.	1.7	213
3	Thermal tuning of terahertz metamaterial absorber properties based on VO <sub>2</sub> . Physical Chemistry Chemical Physics, 2022, 24, 8846-8853.	1.3	197
4	Surface plasmon resonance (SPR) infrared sensor based on D-shape photonic crystal fibers with ITO coatings. Optics Communications, 2020, 464, 125496.	1.0	157
5	Analysis of a Surface Plasmon Resonance Probe Based on Photonic Crystal Fibers for Low Refractive Index Detection. Plasmonics, 2018, 13, 779-784.	1.8	137
6	Numerical analysis of a photonic crystal fiber based on a surface plasmon resonance sensor with an annular analyte channel. Optics Communications, 2017, 382, 162-166.	1.0	91
7	Theoretical assessment of a highly sensitive photonic crystal fibre based on surface plasmon resonance sensor operating in the near-infrared wavelength. Journal of Modern Optics, 2019, 66, 1-6.	0.6	74
8	A Highly Sensitive Dual-Core Photonic Crystal Fiber Based on a Surface Plasmon Resonance Biosensor with Silver-Graphene Layer. Plasmonics, 2017, 12, 1847-1853.	1.8	70
9	Surface plasmon resonance sensor based on photonic crystal fiber with indium tin oxide film. Optical Materials, 2020, 102, 109800.	1.7	70
10	Surface plasmon resonance chemical sensor composed of a microstructured optical fiber for the detection of an ultra-wide refractive index range and gas-liquid pollutants. Optics Express, 2021, 29, 40734.	1.7	68
11	Overview of refractive index sensors comprising photonic crystal fibers based on the surface plasmon resonance effect [Invited]. Chinese Optics Letters, 2021, 19, 102202.	1.3	65
12	Microstructures of Ni-AlN composite coatings prepared by pulse electrodeposition technology. Applied Surface Science, 2013, 271, 7-11.	3.1	60
13	Surface plasmon resonance sensor based on coupling effects of dual photonic crystal fibers for low refractive indexes detection. Results in Physics, 2020, 18, 103240.	2.0	60
14	A highly temperature-sensitive photonic crystal fiber based on surface plasmon resonance. Optics Communications, 2016, 359, 378-382.	1.0	59
15	Birefringent PCF-Based SPR Sensor for a Broad Range of Low Refractive Index Detection. IEEE Photonics Technology Letters, 2018, 30, 1471-1474.	1.3	50
16	Dual-Band Polarization Conversion Metasurface for RCS Reduction. IEEE Transactions on Antennas and Propagation, 2021, 69, 3044-3049.	3.1	50
17	A high-sensitivity photonic crystal fiber (PCF) based on the surface plasmon resonance (SPR) biosensor for detection of density alteration in non-physiological cells (DANCE). Opto-electronics Review, 2018, 26, 50-56.	2.4	44
18	Near-infrared surface plasmon resonance sensor based on photonic crystal fiber with big open rings. Optik, 2020, 207, 164466.	1.4	41

#	ARTICLE	IF	CITATIONS
19	A square-lattice D-shaped photonic crystal fiber sensor based on SPR to detect analytes with large refractive indexes. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2022, 138, 115106.	1.3	35
20	Ex-centric core photonic crystal fiber sensor with gold nanowires based on surface plasmon resonance. <i>Optik</i> , 2019, 196, 163173.	1.4	34
21	Design and theoretical analysis of a photonic crystal fiber based on surface plasmon resonance sensing. <i>Journal of Nanophotonics</i> , 2015, 9, 093050.	0.4	33
22	Dual-Bandwidth Linear Polarization Converter Based on Anisotropic Metasurface. <i>IEEE Photonics Journal</i> , 2020, 12, 1-11.	1.0	33
23	The single-polarization filter composed of gold-coated photonic crystal fiber. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2019, 383, 3200-3206.	0.9	32
24	A hollow dual-core PCF-SPR sensor with gold layers on the inner and outer surfaces of the thin cladding. <i>Results in Optics</i> , 2020, 1, 100004.	0.9	31
25	Surface plasmon resonance sensor based on U-shaped photonic quasi-crystal fiber. <i>Applied Optics</i> , 2021, 60, 1761.	0.9	27
26	A Highly Sensitive SPR Sensors Based on Two Parallel PCFs for Low Refractive Index Detection. <i>IEEE Photonics Journal</i> , 2018, 10, 1-10.	1.0	25
27	Ultra-short and dual-core photonic crystal fiber polarization splitter composed of metal and gallium arsenide. <i>Optik</i> , 2021, 226, 165779.	1.4	25
28	Combining Pancharatnamâ€“Berry Phase and Conformal Coding Metasurface for Dual-Band RCS Reduction. <i>IEEE Transactions on Antennas and Propagation</i> , 2022, 70, 2352-2357.	3.1	24
29	Tunable single-polarization bimetal-coated and liquid-filled photonic crystal fiber filter based on surface plasmon resonance. <i>Applied Optics</i> , 2019, 58, 6308.	0.9	22
30	Surface plasmon resonance sensor based on eccentric core photonic quasi-crystal fiber with indium tin oxide. <i>Applied Optics</i> , 2019, 58, 6848.	0.9	22
31	Synthesis of Niâ€“TiN composite nanocoatings by magnetic pulse current deposition. <i>Ceramics International</i> , 2015, 41, 11445-11448.	2.3	21
32	Reflection-type 1-bit coding metasurface for radar cross section reduction combined diffusion and reflection. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 445107.	1.3	21
33	High-Efficiency Dual-Frequency Reflective Linear Polarization Converter Based on Metasurface for Microwave Bands. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1910.	1.3	17
34	Circular anti-resonance fibre supporting orbital angular momentum modes with flat dispersion, high purity and low confinement loss. <i>Journal of Modern Optics</i> , 2021, 68, 784-791.	0.6	17
35	Design of pure silica-based photonic crystal fiber for supporting 114 OAM modes transmission. <i>Journal of Optics (United Kingdom)</i> , 2021, 23, 095701.	1.0	15
36	Highly sensitive PCF-SPR biosensor for hyperthermia temperature monitoring. <i>Journal of Optics (India)</i> , 2018, 47, 288-294.	0.8	14

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37	A highly sensitive D-type photonic crystal fiber infrared sensor with indium tin oxide based on surface plasmon resonance. <i>Modern Physics Letters B</i> , 2022, 36, .	1.0	14
38	Analysis of a highly birefringent asymmetric photonic crystal fibre based on a surface plasmon resonance sensor. <i>Journal of Modern Optics</i> , 2016, 63, 1189-1195.	0.6	12
39	Optimization of photonic crystal fibers for transmission of orbital angular momentum modes. <i>Optical and Quantum Electronics</i> , 2021, 53, 1.	1.5	12
40	Transfer matrix method for simulation of the fiber Bragg grating in polarization maintaining fiber. <i>Optics Communications</i> , 2019, 452, 185-188.	1.0	11
41	Theoretical Assessment of Localized Surface Plasmon Resonance Properties of Au-Interlayer-Ag Multilayered Nanoshells. <i>Plasmonics</i> , 2016, 11, 1589-1595.	1.8	10
42	Localized surface plasmon resonance properties of Ag nanorod arrays on graphene-coated Au substrate. <i>Optics Communications</i> , 2017, 402, 216-220.	1.0	10
43	A high-birefringent photonic quasi-crystal fiber with two elliptical air holes. <i>Optik</i> , 2019, 184, 10-15.	1.4	10
44	High-sensitivity SPR sensor based on the eightfold eccentric core PQF with locally coated indium tin oxide. <i>Applied Optics</i> , 2020, 59, 6484.	0.9	10
45	HE <sub>1,1</sub> mode-excited surface plasmon resonance for refractive index sensing by photonic crystal fibers with high sensitivity and long detection distance. <i>Optik</i> , 2022, 265, 169471.	1.4	10
46	Design of bimetal-coated photonic crystal fiber filter based on surface plasmon resonance. <i>Results in Optics</i> , 2020, 1, 100027.	0.9	9
47	Ultra-sensitive hexagonal PCF-SPR sensor with a broad detection range. <i>Journal of Modern Optics</i> , 2020, 67, 1545-1554.	0.6	9
48	Effects of sputtering power on structural, electrical and optical properties of Cr-doped ZnO thin films prepared by magnetron sputtering. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 493-497.	1.1	8
49	Multi-wavelength unidirectional forward scattering in the visible range in an all-dielectric silicon hollow nanodisk. <i>Applied Optics</i> , 2018, 57, 4771.	0.9	8
50	Highly Sensitive Dual-core Photonic Crystal Fiber Based on a Surface Plasmon Resonance Sensor with Gold Film. <i>Plasmonics</i> , 2022, 17, 543-550.	1.8	8
51	Effects of air holes in the cladding of photonic crystal fibers on dispersion and confinement loss of orbital angular momentum modes. <i>Optical and Quantum Electronics</i> , 2022, 54, .	1.5	8
52	Optical Anapole Modes in Gallium Phosphide Nanodisk with Forked Slits for Electric Field Enhancement. <i>Nanomaterials</i> , 2021, 11, 1490.	1.9	7
53	A new technique to optimize the properties of photonic crystal fibers supporting transmission of multiple orbital angular momentum modes. <i>Journal of Optics (India)</i> , 2023, 52, 307-316.	0.8	7
54	Plasma-target surface interaction during non-equilibrium plasma irradiation at atmospheric pressure: Generation of dusty plasma. <i>Laser and Particle Beams</i> , 2014, 32, 69-78.	0.4	6

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55	Discriminating Twisting Direction by Polarization Maintaining Fiber Bragg Grating. IEEE Photonics Technology Letters, 2018, 30, 654-657.	1.3	6
56	A novel photonic quasi-crystal fiber for transmission of orbital angular momentum modes. Optik, 2022, 251, 168446.	1.4	5
57	Effects of substrate temperature on the structural and magnetic properties in Cr-doped ZnO films prepared by magnetron sputtering. Journal of Materials Science: Materials in Electronics, 2014, 25, 4139-4144.	1.1	4
58	Analysis of Local Surface Plasmon Resonance in Multilayered Au/Ag/Graphene Nanoshells. Nano, 2017, 12, 1750062.	0.5	4
59	Localized surface plasmon resonance properties of symmetry-broken Au@ITO@Ag multilayered nanoshells. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	4
60	Dual-band unidirectional forward scattering of Au@Si sliced nanorod in the visible region. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	4
61	Ultra-short dual-core GaAs photonic crystal fiber splitter filled with nematic liquid crystal. Optical Engineering, 2021, 60, .	0.5	4
62	Investigation of a high-sensitivity surface plasmon resonance sensor based on the eccentric core quasi D-shape photonic quasi-crystal fiber. Journal of Modern Optics, 2021, 68, 555-563.	0.6	4
63	Single-polarization photonic crystal fiber filter composed of elliptical gold films. Optical Engineering, 2020, 59, 1.	0.5	4
64	Optical properties of local surface plasmon resonance in Ag/ITO sliced nanosphere by the discrete dipole approximation. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	3
65	Influence of annealing on microstructure and properties of Cr-doped ZnO thin films deposited on glass surface. Journal of Materials Science: Materials in Electronics, 2017, 28, 3812-3818.	1.1	3
66	Asymmetrical photonic crystal fiber based on the surface plasmon resonance sensor and analysis by the lower-birefringence peak method. Optik, 2019, 189, 121-129.	1.4	3
67	Optical diode composed of subwavelength slit-groove arrays with ultrahigh transmission contrast based on surface plasmon polariton. Optik, 2019, 186, 266-274.	1.4	3
68	Forward and Backward Unidirectional Scattering by the Core-Shell Nanocube Dimer with Balanced Gain and Loss. Nanomaterials, 2020, 10, 1440.	1.9	3
69	Multi-functional gallium arsenide photonic crystal polarization splitter with a gold core. Modern Physics Letters B, 2021, 35, 2150229.	1.0	3
70	A photonic quasi-crystal fiber composed of circular air holes with high birefringence and low confinement loss. Optik, 2021, 231, 166497.	1.4	3
71	Photonic spin Hall effect: a new window in D-shaped fiber by weak measurements. Optics Express, 2019, 27, 14064.	1.7	3
72	Dual-band directional scattering with all-dielectric trimer in the near-infrared region. Applied Optics, 2019, 58, 5082.	0.9	3

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73	Detection of kerosene adulteration in automobile fuel by a low-loss surface plasmon resonance (SPR) chemical sensor. <i>Analytical Methods</i> , 2022, 14, 2153-2160.	1.3	3
74	Numerical Analysis of Multifunctional Biosensor with Dual-Channel Photonic Crystal Fibers Based on Localized Surface Plasmon Resonance. <i>Coatings</i> , 2022, 12, 742.	1.2	3
75	A photonic quasi-crystal fibre supporting stable transmission of 150 OAM modes with high mode quality and flat dispersion. <i>Journal of Modern Optics</i> , 2022, 69, 887-896.	0.6	3
76	Numerical analysis of a high-birefringent photonic quasi-crystal fiber with circular air holes. <i>Optik</i> , 2020, 207, 163850.	1.4	2
77	Design of broadband single-polarization filter based on simple structure photonic crystal fiber with gold-coated air holes. <i>Modern Physics Letters B</i> , 2021, 35, .	1.0	2
78	Photonic fibre crystal sensor with a D-shape based on surface plasma resonance containing microfluidic channels for detection of a wide range of refractive indexes. <i>Journal of Modern Optics</i> , 2022, 69, 1-11.	0.6	2
79	Efficient photonic crystal fiber polarization splitters composed of gallium arsenide and nematic liquid crystals. <i>Modern Physics Letters B</i> , 2021, 35, 2150077.	1.0	2
80	Grating Structure Broadband Absorber Based on Gallium Arsenide and Titanium. <i>Coatings</i> , 2022, 12, 588.	1.2	2
81	Toroidal dipole and magnetic multipole excitations from the same nanostructure with different direction of electric dipole emitters. <i>Applied Physics A: Materials Science and Processing</i> , 2020, 126, 1.	1.1	1
82	Enhancement of unidirectional forward scattering and suppression of backward scattering in hollow silicon nanoblocks. <i>Applied Optics</i> , 2021, 60, 8737.	0.9	1
83	Dual-core photonic crystal fiber polarization beam splitter filled with salt water. <i>Optical Engineering</i> , 2021, 60, .	0.5	1
84	Multiple unidirectional forward scattering of hybrid metal-dielectric nanoantenna in the near-infrared region. <i>Optical Materials Express</i> , 2018, 8, 3410.	1.6	1
85	Analysis of Localized Surface Plasmon Resonance in Ag/ITO/CdS/SiO <sub>2</sub> Multilayered Nanostructured Composite. <i>Nano</i> , 2015, 10, 1550117.	0.5	0
86	Structural and optical properties of oxygen to argon flow ratio on the Zn <sub>0.98</sub> Cr <sub>0.02</sub> O thin films deposited by RF magnetron sputtering. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 316-321.	1.1	0
87	Nanoscale Mechanical Properties of Nanoindented Ni <sub>48.8</sub> Mn <sub>27.2</sub> Ga <sub>24</sub> Ferromagnetic Shape Memory Thin Film. <i>Scanning</i> , 2017, 2017, 1-5.	0.7	0
88	Localized Surface Plasmon Resonance Properties of Concentric Dual-Ring Nanodisk. <i>Nano</i> , 2019, 14, 1950071.	0.5	0
89	Theoretical Study on the Stability, Electronic, Magnetic and Spectral Properties of GaAg (n = 1-7) Clusters. <i>Russian Journal of Physical Chemistry B</i> , 2021, 15, 420-427.	0.2	0
90	Fano resonances in symmetric plasmonic split-ring/ring dimer nanostructures. <i>Applied Optics</i> , 2019, 58, 8069.	0.9	0