

Tsung-Hsien Lin

List of Publications by Year in descending order

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135
papers

2,731
citations

172457

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223800

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135
docs citations

135
times ranked

1643
citing authors

#	ARTICLE	IF	CITATIONS
1	Red, Green and Blue Reflections Enabled in an Optically Tunable Self-Organized 3D Cubic Nanostructured Thin Film. <i>Advanced Materials</i> , 2013, 25, 5050-5054.	21.0	158
2	Cholesteric liquid crystal laser with wide tuning capability. <i>Applied Physics Letters</i> , 2005, 86, 161120.	3.3	119
3	Meta-q-plate for complex beam shaping. <i>Scientific Reports</i> , 2016, 6, 25528.	3.3	86
4	Electrically controllable laser based on cholesteric liquid crystal with negative dielectric anisotropy. <i>Applied Physics Letters</i> , 2006, 88, 061122.	3.3	80
5	Reconfiguration of three-dimensional liquid-crystalline photonic crystals by electrostriction. <i>Nature Materials</i> , 2020, 19, 94-101.	27.5	80
6	Highly efficient and polarization-independent Fresnel lens based on dye-doped liquid crystal. <i>Optics Express</i> , 2007, 15, 2900.	3.4	79
7	Random lasing in blue phase liquid crystals. <i>Optics Express</i> , 2012, 20, 23978.	3.4	75
8	Large three-dimensional photonic crystals based on monocrystalline liquid crystal blue phases. <i>Nature Communications</i> , 2017, 8, 727.	12.8	69
9	Optically tuneable blue phase photonic band gaps. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	66
10	A stable and switchable uniform lying helix structure in cholesteric liquid crystals. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	64
11	Lasing in chiral photonic liquid crystals and associated frequency tuning. <i>Optics Express</i> , 2004, 12, 1857.	3.4	62
12	Light-Driven Wide-Range Nonmechanical Beam Steering and Spectrum Scanning Based on a Self-Organized Liquid Crystal Grating Enabled by a Chiral Molecular Switch. <i>Advanced Optical Materials</i> , 2015, 3, 166-170.	7.3	61
13	Electric Field-Driven Shifting and Expansion of Photonic Band Gaps in 3D Liquid Photonic Crystals. <i>ACS Photonics</i> , 2015, 2, 1524-1531.	6.6	60
14	Versatile Energy-Saving Smart Glass Based on Tristable Cholesteric Liquid Crystals. <i>ACS Applied Energy Materials</i> , 2020, 3, 7601-7609.	5.1	59
15	Rollable multicolor display using electrically induced blueshift of a cholesteric reactive mesogen mixture. <i>Applied Physics Letters</i> , 2006, 89, 091124.	3.3	56
16	Bistable reflective polarizer-free optical switch based on dye-doped cholesteric liquid crystal [Invited]. <i>Optical Materials Express</i> , 2011, 1, 1457.	3.0	55
17	Multi-electrode tunable liquid crystal lenses with one lithography step. <i>Optics Letters</i> , 2018, 43, 271.	3.3	44
18	Blue-phase liquid crystal cored optical fiber array with photonic bandgaps and nonlinear transmission properties. <i>Optics Express</i> , 2013, 21, 4319.	3.4	42

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19	Optically-tunable beam steering grating based on azobenzene doped cholesteric liquid crystal. Optics Express, 2010, 18, 17498.	3.4	41
20	Axially symmetric polarization converters based on photo-aligned liquid crystal films. Optics Express, 2008, 16, 3768.	3.4	40
21	Direction switching and beam steering of cholesteric liquid crystal gratings. Applied Physics Letters, 2012, 100, .	3.3	37
22	Nonlinear optical grating diffraction in dye-doped blue-phase liquid crystals. Optics Letters, 2012, 37, 3225.	3.3	36
23	Polarization controllable Fresnel lens using dye-doped liquid crystals. Optics Express, 2006, 14, 2359.	3.4	35
24	Temperature dependence of refractive index in blue phase liquid crystals. Optical Materials Express, 2013, 3, 527.	3.0	35
25	Full-color reflectance-tunable filter based on liquid crystal cladded guided-mode resonant grating. Optics Express, 2016, 24, 22892.	3.4	34
26	Polarization independent Fabry-Pérot filter based on polymer-stabilized blue phase liquid crystals with fast response time. Optics Express, 2011, 19, 25441.	3.4	32
27	Polarization converters based on axially symmetric twisted nematic liquid crystal. Optics Express, 2010, 18, 3601.	3.4	31
28	Influence of Polymerization Temperature on Hysteresis and Residual Birefringence of Polymer Stabilized Blue Phase LCs. Journal of Display Technology, 2011, 7, 615-618.	1.2	31
29	Photo-patterning micro-mirror devices using azo dye-doped cholesteric liquid crystals. Optics Express, 2006, 14, 4479.	3.4	30
30	Enhanced image quality of OLED transparent display by cholesteric liquid crystal back-panel. Optics Express, 2017, 25, 29199.	3.4	30
31	Photo and electrical tunable effects in photonic liquid crystal fiber. Optics Express, 2010, 18, 2814.	3.4	29
32	Bistable cholesteric liquid crystal light shutter with multielectrode driving. Applied Optics, 2014, 53, E33.	1.8	28
33	Pinning effect on the photonic bandgaps of blue-phase liquid crystal. Applied Optics, 2011, 50, 1606.	2.1	27
34	Electrically switchable spatial filter based on polymer-dispersed liquid crystal film. Journal of Applied Physics, 2004, 96, 5402-5404.	2.5	26
35	Polarization-independent rapidly responding phase grating based on hybrid blue phase liquid crystal. Journal of Applied Physics, 2013, 113, .	2.5	26
36	Ultrafast pulse compression, stretching-and-recompression using cholesteric liquid crystals. Optics Express, 2016, 24, 10458.	3.4	26

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37	Smart Window with Active-Passive Hybrid Control. <i>Materials</i> , 2020, 13, 4137.	2.9	26
38	Photoalignment effect in a liquid-crystal film doped with nanoparticles and azo-dye. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	25
39	Measurement of helical twisting power based on axially symmetrical photo-aligned dye-doped liquid crystal film. <i>Optics Express</i> , 2009, 17, 15926.	3.4	25
40	Polarization-independent liquid crystal lens based on axially symmetric photoalignment. <i>Optics Express</i> , 2011, 19, 2294.	3.4	25
41	Bistable effect in the liquid crystal blue phase. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	24
42	Multi-wavelength laser emission in dye-doped photonic liquid crystals. <i>Optics Express</i> , 2008, 16, 18334.	3.4	23
43	Highly sensitive optical temperature sensor based on a SiN micro-ring resonator with liquid crystal cladding. <i>Optics Express</i> , 2016, 24, 1002.	3.4	23
44	Arbitrary Beam Steering Enabled by Photomechanically Bendable Cholesteric Liquid Crystal Polymers. <i>Advanced Optical Materials</i> , 2017, 5, 1600824.	7.3	22
45	Photoaddressable bistable reflective liquid crystal display. <i>Applied Physics Letters</i> , 2006, 89, 021116.	3.3	21
46	Axially symmetric liquid crystal devices based on double-side photo-alignment. <i>Optics Express</i> , 2008, 16, 19643.	3.4	21
47	Single-cell-gap transfective liquid-crystal display based on photo- and nanoparticle-induced alignment effects. <i>Optics Letters</i> , 2009, 34, 2545.	3.3	20
48	Liquid-crystal random fiber laser for speckle-free imaging. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	20
49	Reversible light-directed self-organized 3D liquid crystalline photonic nanostructures doped with azobenzene-functionalized bent-shaped molecules. <i>Journal of Materials Chemistry C</i> , 2018, 6, 7740-7744.	5.5	19
50	Polarization-independent bistable light valve in blue phase liquid crystal filled photonic crystal fiber. <i>Applied Optics</i> , 2013, 52, 4849.	1.8	18
51	Nonlinear Optics of Nematic and Blue Phase Liquid Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 2014, 594, 31-41.	0.9	18
52	All-optical transistor- and diode-action and logic gates based on anisotropic nonlinear responsive liquid crystal. <i>Scientific Reports</i> , 2016, 6, 30873.	3.3	18
53	Photo-controllable tristable optical switch based on dye-doped liquid crystal. <i>Dyes and Pigments</i> , 2014, 103, 21-24.	3.7	17
54	Ultrafast switching of optical singularity eigenstates with compact integrable liquid crystal structures. <i>Optics Express</i> , 2018, 26, 28818.	3.4	17

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55	Bistable cholesteric-blue phase liquid crystal using thermal hysteresis. <i>Optical Materials</i> , 2011, 34, 248-250.	3.6	16
56	Electrically tunable high Q-factor micro-ring resonator based on blue phase liquid crystal cladding. <i>Optics Express</i> , 2014, 22, 17776.	3.4	15
57	Slowing sub-picosecond laser pulses with 055 mm-thick cholesteric liquid crystal. <i>Optical Materials Express</i> , 2017, 7, 2005.	3.0	15
58	Loss-reduced photonic liquid-crystal fiber by using photoalignment method. <i>Applied Optics</i> , 2010, 49, 4846.	2.1	14
59	Study of electro-optical properties of templated blue phase liquid crystals. <i>Optical Materials Express</i> , 2013, 3, 1516.	3.0	14
60	Electrically assisted band-edge mode selection of photonic crystal lasing in chiral nematic liquid crystals. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	14
61	Optically rewritable dynamic phase grating based on blue-phase-templated azobenzene liquid crystal. <i>Optics Express</i> , 2019, 27, 10580.	3.4	14
62	Optical simulation of cholesteric liquid crystal displays using the finite-difference time-domain method. <i>Optics Express</i> , 2006, 14, 5594.	3.4	13
63	Polarization-independent 2 pi phase modulation for Terahertz using chiral nematic liquid crystals. <i>Optical Materials Express</i> , 2016, 6, 2283.	3.0	13
64	Tunable grating based on stressed liquid crystal. <i>Optics Express</i> , 2008, 16, 2062.	3.4	12
65	Photo-switchable bistable twisted nematic liquid crystal optical switch. <i>Optics Express</i> , 2013, 21, 4361.	3.4	12
66	Polarization-asymmetric bidirectional random laser emission from a twisted nematic liquid crystal. <i>Journal of Applied Physics</i> , 2017, 121, 033102.	2.5	12
67	Fresnel lenses based on dye-doped liquid crystals. , 2008, , .		11
68	Vertically Integrated Transflective Liquid Crystal Display Using Multi-Stable Cholesteric Liquid Crystal Film. <i>Journal of Display Technology</i> , 2012, 8, 613-616.	1.2	11
69	Bistable light-driven π phase switching using a twisted nematic liquid crystal film. <i>Optics Express</i> , 2014, 22, 12133.	3.4	11
70	Self-Organized 3D Photonic Superstructure: Blue Phase Liquid Crystal. <i>Nanoscience and Technology</i> , 2015, , 337-378.	1.5	11
71	A 2D/3D Switchable Directional-Backlight Autostereoscopic Display Using Polymer Dispersed Liquid Crystal Films. <i>Journal of Display Technology</i> , 2016, 12, 1738-1744.	1.2	11
72	Bistable switching of polarization-grating diffractions enabled by a front bistable twisted nematic film. <i>Optics Letters</i> , 2019, 44, 187.	3.3	11

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73	Dynamical studies of the mechanisms for optical nonlinearities of methyl-red dye doped blue phase liquid crystals. <i>Optics Express</i> , 2015, 23, 21650.	3.4	10
74	Mechanism of scattering bistable light valves based on salt-doped cholesteric liquid crystals. <i>Optics Express</i> , 2021, 29, 41213.	3.4	10
75	Transflective spatial filter based on azo-dye-doped cholesteric liquid crystal films. <i>Applied Physics Letters</i> , 2005, 87, 011106.	3.3	9
76	Polarization-tunable chiral nematic liquid crystal lasing. <i>Journal of Applied Physics</i> , 2010, 107, .	2.5	9
77	Photo-rewritable flexible LCD using indium zinc oxide/polycarbonate substrates. <i>Applied Optics</i> , 2011, 50, 213.	2.1	9
78	17.3: Hysteresis and Residual Birefringence Free Polymer-stabilized Blue Phase Liquid Crystal. <i>Digest of Technical Papers SID International Symposium</i> , 2011, 42, 213-215.	0.3	9
79	Electrical control of shape of laser beam using axially symmetric liquid crystal cells. <i>Applied Optics</i> , 2012, 51, 1540.	1.8	9
80	Electrically Tunable Fresnel Lens in Twisted-Nematic Liquid Crystals Fabricated by a Sagnac Interferometer. <i>Polymers</i> , 2019, 11, 1448.	4.5	9
81	Electrotunable achromatic polarization rotator. <i>Optica</i> , 2021, 8, 364.	9.3	9
82	Polarization controllable spatial filter based on azo-dye-doped liquid-crystal film. <i>Optics Letters</i> , 2005, 30, 1390.	3.3	8
83	Optically controllable bistable reflective liquid crystal display. <i>Optics Letters</i> , 2012, 37, 2370.	3.3	8
84	Improvement of electro-optical properties of PSBP LCD using a double-sided IPS electrode. <i>Journal of the Society for Information Display</i> , 2012, 20, 351-353.	2.1	8
85	Enhancing the laser power by stacking multiple dye-doped chiral polymer films. <i>Optics Express</i> , 2006, 14, 11299.	3.4	7
86	Optical bistability in a silicon nitride microring resonator with azo dye-doped liquid crystal as cladding material. <i>Optics Express</i> , 2013, 21, 10989.	3.4	7
87	Tailoring the photon spin via light-matter interaction in liquid-crystal-based twisting structures. <i>Npj Quantum Materials</i> , 2017, 2, .	5.2	7
88	Improving hysteresis of room-temperature air-quenching MAPb13-xClx solar cells by using mixed-lead halide precursor. <i>Materials Chemistry and Physics</i> , 2021, 259, 124032.	4.0	7
89	Cholesteric Liquid Crystal Display With Wide Viewing Angle Based on Multi-Domain Phase-Separated Composite Films. <i>Journal of Display Technology</i> , 2011, 7, 373-376.	1.2	6
90	Selective variable optical attenuator for visible and mid-Infrared wavelengths. <i>Optics Express</i> , 2018, 26, 17009.	3.4	6

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91	All-optical control of polarization splitting with a dielectric-clad azobenzene liquid crystal. Optics Express, 2018, 26, 781.	3.4	6
92	Optical control of the rotation of cholesteric liquid crystal gratings. Optics Express, 2019, 27, 10806.	3.4	6
93	Direction controllable linearly polarized laser from a dye-doped cholesteric liquid crystal. Optics Express, 2006, 14, 5571.	3.4	5
94	27.2: Optically Rewritable Reflective Liquid Crystal Display. Digest of Technical Papers SID International Symposium, 2006, 37, 1257.	0.3	5
95	Wavelength tunable infrared light source based on semiconductor-integrated liquid crystal filter. Optics Express, 2012, 20, 22872.	3.4	5
96	Comprehensive three-dimensional analysis of surface plasmon polariton modes at uniaxial liquid crystal-metal interface. Optics Express, 2015, 23, 32377.	3.4	5
97	Analysis of surface anchored lattice plane orientation in blue phase liquid crystal and its in-plane electric field-dependent capacitance response. Liquid Crystals, 2015, 42, 1111-1119.	2.2	5
98	Broadband mid-infrared polarization rotator based on optically addressable LCs. Optics Express, 2017, 25, 16123.	3.4	5
99	Full-color reflector using vertically stacked liquid crystal guided-mode resonators. Applied Optics, 2017, 56, 4219.	2.1	5
100	Liquid crystal beyond displays: feature introduction. Optics Express, 2019, 27, 20785.	3.4	5
101	Tri-stable Cholesteric Liquid Crystal Smart Window. Digest of Technical Papers SID International Symposium, 2018, 49, 543-545.	0.3	4
102	Multifunctional Liquid Crystal Smart Glass with Light Field Shaping, Dimming, and Scattering Control. Advanced Photonics Research, 2022, 3, .	3.6	4
103	Multi-stable variable optical attenuator based on a liquid crystal gel-filled photonic crystal fiber. Applied Optics, 2014, 53, E51.	1.8	3
104	Sub-Second Switching Speed Polarization-Independent 2 pi Terahertz Phase Shifter. IEEE Photonics Journal, 2017, 9, 1-7.	2.0	3
105	A Planar Fresnel Lens in Reflection Type Based on Azo-Dye-Doped Cholesteric Liquid Crystals Fabricated by Photo-Alignment. Polymers, 2020, 12, 2972.	4.5	3
106	Spatial filter based on azo-dye-doped liquid crystal films. , 2007, , .		2
107	Lasing effect in blue phase liquid crystal. Proceedings of SPIE, 2013, , .	0.8	2
108	Optimization of Dynamic Drive Scheme for Cholesteric LCDs. Journal of Display Technology, 2016, 12, 35-39.	1.2	2

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109	Functional Superhydrophobic Surfaces with Spatially Programmable Adhesion. <i>Polymers</i> , 2020, 12, 2968.	4.5	2
110	Fabrications of liquid-crystal polarization converters and their applications. <i>Proceedings of SPIE</i> , 2009, , .	0.8	1
111	P-84: Thermal Switchable Bistable Cholesteric-Blue Phase Liquid Crystal Display. <i>Digest of Technical Papers SID International Symposium</i> , 2012, 43, 1379-1381.	0.3	1
112	Automatic elastic net clustering algorithm. , 2014, , .		1
113	Pâ€126: Photoâ€Controllable Multiâ€Stable Liquid Crystal Optical Switch. <i>Digest of Technical Papers SID International Symposium</i> , 2014, 45, 1457-1459.	0.3	1
114	Femtoseconds-picoseconds nonlinear optics with nearly-mm thick cholesteric liquid crystals. , 2017, , .		1
115	74â€4: Highâ€imageâ€quality Transparent Display based on AMOLED with Cholesteric Liquid Crystal Backâ€panel. <i>Digest of Technical Papers SID International Symposium</i> , 2018, 49, 993-995.	0.3	1
116	Electrically switchable spatial filter based on polymer-dispersed liquid crystal film. , 2005, 5936, 12.		0
117	Lasing in photonic crystals based on dye-doped liquid crystal films (Invited Paper). , 2005, 5741, 128.		0
118	P-128: Multi-dimensional Cholesteric Liquid Crystal Displays for Broadband Reflection and Wide Viewing Angle. <i>Digest of Technical Papers SID International Symposium</i> , 2006, 37, 681.	0.3	0
119	A novel structure of directly patterned isolating layer for organic thin-film transistor-driven organic light emitting diodes. , 2007, , .		0
120	Spatial filters based on azo-dye-doped liquid crystal films. , 2007, , .		0
121	Pâ€181: Axially Symmetric Liquidâ€Crystal Polarization Converter. <i>Digest of Technical Papers SID International Symposium</i> , 2008, 39, 1888-1890.	0.3	0
122	Multi-wavelength cholesteric liquid crystal laser. <i>Proceedings of SPIE</i> , 2009, , .	0.8	0
123	Photonic bandgaps controllable blue phase liquid crystal. <i>Proceedings of SPIE</i> , 2011, , .	0.8	0
124	P-132: Influence of Polymerization Conditions on Response Time of Encapsulated Cholesteric LCs. <i>Digest of Technical Papers SID International Symposium</i> , 2011, 42, 1606-1608.	0.3	0
125	Simulation of laser phenomenon of cholesteric liquid crystal using auxiliary differential equation finite-difference time-domain method. , 2012, , .		0
126	Electrical and optical switchings of the directions of cholesteric liquid crystals gratings. , 2012, , .		0

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127	Optics and Photonics of Taiwan International Conference: Introduction by the feature editors. Applied Optics, 2014, 53, DT1.	1.8	0
128	Gratings: Light-Driven Wide-Range Nonmechanical Beam Steering and Spectrum Scanning Based on a Self-Organized Liquid Crystal Grating Enabled by a Chiral Molecular Switch (Advanced Optical) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 697	0.7	0
129	Photo-Alignment Technology. Topics in Applied Physics, 2015, , 273-287.	0.8	0
130	Millimeter-Scaled Thick Cell Gap Measurement by Terahertz Spectroscopy Technology. IEEE Photonics Journal, 2016, 8, 1-8.	2.0	0
131	Widely tunable guided-mode resonance filter using 90° twisted liquid crystal cladding. , 2017, , .		0
132	26.3: <i>Invited Paper:</i> Multi-functional liquid crystal smart window. Digest of Technical Papers SID International Symposium, 2019, 50, 266-266.	0.3	0
133	Photo-addressable multi-stable optical switch. , 2014, , .		0
134	Dynamic control of 3D blue-phase photonic crystal lattices. , 2019, , .		0
135	Polarization-controlled chirped guided-mode resonance filter incorporating a hybrid splay-twist liquid crystal. Applied Optics, 2021, 60, 10873.	1.8	0