

Daping Chu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2389434/publications.pdf>

Version: 2024-02-01

125
papers

3,114
citations

172457

29
h-index

189892

50
g-index

127
all docs

127
docs citations

127
times ranked

3500
citing authors

#	ARTICLE	IF	CITATIONS
1	Fundamentals of phase-only liquid crystal on silicon (LCOS) devices. <i>Light: Science and Applications</i> , 2014, 3, e213-e213.	16.6	352
2	Broadband MoS ₂ Field-Effect Phototransistors: Ultrasensitive Visible-Light Photoresponse and Negative Infrared Photoresponse. <i>Advanced Materials</i> , 2018, 30, 1705880.	21.0	186
3	Molar Extinction Coefficient of Single-Wall Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2011, 115, 14682-14686.	3.1	132
4	Coherence properties of different light sources and their effect on the image sharpness and speckle of holographic displays. <i>Scientific Reports</i> , 2017, 7, 5893.	3.3	122
5	Surface engineering of layered double hydroxide (LDH) nanoparticles for polymer flame retardancy. <i>Powder Technology</i> , 2015, 277, 63-73.	4.2	95
6	A high-resolution optically addressed spatial light modulator based on ZnO nanoparticles. <i>Light: Science and Applications</i> , 2015, 4, e259-e259.	16.6	85
7	Novel multi-component flame retardant system based on nanoscopic aluminium-trihydroxide (ATH). <i>Powder Technology</i> , 2017, 305, 538-545.	4.2	80
8	The Applications and Technology of Phase-Only Liquid Crystal on Silicon Devices. <i>Journal of Display Technology</i> , 2011, 7, 112-119.	1.2	76
9	Sustainable steric stabilization of colloidal titania nanoparticles. <i>Applied Surface Science</i> , 2017, 409, 438-447.	6.1	67
10	Triple-Indicator-Based Multidimensional Colorimetric Sensing Platform for Heavy Metal Ion Detections. <i>ACS Sensors</i> , 2018, 3, 1756-1764.	7.8	65
11	High emission current density, vertically aligned carbon nanotube mesh, field emitter array. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	62
12	Dispersion characteristics of dry and colloidal nano-titania into epoxy resin. <i>Powder Technology</i> , 2014, 268, 158-164.	4.2	59
13	High-birefringence nematic liquid crystal for broadband THz applications. <i>Liquid Crystals</i> , 2016, 43, 955-962.	2.2	58
14	Liquid Crystal-Based Enclosed Coplanar Waveguide Phase Shifter for 54-66 GHz Applications. <i>Crystals</i> , 2019, 9, 650.	2.2	52
15	Zinc oxide nanowire networks for macroelectronic devices. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	49
16	Stabilized super-thermite colloids: A new generation of advanced highly energetic materials. <i>Applied Surface Science</i> , 2017, 419, 328-336.	6.1	45
17	Band-limited double-phase method for enhancing image sharpness in complex modulated computer-generated holograms. <i>Optics Express</i> , 2021, 29, 2597.	3.4	45
18	Thermal decomposition of ammonium perchlorate catalyzed with CuO nanoparticles. <i>Defence Technology</i> , 2019, 15, 868-874.	4.2	44

#	ARTICLE	IF	CITATIONS
19	Continuous hydrothermal synthesis of AlO(OH) nanorods as a clean flame retardant agent. <i>Particuology</i> , 2015, 22, 66-71.	3.6	43
20	Synthesis and surface modification of nanophosphorous-based flame retardant agent by continuous flow hydrothermal synthesis. <i>Particuology</i> , 2015, 22, 82-88.	3.6	41
21	Electrical Rectifying and Photosensing Property of Schottky Diode Based on MoS ₂ . <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 24613-24619.	8.0	40
22	Continuous flow formulation and functionalization of magnesium di-hydroxide nanorods as a clean nano-fire extinguisher. <i>Powder Technology</i> , 2015, 278, 72-83.	4.2	39
23	Rapid hologram generation utilizing layer-based approach and graphic rendering for realistic three-dimensional image reconstruction by angular tiling. <i>Journal of Electronic Imaging</i> , 2014, 23, 023016.	0.9	38
24	An accuracy measurement method for star trackers based on direct astronomic observation. <i>Scientific Reports</i> , 2016, 6, 22593.	3.3	36
25	High figure-of-merit compact phase shifters based on liquid crystal material for 1~10 GHz applications. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 011701.	1.5	36
26	Optimal quantization for amplitude and phase in computer-generated holography. <i>Optics Express</i> , 2021, 29, 119.	3.4	34
27	Nanometer resolution piezoresponse force microscopy to study deep submicron ferroelectric and ferroelastic domains. <i>Applied Physics Letters</i> , 2009, 94, 162903.	3.3	33
28	Domains Beyond the Grain Boundary. <i>Advanced Functional Materials</i> , 2011, 21, 1827-1832.	14.9	32
29	Pixel-level fringing-effect model to describe the phase profile and diffraction efficiency of a liquid crystal on silicon device. <i>Applied Optics</i> , 2015, 54, 5903.	2.1	31
30	Complete spectroscopic picture of concealed explosives: Laser induced Raman versus infrared. <i>TrAC - Trends in Analytical Chemistry</i> , 2016, 85, 34-41.	11.4	30
31	Instant synthesis of bespoke nanoscopic photocatalysts with enhanced surface area and photocatalytic activity for wastewater treatment. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2017, 344, 121-133.	3.9	27
32	Full bandwidth dynamic coarse integral holographic displays with large field of view using a large resonant scanner and a galvanometer scanner. <i>Optics Express</i> , 2018, 26, 17459.	3.4	27
33	Ammonium Perchlorate Encapsulated with TiO ₂ Nanocomposite for Catalyzed Combustion Reactions. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2019, 29, 1349-1357.	3.7	27
34	Colorimetric-Based Detection of TNT Explosives Using Functionalized Silica Nanoparticles. <i>Sensors</i> , 2015, 15, 12891-12905.	3.8	26
35	Small phase pattern 2D beam steering and a single LCOS design of 40 1 Å— 12 stacked wavelength selective switches. <i>Optics Express</i> , 2016, 24, 12240.	3.4	26
36	Low-Cost CDC ROADM Architecture Based on Stacked Wavelength Selective Switches. <i>Journal of Optical Communications and Networking</i> , 2017, 9, 375.	4.8	26

#	ARTICLE	IF	CITATIONS
37	Instant detection and identification of concealed explosive-related compounds: Induced Stokes Raman versus infrared. <i>Forensic Science International</i> , 2017, 270, 83-90.	2.2	25
38	Flexible Multimode Polymer Waveguide Arrays for Versatile High-Speed Short-Reach Communication Links. <i>Journal of Lightwave Technology</i> , 2018, 36, 2685-2693.	4.6	25
39	Fast two-step layer-based method for computer generated hologram using sub-sparse 2D fast Fourier transform. <i>Optics Express</i> , 2018, 26, 17487.	3.4	24
40	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 90 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \hat{\text{A}}^\circ \langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{domain3.2}$ dynamics and relaxation in thin ferroelectric/ferroelastic films. <i>Physical Review B</i> , 2010, 81, .		23
41	Green Synthesis of Hydroxyapatite Nanoparticles with Controlled Morphologies and Surface Properties Toward Biomedical Applications. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2020, 30, 899-906.	3.7	23
42	Ferric Oxide Colloid: A Novel Nano-catalyst for Solid Propellants. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2020, 30, 706-713.	3.7	22
43	Compact phase shifter based on highly anisotropic liquid crystals for microwave frequency. <i>Electronics Letters</i> , 2014, 50, 525-526.	1.0	21
44	A scalable diffraction-based scanning 3D colour video display as demonstrated by using tiled gratings and a vertical diffuser. <i>Scientific Reports</i> , 2017, 7, 44656.	3.3	21
45	Holobricks: modular coarse integral holographic displays. <i>Light: Science and Applications</i> , 2022, 11, 57.	16.6	21
46	High-Accuracy Self-Calibration for Smart, Optical Orbiting Payloads Integrated with Attitude and Position Determination. <i>Sensors</i> , 2016, 16, 1176.	3.8	20
47	Novel laser induced photoacoustic spectroscopy for instantaneous trace detection of explosive materials. <i>Forensic Science International</i> , 2017, 277, 215-222.	2.2	20
48	Deep learning for hologram generation. <i>Optics Express</i> , 2021, 29, 27373.	3.4	20
49	High-resolution patterning of solution-processable materials via externally engineered pinning of capillary bridges. <i>Nature Communications</i> , 2018, 9, 393.	12.8	19
50	Novel High Energy Density Material Based on Metastable Intermolecular Nanocomposite. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2020, 30, 3980-3988.	3.7	19
51	Realization of real-time interactive 3D image holographic display [Invited]. <i>Applied Optics</i> , 2016, 55, A127.	2.1	18
52	Density Modulation of Embedded Nanoparticles via Spatial, Temporal, and Chemical Control Elements. <i>Advanced Materials</i> , 2019, 31, e1901802.	21.0	18
53	Phase flicker optimisation in digital liquid crystal on silicon devices. <i>Optics Express</i> , 2019, 27, 24556.	3.4	18
54	Ferrite Nanoparticles: Synthesis, Characterization, and Catalytic Activity Evaluation for Solid Rocket Propulsion Systems. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2019, 29, 721-729.	3.7	17

#	ARTICLE	IF	CITATIONS
55	Uniform and fast switching of window-size smectic A liquid crystal panels utilising the field gradient generated at the fringes of patterned electrodes. <i>Liquid Crystals</i> , 2016, 43, 735-749.	2.2	16
56	Novel colloidal molybdenum hydrogen bronze (MHB) for instant detection and neutralization of hazardous peroxides. <i>TrAC - Trends in Analytical Chemistry</i> , 2018, 102, 272-279.	11.4	16
57	High-Speed Data Transmission Over Flexible Multimode Polymer Waveguides Under Flexure. <i>IEEE Photonics Technology Letters</i> , 2018, 30, 1329-1332.	2.5	16
58	Improvements of phase linearity and phase flicker of phase-only LCoS devices for holographic applications. <i>Applied Optics</i> , 2019, 58, G248.	1.8	16
59	Tantalum-oxide catalysed chemical vapour deposition of single- and multi-walled carbon nanotubes. <i>RSC Advances</i> , 2013, 3, 4086.	3.6	15
60	Nano- ϵ Domain Pinning in Ferroelastic- ϵ Ferroelectrics by Extended Structural Defects. <i>Advanced Functional Materials</i> , 2014, 24, 5567-5574.	14.9	15
61	Full resolution auto-stereoscopic mobile display based on large scale uniform switchable liquid crystal micro-lens array. <i>Optics Express</i> , 2017, 25, 9654.	3.4	15
62	Prospective Immersive Human-Machine Interface for Future Vehicles: Multiple Zones Turn the Full Windscreen Into a Head-Up Display. <i>IEEE Vehicular Technology Magazine</i> , 2021, 16, 83-92.	3.4	15
63	Spatiotemporal double-phase hologram for complex-amplitude holographic displays. <i>Chinese Optics Letters</i> , 2020, 18, 100901.	2.9	15
64	Implementation of shading effect for reconstruction of smooth layer-based 3D holographic images. <i>Proceedings of SPIE</i> , 2013, , .	0.8	14
65	High performance non-volatile ferroelectric copolymer memory based on a ZnO nanowire transistor fabricated on a transparent substrate. <i>Applied Physics Letters</i> , 2014, 104, 033101.	3.3	14
66	24 [1 μ m–12] Wavelength Selective Switches Integrated on a Single 4k LCoS Device. <i>Journal of Lightwave Technology</i> , 2021, 39, 1033-1039.	4.6	14
67	Scalable coarse integral holographic video display with integrated spatial image tiling. <i>Optics Express</i> , 2020, 28, 9899.	3.4	14
68	A compensation method for the full phase retardance nonuniformity in phase-only liquid crystal on silicon spatial light modulators. <i>Optics Express</i> , 2014, 22, 26392.	3.4	13
69	Transparent conductors for Mid-infrared liquid crystal spatial light modulators. <i>Thin Solid Films</i> , 2018, 660, 411-420.	1.8	13
70	The significant role of stabilized colloidal ZrO ₂ nanoparticles for corrosion protection of AA2024. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2019, 12, 100242.	2.9	13
71	Effect of Uniaxial Tensile Strains at Different Orientations on the Characteristics of AlGaIn/GaN High-Electron-Mobility Transistors. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 449-454.	3.0	12
72	Perception of perspective in augmented reality head-up displays. <i>International Journal of Human Computer Studies</i> , 2021, 155, 102693.	5.6	12

#	ARTICLE	IF	CITATIONS
73	High quality micro liquid crystal phase lenses for full resolution image steering in auto-stereoscopic displays. <i>Optics Express</i> , 2014, 22, 21679.	3.4	11
74	Compact Liquid Crystal Based Tunable Band-Stop Filter with an Ultra-Wide Stopband by Using Wave Interference Technique. <i>International Journal of Antennas and Propagation</i> , 2017, 2017, 1-11.	1.2	11
75	The potentials of TiO ₂ nanocatalyst on HMX thermolysis. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 14930-14940.	2.2	11
76	Digital phase-only liquid crystal on silicon device with enhanced optical efficiency. <i>OSA Continuum</i> , 2019, 2, 2445.	1.8	11
77	Surface modified colloidal silica nanoparticles: Novel aspect for complete identification of explosive materials. <i>Talanta</i> , 2020, 211, 120695.	5.5	10
78	Ferric oxide colloid: novel nanocatalyst for heterocyclic nitramines. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 4185-4195.	2.2	9
79	Reciprocal 360-deg 3D light-field image acquisition and display system [Invited]. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2019, 36, A77.	1.5	9
80	Using Transmissive Photonic Band Edge Shift to Detect Explosives: A Study with 2,4,6-Trinitrotoluene (TNT). <i>ACS Photonics</i> , 2017, 4, 384-395.	6.6	8
81	Head-up display with dynamic depth-variable viewing effect. <i>Optik</i> , 2020, 221, 165319.	2.9	8
82	Sub-millisecond switching of multi-level liquid crystal on silicon spatial light modulators for increased information bandwidth. <i>Optics Express</i> , 2021, 29, 24614.	3.4	8
83	Transient Crosstalk in Holographic Optical Switching Based on Wavefront Encoding. <i>Journal of Lightwave Technology</i> , 2020, 38, 1618-1624.	4.6	7
84	Implementation of 10-Bit Phase Modulation for Phase-Only LCOS Devices Using Deep Learning. <i>Advanced Devices & Instrumentation</i> , 2020, 2020, .	6.5	7
85	Design of a low-cost and compact 1- μ m wavelength-selective switch for access networks. <i>Applied Optics</i> , 2015, 54, 8844.	2.1	6
86	Effect of masking phase-only holograms on the quality of reconstructed images. <i>Applied Optics</i> , 2016, 55, 3158.	1.8	6
87	Fano resonance engineering in mirror-symmetry-broken THz metamaterials. <i>Applied Physics B: Lasers and Optics</i> , 2016, 122, 1.	2.2	6
88	Colloid Thermite Nanostructure: A Novel High Energy Density Material for Enhanced Explosive Performance. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2021, 31, 559-565.	3.7	5
89	Crosstalk Spectrum Optimisation for Stacked Wavelength Selective Switches Based on 2D Beam Steering. , 2018, , .		5
90	Impact of WSS Passband Narrowing Effect on the Capacity of the Flexible-spectrum Networks. , 2017, , .		5

#	ARTICLE	IF	CITATIONS
91	26.1: A Coarse Integral Holographic Display. Digest of Technical Papers SID International Symposium, 2013, 44, 310-313.	0.3	4
92	Tuneable Liquid Crystal Micro-Lens Array for Image Contrast Enhancement in a Pixelated Thin Film Photo-Transistor Flat Panel Imager. Micromachines, 2017, 8, 205.	2.9	4
93	Highly anisotropic LC material with low dielectric loss for the application of tunable notch filters. Journal of Electromagnetic Waves and Applications, 2019, 33, 1070-1081.	1.6	4
94	High-Resolution Electrochemical Transistors Defined by Mold-Guided Drying of PEDOT:PSS Liquid Suspension. ACS Applied Electronic Materials, 2020, 2, 2611-2618.	4.3	4
95	Iterative Phase-Only Hologram Generation Based on the Perceived Image Quality. Applied Sciences (Switzerland), 2019, 9, 4457.	2.5	4
96	Effects of phase flicker in digitally driven phase-only LCOS devices on holographic reconstructed images. Applied Optics, 2022, 61, B25.	1.8	4
97	Efficient dynamic control method of light polarization using single phase-only liquid crystal on silicon spatial light modulators for optical data storage. Applied Optics, 2022, 61, B34.	1.8	4
98	A tunable wideband microstrip bandstop filter based on liquid crystal materials. , 2014, , .		3
99	Advanced die-level assembly techniques and quality analysis for phase-only liquid crystal on silicon devices. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2016, 230, 1659-1664.	2.4	3
100	Bend- and Twist-Insensitive Flexible Multimode Polymer Optical Interconnects. Journal of Lightwave Technology, 2020, 38, 6561-6568.	4.6	3
101	Sensing of Oxygen Partial Pressure in Air with ZnO Nanoparticles. Sensors, 2020, 20, 562.	3.8	3
102	Variety of Ordered Patterns in Donor-Acceptor Polymer Semiconductor Films Crystallized from Solution. ACS Applied Materials & Interfaces, 2021, 13, 19055-19063.	8.0	3
103	24 1Å–12 Wavelength-Selective Switches Using a 312-port 3D Waveguide and a Single 4k LCoS. , 2020, , .		3
104	Nitrocellulose catalyzed with nanothermite particles: advanced energetic nanocomposite with superior decomposition kinetics. Journal of Energetic Materials, 0, , 1-16.	2.0	3
105	Optimisation of CNTs and ZnO nanostructures for electron sources. , 2010, , .		2
106	Filling factor characteristics of masking phase-only hologram on the quality of reconstructed images. , 2016, , .		2
107	Video-rate holograms power up. Nature Electronics, 2018, 1, 214-215.	26.0	2
108	Two-dimensional arrays self-assembled via interference of concentration modulation waves in drying solutions. Materials Horizons, 2019, 6, 507-514.	12.2	2

#	ARTICLE	IF	CITATIONS
109	LCOS SLM based compact system of polarization modulation for data storage in glass. , 2021, , .		2
110	Large-size updatable optically addressed spatial light modulator (OASLM) based on ZnO nanoparticles for large-area holographic 3D displays. OSA Continuum, 2020, 3, 1703.	1.8	2
111	Flexible memory device based on polymer ferroelectric with zinc oxide single-nanowire transistors for robust multilevel operation. Applied Physics Letters, 2021, 119, 203102.	3.3	2
112	Domains Beyond Grain Boundaries: Domains Beyond the Grain Boundary (Adv. Funct. Mater. 10/2011). Advanced Functional Materials, 2011, 21, 1746-1746.	14.9	1
113	Digital Holographic Display. , 2018, , 113-129.		1
114	Compact liquid crystal based phase shifter with integrated bias tees. , 2018, , .		1
115	Computational load reduction by avoiding the recalculation of angular redundancy in computer-generated holograms. ETRI Journal, 2019, 41, 52-60.	2.0	1
116	Design for 360-degree 3D Light-field Camera and Display. , 2018, , .		1
117	Full bandwidth coarse integral holographic video displays with spatial tiling for scalability. , 2020, , .		1
118	Reduction of switching time in ZnO nanoparticle-based reflective OASLM for holographic displays. , 2020, , .		1
119	Reduction of response time in transmissive optically addressed spatial light modulator using solution-based ZnO NP/PEDOT:PSS heterojunction. Journal of Optics (United Kingdom), 2020, 22, 115604.	2.2	1
120	Flexible Polymer Waveguide Technology for Low-Cost In-Car and In-Plane Optical Interconnects. , 2018, , .		0
121	38 th : Magnifying Viewer using Poly-Si Thin-Film Phototransistor and Liquid-Crystal Micro-Lens Array. Digest of Technical Papers SID International Symposium, 2020, 51, 540-543.	0.3	0
122	33.1: Invited Paper: Fast switching liquid crystal on silicon spatial light modulator for increased bandwidth. Digest of Technical Papers SID International Symposium, 2021, 52, 439-439.	0.3	0
123	Mode-mixing in multimode polymer waveguides for on-board optical interconnects. , 2019, , .		0
124	Impact of Phase Flicker on the Performance of Multilevel Phase Holograms with Phase-Only LCOS Devices. , 2021, , .		0
125	Kinetic Study and Thermal Decomposition Mechanisms of Superthermite-Based Nitrocellulose Nanocomposite. Combustion Science and Technology, 2024, 196, 391-405.	2.3	0