

Jang-Kun Song

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7978854/publications.pdf>

Version: 2024-02-01

117
papers

1,854
citations

304743

22
h-index

330143

37
g-index

120
all docs

120
docs citations

120
times ranked

2134
citing authors

#	ARTICLE	IF	CITATIONS
1	Electro-optical switching of graphene oxide liquid crystals with an extremely large Kerr coefficient. <i>Nature Materials</i> , 2014, 13, 394-399.	27.5	287
2	Technical evolution of liquid crystal displays. <i>NPG Asia Materials</i> , 2009, 1, 29-36.	7.9	123
3	Detection of graphene domains and defects using liquid crystals. <i>Nature Communications</i> , 2014, 5, 3484.	12.8	62
4	Hybrid supercapacitors based on metal organic frameworks using p-phenylenediamine building block. <i>Chemical Engineering Journal</i> , 2019, 361, 1235-1244.	12.7	51
5	Flexoelectric behavior of bimesogenic liquid crystals in the nematic phase – observation of a new self-assembly pattern at the twist-bend nematic and the nematic interface. <i>Journal of Materials Chemistry C</i> , 2014, 2, 8179-8184.	5.5	48
6	Triboelectric Nanogenerator Based on Human Hair. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 6321-6327.	6.7	43
7	Water-assisted stable dispersal of graphene oxide in non-dispersible solvents and skin formation on the GO dispersion. <i>Carbon</i> , 2016, 98, 188-194.	10.3	41
8	Optimization of particle size for high birefringence and fast switching time in electro-optical switching of graphene oxide dispersions. <i>Optics Express</i> , 2015, 23, 4435.	3.4	38
9	Redox active multi-layered Zn-pPDA MOFs as high-performance supercapacitor electrode material. <i>Electrochimica Acta</i> , 2019, 297, 145-154.	5.2	38
10	Bottom-up and top-down manipulations for multi-order photonic crystallinity in a graphene-oxide colloid. <i>NPG Asia Materials</i> , 2016, 8, e296-e296.	7.9	35
11	Standing wave-mediated molecular reorientation and spontaneous formation of tunable, concentric defect arrays in liquid crystal cells. <i>NPG Asia Materials</i> , 2018, 10, e459-e459.	7.9	35
12	Effect of centrifugal cleaning on the electro-optic response in the preparation of aqueous graphene-oxide dispersions. <i>Carbon</i> , 2014, 80, 560-564.	10.3	34
13	Energy harvesting using air bubbles on hydrophobic surfaces containing embedded charges. <i>Applied Energy</i> , 2017, 206, 432-438.	10.1	31
14	Alignment of Liquid Crystals Using a Molecular Layer with Patterned Molecular Density. <i>Advanced Materials</i> , 2012, 24, 6105-6110.	21.0	30
15	Second-order Jahn-Teller distortion in the thermally stable Li(La, Gd)MgWO ₆ :Eu ³⁺ phosphor with high quantum efficiency. <i>Dyes and Pigments</i> , 2019, 160, 165-171.	3.7	30
16	Dielectrophoretic manipulation of the mixture of isotropic and nematic liquid. <i>Nature Communications</i> , 2015, 6, 7936.	12.8	29
17	Contact electrification efficiency dependence on surface energy at the water-solid interface. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	29
18	Ag-doped sepiolite intercalated graphene nanostructure for hybrid capacitive deionization system. <i>Separation and Purification Technology</i> , 2019, 229, 115799.	7.9	29

#	ARTICLE	IF	CITATIONS
19	Pixel-Division Technology for High-Quality Vertical-Alignment LCDs. IEEE Electron Device Letters, 2010, 31, 987-989.	3.9	27
20	Tamarind shell derived N-doped carbon for capacitive deionization (CDI) studies. Journal of Electroanalytical Chemistry, 2019, 848, 113307.	3.8	25
21	Self-constructed stable liquid crystal alignment in a monomer-liquid crystal mixture system. Liquid Crystals, 2012, 39, 1049-1053.	2.2	24
22	Manipulation of structural color reflection in graphene oxide dispersions using electric fields. Optics Express, 2015, 23, 18969.	3.4	24
23	Guided Electro-Optical Switching of Small Graphene Oxide Particles by Larger Ones in Aqueous Dispersion. Langmuir, 2016, 32, 13458-13463.	3.5	23
24	Achieving low dielectric, surface free energy and UV shielding green nanocomposites via reinforcing bio-silica aerogel with polybenzoxazine. New Journal of Chemistry, 2017, 41, 5313-5321.	2.8	23
25	Hybrid nanogenerator and enhancement of water-solid contact electrification using triboelectric charge supplier. Nano Energy, 2018, 52, 402-407.	16.0	22
26	X-ray and Raman scattering study of orientational order in nematic and heliconical nematic liquid crystals. Physical Review E, 2016, 94, 060701.	2.1	21
27	Ionic impurity control by a photopolymerisation process of reactive mesogen. Liquid Crystals, 2013, 40, 458-467.	2.2	19
28	Three-dimensional reconstruction of topological deformation in chiral nematic microspheres using fluorescence confocal polarizing microscopy. Optics Express, 2016, 24, 7381.	3.4	19
29	Quantum dot light-emitting diodes using a graphene oxide/PEDOT:PSS bilayer as hole injection layer. RSC Advances, 2017, 7, 43396-43402.	3.6	19
30	Assessment of Image Quality Degraded by Tone Rendering Distortion. Journal of Display Technology, 2011, 7, 365-372.	1.2	18
31	Flow-induced ordering of particles and flow velocity profile transition in a tube flow of graphene oxide dispersions. Liquid Crystals, 2015, 42, 261-269.	2.2	17
32	Computation of refractive index and optical retardation in stretched polymer films. Optics Express, 2017, 25, 16409.	3.4	17
33	Selectivity of Threefold Symmetry in Epitaxial Alignment of Liquid Crystal Molecules on Macroscale Single-Crystal Graphene. Advanced Materials, 2018, 30, e1802441.	21.0	17
34	Threshold voltage instability and polyimide charging effects of LTPS TFTs for flexible displays. Scientific Reports, 2021, 11, 8387.	3.3	16
35	Perceptual Strength of 3-D Crosstalk in Both Achromatic and Color Images in Stereoscopic 3-D Displays. IEEE Transactions on Image Processing, 2012, 21, 3253-3261.	9.8	15
36	Effect of solvents on the electro-optical switching of graphene oxide dispersions. Applied Physics Letters, 2016, 108, .	3.3	15

#	ARTICLE	IF	CITATIONS
37	Water front recession and the formation of various types of wrinkles in dried graphene oxide droplets. <i>Carbon</i> , 2016, 105, 297-304.	10.3	15
38	Functional films using reactive mesogens for display applications. <i>Journal of Information Display</i> , 2017, 18, 119-129.	4.0	15
39	Laser-Induced Nanodroplet Injection and Reconfigurable Double Emulsions with Designed Inner Structures. <i>Advanced Science</i> , 2019, 6, 1900785.	11.2	15
40	All-solution-processed colour-tuneable tandem quantum-dot light-emitting diode driven by AC signal. <i>Nanoscale</i> , 2020, 12, 17020-17028.	5.6	15
41	The Effects of Valence Band Offset on Threshold Voltage Shift in a-InGaZnO TFTs Under Negative Bias Illumination Stress. <i>IEEE Electron Device Letters</i> , 2020, 41, 737-740.	3.9	15
42	Widely Tunable Optical Vortex Array Generator Based on Grid Patterned Liquid Crystal Cell. <i>Advanced Optical Materials</i> , 2021, 9, 2001604.	7.3	15
43	Individual variation in 3D visual fatigue caused by stereoscopic images. <i>IEEE Transactions on Consumer Electronics</i> , 2012, 58, 500-504.	3.6	14
44	Tunable optical vortex arrays using spontaneous periodic pattern formation in nematic liquid crystal cells. <i>Current Applied Physics</i> , 2018, 18, 819-823.	2.4	14
45	Integration of multiple bubble motion active transducers for improving energy-harvesting efficiency. <i>Energy</i> , 2018, 160, 648-653.	8.8	14
46	Effect of solvents on photonic crystallinity in graphene oxide dispersions. <i>Carbon</i> , 2017, 123, 283-289.	10.3	11
47	Shear-induced assembly of graphene oxide particles into stripes near surface. <i>Liquid Crystals</i> , 2018, 45, 1303-1311.	2.2	11
48	Effect of molecular-scale surface morphology on the surface melting of liquid crystals on self-assembled monolayers. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	10
49	Flexoelectric Behavior of a Bimesogenic Liquid Crystal. <i>Molecular Crystals and Liquid Crystals</i> , 2015, 611, 65-70.	0.9	10
50	Flow-induced Alignment of Disk-like Graphene Oxide Particles in Isotropic and Biphasic Colloids. <i>Molecular Crystals and Liquid Crystals</i> , 2015, 610, 68-76.	0.9	10
51	Deterioration and recovery of electro-optical performance of aqueous graphene-oxide liquid-crystal cells after prolonged storage. <i>Carbon</i> , 2016, 105, 8-13.	10.3	10
52	Electrowetting in a water droplet with a movable floating substrate. <i>Physical Review E</i> , 2016, 93, 053102.	2.1	10
53	Dielectrophoretic Condensation and Tailored Phase Separation in Graphene Oxide Liquid Crystals. <i>Particle and Particle Systems Characterization</i> , 2017, 34, 1600344.	2.3	10
54	Bio-silicon reinforced siloxane core polyimide green nanocomposite with multifunctional behavior. <i>High Performance Polymers</i> , 2018, 30, 549-560.	1.8	10

#	ARTICLE	IF	CITATIONS
55	Electrical switching of birefringence in zirconium phosphate colloids with various solvents. <i>Optics Express</i> , 2018, 26, 173.	3.4	10
56	Facile synthesis of a hierarchical CuS/CuSCN nanocomposite with advanced energy storage properties. <i>New Journal of Chemistry</i> , 2018, 42, 15387-15396.	2.8	10
57	Electrically and electrohydrodynamically driven phase transition and structural color switching of oligomer tethered 2D colloid. <i>RSC Advances</i> , 2018, 8, 16549-16556.	3.6	9
58	Particle size dependence of electro-optical switching in ZrP nano colloid. <i>Liquid Crystals</i> , 2019, 46, 159-165.	2.2	9
59	High-performance ITO thin films for on-cell touch sensor of foldable OLED displays. <i>Journal of Information Display</i> , 2022, 23, 77-85.	4.0	9
60	Fluorescent light source with continuously tunable polarization via modification of molecular orientation. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	8
61	Tunable Transfer of Molecules between Liquid Crystal Microdroplets and Control of Photonic Crystallinity in Isolated Microdroplets. <i>Advanced Optical Materials</i> , 2017, 5, 1700119.	7.3	8
62	Charge Modulation Layer and Wide-Color Tunability in a QD-LED with Multiemission Layers. <i>Small</i> , 2021, 17, e2007397.	10.0	8
63	Polymerized micro-patterned optical birefringence film and its fabrication using multi beam mixing. <i>Optics Express</i> , 2011, 19, 26956.	3.4	7
64	Photo-controllable electro-optic response of liquid crystalline cells using photo-isomeric molecules. <i>Liquid Crystals</i> , 2013, 40, 646-655.	2.2	7
65	Degradation of electrowetting for upward and downward electrolyte droplets containing microparticles. <i>Applied Physics Letters</i> , 2014, 104, 081610.	3.3	7
66	Perceived Color Impression for Spatially Mixed Colors. <i>Journal of Display Technology</i> , 2014, 10, 282-287.	1.2	7
67	Electrophoretic assembly and topological weaving of crumpled two-dimensional sheets with entangled defect loops. <i>Carbon</i> , 2017, 119, 211-218.	10.3	7
68	Controlling wrinkles and assembly patterns in dried graphene oxide films using lyotropic graphene oxide liquid crystals. <i>Liquid Crystals</i> , 2017, 44, 939-947.	2.2	7
69	Biphasic Dielectrophoresis of Isotropic Pocket Carriers Containing Quantum Dots (QDs) in Nematic Medium and Fabrication of QD Cluster Array with Matrix Emission of Point Light Sources. <i>Particle and Particle Systems Characterization</i> , 2019, 36, 1800470.	2.3	7
70	Hybrid Device of Blue GaN Light-Emitting Diodes and Organic Light-Emitting Diodes with Color Tunability for Smart Lighting Sources. <i>ACS Omega</i> , 2022, 7, 5502-5509.	3.5	7
71	High efficiency organic light-emitting display using selective spectral photo-recycling. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 109, 431-436.	2.3	6
72	Ultralight and compressible mussel-inspired dopamine-conjugated poly(aspartic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf,50 62 Td (acid)/Fe3+	3.7	6

#	ARTICLE	IF	CITATIONS
73	Reduced Graphene Oxide as Efficient Hole Injection Layer for Quantum Dot Light-Emitting Diodes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1800517.	1.8	6
74	Generation and manipulation of isotropic droplets in nematic medium using switchable dielectrophoresis. <i>Physical Review E</i> , 2020, 101, 012704.	2.1	6
75	The Beauty of Twist-Bend Nematic Phase: Fast Switching Domains, First Order Fr�edericksz Transition and a Hierarchy of Structures. <i>Crystals</i> , 2021, 11, 621.	2.2	6
76	Inter-Electrode Coupling and Crosstalk Mechanism in TFT-LCDs. <i>Journal of Display Technology</i> , 2011, 7, 267-273.	1.2	5
77	Colour shift reduction in vertical alignment liquid crystal cells using the temporal averaging effect of oscillating molecular motion. <i>Liquid Crystals</i> , 2012, 39, 333-337.	2.2	5
78	Suspended, one-side anchored, or double-side anchored nematic droplets in an isotropic medium. <i>Liquid Crystals</i> , 2016, 43, 1237-1243.	2.2	5
79	A Facile Chemical Reduction of Graphene-Oxide Using <i>p</i> -Toluene Sulfonic Acid and Fabrication of Reduced Graphene-Oxide Film. <i>Journal of Nanoscience and Nanotechnology</i> , 2016, 16, 327-332.	0.9	5
80	Comment on "An ultrathin stretchable triboelectric nanogenerator with coplanar electrode for energy harvesting and gesture sensing" by X. Chen, Y. Song, H. Chen, J. Zhang and H. Zhang, <i>Journal of Materials Chemistry A</i> , 2017, 5, 12361. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24011-24013.	10.3	5
81	Quantum Dot Arrays Fabricated Using <i>In Situ</i> Photopolymerization of a Reactive Mesogen and Dielectrophoresis. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 40655-40661.	8.0	5
82	Conduction band offset-dependent induced threshold voltage shifts in a-InGaZnO TFTs under positive bias illumination stress. <i>AIP Advances</i> , 2021, 11, .	1.3	5
83	Effects of polyimide curing on image sticking behaviors of flexible displays. <i>Scientific Reports</i> , 2021, 11, 21805.	3.3	5
84	Laser processing of microdroplet structure of liquid crystal in 3D. <i>Optics Express</i> , 2022, 30, 26018.	3.4	5
85	Smart Reflector Using Photoluminescence Cholesteric Liquid Crystal for Electrowetting Displays. <i>Journal of Display Technology</i> , 2016, 12, 1013-1018.	1.2	4
86	Comment on "Tunable Design of Structural Colors Produced by Pseudo-1D Photonic Crystals of Graphene Oxide and Thin-Film Interference from Dried Graphene Oxide Film. <i>Small</i> , 2017, 13, 1603125.	10.0	4
87	191: Late-News-Poster: Effects of Channel Doping on Flexible LTPS TFTs: Density of State, Generation Lifetime, and Image Sticking. <i>Digest of Technical Papers SID International Symposium</i> , 2020, 51, 1383-1385.	0.3	4
88	Channel Defect Analysis Method of a-IGZO TFTs on Polyimide for Flexible Displays. <i>Journal of Semiconductor Technology and Science</i> , 2020, 20, 474-478.	0.4	4
89	Widely Tunable GRIN Lenses Using Negative Dielectrophoretic Manipulation of Phosphate Nanosheets Colloid. <i>Advanced Optical Materials</i> , 2022, 10, .	7.3	4
90	Tri-Stable Polarization Switching of Fluorescent Light Using Photo-Luminescent Cholesteric Liquid Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 2014, 601, 29-35.	0.9	3

#	ARTICLE	IF	CITATIONS
91	Beam deflector and position sensor using electrowetting and mechanical wetting of sandwiched droplets. Journal Physics D: Applied Physics, 2016, 49, 385106.	2.8	3
92	The oblique chiral nematic phase in calamitic Bimesogens. Liquid Crystals, 2017, , 1-13.	2.2	3
93	External pressure induced liquid crystal defects for optical vortex generation. AIP Advances, 2018, 8, 065219.	1.3	3
94	Maskless Fabrication of Film-Patterned-Retarder (FPR) Using Wedged Liquid Crystal Cell. IEEE Photonics Journal, 2019, 11, 1-8.	2.0	3
95	Charging Compensation Layer on Polyimide for Enhanced Device Stability in Flexible Technology. Electronic Materials Letters, 2021, 17, 215-221.	2.2	3
96	Hole injection improvement in quantum-dot light-emitting diodes using bi-layered hole injection layer of PEDOT:PSS and V2O. Optics and Laser Technology, 2022, 149, 107864.	4.6	3
97	Highly Reliable Flexible Device with a Charge Compensation Layer. ACS Applied Materials & Interfaces, 2022, 14, 12863-12872.	8.0	3
98	Image Quality Improvement in LCDs With Temporal Division Method Using Pixel Dithering. Journal of Display Technology, 2015, 11, 438-442.	1.2	2
99	Dual-field-induced biaxial nematic ordering of two-dimensional nanoparticles and enhancement of interparticle interactions. Physical Review E, 2019, 100, 020701.	2.1	2
100	Switchable dielectrophoresis of defect-free droplets in an anisotropic liquid crystal medium. Soft Matter, 2019, 15, 5026-5033.	2.7	2
101	P-183L: Late-News Poster: Temporal Division Method for Improving Off-Axis Image Quality of VA LCDs. Digest of Technical Papers SID International Symposium, 2014, 45, 1485-1488.	0.3	1
102	Electro-optical switching of liquid crystals of graphene oxide. Series in Sof Condensed Matter, 2016, , 817-846.	0.1	1
103	Self-alignment technique of liquid crystal using a novel additive containing thiol group. Journal of Molecular Liquids, 2021, 322, 114557.	4.9	1
104	P-3: Crosstalk Visibility in Stereoscopic Displays. Digest of Technical Papers SID International Symposium, 2011, 42, 1102-1104.	0.3	0
105	P-160: Improvement of the Contrast Ratio in Twisted Nematic LCD. Digest of Technical Papers SID International Symposium, 2011, 42, 1704-1706.	0.3	0
106	Paper No 6.3: Fluorescent Cholesteric Liquid Crystal Display with Self-Compensation Functions. Digest of Technical Papers SID International Symposium, 2013, 44, 171-173.	0.3	0
107	53.4: Color Optimization for OLED Displays. Digest of Technical Papers SID International Symposium, 2014, 45, 778-780.	0.3	0
108	P-209L:Late-News Poster: Pseudo Gate Doubling Method for Increasing Charging Time in High Resolution Shutter Type Stereoscopic 3D LCD TVs. Digest of Technical Papers SID International Symposium, 2016, 47, 1309-1312.	0.3	0

#	ARTICLE	IF	CITATIONS
109	Molecular Transfer: Tunable Transfer of Molecules between Liquid Crystal Microdroplets and Control of Photonic Crystallinity in Isolated Microdroplets (Advanced Optical Materials 12/2017). Advanced Optical Materials, 2017, 5, .	7.3	0
110	Doping effects of vanadium pentoxide in hole injection layer for quantum dot light emitting diodes. AIP Conference Proceedings, 2017, , .	0.4	0
111	A self-assembled nanoparticle cluster array fabricated using nematic-isotropic phase separation on a functionalized surface. Soft Matter, 2019, 15, 6696-6702.	2.7	0
112	P5.2: Performance of QLED Device by QD Layer Solvent Treatment. Digest of Technical Papers SID International Symposium, 2021, 52, 521-521.	0.3	0
113	12.1: <i>Invited Paper:</i> Electro-optical photonic crystal device using 2D colloid. Digest of Technical Papers SID International Symposium, 2021, 52, 77-77.	0.3	0
114	Leakage Current Analysis Method for Metal Insulator Semiconductor Capacitors Through Low-Frequency Noise Measurement. Journal of Nanoscience and Nanotechnology, 2021, 21, 1966-1970.	0.9	0
115	P9.1: Tandem Structure Quantum Dot Light-Emitting Diodes using Charge Generation Mechanism and Electron Transport Layer. Digest of Technical Papers SID International Symposium, 2021, 52, 940-940.	0.3	0
116	23.8: Field Polarity Dependent Electron-Only Tandem Quantum-Dot Light-Emitting Diode for Color-Tunable Pixel. Digest of Technical Papers SID International Symposium, 2021, 52, 308-308.	0.3	0
117	Fabrication of optical vortex array by fixing standing wave mediated periodic defects in nematic liquid crystals via photopolymerization. Liquid Crystals, 0, , 1-10.	2.2	0