

# Jang-Kun Song

## List of Publications by Year in descending order

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117  
papers

1,854  
citations

304743

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120  
docs citations

120  
times ranked

2134  
citing authors

#	ARTICLE	IF	CITATIONS
1	High-performance ITO thin films for on-cell touch sensor of foldable OLED displays. Journal of Information Display, 2022, 23, 77-85.	4.0	9
2	Hybrid Device of Blue GaN Light-Emitting Diodes and Organic Light-Emitting Diodes with Color Tunability for Smart Lighting Sources. ACS Omega, 2022, 7, 5502-5509.	3.5	7
3	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
4	Widely Tunable GRIN Lenses Using Negative Dielectrophoretic Manipulation of Phosphate Nanosheets Colloid. Advanced Optical Materials, 2022, 10, .	7.3	4
5	Highly Reliable Flexible Device with a Charge Compensation Layer. ACS Applied Materials & Interfaces, 2022, 14, 12863-12872.	8.0	3
6	Laser processing of microdroplet structure of liquid crystal in 3D. Optics Express, 2022, 30, 26018.	3.4	5
7	Widely Tunable Optical Vortex Array Generator Based on Grid Patterned Liquid Crystal Cell. Advanced Optical Materials, 2021, 9, 2001604.	7.3	15
8	Self-alignment technique of liquid crystal using a novel additive containing thiol group. Journal of Molecular Liquids, 2021, 322, 114557.	4.9	1
9	Charging Compensation Layer on Polyimide for Enhanced Device Stability in Flexible Technology. Electronic Materials Letters, 2021, 17, 215-221.	2.2	3
10	P&#5.2: Performance of QLED Device by QD Layer Solvent Treatment. Digest of Technical Papers SID International Symposium, 2021, 52, 521-521.	0.3	0
11	12.1: <i>Invited Paper:</i> Electro&#201;optical photonic crystal device using 2D colloid. Digest of Technical Papers SID International Symposium, 2021, 52, 77-77.	0.3	0
12	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
13	Conduction band offset-dependent induced threshold voltage shifts in a-InGaZnO TFTs under positive bias illumination stress. AIP Advances, 2021, 11, .	1.3	5
14	Charge Modulation Layer and Wide&#201;Color Tunability in a QD&#201;LED with Multiemission Layers. Small, 2021, 17, e2007397.	10.0	8
15	Threshold voltage instability and polyimide charging effects of LTPS TFTs for flexible displays. Scientific Reports, 2021, 11, 8387.	3.3	16
16	The Beauty of Twist-Bend Nematic Phase: Fast Switching Domains, First Order Fr&#201;edericksz Transition and a Hierarchy of Structures. Crystals, 2021, 11, 621.	2.2	6
17	P&#9.1: Tandem Structure Quantum Dot Light&#201;emitting Diodes using Charge Generation Mechanism and Electron Transport Layer. Digest of Technical Papers SID International Symposium, 2021, 52, 940-940.	0.3	0
18	23.8: Field Polarity Dependent Electron&#201;Only Tandem Quantum&#201;Dot Light&#201;Emitting Diode for Color&#201;Tunable Pixel. Digest of Technical Papers SID International Symposium, 2021, 52, 308-308.	0.3	0

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19	Effects of polyimide curing on image sticking behaviors of flexible displays. <i>Scientific Reports</i> , 2021, 11, 21805.	3.3	5
20	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
21	Quantum Dot Arrays Fabricated Using <i>in Situ</i> Photopolymerization of a Reactive Mesogen and Dielectrophoresis. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 40655-40661.	8.0	5
22	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
23	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
24	Generation and manipulation of isotropic droplets in nematic medium using switchable dielectrophoresis. <i>Physical Review E</i> , 2020, 101, 012704.	2.1	6
25	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
26	Particle size dependence of electro-optical switching in ZrP nano colloid. <i>Liquid Crystals</i> , 2019, 46, 159-165.	2.2	9
27	Second-order Jahn-Teller distortion in the thermally stable Li(La, Gd)MgWO <sub>6</sub> :Eu <sup>3+</sup> phosphor with high quantum efficiency. <i>Dyes and Pigments</i> , 2019, 160, 165-171.	3.7	30
28	Tamarind shell derived N-doped carbon for capacitive deionization (CDI) studies. <i>Journal of Electroanalytical Chemistry</i> , 2019, 848, 113307.	3.8	25
29	Laser-Induced Nanodroplet Injection and Reconfigurable Double Emulsions with Designed Inner Structures. <i>Advanced Science</i> , 2019, 6, 1900785.	11.2	15
30	Ag-doped sepiolite intercalated graphene nanostructure for hybrid capacitive deionization system. <i>Separation and Purification Technology</i> , 2019, 229, 115799.	7.9	29
31	A self-assembled nanoparticle cluster array fabricated using nematic-isotropic phase separation on a functionalized surface. <i>Soft Matter</i> , 2019, 15, 6696-6702.	2.7	0
32	Maskless Fabrication of Film-Patterned-Retarder (FPR) Using Wedged Liquid Crystal Cell. <i>IEEE Photonics Journal</i> , 2019, 11, 1-8.	2.0	3
33	Dual-field-induced biaxial nematic ordering of two-dimensional nanoparticles and enhancement of interparticle interactions. <i>Physical Review E</i> , 2019, 100, 020701.	2.1	2
34	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
35	Switchable dielectrophoresis of defect-free droplets in an anisotropic liquid crystal medium. <i>Soft Matter</i> , 2019, 15, 5026-5033.	2.7	2
36	Redox active multi-layered Zn-pPDA MOFs as high-performance supercapacitor electrode material. <i>Electrochimica Acta</i> , 2019, 297, 145-154.	5.2	38

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37	Hybrid supercapacitors based on metal organic frameworks using p-phenylenediamine building block. <i>Chemical Engineering Journal</i> , 2019, 361, 1235-1244.	12.7	51
38	Triboelectric Nanogenerator Based on Human Hair. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 6321-6327.	6.7	43
39	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
40	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
41	Shear-induced assembly of graphene oxide particles into stripes near surface. <i>Liquid Crystals</i> , 2018, 45, 1303-1311.	2.2	11
42	Bio-silicon reinforced siloxane core polyimide green nanocomposite with multifunctional behavior. <i>High Performance Polymers</i> , 2018, 30, 549-560.	1.8	10
43	External pressure induced liquid crystal defects for optical vortex generation. <i>AIP Advances</i> , 2018, 8, 065219.	1.3	3
44	Ultralight and compressible mussel-inspired dopamine-conjugated poly(aspartic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf,50 462 Td (acid)/Fe3	3.7	6
45	Reduced Graphene Oxide as Efficient Hole Injection Layer for Quantumâ€•Lightâ€•Emitting Diodes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1800517.	1.8	6
46	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
47	Electrical switching of birefringence in zirconium phosphate colloids with various solvents. <i>Optics Express</i> , 2018, 26, 173.	3.4	10
48	Selectivity of Threefold Symmetry in Epitaxial Alignment of Liquid Crystal Molecules on Macroscale Singleâ€•Crystal Graphene. <i>Advanced Materials</i> , 2018, 30, e1802441.	21.0	17
49	Contact electrification efficiency dependence on surface energy at the water-solid interface. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	29
50	Integration of multiple bubble motion active transducers for improving energy-harvesting efficiency. <i>Energy</i> , 2018, 160, 648-653.	8.8	14
51	Hybrid nanogenerator and enhancement of waterâ€•solid contact electrification using triboelectric charge supplier. <i>Nano Energy</i> , 2018, 52, 402-407.	16.0	22
52	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
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	The oblique chiral nematic phase in calamitic Bimesogens. <i>Liquid Crystals</i> , 2017, , 1-13.	2.2	3

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55	Electrophoretic assembly and topological weaving of crumpled two-dimensional sheets with entangled defect loops. <i>Carbon</i> , 2017, 119, 211-218.	10.3	7
56	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
57	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
58	Achieving low dielectric, surface free energy and UV shielding green nanocomposites via reinforcing bio-silica aerogel with polybenzoxazine. <i>New Journal of Chemistry</i> , 2017, 41, 5313-5321.	2.8	23
59	Molecular Transfer: Tunable Transfer of Molecules between Liquid Crystal Microdroplets and Control of Photonic Crystallinity in Isolated Microdroplets ( <i>Advanced Optical Materials</i> 12/2017). <i>Advanced Optical Materials</i> , 2017, 5, .	7.3	0
60	Doping effects of vanadium pentoxide in hole injection layer for quantum dot light emitting diodes. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	0
61	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, 24011-24013. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24011-24013.	10.3	5
62	Quantum dot light-emitting diodes using a graphene oxide/PEDOT:PSS bilayer as hole injection layer. <i>RSC Advances</i> , 2017, 7, 43396-43402.	3.6	19
63	Energy harvesting using air bubbles on hydrophobic surfaces containing embedded charges. <i>Applied Energy</i> , 2017, 206, 432-438.	10.1	31
64	Effect of solvents on photonic crystallinity in graphene oxide dispersions. <i>Carbon</i> , 2017, 123, 283-289.	10.3	11
65	Functional films using reactive mesogens for display applications. <i>Journal of Information Display</i> , 2017, 18, 119-129.	4.0	15
66	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
67	Computation of refractive index and optical retardation in stretched polymer films. <i>Optics Express</i> , 2017, 25, 16409.	3.4	17
68	P-209L:Late-News Poster: Pseudo Gate Doubling Method for Increasing Charging Time in High Resolution Shutter Type Stereoscopic 3D LCD TVs. <i>Digest of Technical Papers SID International Symposium</i> , 2016, 47, 1309-1312.	0.3	0
69	Smart Reflector Using Photoluminescence Cholesteric Liquid Crystal for Electrowetting Displays. <i>Journal of Display Technology</i> , 2016, 12, 1013-1018.	1.2	4
70	X-ray and Raman scattering study of orientational order in nematic and heliconical nematic liquid crystals. <i>Physical Review E</i> , 2016, 94, 060701.	2.1	21
71	Electro-optical switching of liquid crystals of graphene oxide. <i>Series in Solid State Chemistry</i> , 2016, , 817-846.	0.1	1
72	Effect of solvents on the electro-optical switching of graphene oxide dispersions. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	15

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73	Deterioration and recovery of electro-optical performance of aqueous graphene-oxide liquid-crystal cells after prolonged storage. Carbon, 2016, 105, 8-13.	10.3	10
74	Water front recession and the formation of various types of wrinkles in dried graphene oxide droplets. Carbon, 2016, 105, 297-304.	10.3	15
75	Suspended, one-side anchored, or double-side anchored nematic droplets in an isotropic medium. Liquid Crystals, 2016, 43, 1237-1243.	2.2	5
76	Bottom-up and top-down manipulations for multi-order photonic crystallinity in a graphene-oxide colloid. NPG Asia Materials, 2016, 8, e296-e296.	7.9	35
77	Beam deflector and position sensor using electrowetting and mechanical wetting of sandwiched droplets. Journal Physics D: Applied Physics, 2016, 49, 385106.	2.8	3
78	Guided Electro-Optical Switching of Small Graphene Oxide Particles by Larger Ones in Aqueous Dispersion. Langmuir, 2016, 32, 13458-13463.	3.5	23
79	Electrowetting in a water droplet with a movable floating substrate. Physical Review E, 2016, 93, 053102.	2.1	10
80	Three-dimensional reconstruction of topological deformation in chiral nematic microspheres using fluorescence confocal polarizing microscopy. Optics Express, 2016, 24, 7381.	3.4	19
81	Water-assisted stable dispersal of graphene oxide in non-dispersible solvents and skin formation on the GO dispersion. Carbon, 2016, 98, 188-194.	10.3	41
82	A Facile Chemical Reduction of Graphene-Oxide Using <i>p</i> -Toluene Sulfonic Acid and Fabrication of Reduced Graphene-Oxide Film. Journal of Nanoscience and Nanotechnology, 2016, 16, 327-332.	0.9	5
83	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
84	Flexoelectric Behavior of a Bimesogenic Liquid Crystal. Molecular Crystals and Liquid Crystals, 2015, 611, 65-70.	0.9	10
85	Image Quality Improvement in LCDs With Temporal Division Method Using Pixel Dithering. Journal of Display Technology, 2015, 11, 438-442.	1.2	2
86	Optimization of particle size for high birefringence and fast switching time in electro-optical switching of graphene oxide dispersions. Optics Express, 2015, 23, 4435.	3.4	38
87	Manipulation of structural color reflection in graphene oxide dispersions using electric fields. Optics Express, 2015, 23, 18969.	3.4	24
88	Dielectrophoretic manipulation of the mixture of isotropic and nematic liquid. Nature Communications, 2015, 6, 7936.	12.8	29
89	Flow-induced Alignment of Disk-like Graphene Oxide Particles in Isotropic and Biphasic Colloids. Molecular Crystals and Liquid Crystals, 2015, 610, 68-76.	0.9	10
90	Degradation of electrowetting for upward and downward electrolyte droplets containing microparticles. Applied Physics Letters, 2014, 104, 081610.	3.3	7

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91	Effect of molecular-scale surface morphology on the surface melting of liquid crystals on self-assembled monolayers. Applied Physics Letters, 2014, 105, .	3.3	10
92	53.4: Color Optimization for OLED Displays. Digest of Technical Papers SID International Symposium, 2014, 45, 778-780.	0.3	0
93	Tri-Stable Polarization Switching of Fluorescent Light Using Photo-Luminescent Cholesteric Liquid Crystals. Molecular Crystals and Liquid Crystals, 2014, 601, 29-35.	0.9	3
94	Detection of graphene domains and defects using liquid crystals. Nature Communications, 2014, 5, 3484.	12.8	62
95	Electro-optical switching of graphene oxide liquid crystals with an extremely large Kerr coefficient. Nature Materials, 2014, 13, 394-399.	27.5	287
96	Pa€183L: <i>Lateâ€News Poster</i>: Temporal Division Method for Improving Offâ€Axis Image Quality of VA LCDs. Digest of Technical Papers SID International Symposium, 2014, 45, 1485-1488.	0.3	1
97	Perceived Color Impression for Spatially Mixed Colors. Journal of Display Technology, 2014, 10, 282-287.	1.2	7
98	Flexoelectric behavior of bimesogenic liquid crystals in the nematic phase â€“ observation of a new self-assembly pattern at the twist-bend nematic and the nematic interface. Journal of Materials Chemistry C, 2014, 2, 8179-8184.	5.5	48
99	Effect of centrifugal cleaning on the electro-optic response in the preparation of aqueous graphene-oxide dispersions. Carbon, 2014, 80, 560-564.	10.3	34
100	Ionic impurity control by a photopolymerisation process of reactive mesogen. Liquid Crystals, 2013, 40, 458-467.	2.2	19
101	Photo-controllable electro-optic response of liquid crystalline cells using photo-isomeric molecules. Liquid Crystals, 2013, 40, 646-655.	2.2	7
102	Fluorescent light source with continuously tunable polarization via modification of molecular orientation. Journal of Applied Physics, 2013, 114, .	2.5	8
103	Paper No 6.3: Fluorescent Cholesteric Liquid Crystal Display with Selfâ€Compensation Functions. Digest of Technical Papers SID International Symposium, 2013, 44, 171-173.	0.3	0
104	High efficiency organic light-emitting display using selective spectral photo-recycling. Applied Physics A: Materials Science and Processing, 2012, 109, 431-436.	2.3	6
105	Individual variation in 3D visual fatigue caused by stereoscopic images. IEEE Transactions on Consumer Electronics, 2012, 58, 500-504.	3.6	14
106	Self-constructed stable liquid crystal alignment in a monomer-liquid crystal mixture system. Liquid Crystals, 2012, 39, 1049-1053.	2.2	24
107	Alignment of Liquid Crystals Using a Molecular Layer with Patterned Molecular Density. Advanced Materials, 2012, 24, 6105-6110.	21.0	30
108	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

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109	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
110	Inter-Electrode Coupling and Crosstalk Mechanism in TFT-LCDs. <i>Journal of Display Technology</i> , 2011, 7, 267-273.	1.2	5
111	Assessment of Image Quality Degraded by Tone Rendering Distortion. <i>Journal of Display Technology</i> , 2011, 7, 365-372.	1.2	18
112	Polymerized micro-patterned optical birefringence film and its fabrication using multi beam mixing. <i>Optics Express</i> , 2011, 19, 26956.	3.4	7
113	P-3: Crosstalk Visibility in Stereoscopic Displays. <i>Digest of Technical Papers SID International Symposium</i> , 2011, 42, 1102-1104.	0.3	0
114	P-160: Improvement of the Contrast Ratio in Twisted Nematic LCD. <i>Digest of Technical Papers SID International Symposium</i> , 2011, 42, 1704-1706.	0.3	0
115	Pixel-Division Technology for High-Quality Vertical-Alignment LCDs. <i>IEEE Electron Device Letters</i> , 2010, 31, 987-989.	3.9	27
116	Technical evolution of liquid crystal displays. <i>NPG Asia Materials</i> , 2009, 1, 29-36.	7.9	123
117	Fabrication of optical vortex array by fixing standing wave mediated periodic defects in nematic liquid crystals via photopolymerization. <i>Liquid Crystals</i> , 0, , 1-10.	2.2	0