Jong-Hyun Kim

List of Publications by Year
in descending order

59	891	687363 13	477307 29
papers	citations	h-index	g-index

59	59	59	744
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Tristable nematic liquid-crystal device using micropatterned surface alignment. Nature, 2002, 420, 159-162.	27.8	322
2	Surface alignment bistability of nematic liquid crystals by orientationally frustrated surface patterns. Applied Physics Letters, 2001, 78, 3055-3057.	3.3	117
3	Nano-rubbing of a liquid crystal alignment layer by an atomic force microscope: a detailed characterization. Nanotechnology, 2002, 13, 133-137.	2.6	69
4	Changes in the Raman spectra of monolayer MoS₂ upon thermal annealing. Journal of Raman Spectroscopy, 2018, 49, 1938-1944.	2.5	42
5	Mapping of the atomic lattice orientation of a graphite flake using macroscopic liquid crystal texture. Nanotechnology, 2012, 23, 395704.	2.6	26
6	Temperature effect on a rubbed polyimide alignment layer. Journal of Applied Physics, 2000, 87, 155-158.	2.5	22
7	Simple model for patterned bidirectional anchoring of nematic liquid crystal and its bistability. Applied Physics Letters, 2002, 80, 374-376.	3.3	22
8	Dynamic measurement for electric field sensor based on wavelength-swept laser. Optics Express, 2014, 22, 16139.	3.4	21
9	Rubbing strength dependence of surface interaction potential and surface-induced order above the nematicâ€“isotropic transition. Journal of Applied Physics, 1998, 84, 6027-6033.	2.5	20
10	Depression of the nematic-isotropic phase transition temperature at nanopatterned surfaces. Physical Review E, 2002, 66, 041502.	2.1	17
11	Structural analysis of graphene synthesized by chemical vapor deposition on copper foil using nematic liquid crystal texture. Carbon, 2014, 76, 113-122.	10.3	17
12	High-resolution bistable nematic liquid crystal device realized on orientational surface patterns. Applied Physics Letters, 2003, 83, 3602-3604.	3.3	16
13	Fast electro-optic device controlled by dielectric response of planarly aligned cholesteric liquid crystals. Journal of Applied Physics, 2009, 106, 014503.	2.5	14
14	Optical retardation of rub-induced scratches in a polyimide-treated substrate. Applied Physics Letters, 1998, 72, 1917-1919.	3.3	12
15	Controlling Surface Alignment on Nanoscopically Tailored Competing Domains. Molecular Crystals and Liquid Crystals, 2001, 367, 151-158.	0.3	12
16	Ground state and peculiarity of particle interactions in liquid crystal colloids. European Physical Journal E, 2020, 43, 1.	1.6	12
17	The interaction of colloidal particles with weak homeotropic anchoring energy in homogeneous nematic liquid crystal cells. Soft Matter, 2014, 10, 2664.	2.7	11
18	Acoustic anisotropy in 5CB liquid crystal cells as determined by using Brillouin light scattering. Journal of the Korean Physical Society, 2012, 61, 862-866.	0.7	9

#	Article	IF	Citations
19	Tunable, multiwavelength-swept fiber laser based on nematic liquid crystal device for fiber-optic electric-field sensor. Optics Communications, 2018, 410, 637-642.	2.1	9
20	Characterization of Second-Order Reflection Bands from a Cholesteric Liquid Crystal Cell Based on a Wavelength-Swept Laser. Sensors, 2020, 20, 4643.	3.8	8
21	In situobservation of dynamic pitch jumps of in-planar cholesteric liquid crystal layers based on wavelength-swept laser. Optics Express, 2018, 26, 28751.	3.4	8
22	Tilt angle change of nematic liquid crystal as a function of the number of graphite layers. Liquid Crystals, 2013, 40, 216-220.	2.2	7
23	Coulomb-like elastic interaction induced by symmetry breaking in nematic liquid crystal colloids. Scientific Reports, 2017, 7, 15916.	3.3	7
24	Multistability of nematic liquid crystals realized on microscopic orientation patterns. Journal of Applied Physics, 2007, 102, 036102.	2.5	6
25	Motion of a colloidal particle in a nonuniform director field of a nematic liquid crystal. Physical Review E, 2017, 95, 012709.	2.1	6
26	Measurement of Effective Refractive Index of Nematic Liquid Crystal in Fabry-Perot Etalon. Journal of the Optical Society of Korea, 2015, 19, 346-350.	0.6	6
27	Inter-particle interactions of weak homeotropic anchoring with electric field in a homogeneous nematic cell. Liquid Crystals, 2016, 43, 1589-1596.	2.2	5
28	Tuning photoluminescence spectra of MoS₂ with liquid crystals. Nanoscale, 2021, 13, 16641-16648.	5.6	5
29	Transmission Characteristics in Liquid-Crystal-Infiltrated Photonic Crystal Fibers. Japanese Journal of Applied Physics, 2008, 47, 2174-2175.	1.5	4
30	Magnetic-field-induced structural change of a two-dimensional colloid of glycerol droplets on a nematic liquid-crystal surface. Physical Review E, 2013, 87, .	2.1	4
31	Measurement of anchoring coefficient of homeotropically aligned nematic liquid crystal using a polarizing optical microscope in reflective mode. AIP Advances, 2015, 5, 097170.	1.3	4
32	Fine Bistable Device of Nematic Liquid Crystal Realized on Orientational Surface Patterns. Molecular Crystals and Liquid Crystals, 2005, 433, 41-49.	0.9	3
33	Technique for azimuthal anchoring measurement of nematic liquid crystals using magnetic field induced deformation. Applied Physics Letters, 2007, 90, 101908.	3.3	3
34	Measuring the Thickness of Flakes of Hexagonal Boron Nitride Using the Change in Zero-Contrast Wavelength of Optical Contrast. Journal of the Optical Society of Korea, 2015, 19, 503-507.	0.6	3
35	Electro-optic response of surface-induced nematic order above the nematic-isotropic phase transition temperature. Physical Review E, 1999, 60, 5600-5606.	2.1	2
36	Dielectric and Flexoelectric Responses of Nematic Liquid Crystals on Circularly Orientating Patterns. Japanese Journal of Applied Physics, 2007, 46, 1617-1619.	1.5	2

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37	Alignment characteristic of nematic liquid crystals on orientational patterns realized by interfering laser light. Journal Physics D: Applied Physics, 2008, 41, 045407.	2.8	2
38	Electro-optical Characteristics of Ferroelectric Liquid Crystal Embedded in Photonic Crystal Fiber. Japanese Journal of Applied Physics, 2013, 52, 051701.	1.5	2
39	Measuring nematic liquid crystal anchoring energy using whispering gallery modes. Optics Express, 2015, 23, 24903.	3.4	2
40	Analogue Orientation Control of a Carbon Fibre in a Nematic Liquid Crystal. Scientific Reports, 2019, 9, 20223.	3.3	2
41	Hacking detection based on the elastic properties of liquid crystals in different phases. Optics Express, 2021, 29, 39352.	3.4	2
42	Liquid Crystal Alignment on Electron Beam Irradiated Substrate. Molecular Crystals and Liquid Crystals, 2011, 546, 110/[1580]-115/[1585].	0.9	1
43	Relaxation of slow ions in nematic liquid crystal device. Journal of the Korean Physical Society, 2013, 63, 2024-2028.	0.7	1
44	Fiber optic dynamic electric field sensor based on nematic liquid crystal Fabry-Perot etalon. , 2014, , .		1
45	Asymmetric motion of bubble in nematic liquid crystal induced by symmetry-broken evaporation. Europhysics Letters, 2016, 115, 16002.	2.0	1
46	Optical Fluctuation of Texture in Nematic Liquid Crystal Droplets. Journal of the Physical Society of Japan, 2016, 85, 074601.	1.6	1
47	Study on the vertical alignment of nematic liquid crystals by fumed silica doping. Molecular Crystals and Liquid Crystals, 2018, 667, 16-24.	0.9	1
48	Surface-induced transition of nematic liquid crystals on graphene/SiC substrate. Europhysics Letters, 2018, 124, 46004.	2.0	1
49	Electrical Energy Harvesting from the Flexible Liquid Crystal Cells. Journal of Physical Chemistry C, 2021, 125, 22429-22434.	3.1	1
50	A bistable device of a nematic LC showing the sign reversal of the dielectric anisotropy. Molecular Crystals and Liquid Crystals, 2004, 410, 409-415.	0.9	0
51	Effective frequency-dependent anchoring coefficient and rotational viscosity of nematic liquid crystals. Current Applied Physics, 2013, 13, 990-995.	2.4	0
52	Effective Anchoring Energy of Nematic Liquid Crystals on Stripe Anchoring Patterns. Japanese Journal of Applied Physics, 2013, 52, 080201.	1.5	0
53	Measurement of effective refractive index of nematic liquid crystal. , 2014, , .		0
54	Fiber-optic electric field sensor based on wavelength-swept laser. , 2014, , .		0

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55	Electric field sensor based on cholesteric liquid crystal Fabry-Perot etalon. Proceedings of SPIE, 2015, , .	0.8	0
56	Measuring of the pitch variation of cholesteric liquid crystals under electric field using wavelength-swept laser. , 2017, , .		0
57	Tunable multiwavelength fiber laser based on nematic liquid crystal device for fiber-optic electric field sensor. , 2017, , .		0
58	Bidirectional rotation control of a carbon fiber in nematic liquid crystal using AC electric field. Scientific Reports, 2020, 10, 18650.	3.3	0
59	Ostwald Ripening of the Air Bubbles in Liquid Crystals. New Physics: Sae Mulli, 2018, 68, 501-507.	0.1	0