Hae-Chang Jeong

List of Publications by Year
in descending order

69	592	687363 13	713466 21
papers	citations	h-index	g-index

69	69	69	484
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Control of the wrinkle structure on surface-reformed poly(dimethylsiloxane) via ion-beam bombardment. Scientific Reports, 2015, 5, 12356.	3.3	55
2	Superior fast switching of liquid crystal devices using graphene quantum dots. Liquid Crystals, 2014, 41, 761-767.	2.2	49
3	Homogeneous self-aligned liquid crystals on wrinkled-wall poly(dimethylsiloxane) via localised ion-beam irradiation. Scientific Reports, 2015, 5, 8641.	3.3	35
4	Selective Liquid Crystal Driving Mode Achieved by Controlling the Pretilt Angle via a Nanopatterned Organic/Inorganic Hybrid Thin Film. Advanced Optical Materials, 2021, 9, 2001639.	7.3	30
5	Electro-optical properties of liquid crystal displays based on the transparent zinc oxide films treated by using a rubbing method. Optical Materials, 2018, 75, 252-257.	3.6	26
6	Localized Ion-Beam Irradiation-Induced Wrinkle Patterns. ACS Applied Materials & Interfaces, 2015, 7, 23216-23222.	8.0	24
7	Tailoring the Orientation and Periodicity of Wrinkles Using Ion-Beam Bombardment. Langmuir, 2016, 32, 7138-7143.	3.5	24
8	Residual DC voltage-free behaviour of liquid crystal system with nickel nanoparticle dispersion. Liquid Crystals, 2014, 41, 247-251.	2.2	22
9	Spontaneous liquid crystal alignment on solution-derived nanocrystalline tin-oxide films. Journal of Materials Chemistry C, 2014, 2, 3960-3964.	5.5	21
10	Nano pattern transfer on acrylic polymers with UV irradiation for liquid crystal alignment. Polymer, 2019, 161, 1-7.	3.8	20
11	Thermal and electro-optical properties of cerium-oxide-doped liquid-crystal devices. Liquid Crystals, 2017, 44, 538-543.	2.2	16
12	One-dimensional surface wrinkling for twisted nematic liquid crystal display based on ultraviolet nanoimprint lithography. Optics Express, 2019, 27, 18094.	3.4	16
13	Enhanced electro-optical behaviour of a liquid crystal system via multi-walled carbon nanotube doping. Liquid Crystals, 2014, 41, 25-29.	2.2	15
14	Homogeneous Liquid Crystal Alignment on Ion Beam-Induced Y₂Sn₂O₇Layers. IEEE Electron Device Letters, 2015, 36, 363-365.	3.9	12
15	Nanocrystalline LaYSrO films for liquid-crystal alignment via a solution process. Liquid Crystals, 2014, 41, 940-945.	2.2	10
16	Ion-beam-irradiated solution-derived tin oxide films for liquid crystal orientation. RSC Advances, 2015, 5, 1918-1922.	3.6	10
17	Physicochemical analysis of ion beam-induced surface modifications on polyethylene glycol films for liquid crystal alignment. Liquid Crystals, 2019, 46, 1799-1807.	2.2	10
18	High performance twisted nematic liquid crystal display with solution-derived YZO surface modification via ion-beam irradiation. Optics Express, 2014, 22, 31396.	3.4	9

#	Article	IF	Citations
19	Hysteresis-free liquid crystal devices based on solution-derived oxide compound films treated by ion beam irradiation. RSC Advances, 2015, 5, 54079-54084.	3.6	9
20	Formation of the Wrinkle Structure on a Styreneâ€“Butadieneâ€“Styrene Block Copolymer Surface by Surface Chemical Reformation via Ion-Beam Irradiation. Journal of Physical Chemistry C, 2020, 124, 8378-8385.	3.1	9
21	Homogeneous liquid crystal alignment characteristics on solution-derived HfYGaO films treated with IB irradiation. Optics Express, 2015, 23, 17290.	3.4	8
22	Liquid crystal alignment on ion-beam irradiated bismuth-doped tin oxide films and their application to liquid crystal displays. Liquid Crystals, 2019, 46, 86-93.	2.2	8
23	High-quality nano structures fabrication on organic/inorganic hybrid thin films by using UV nanoimprint lithography. Materials Chemistry and Physics, 2021, 269, 124771.	4.0	8
24	Superior electro-optical properties of electrically controlled birefringence mode using solution-derived La2O3 films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	2.1	7
25	Hysteresis-free, energy efficient twisted nematic liquid crystal systems based on IB-irradiated gallium-doped tin oxide films. Journal of Sol-Gel Science and Technology, 2016, 79, 29-36.	2.4	7
26	Liquid crystal aligning capabilities on surface-reformed indium-doped zinc oxide films via ion-beam exposure. Liquid Crystals, 2018, 45, 1137-1146.	2.2	7
27	Ion-beam-induced surface modification of solution-derived indium-doped zinc oxide film for a liquid crystal device with stable and fast switching properties. Optical Materials, 2018, 84, 209-214.	3.6	7
28	Decreasing the Residual DC Voltage by Neutralizing the Charged Mobile Ions in Liquid Crystals. Crystals, 2019, 9, 181.	2.2	7
29	Anisotropic reactive mesogens transfer onto polyimides-mixture layer via imprinting method for continuous pretilt angle control. Liquid Crystals, 2015, 42, 174-180.	2.2	6
30	Homogeneous liquid crystal alignment on poly(vinylidene fluoride-trifluoroethylene) films subjected to ion-beam irradiation. Liquid Crystals, 2015, 42, 1262-1268.	2.2	6
31	Superior switching behavior of liquid crystals on surface-modified compound oxide films. Optical Materials, 2015, 50, 104-109.	3.6	6
32	Homogeneous alignment of liquid crystals on low-temperature solution-derived gallium oxide films via IB irradiation method. Liquid Crystals, 0, , 1-7.	2.2	6
33	Homogeneous liquid crystal alignment of spin-coated strontium oxide and its application for superior LCD performance. Journal of Sol-Gel Science and Technology, 2016, 78, 11-18.	2.4	6
34	Superior electro-optical performance in vertically aligned liquid crystal devices based on aluminum oxide films. Soft Materials, 2018, 16, 71-76.	1.7	6
35	Homogeneously aligned liquid crystal molecules on unidirectional buckle pattern of polyurethane films. Liquid Crystals, 2018, 45, 95-101.	2.2	6
36	Ion beam-induced topographical and chemical modification on the poly(styrene-co-allyl alcohol) and its effect on the molecular interaction between the modified surface and liquid crystals. Materials Chemistry and Physics, 2016, 182, 94-100.	4.0	5

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37	Homogeneously aligned liquid crystal molecules on reformed poly(methyl methacrylate) via ion-beam irradiation. Optical Materials, 2016, 54, 288-293.	3.6	5
38	Effect of the ion-beam bombardment and annealing temperature on sol-gel derived yttrium aluminum oxide film as liquid crystal alignment layer. Optical Materials, 2017, 64, 569-573.	3.6	5
39	Effect of the Physicochemical Modification on Bismuth-doped Zinc Oxide in the Anisotropic Orientation of Liquid Crystal Molecules. ECS Journal of Solid State Science and Technology, 2020, 9, 043001.	1.8	5
40	Ion-beam irradiation modified chemical and physical surface characteristics of polyethylene glycol film for liquid crystal aligning. Soft Materials, 2019, 17, 368-374.	1.7	4
41	Electro-optical performance of liquid crystal device based on Al-doped SnO fabricated by sol-gel process. Liquid Crystals, 2020, 47, 345-351.	2.2	4
42	Shear Induced TiO2 Nano Structure Using Brush-Coating for Liquid Crystal Alignment. Crystals, 2020, 10, 860.	2.2	4
43	Soft imprint lithography for liquid crystal alignment using a wrinkled UVO-treated PDMS transferring method. Journal of Molecular Liquids, 2021, 323, 115150.	4.9	4
44	Effect of the annealing temperature and ion-beam bombardment on the properties of solution-derived HfYGaO films as liquid crystal alignment layers. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, 061507.	2.1	3
45	Inducement of homogeneous liquid crystal alignment on surface-reformed polyurethane films via manipulation of ion-beam irradiation incidence angle. Soft Materials, 2017, 15, 325-330.	1.7	3
46	Orientation-induced properties of anisotropic polyacrylamide thin layer via plasma treatment in liquid crystal system. European Polymer Journal, 2022, 163, 110937.	5.4	3
47	Solution-Driven Imprinting Lithography of Solâ€“Gel ZnO Thin Films for Liquid Crystal Display. Langmuir, 2022, 38, 2561-2568.	3.5	3
48	High Performance of the Electrically Controlled Birefringence Mode in Solution-Derived La2O3Film Using Low Temperature. Soft Materials, 2015, 13, 1-4.	1.7	2
49	Free residual DC voltage for nematic liquid crystals on solution-derived lanthanum tin oxide film. Liquid Crystals, 2017, 44, 1421-1428.	2.2	2
50	Surface modified solution-derived lanthanum-doped zinc oxide film for nematic liquid crystal system with free residual DC voltage. Materials Chemistry and Physics, 2018, 213, 383-388.	4.0	2
51	Physicochemical Modification Effect on Homogeneously Aligned Liquid Crystals Based on the Nickel Oxide Thin Film. Journal of Nanoscience and Nanotechnology, 2019, 19, 6139-6143.	0.9	2
52	Formation of Wrinkle Structures on Styrene-b-isoprene-b-styrene Films Using One-Step Ion-Beam Irradiation. Langmuir, 2020, 36, 3952-3957.	3.5	2
53	Uniformly aligned liquid crystal molecules on reformed poly(ethylene-co-vinyl acetate) layers driven by ion beam exposure. Liquid Crystals, 0, , 1-10.	2.2	2
54	Fast switching of liquid crystals on transferred reactive mesogens film via soft imprinting method. RSC Advances, 2014, 4, 34610-34614.	3.6	1

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55	Alignment of liquid crystals on solution-processed HfZnO films via ion beam irradiation. Liquid Crystals, 2015, 42, 998-1002.	2.2	1
56	Alignment of liquid crystal molecules on solution-derived zinc-tin-oxide films via ion beam irradiation. Materials Chemistry and Physics, 2016, 173, 186-191.	4.0	1
57	Unidirectional alignment of liquid crystals on solution-derived hafnium tin oxide films via ion-beam irradiation. Journal of Sol-Gel Science and Technology, 2017, 82, 261-268.	2.4	1
58	Effect of Annealing Temperature on Liquid Crystal Alignment Using Ion-Beam Irradiated Gallium Tin Oxide as an Alignment Layer and Effective Liquid Crystal Switching in Twisted Nematic Mode. Journal of Nanoscience and Nanotechnology, 2017, 17, 7240-7245.	0.9	1
59	Liquid Crystal Alignment on Polyurethane Layer Treated by Ion Beam Irradiation with Low Power Intensity. ECS Journal of Solid State Science and Technology, 2018, 7, R70-R73.	1.8	1
60	Superior nanopatterns via adjustable nanoimprint lithography on aluminum oxide in high-K thin films with ultraviolet curable polymer. RSC Advances, 2021, 12, 88-93.	3.6	1
61	Anisotropy and surface morphology of polystyrene-block-poly(ethylene-ran-butylene)-block-polystyrene thin layer irradiated with ion beam. Liquid Crystals, 2022, 49, 1275-1284.	2.2	1
62	Liquid crystals alignment and switching between surface reinforced poly(ethylene-co-vinyl acetate) thin layers. Optical Materials, 2022, 125, 112088.	3.6	1
63	Liquid Crystal Aligning Capabilities in Solution-Processed HfZrO Layers Created via Ion-Beam Irradiation. ECS Journal of Solid State Science and Technology, 2014, 3, R212-R215.	1.8	0
64	Twisted nematic LC mode with high electro-optical performance and high thermal endurance formed using IB-irradiated poly(methyl methacrylate) as an alignment layer. Soft Materials, 2016, 14, 148-153.	1.7	0
65	Liquid crystal alignment on ion-beam irradiated homogeneous hafnium strontium oxide films deposited by solâ€“gel process. Journal of Sol-Gel Science and Technology, 2017, 82, 621-626.	2.4	0
66	Stable and fast switching of liquid crystals on solution-derived compound oxide films irradiated by ion beam. Journal of Sol-Gel Science and Technology, 2017, 83, 495-501.	2.4	0
67	Surface modified solutionâ€derived nickel oxide film via ionâ€beam irradiation as a liquid crystal alignment layer. Journal of the Society for Information Display, 2019, 27, 806-815.	2.1	0
68	The Effect of Ion-Beam Bombardment on Solution-Processed Nickel Oxide Films Used for Liquid Crystal Alignment. ECS Journal of Solid State Science and Technology, 2019, 8, R66-R69.	1.8	0
69	Liquid crystal alignment properties on surface-reformed solution-derived lanthanum-doped zinc oxide films. Soft Materials, 2019, 17, 32-40.	1.7	0