Pavel Dolganov

List of Publications by Citations

86 papers	676 citations	15 h-index	20 g-index
88 ext. papers	723 ext. citations	1.9 avg, IF	4.31 L-index

#	Paper	IF	Citations
86	Structures and phase transitions in polar smectic liquid crystals. *Physical Review E*, **2003**, 67, 041716	2.4	58
85	Collective behavior of light-induced droplets in smectic membranes. *European Physical Journal E*, **2003**, 12, 593-7	1.5	30
84	Undulation instabilities in the meniscus of smectic membranes. *Physical Review Letters*, **2011**, 106, 117802	7.4	24
83	Director configuration and self-organization of inclusions in two-dimensional smectic membranes. *Physical Review E*, **2006**, 73, 041706	2.4	24
82	Rearrangement of topological defects and anchoring on the inclusion boundary in ferroelectric smectic membranes. *Physical Review E*, **2007**, 75, 031706	2.4	24
81	Ferroelectricity-induced effects in interaction and self-organization of inclusions in smectic membranes. *Europhysics Letters*, **2006**, 76, 250-256	1.6	22
80	Shape of nematic droplets in smectic membranes. *Europhysics Letters*, **2007**, 78, 66001	1.6	22
79	Interaction of surfaces in smectic membranes and their instability near thinning transitions. *Physical Review E*, **2005**, 72, 031713	2.4	20
78	Density of photonic states in cholesteric liquid crystals. *Physical Review E*, **2015**, 91, 042509	2.4	18
77	Manifold of polar smectic liquid crystals with spatial modulation of the order parameter. *Physical Review E*, **2011**, 83, 061705	2.4	17
76	Influence of chirality on director configuration and droplet interaction in ferroelectric free-standing films. *Physical Review E*, **2008**, 78, 021701	2.4	17
75	Photo- and thermo-induced variation of photonic properties of cholesteric liquid crystal containing azobenzene-based chiral dopant. *Molecular Crystals and Liquid Crystals*, **2016**, 633, 14-22	0.5	16
74	Commensurate polar smectic structures with a two-component order parameter. *Physical Review E*, **2010**, 82, 040701	2.4	16
73	Orientational defects in freely suspended smectic C films. *JETP Letters*, **2003**, 77, 429-433	1.2	16
72	Description of optical properties of cholesteric photonic liquid crystals based on Maxwell equations and Kramers-Kronig relations. *Physical Review E*, **2013**, 87,	2.4	15
71	Polar smectic subphases: Phase diagrams, structures and X-ray scattering. *JETP Letters*, **2002**, 76, 498-501	1.2	15
70	Coalescence of viscous two-dimensional smectic islands. *Physical Review E*, **2019**, 99, 062702	2.4	14

69	Structural transitions in thin free-standing films of an antiferroelectric liquid crystal exhibiting the smectic-C(*)(alpha) phase in the bulk sample. *Physical Review E*, **2002**, 65, 031702	2.4	14
68	Landau theory description of polar smectic structures. *Liquid Crystals Reviews*, **2013**, 1, 127-149	2.8	13
67	Field-induced transitions between multilayer phases of polar smectic liquid crystals. *Physical Review E*, **2012**, 86, 020701	2.4	13
66	Structures in the meniscus of smectic membranes: the role of dislocations?. *Soft Matter*, **2017**, 13, 3649-3663	3.8	12
65	Interaction and self-organization of inclusions in two-dimensional free-standing smectic films. *Liquid Crystals Reviews*, **2019**, 7, 1-29	2.8	12
64	Ferrielectric smectic phase with a layer-by-layer change of the two-component order parameter. *JETP Letters*, **2008**, 87, 253-257	1.2	11
63	Manifold configurations of the director field formed by topological defects in free and confined geometry in smectic films. *Physical Review E*, **2014**, 90, 062501	2.4	10
62	Different mechanisms of nucleation and self-organization of droplets in ferroelectric smectic membranes. *European Physical Journal E*, **2008**, 25, 31-7	1.5	10
61	2pi and pi walls in antiferroelectric smectic-C*A and smectic-C free-standing films. *Physical Review E* , **2004**, 70, 041708	2.4	10
60	Light-induced layer by layer thickening in photosensitive liquid crystal membranes. *Physical Review Letters*, **2005**, 95, 027802	7.4	10
59	Photonic crystal microspheres. *Optical Materials*, **2015**, 49, 208-212	3.3	9
58	Formation and structure of a soliton in an antiferroelectric liquid crystal in an electric field. *JETP Letters*, **2009**, 89, 161-166	1.2	9
57	Field-induced structures and transitions in chiral antiferroelectric liquid crystals. *Physical Review E*, **2008**, 77, 031703	2.4	9
56	The effect of spontaneous polarization on two-dimensional elasticity of smectic liquid crystals. *Journal of Experimental and Theoretical Physics*, **2013**, 116, 1043-1049	1	8
55	Luminescence spectra of a cholesteric photonic crystal. *JETP Letters*, **2017**, 105, 657-660	1.2	8
54	Collapse of islands in freely suspended smectic nanofilms. *JETP Letters*, **2017**, 106, 229-233	1.2	8
53	Stepwise transition of a topological defect from the smectic film to the boundary of a dipolar inclusion. *Physical Review E*, **2010**, 81, 031709	2.4	8
52	Two-dimensional hexagonal smectic structure formed by topological defects. *Physical Review E*, **2016**, 93, 032704	2.4	7

51	Laws of formation of polar smectic phases under a frustrated interaction. *Journal of Experimental and Theoretical Physics*, **2012**, 115, 1140-1150	1	7
50	Stability of a free-standing liquid-crystal film: The measurement of the interaction between the film surfaces. *Journal of Experimental and Theoretical Physics*, **2007**, 105, 665-672	1	7
49	Coalescence of holes in two-dimensional free-standing smectic films. *Physical Review E*, **2020**, 101, 052701	2.4	6
48	Electric-field-induced transition from helical to planar smectic structures without helix unwinding. *Physical Review E*, **2013**, 87, 062505	2.4	6
47	Dimer structures formed in smectic films by inclusions with parallel and antiparallel topological dipole moments. *JETP Letters*, **2009**, 90, 382-386	1.2	6
46	Behavior of inclusions with different value and orientation of topological dipoles in ferroelectric smectic films. *Journal of Experimental and Theoretical Physics*, **2009**, 109, 169-175	1	6
45	Optical properties and photonic density of states in one-dimensional and three-dimensional liquid-crystalline photonic crystals. *Liquid Crystals*, **2020**, 47, 231-237	2.3	6
44	Dispersion of light in opal photonic crystal. *Physics of the Solid State*, **2007**, 49, 1700-1703	0.8	5
43	Orientational action of edge dislocations on the director field in antiferroelectric smectic-C_{A}^{*} films. *Physical Review E*, **2017**, 95, 012711	2.4	4
42	Topological defects in smectic islands in freely suspended films. *JETP Letters*, **2015**, 101, 453-458	1.2	4
41	Landau Model of the Phase Transitions for Description of Commensurate Polar Smectic Structures. *Ferroelectrics*, **2012**, 431, 21-31	0.6	4
40	Temperature-and field-induced transitions in free-standing films of an antiferroelectric liquid crystal. *Journal of Experimental and Theoretical Physics*, **2002**, 95, 728-735	1	4
39	Dynamics of capillary coalescence and breakup: Quasi-two-dimensional nematic and isotropic droplets. *Physical Review E*, **2021**, 104, 014702	2.4	4
38	Linear defects forming the ground state of polar free standing smectic-C* films. *Soft Matter*, **2018**, 14, 7174-7179	3.6	3
37	Temperature dependence of the photonic bandgap and the orientational order parameter for a cholesteric photonic crystal. *Journal of Experimental and Theoretical Physics*, **2014**, 118, 891-895	1	3
36	Transformation of the structure of smectic liquid crystals associated with frustration and the surface of ultrathin films. *JETP Letters*, **2014**, 100, 59-69	1.2	3
35	Two-stage crystallization on the surface of smectic nanofilms. *JETP Letters*, **2011**, 93, 731-735	1.2	3
34	Unwinding of the antiferroelectric helix in an electric field. *Physical Review E*, **2010**, 81, 051704	2.4	3

33	Coalescence of Islands of Different Thicknesses in Smectic Nanofilms. *JETP Letters*, **2019**, 110, 545-550	1.2	3
32	Photon Density of States in a Cholesteric Photonic Crystal. *JETP Letters*, **2018**, 108, 170-174	1.2	3
31	Effect of Heat Treatment on Water Vapor Adsorption by Opal Structures and Their Effective Refractive Index. *Inorganic Materials*, **2019**, 55, 143-148	0.9	2
30	Polar liquid crystals with multilayer ordering. *JETP Letters*, **2015**, 101, 444-448	1.2	2
29	Spectral and Polarization Characteristics of the Light Passing through a Cholesteric Photonic Crystal. *Journal of Experimental and Theoretical Physics*, **2020**, 130, 790-796	1	2
28	Chain structures and clusters of particles with the mixed dipole–quadrupole interaction in smectic freely suspended nanofilms. *JETP Letters*, **2016**, 104, 263-268	1.2	2
27	Photonic liquid crystals: Optical properties and their dependence on light polarization and temperature. *Physics of the Solid State*, **2013**, 55, 1101-1104	0.8	2
26	Smectic islands in antiferroelectric nanofilms. *Journal of Experimental and Theoretical Physics*, **2017**, 125, 709-713	1	2
25	Anomalies of a meniscus of microinclusions in freely suspended smectic films. *JETP Letters*, **2015**, 102, 242-247	1.2	2
24	Structure of and 2 Walls in Smectic films. *JETP Letters*, **2012**, 96, 317-321	1.2	2
23	Electronic and vibrational spectra of a gel of single-wall carbon nanotubes in an ionic liquid. *Bulletin of the Russian Academy of Sciences: Physics*, **2007**, 71, 660-662	0.4	2
22	Photonic stop bands in opal films and crystalline liquids **2006**,		2
21	Anticlinic-synclinic transitions in superthin free-standing smectic films. *JETP Letters*, **2004**, 80, 280-284	1.2	2
20	Optical reflectivity study of synclinic and anticlinic structures in thin freely suspended smectic films. *European Physical Journal E*, **2000**, 3, 7-10	1.5	2
19	Dynamics of island-meniscus coalescence in free-standing smectic films. *Soft Matter*, **2020**, 16, 8506-8511	3.6	2
18	Photonic properties of polymer-stabilized photosensitive cholesteric liquid crystal studied by combination of optical activity, transmission and fluorescence. *Liquid Crystals*, **2021**, 48, 1339-1348	2.3	2
17	Topological defects in smectic islands formed in antiferroelectric freestanding nanofilms. *Surface Innovations*, **2019**, 7, 168-173	1.9	1
16	Stripe instabilities in the menisci of free-standing smectic films: influence of the phase sequence of the mesogenic material. *Liquid Crystals*, **2018**, 45, 1415-1418	2.3	1

15	Step-by-step first order antiferroelectric-paraelectric transition induced by frustration and electric field. *JETP Letters*, **2014**, 99, 191-195	1.2	1
14	Inverse opal based on a polymer filler and transformation of its optical characteristics. *Physics of the Solid State*, **2014**, 56, 746-750	0.8	1
13	Structures and orientational transitions in thin smectic films of tilted hexatic. *Journal of Experimental and Theoretical Physics*, **2006**, 102, 616-624	1	1
12	Quasi-two-dimensional coalescence of nematic and isotropic droplets and Rayleigh-Plateau instability in flat optical cells. *Soft Matter*, **2021**,	3.6	1
11	Synthesis of polymer - based inverted opal and transformation of its optical properties. *Advances in Nano Research*, **2014**, 2, 69-76		1
10	Phase transitions in nanofilms of polar smectic liquid crystals with multilayer periodicity. *Physical Review E*, **2018**, 98,	2.4	1
9	Synclinic-anticlinic symmetry in the structure of multilayer polar liquid crystals. *Physical Review E*, **2018**, 98,	2.4	1
8	Influence of the Surface Orientation on the Spectral Characteristics of Liquid-Crystal Photonic Crystals. *Journal of Surface Investigation*, **2021**, 15, 829-832	0.5	0
7	Transient hexagonal structures in sheared emulsions of isotropic inclusions on smectic bubbles in microgravity conditions. *Scientific Reports*, **2021**, 11, 19144	4.9	0
6	Electric Field Induced Transitions in Polar Liquid Crystals with Frustrating Interlayer Interaction. *Molecular Crystals and Liquid Crystals*, **2015**, 610, 35-43	0.5	
5	Report on the 13th European Conference on Liquid Crystals. *Liquid Crystals Today*, **2016**, 25, 40-41	1.9	
4	Surface 2D walls in polar free-standing smectic films. *JETP Letters*, **2015**, 101, 754-759	1.2	
3	Electric-field-induced unwinding of ferroelectric helix in thin smectic C* layers with soft and rigid anchoring of molecules. *Journal of Experimental and Theoretical Physics*, **2008**, 107, 526-531	1	
2	Meniscus-Induced Thinning of Smectic Nanofilms. *JETP Letters*, **2022**, 115, 208-212	1.2	
1	Birth and annihilation of topological defects on the nematic–isotropic interface during droplet coalescence. *Liquid Crystals*,1-9	2.3	