Natasa Vaupotic

List of Publications by Citations

58 papers	1,134 citations	20 h-index	31 g-index
63 ext. papers	1,266 ext. citations	4.6 avg, IF	4.26 L-index

#	Paper	IF	Citations
58	A Twist-Bend Nematic (NTB) Phase of Chiral Materials. *Angewandte Chemie - International Edition*, **2015**, 54, 10155-9	16.4	84
57	Structure studies of the nematic phase formed by bent-core molecules. *Physical Review E*, **2009**, 80, 030701	2.4	81
56	Multi-level chirality in liquid crystals formed by achiral molecules. *Nature Communications*, **2019**, 10, 1922	17.4	73
55	Switching mechanism in polar columnar mesophases made of bent-core molecules. *ChemPhysChem*, **2005**, 6, 1087-93	3.2	60
54	Structure of nanoscale-pitch helical phases: blue phase and twist-bend nematic phase resolved by resonant soft X-ray scattering. *Soft Matter*, **2017**, 13, 6694-6699	3.6	59
53	Physical gels made of liquid crystalline B4 phase. *Chemical Communications*, **2013**, 49, 3119-21	5.8	51
52	Reentrant ferroelectricity in liquid crystals. *Physical Review Letters*, **2001**, 86, 3048-51	7.4	43
51	Modulated structures in bent-core liquid crystals: two faces of one phase. *Physical Review Letters*, **2007**, 98, 247802	7.4	38
50	Landau-de Gennes theory of the chevron structure in a smectic liquid crystal. *Physical Review E*, **1996**, 54, 3783-3792	2.4	37
49	Paraelectric-antiferroelectric phase transition in achiral liquid crystals. *Physical Review E*, **2005**, 72, 060701	2.4	36
48	Polar order and tilt in achiral smectic phases. *Physical Review E*, **2006**, 74, 021702	2.4	33
47	Modulated general tilt structures in bent-core liquid crystals. *Journal of Materials Chemistry*, **2008**, 18, 3044		32
46	Flexoelectricity in chiral nematic liquid crystals as a driving mechanism for the twist-bend and splay-bend modulated phases. *Physical Review E*, **2014**, 89, 030501	2.4	31
45	Polarization modulation instability in liquid crystals with spontaneous chiral symmetry breaking. *Physical Review E*, **2005**, 72, 031701	2.4	30
44	Thermotropic cubic and tetragonal phases made of rod-like molecules. *Physical Chemistry Chemical Physics*, **2014**, 16, 16067-74	3.6	29
43	Short-range smectic fluctuations and the flexoelectric model of modulated nematic liquid crystals. *Physical Review E*, **2016**, 93, 022704	2.4	25
42	Ferroelectric behavior of orthogonal smectic phase made of bent-core molecules. *Physical Review E* , **2011**, 84, 031706	2.4	23

41	2-D Density-modulated structures in asymmetric bent-core liquid crystals. *Journal of Materials Chemistry*, **2008**, 18, 881		22
40	Monolayer Filaments versus Multilayer Stacking of Bent-Core Molecules. *Angewandte Chemie - International Edition*, **2016**, 55, 3468-72	16.4	22
39	Evidence for general tilt columnar liquid crystalline phase. *Soft Matter*, **2009**, 5, 2281	3.6	20
38	Polar and apolar columnar phases made of bent-core mesogens. *Topics in Current Chemistry*, **2012**, 318, 281-302		19
37	Effect of spontaneous polarization and polar surface anchoring on the director and layer structure in surface-stabilized ferroelectric liquid crystal cells. *Physical Review E*, **2003**, 68, 061705	2.4	19
36	Effect of optical purity on phase sequence in antiferroelectric liquid crystals. *Physical Review E*, **2005**, 71, 041701	2.4	18
35	Critical behavior of the optical birefringence at the nematic to twist-bend nematic phase transition. *Physical Review E*, **2018**, 98,	2.4	17
34	Liquid crystals: a new topic in physics for undergraduates. *European Journal of Physics*, **2013**, 34, 745-761	0.8	16
33	Chirality of Liquid Crystals Formed from Achiral Molecules Revealed by Resonant X-Ray Scattering. *Advanced Materials*, **2020**, 32, e1905591	24	15
32	Molecular Packing in Double Gyroid Cubic Phases Revealed via Resonant Soft X-Ray Scattering. *Physical Review Letters*, **2020**, 125, 027801	7.4	15
31	From Sponges to Nanotubes: A Change of Nanocrystal Morphology for Acute-Angle Bent-Core Molecules. *Angewandte Chemie - International Edition*, **2016**, 55, 12238-42	16.4	15
30	Structural transitions in surface-stabilized smectic-C cells near the smectic□□smetic□ phase-transition temperature. *Physical Review E*, **1998**, 57, 5651-5659	2.4	13
29	Dielectric response of antiferroelectric liquid crystals. *Ferroelectrics*, **2000**, 245, 175-184	0.6	12
28	Influence of an external electric field on structure in surface-stabilized smectic-C chevron cells. *Physical Review E*, **2000**, 62, 2317-23	2.4	12
27	Polarization Gratings Spontaneously Formed from a Helical Twist-Bend Nematic Phase. *ChemPhysChem*, **2018**, 19, 2566-2571	3.2	11
26	Spontaneous breaking of minimal surface condition: labyrinths in free standing smectic films. *Physical Review Letters*, **2005**, 95, 207801	7.4	11
25	Bi-continuous orthorhombic soft matter phase made of polycatenar molecules. *Soft Matter*, **2020**, 16, 3882-3885	3.6	10
24	A Twist-Bend Nematic (NTB) Phase of Chiral Materials. *Angewandte Chemie*, **2015**, 127, 10293-10297	3.6	10

23	Direction dependence of the extraordinary refraction index in uniaxial nematic liquid crystals. *European Journal of Physics*, **2013**, 34, 331-344	0.8	10
22	Effect of dimerization on the field-induced birefringence in ferrofluids. *Physical Review E*, **2013**, 87, 062322	2.4	9
21	New structural model of a chiral cubic liquid crystalline phase. *Physical Chemistry Chemical Physics*, **2020**, 22, 12814-12820	3.6	8
20	Thermal diffusivity anisotropy measured by a temperature wave method in the homologous series of (p-alkoxybenzylidene)-p-octylaniline (nO.8). *Journal of Chemical Physics*, **2015**, 143, 074903	3.9	8
19	Landau-de Gennes Theory of the Polarization Modulated and Layer Undulated Structure in Liquid Crystals Made of Bent-Core Molecules. *Ferroelectrics*, **2006**, 344, 151-159	0.6	8
18	Photonic Bandgap in Achiral Liquid Crystals-A Twist on a Twist. *Advanced Materials*, **2021**, 33, e2103288	24	8
17	Bottle model of colour vision with the colour brown as an example. *European Journal of Physics*, **2006**, 27, 611-620	0.8	5
16	Monolayer Filaments versus Multilayer Stacking of Bent-Core Molecules. *Angewandte Chemie*, **2016** , 128, 3529-3533	3.6	4
15	Effect of a bias electric field on the structure and dielectric response of the ferroelectric smectic-A liquid crystal in thin planar cells. *Physical Review E*, **2014**, 89, 012501	2.4	4
14	Stability of a pixel in surface stabilized smectic-c chevron cells. *Ferroelectrics*, **2000**, 245, 185-195	0.6	4
13	Ferro- and Antiferroelectric Liquid Crystals **2003**, 257-510		4
12	Structure-sensitive bend elastic constants between piconewton and subnanonewton in diphenylacetylene-core-based liquid crystals. *Physical Review E*, **2014**, 90, 042506	2.4	3
11	How to Teach Liquid Crystals?. *Molecular Crystals and Liquid Crystals*, **2011**, 547, 255/[1945]-261/[1951]	0.5	3
10	From Sponges to Nanotubes: A Change of Nanocrystal Morphology for Acute-Angle Bent-Core Molecules. *Angewandte Chemie*, **2016**, 128, 12426-12430	3.6	3
9	Magnetic moment of a single metal nanoparticle determined from the Faraday effect. *Physical Review E*, **2013**, 87,	2.4	2
8	Structure and energy of the wall separating two states in surface-stabilized smectic C chevron cells. *Liquid Crystals*, **1999**, 26, 1429-1435	2.3	2
7	Structure and grating efficiency of thin cells filled by a twist-bend nematic liquid crystal. *Physical Review E*, **2020**, 102, 032704	2.4	2
6	Columnar Liquid Crystalline Phases Made of Bent-Core Mesogens **2014**, 1-26		1

List of Publications

5	Smectic Phases of Bent-Core Liquid Crystals **2014**, 1-33		1
4	Measurements of the Orientational Elastic Constants of the Nematic Liquid Crystal by A Four-Wave Mixing. *Molecular Crystals and Liquid Crystals*, **1994**, 251, 33-42		1
3	Modeling of the Resonant X-ray Response of a Chiral Cubic Phase. *Crystals*, **2021**, 11, 214	2.3	1
2	Dielectric Response of the Orthogonal Ferroelectric Smectic Phase in Thin Planar Cells in Low DC Bias Electric Field. *Ferroelectrics*, **2014**, 468, 77-83	0.6	0
1	Is the General Angle Between the Tilt and the Polarization Possible in Rod-Like Systems?. *Ferroelectrics*, **2010**, 395, 133-138	0.6	