

# Eva D Korblova

## List of Publications by Year in descending order

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72  
papers

4,558  
citations

186265

28  
h-index

98798

67  
g-index

77  
all docs

77  
docs citations

77  
times ranked

1966  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spontaneous Formation of Macroscopic Chiral Domains in a Fluid Smectic Phase of Achiral Molecules. <i>Science</i> , 1997, 278, 1924-1927.	12.6	1,176
2	Chiral heliconical ground state of nanoscale pitch in a nematic liquid crystal of achiral molecular dimers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 15931-15936.	7.1	431
3	A Ferroelectric Liquid Crystal Conglomerate Composed of Racemic Molecules. <i>Science</i> , 2000, 288, 2181-2184.	12.6	328
4	Polarization-Modulated Smectic Liquid Crystal Phases. <i>Science</i> , 2003, 301, 1204-1211.	12.6	296
5	Helical Nanofilament Phases. <i>Science</i> , 2009, 325, 456-460.	12.6	291
6	Chiral Isotropic Liquids from Achiral Molecules. <i>Science</i> , 2009, 325, 452-456.	12.6	250
7	First-principles experimental demonstration of ferroelectricity in a thermotropic nematic liquid crystal: Polar domains and striking electro-optics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 14021-14031.	7.1	174
8	Spontaneous Ferroelectric Order in a Bent-Core Smectic Liquid Crystal of Fluid Orthorhombic Layers. <i>Science</i> , 2011, 332, 72-77.	12.6	141
9	Athermal photofluidization of glasses. <i>Nature Communications</i> , 2013, 4, 1521.	12.8	111
10	On the Nature of the B4 Banana Phase:â€‰% Crystal or Not a Crystal?. <i>Crystal Growth and Design</i> , 2005, 5, 2091-2099.	3.0	80
11	Chirality-Preserving Growth of Helical Filaments in the B4 Phase of Bent-Core Liquid Crystals. <i>Journal of the American Chemical Society</i> , 2011, 133, 12656-12663.	13.7	75
12	Organization of the polarization splay modulated smectic liquid crystal phase by topographic confinement. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 21311-21315.	7.1	70
13	Self-assembled monolayers for liquid crystal alignment: simple preparation on glass using alkyltrialkoxysilanes. <i>Liquid Crystals</i> , 2004, 31, 481-489.	2.2	56
14	Multistep hierarchical self-assembly of chiral nanopore arrays. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 14342-14347.	7.1	53
15	Nanoconfinement of guest materials by helical nanofilament networks of bent-core mesogens. <i>Soft Matter</i> , 2013, 9, 462-471.	2.7	51
16	Polar in-plane surface orientation of a ferroelectric nematic liquid crystal: Polar monodomains and twisted state electro-optics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	51
17	High-Sensitivity Aminoazobenzene Chemisorbed Monolayers for Photoalignment of Liquid Crystals. <i>Langmuir</i> , 2009, 25, 997-1003.	3.5	47
18	A Modulated Helical Nanofilament Phase. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 5254-5257.	13.8	45

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19	Orientation of a Helical Nanofilament (B4) Liquidâ€Crystal Phase: Topographic Control of Confinement, Shear Flow, and Temperature Gradients. <i>Advanced Materials</i> , 2011, 23, 1962-1967.	21.0	42
20	A bow-phase mesogen showing strong, robust analog electro-optics. <i>Journal of Materials Chemistry</i> , 2001, 11, 2743-2747.	6.7	38
21	Structure of the B4 Liquid Crystal Phase near a Glass Surface. <i>ChemPhysChem</i> , 2012, 13, 155-159.	2.1	38
22	Alignment of helical nanofilaments on the surfaces of various self-assembled monolayers. <i>Soft Matter</i> , 2013, 9, 6185.	2.7	38
23	Surface alignment of ferroelectric nematic liquid crystals. <i>Soft Matter</i> , 2021, 17, 8130-8139.	2.7	38
24	Topological Ferroelectric Bistability in a Polarization-Modulated Orthogonal Smectic Liquid Crystal. <i>Journal of the American Chemical Society</i> , 2012, 134, 9681-9687.	13.7	33
25	Diastereomeric liquid crystal domains at the mesoscale. <i>Nature Communications</i> , 2015, 6, 7763.	12.8	33
26	Structural transitions and guest/host complexing of liquid crystal helical nanofilaments induced by nanoconfinement. <i>Science Advances</i> , 2017, 3, e1602102.	10.3	32
27	Pretransitional Orientational Ordering of a Calamitic Liquid Crystal by Helical Nanofilaments of a Bent-Core Mesogen. <i>Langmuir</i> , 2010, 26, 15541-15545.	3.5	30
28	Electrically Tunable Reflection Color of Chiral Ferroelectric Nematic Liquid Crystals. <i>Advanced Optical Materials</i> , 2021, 9, 2101230.	7.3	30
29	Reflection Symmetry Breaking in Achiral Rod-Shaped Smectic Liquid Crystals?. <i>Journal of the American Chemical Society</i> , 2006, 128, 5318-5319.	13.7	28
30	Self-assembled hydrophobic surface generated from a helical nanofilament (B4) liquid crystal phase. <i>Soft Matter</i> , 2013, 9, 2793.	2.7	28
31	Ideal mixing of paraelectric and ferroelectric nematic phases in liquid crystals of distinct molecular species. <i>Liquid Crystals</i> , 2022, 49, 1531-1544.	2.2	25
32	Triclinic Fluid Order. <i>Physical Review Letters</i> , 2010, 104, 067801.	7.8	23
33	The organometallic â€molecular tinkertoyâ€™ approach to planar grid polymers. <i>Journal of Organometallic Chemistry</i> , 1997, 548, 83-89.	1.8	21
34	Polar electro-optic switching in droplets of an achiral nematic liquid crystal. <i>Liquid Crystals</i> , 1999, 26, 1555-1561.	2.2	19
35	A bistable liquid-crystal display mode based on electrically driven smectic A layer reorientation. <i>Applied Physics Letters</i> , 2007, 91, .	3.3	19
36	On the Origin of the â€Giantâ€™ Electroclinic Effect in a â€De Vriesâ€™ Type Ferroelectric Liquid Crystal Material for Chirality Sensing Applications. <i>ChemPhysChem</i> , 2009, 10, 890-892.	2.1	18

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37	Physico-chemical confinement of helical nanofilaments. <i>Soft Matter</i> , 2015, 11, 3653-3659.	2.7	17
38	de Gennes' triclinic smectics "not so far-fetched after all. <i>Liquid Crystals</i> , 2009, 36, 1309-1317.	2.2	16
39	Multidimensional Helical Nanostructures in Multiscale Nanochannels. <i>Langmuir</i> , 2015, 31, 8156-8161.	3.5	16
40	The peculiar optic, dielectric and X-ray diffraction properties of a fluorinated de Vries asymmetric diffuse cone model ferroelectric liquid crystal. <i>Liquid Crystals</i> , 2006, 33, 17-23.	2.2	15
41	Effective conductivity due to continuous polarization reorientation in fluid ferroelectrics. <i>Physical Review E</i> , 2011, 84, 020701.	2.1	15
42	Supermolecular stereochemistry in ferroelectric liquid crystals. <i>Journal of Physical Organic Chemistry</i> , 2000, 13, 830-836.	1.9	14
43	A General Method for Measurement of Enantiomeric Excess by Using Electrooptics in Ferroelectric Liquid Crystals. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 1473-1475.	13.8	14
44	Chiral Isotropic Sponge Phase of Hexatic Smectic Layers of Achiral Molecules. <i>ChemPhysChem</i> , 2014, 15, 1502-1507.	2.1	13
45	Effect of Concentration on the Photo-Orientation and Relaxation Dynamics of Self-Assembled Monolayers of Mixtures of an Azobenzene-Based Triethoxysilane with Octyltriethoxysilane. <i>Langmuir</i> , 2011, 27, 3336-3342.	3.5	12
46	Chiral SmA* materials for display applications?. <i>Journal of the Society for Information Display</i> , 2007, 15, 585-588.	2.1	11
47	Bistable SmA liquid crystal display driven by a two-direction electric field. <i>Journal of the Society for Information Display</i> , 2008, 16, 675-681.	2.1	11
48	Phase Winding of a Nematic Liquid Crystal by Dynamic Localized Reorientation of an Azo-Based Self-Assembled Monolayer. <i>Langmuir</i> , 2014, 30, 9560-9566.	3.5	11
49	Nanoconfinement of the Low-Temperature Dark Conglomerate: Structural Control from Focal Conics to Helical Nanofilaments. <i>Chemistry - A European Journal</i> , 2019, 25, 7438-7442.	3.3	11
50	Topography of bent-core liquid crystals at the air/liquid crystal interface. <i>Liquid Crystals</i> , 2013, 40, 1730-1735.	2.2	10
51	Field alignment of bent-core smectic liquid crystals for analog optical phase modulation. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	10
52	Spiral layer undulation defects in B7 liquid crystals. <i>Soft Matter</i> , 2013, 9, 11303.	2.7	9
53	Nucleation and growth of a helical nanofilament (B4) liquid-crystal phase confined in nanobowls. <i>Soft Matter</i> , 2015, 11, 7778-7782.	2.7	9
54	Ferroelectric and antiferroelectric odd-even behavior in a tricarbosilane-terminated liquid crystal homologous series. <i>Chemical Science</i> , 2014, 5, 1869-1874.	7.4	8

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55	Director structures in achiral smectic C liquid crystal cells: field-induced twist domain nucleation. <i>Liquid Crystals</i> , 2006, 33, 25-32.	2.2	7
56	Electro-optic response of the anticlinic, antiferroelectric liquid-crystal phase of a biaxial bent-core molecule with tilt angle near 45°. <i>Physical Review E</i> , 2012, 85, 031704.	2.1	7
57	Manipulating the twist sense of helical nanofilaments of bent-core liquid crystals using rod-shaped, chiral mesogenic dopants. <i>Liquid Crystals</i> , 2016, 43, 1083-1091.	2.2	6
58	Main-Chain Ferroelectric Liquid Crystal Polymers for Electronic Nonlinear Optics Applications 1. <i>Ferroelectrics</i> , 2004, 309, 77-82.	0.6	5
59	Dynamics of cis isomers in highly sensitive amino-azobenzene monolayers: The effect of slow relaxation on photo-induced anisotropy. <i>Journal of Applied Physics</i> , 2011, 109, 103521.	2.5	5
60	Cybotactic behavior in the de Vries smectic-A* liquid-crystal structure formed by a silicon-containing molecule. <i>Physical Review E</i> , 2014, 89, 032502.	2.1	5
61	The heliconical nematic twist-bend phase from "classical" bent-core benzylideneanilines with oligomethylene cores. <i>Molecular Crystals and Liquid Crystals</i> , 2017, 647, 430-438.	0.9	5
62	Precision adiabatic scanning calorimetry of a nematic " ferroelectric nematic phase transition. <i>Liquid Crystals</i> , 2022, 49, 780-789.	2.2	5
63	Airflow-aligned helical nanofilament (B4) phase in topographic confinement. <i>Scientific Reports</i> , 2016, 6, 29111.	3.3	4
64	New SmAPF Mesogens Designed for Analog Electrooptics Applications. <i>Materials</i> , 2017, 10, 1284.	2.9	4
65	Design of Smectic Liquid Crystal Phases Using Layer Interface Clinicity. <i>ACS Symposium Series</i> , 2001, , 268-281.	0.5	1
66	<title>Ferroelectric smectic liquid crystals in the bent-core family: alignment for V-shaped analog switching</title>. , 1999, 3800, 21.		0
67	Antiferroelectric Liquid Crystals from Achiral Molecules And A Liquid Conglomerate. <i>Materials Research Society Symposia Proceedings</i> , 1999, 559, 3.	0.1	0
68	Design and synthesis of an achiral ferroelectric smectic liquid crystal. , 2011, , .		0
69	SmAPf phase, its properties and potential dye alignment (Conference Presentation). , 2016, , .		0
70	Host-guest chemistry in the helical nanofilament phase (Conference Presentation). , 2016, , .		0
71	Frontispiece: Nanoconfinement of the Low-Temperature Dark Conglomerate: Structural Control from Focal Conics to Helical Nanofilaments. <i>Chemistry - A European Journal</i> , 2019, 25, .	3.3	0
72	Homeotropic alignment of multiple bent-core liquid crystal phases using a polydimethylsiloxane alignment layer. , 2017, , .		0