

Przemysław Kula

List of Publications by Year in descending order

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106
papers

1,788
citations

279798

23
h-index

330143

37
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106
all docs

106
docs citations

106
times ranked

1180
citing authors

#	ARTICLE	IF	CITATIONS
1	Deuterated Liquid Crystals – practical synthesis of deuterium labeled 4-alkyl-4- ³ -isothiocyanato-[1,1'-4E ¹ ,1'- ³]terphenyls. <i>Journal of Molecular Liquids</i> , 2022, 345, 117847.	4.9	4
2	Realizing Persistent-Spin-Helix Lasing in the Regime of Rashba-Dresselhaus Spin-Orbit Coupling in a Dye-Filled Liquid-Crystal Optical Microcavity. <i>Physical Review Applied</i> , 2022, 17, .	3.8	7
3	Insight into cold- and melt crystallization phenomena of a smectogenic liquid crystal. <i>CrystEngComm</i> , 2022, 24, 3074-3087.	2.6	10
4	Fluorophenol-Containing Hydrogen-Bond Acidic Polysiloxane for Gas Sensing-Synthesis and Characterization. <i>Polymers</i> , 2022, 14, 1147.	4.5	0
5	Thermal, optical, and volumetric studies on mixing properties of binary nematic mixtures of 9CHBT/11CHBT. <i>Journal of Molecular Liquids</i> , 2022, 360, 119411.	4.9	1
6	Induction of the smectic A phase in liquid crystalline mixtures formulated using non-chiral compounds with positive and negative dielectric anisotropy. <i>Phase Transitions</i> , 2022, 95, 523-536.	1.3	3
7	Effect of high pressure on relaxation dynamics and crystallization kinetics of chiral liquid crystal in its smectic phase. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 17466-17478.	2.8	11
8	Observation of second-order meron polarization textures in optical microcavities. <i>Optica</i> , 2021, 8, 255.	9.3	28
9	Electro-Optical and Photo Stabilization Study of Nematic Ternary Mixture. <i>Materials</i> , 2021, 14, 2283.	2.9	6
10	Phase behaviour and crystal structures of 2,3-difluorinated <i>p</i> -terphenyl derivatives. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2021, 77, 435-440.	0.5	2
11	Self-assembling behaviour of chiral calamitic monoacrylates targeted for polymer stabilisation of polar smectic phases in chiral liquid crystals. <i>Journal of Molecular Liquids</i> , 2021, 331, 115723.	4.9	16
12	Synthesis, Mesomorphism and the Optical Properties of Alkyl-deuterated Nematogenic 4-[(2,6-Difluorophenyl)ethynyl]biphenyls. <i>Materials</i> , 2021, 14, 4653.	2.9	3
13	Light-emitting high birefringence chlorinated bistolanes. <i>Journal of Molecular Liquids</i> , 2021, 341, 117267.	4.9	2
14	On the relaxation dynamics of a double glass-forming antiferroelectric liquid crystal. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 8673-8688.	2.8	19
15	Realizing Optical Persistent Spin Helix and Stern-Gerlach Deflection in an Anisotropic Liquid Crystal Microcavity. <i>Physical Review Letters</i> , 2021, 127, 190401.	7.8	14
16	New Ferroelectric Liquid Crystalline Materials with Properties Suitable for Surface Stabilized and Deformed Helix Effects. <i>Zhidkie Kristally I Ikh Prakticheskoe Ispol'zovanie</i> , 2021, 21, 61-73.	0.1	3
17	Synthesis and mesomorphic properties of four ring, rod-like fluorene derivatives – the influence of the lateral substitution on mesomorphic properties of 2,7-bis(4-alkylphenyl)-fluorenes. <i>Liquid Crystals</i> , 2020, 47, 17-27.	2.2	12
18	Liquid crystals for IR: Part I – synthesis and properties of perfluoroalkyl or perfluoroalkoxy terminated oligophenyls. <i>Liquid Crystals</i> , 2020, 47, 2122-2143.	2.2	8

#	ARTICLE	IF	CITATIONS
19	Liquid crystals for IR: Part II synthesis and properties of perfluoroalkyl- or perfluoroalkoxy-terminated tolanes. <i>Liquid Crystals</i> , 2020, 47, 2144-2160.	2.2	8
20	Molecular dynamics and cold crystallization process in a liquid-crystalline substance with para-, ferro- and antiferro-electric phases as studied by dielectric spectroscopy and scanning calorimetry. <i>Journal of Molecular Liquids</i> , 2020, 297, 111913.	4.9	23
21	Effect of fluorinated achiral chain length on structural, dielectric and electro-optic properties of two terphenyl based antiferroelectric liquid crystals. <i>Journal of Molecular Liquids</i> , 2020, 298, 112056.	4.9	11
22	Fast-response halogenated 4-alkyl-4-cyano-p-terphenyls as dual frequency addressing nematics. <i>Fluid Phase Equilibria</i> , 2020, 522, 112770.	2.5	14
23	Vibrational Dynamics of a Chiral Smectic Liquid Crystal Undergoing Vitrification and Cold Crystallization. <i>Crystals</i> , 2020, 10, 655.	2.2	17
24	The effect of partially fluorinated chain length on the mesomorphic properties of chiral 2,3-difluoroterphenylates. <i>Liquid Crystals</i> , 2020, 47, 2332-2340.	2.2	4
25	Liquid Crystals for IR: Part III - Bi- and multicomponent mixtures based on perfluoroalkyl or perfluoroalkoxy terminated oligophenyls and tolanes. <i>Liquid Crystals</i> , 2020, 47, 2161-2170.	2.2	4
26	Orientation control of ideal blue phase photonic crystals. <i>Scientific Reports</i> , 2020, 10, 10148.	3.3	24
27	Pyrimidine-based ferroelectric mixtures – The influence of oligophenyl based chiral doping system. <i>Journal of Molecular Liquids</i> , 2020, 303, 112693.	4.9	10
28	Engineering spin-orbit synthetic Hamiltonians in liquid-crystal optical cavities. <i>Science</i> , 2019, 366, 727-730.	12.6	93
29	Relaxation dynamics and crystallization study of glass-forming chiral-nematic liquid crystal S,S-2,7-bis(4-pentylphenyl)-9,9-dimethylbutyl 9H-fluorene (5P-Am*FLAm*-P5). <i>European Physical Journal E</i> , 2019, 42, 121.	1.6	17
30	Multifrequency Driven Nematics. <i>Crystals</i> , 2019, 9, 275.	2.2	3
31	Memory effect in nematic phase of liquid crystal doped with magnetic and non-magnetic nanoparticles. <i>Journal of Molecular Liquids</i> , 2019, 282, 286-291.	4.9	24
32	Electro-Steering Tapered Fiber-Optic Device with Liquid Crystal Cladding. <i>Journal of Sensors</i> , 2019, 2019, 1-11.	1.1	5
33	On the balance between nematic and smectic phases in 2,3-difluoro-4,4-dialkyl-p-terphenyls. <i>Liquid Crystals</i> , 2019, 46, 1558-1567.	2.2	13
34	Ultrafast electrical switching of nanostructured metadvice with dual-frequency liquid crystal. <i>Scientific Reports</i> , 2019, 9, 20367.	3.3	39
35	A new mesogenic fluorene derivative: 2,7-bis(4-pentylphenyl)-9,9-diethyl-9H-fluorene. <i>Liquid Crystals</i> , 2019, 46, 543-549.	2.2	5
36	Synthesis and mesomorphic properties of 4,4-dialkynyl-2,3-difluoro-p-terphenyls – the influence of C≡C acetylene linking bridge. <i>Liquid Crystals</i> , 2019, 46, 618-628.	2.2	12

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37	Optical properties of cubic blue phase liquid crystal in photonic microstructures. Optics Express, 2019, 27, 14270.	3.4	10
38	Polarization properties of an optical fiber biconical taper with a liquid crystal cladding. , 2019, , .		0
39	Liquid crystal based tunable spurline filters with notch frequencies at 50 and 85 GHz. Microwave and Optical Technology Letters, 2018, 60, 672-679.	1.4	5
40	The influence of the dialkylphenyltolane's difluorosubstitution on mesomorphic and dielectric properties. Liquid Crystals, 2018, 45, 1460-1469.	2.2	19
41	A direct assessment of refractive indices of nematic liquid crystals at broad VIS - MWIR range. Liquid Crystals, 2018, 45, 703-714.	2.2	6
42	Molecular Ordering of Nematic Liquid Crystals in Tubular Nanopores: Tailoring of Optical Anisotropy at the Nanoscale by Polymer Pore-surface Grafting. , 2018, , .		0
43	Tunable optical spin Hall effect in a liquid crystal microcavity. Light: Science and Applications, 2018, 7, 74.	16.6	44
44	Interplay between Crystallization and Glass Transition in Nematic Liquid Crystal 2,7-Bis(4-pentylphenyl)-9,9-diethyl-9H-fluorene. Journal of Physical Chemistry B, 2018, 122, 10627-10636.	2.6	21
45	Application of retardation-modulation polarimetry in studies of nanocomposite materials. , 2018, , .		1
46	Refractive index matched liquid crystal cell for laser metrology application. Liquid Crystals, 2018, 45, 1690-1698.	2.2	3
47	Synthesis and properties of chosen 4-butyl-phenyltolane derivatives " On the influence of core substitution on birefringence, mesomorphic and dielectric properties. Journal of Molecular Liquids, 2018, 267, 511-519.	4.9	24
48	The influence of orienting layers on blue phase liquid crystals in rectangular geometries. Photonics Letters of Poland, 2018, 10, 100.	0.4	2
49	Design of new super-high birefringent isothiocyanato bistolanes " synthesis and properties. Liquid Crystals, 2017, 44, 1462-1467.	2.2	44
50	Solc filters in a reflective geometry. Journal of Optics (United Kingdom), 2017, 19, 045703.	2.2	3
51	Mid-wave infrared liquid crystal shutter for breathalyzer applications. Opto-electronics Review, 2017, 25, 103-109.	2.4	3
52	A ferroelectric liquid crystal confined in cylindrical nanopores: reversible smectic layer buckling, enhanced light rotation and extremely fast electro-optically active Goldstone excitations. Nanoscale, 2017, 9, 19086-19099.	5.6	22
53	Low aberration and fast switching microlenses based on a novel liquid crystal mixture. Optics Express, 2017, 25, 14795.	3.4	28
54	Investigation of Kerr effect in a blue phase liquid crystal using wedge-cell technique. Photonics Letters of Poland, 2017, 9, 54.	0.4	2

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55	Perdeuterated liquid crystals for near infrared applications. <i>Optical Materials</i> , 2016, 60, 209-213.	3.6	13
56	New low polar tolane cholesterics designed for infrared applications. <i>RSC Advances</i> , 2016, 6, 84231-84235.	3.6	5
57	Dielectric investigation of the liquid crystal compound with the direct SmA* \leftrightarrow SmC_A* phase transition. <i>Liquid Crystals</i> , 2016, 43, 654-663.	2.2	7
58	High birefringence bistolane liquid crystals: synthesis and properties. <i>RSC Advances</i> , 2016, 6, 403-408.	3.6	46
59	Long Term Stability of Polymer Stabilized Blue Phase Liquid Crystals. <i>Journal of Display Technology</i> , 2015, 11, 703-708.	1.2	2
60	Hybrid Young interferometer for high resolution measurement of dynamic speckle using high birefringence liquid crystal. <i>Proceedings of SPIE</i> , 2015, , .	0.8	0
61	Properties of 2,3, and 2,3-difluorosubstituted 4-alkyl[1,1':4',1'']terphenyl-4-yl alkyl carbonates with SmC phase. <i>Phase Transitions</i> , 2014, 87, 814-819.	1.3	0
62	Synthesis and properties of new non-symmetric 2,5-bis(4-alkylphenylethynyl)thiophenes. <i>Liquid Crystals</i> , 2014, 41, 1647-1652.	2.2	16
63	NIR and MWIR transparent liquid crystals. , 2014, , .		3
64	Liquid crystalline blue phase in mixtures of fluorinated compounds with positive and negative dielectric anisotropy and its electro-optic performance. <i>Liquid Crystals</i> , 2014, 41, 15-24.	2.2	12
65	Birefringence, permittivity, elasticity and rotational viscosity of ambient temperature, high birefringent nematic liquid crystal mixtures. <i>Liquid Crystals</i> , 2014, 41, 591-596.	2.2	18
66	Synthesis and mesomorphic properties of laterally fluorinated alkyl 4-alkylterphenyl-4-yl carbonate liquid crystals. <i>Journal of Materials Chemistry C</i> , 2014, 2, 891-900.	5.5	17
67	Synthesis and mesomorphic properties of laterally substituted 4,4'-dialkyl-p-quaterphenyls. <i>Liquid Crystals</i> , 2014, 41, 503-513.	2.2	34
68	Terahertz properties of fluorinated liquid crystals. <i>Liquid Crystals</i> , 2013, 40, 1586-1590.	2.2	21
69	Spectroscopic investigation of the far-infrared properties of liquid crystals. , 2013, , .		0
70	On the influence of the chiral side linking bridge type upon the synclinic vs. anticlinic balance in the case of 2,3-difluoroterphenyl derivatives. <i>Liquid Crystals</i> , 2013, 40, 256-266.	2.2	14
71	Novel high birefringent isothiocyanates based on quaterphenyl and phenylethynyltolane molecular cores. <i>Liquid Crystals</i> , 2013, 40, 1174-1182.	2.2	44
72	The synthesis and properties of fluoro-substituted analogues of 4-butyl-4'-[(4-butylphenyl)ethynyl]biphenyls. <i>Liquid Crystals</i> , 2013, 40, 482-491.	2.2	29

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73	Synthesis and properties of terphenyl- and quaterphenyl-based chiral diesters. <i>Liquid Crystals</i> , 2013, 40, 83-90.	2.2	31
74	The synthesis of chiral fluorinated 4-alkyl-4'-[(4-alkylphenyl)ethynyl]biphenyls. <i>Tetrahedron Letters</i> , 2013, 54, 3621-3623.	1.4	7
75	Compounds with low relaxation frequency and dual frequency mixtures useful for active matrix addressing. <i>Liquid Crystals</i> , 2013, 40, 1339-1353.	2.2	26
76	High Birefringence Liquid Crystals. <i>Crystals</i> , 2013, 3, 443-482.	2.2	218
77	Ultrabroadband terahertz spectroscopy of a liquid crystal. <i>Optics Express</i> , 2012, 20, 28249.	3.4	69
78	General synthesis method of alkyl-alkoxy multi-fluorotolanes for negative high birefringence nematic mixtures. <i>Liquid Crystals</i> , 2012, 39, 239-247.	2.2	41
79	X-ray diffraction and dielectric spectroscopy studies on a partially fluorinated ferroelectric liquid crystal from the family of terphenyl esters. <i>Liquid Crystals</i> , 2012, 39, 1196-1203.	2.2	26
80	Studies of Phase Diagram of a Liquid Crystal with 4-[2-(3-Fluorophenyl)ethyl]biphenyl Core of Molecules. <i>Acta Physica Polonica A</i> , 2012, 122, 370-374.	0.5	10
81	Determination of Order Parameters in Laterally Fluorosubstituted Terphenyls by ^{19}F -NMR, Optical and Dielectric Anisotropies. <i>Molecular Crystals and Liquid Crystals</i> , 2011, 541, 104/[342]-117/[355].	0.9	9
82	Low absorption liquid crystals for mid-wave infrared applications. <i>Optics Express</i> , 2011, 19, 10843.	3.4	48
83	New Orthoconic Antiferroelectrics Useful for Applications. <i>Ferroelectrics</i> , 2010, 395, 116-132.	0.6	39
84	Synthesis of New Chiral Smectic Mesogenes with 4-(2-Phenylethyl)biphenyl and 4-[2-(3-Fluorophenyl)ethyl]biphenyl Molecular Cores. <i>Synlett</i> , 2010, 2010, 1394-1396.	1.8	7
85	Dielectric properties of selected laterally fluoro-substituted 4,4'-dialkyl, dialkoxy and alkyl-alkoxy [1:1'-4'-1']terphenyls. <i>Liquid Crystals</i> , 2010, 37, 1321-1330.	2.2	19
86	High Birefringence and Low Viscosity Liquid Crystals with Negative Dielectric Anisotropy. <i>Molecular Crystals and Liquid Crystals</i> , 2009, 509, 47/[789]-59/[801].	0.9	10
87	Powdered activated carbon and carbon paste electrodes: comparison of electrochemical behaviour. <i>Journal of Applied Electrochemistry</i> , 2009, 39, 593-600.	2.9	5
88	Mesomorphic and dielectric properties of esters useful for formulation of nematic mixtures for dual frequency addressing system. <i>Opto-electronics Review</i> , 2009, 17, .	2.4	17
89	Modification of High Tilted Antiferroelectric Mixture for Display Applications. <i>Molecular Crystals and Liquid Crystals</i> , 2009, 509, 336/[1078]-348/[1090].	0.9	7
90	66.1: High Birefringence and Negative Dielectric Anisotropy Liquid Crystal Mixtures for Vertical Alignment Applications. <i>Digest of Technical Papers SID International Symposium</i> , 2009, 40, 992-995.	0.3	0

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91	Mesomorphic, dielectric, and optical properties of fluorosubstituted biphenyls, terphenyls, and quaterphenyls. Opto-electronics Review, 2008, 16, .	2.4	36
92	High birefringence and low viscosity negative dielectric anisotropy liquid crystals. Liquid Crystals, 2008, 35, 1401-1408.	2.2	22
93	High birefringence liquid crystalline materials. , 2008, , .		0
94	An Influence of a Single Fluorine Atom Position in the Molecular Rigid Core on Physical Properties of Orthoconic Antiferroelectric Liquid Crystal. Ferroelectrics, 2008, 365, 78-87.	0.6	23
95	UV Dichroism in Vertically Aligned Nematic Displays. Molecular Crystals and Liquid Crystals, 2008, 494, 205-212.	0.9	1
96	Orthoconic antiferroelectric liquid crystals containing a terphenyl rigid core. Phase Transitions, 2007, 80, 771-780.	1.3	24
97	See-through Passive Antiferroelectric Helmet-Mounted Liquid Crystal Display. , 2007, , .		0
98	X-ray Investigation of Smectic Layers in Homologous Series of Chiral Three Ring Esters. Molecular Crystals and Liquid Crystals, 2007, 475, 137-149.	0.9	5
99	Orthoconic antiferroelectric liquid crystals containing biphenyl, terphenyl, or naphthyl mesogenic unit. Opto-electronics Review, 2007, 15, .	2.4	22
100	A 4k projection display for D-cinema, medical imaging and simulation. , 2007, , .		0
101	New Antiferroelectric Compounds from Chiral Terphenyls. Ferroelectrics, 2006, 343, 19-26.	0.6	28
102	Optical microscopy, DSC and dielectric relaxation spectroscopy studies on a partially fluorinated ferroelectric liquid crystalline compound MHPO(13F)BC. Phase Transitions, 2006, 79, 223-235.	1.3	29
103	The Role of Alignment Layers on the Induced Relaxation of Passively Multiplexed Antiferroelectric Liquid Crystal Displays. Molecular Crystals and Liquid Crystals, 2005, 433, 207-216.	0.9	2
104	Orthoconic antiferroelectric liquid crystalline materials. Journal of Optical Technology (A) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222 Td (0.4	4
105	Non-conventional Alignment Surfaces for Antiferroelectric Liquid Crystals. Molecular Crystals and Liquid Crystals, 2004, 422, 37-45.	0.9	10
106	<title>Thermodynamic studies of induced antiferroelectric phases in chiral and racemic systems</title>. , 2004, , .		0