

# Przemysław Kula

## List of Publications by Year in descending order

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106  
papers

1,788  
citations

279487

23  
h-index

329751

37  
g-index

106  
all docs

106  
docs citations

106  
times ranked

1180  
citing authors

#	ARTICLE	IF	CITATIONS
1	High Birefringence Liquid Crystals. Crystals, 2013, 3, 443-482.	1.0	218
2	Engineering spin-orbit synthetic Hamiltonians in liquid-crystal optical cavities. Science, 2019, 366, 727-730.	6.0	93
3	Ultrabroadband terahertz spectroscopy of a liquid crystal. Optics Express, 2012, 20, 28249.	1.7	69
4	Low absorption liquid crystals for mid-wave infrared applications. Optics Express, 2011, 19, 10843.	1.7	48
5	High birefringence bistolane liquid crystals: synthesis and properties. RSC Advances, 2016, 6, 403-408.	1.7	46
6	Novel high birefringent isothiocyanates based on quaterphenyl and phenylethynyltolane molecular cores. Liquid Crystals, 2013, 40, 1174-1182.	0.9	44
7	Design of new super-high birefringent isothiocyanato bistolanes – synthesis and properties. Liquid Crystals, 2017, 44, 1462-1467.	0.9	44
8	Tunable optical spin Hall effect in a liquid crystal microcavity. Light: Science and Applications, 2018, 7, 74.	7.7	44
9	General synthesis method of alkyl-alkoxy multi-fluorotolanes for negative high birefringence nematic mixtures. Liquid Crystals, 2012, 39, 239-247.	0.9	41
10	New Orthoconic Antiferroelectrics Useful for Applications. Ferroelectrics, 2010, 395, 116-132.	0.3	39
11	Ultrafast electrical switching of nanostructured metadvice with dual-frequency liquid crystal. Scientific Reports, 2019, 9, 20367.	1.6	39
12	Mesomorphic, dielectric, and optical properties of fluorosubstituted biphenyls, terphenyls, and quaterphenyls. Opto-electronics Review, 2008, 16, .	2.4	36
13	Synthesis and mesomorphic properties of laterally substituted 4,4'-dialkyl-p-quaterphenyls. Liquid Crystals, 2014, 41, 503-513.	0.9	34
14	Synthesis and properties of terphenyl- and quaterphenyl-based chiral diesters. Liquid Crystals, 2013, 40, 83-90.	0.9	31
15	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.	0.6	29
16	The synthesis and properties of fluoro-substituted analogues of 4-butyl-4'-[(4-butylphenyl)ethynyl]biphenyls. Liquid Crystals, 2013, 40, 482-491.	0.9	29
17	New Antiferroelectric Compounds from Chiral Terphenyls. Ferroelectrics, 2006, 343, 19-26.	0.3	28
18	Low aberration and fast switching microlenses based on a novel liquid crystal mixture. Optics Express, 2017, 25, 14795.	1.7	28

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19	Observation of second-order meron polarization textures in optical microcavities. <i>Optica</i> , 2021, 8, 255.	4.8	28
20	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.	0.9	26
21	Compounds with low relaxation frequency and dual frequency mixtures useful for active matrix addressing. <i>Liquid Crystals</i> , 2013, 40, 1339-1353.	0.9	26
22	Orthoconic antiferroelectric liquid crystals containing a terphenyl rigid core. <i>Phase Transitions</i> , 2007, 80, 771-780.	0.6	24
23	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.	2.3	24
24	Orientation control of ideal blue phase photonic crystals. <i>Scientific Reports</i> , 2020, 10, 10148.	1.6	24
25	Synthesis and properties of chosen 4-butyl-phenyltolane derivatives – On the influence of core substitution on birefringence, mesomorphic and dielectric properties. <i>Journal of Molecular Liquids</i> , 2018, 267, 511-519.	2.3	24
26	An Influence of a Single Fluorine Atom Position in the Molecular Rigid Core on Physical Properties of Orthoconic Antiferroelectric Liquid Crystal. <i>Ferroelectrics</i> , 2008, 365, 78-87.	0.3	23
27	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.	2.3	23
28	Orthoconic antiferroelectric liquid crystals containing biphenyl, terphenyl, or naphthyl mesogenic unit. <i>Opto-electronics Review</i> , 2007, 15, .	2.4	22
29	High birefringence and low viscosity negative dielectric anisotropy liquid crystals. <i>Liquid Crystals</i> , 2008, 35, 1401-1408.	0.9	22
30	A ferroelectric liquid crystal confined in cylindrical nanopores: reversible smectic layer buckling, enhanced light rotation and extremely fast electro-optically active Goldstone excitations. <i>Nanoscale</i> , 2017, 9, 19086-19099.	2.8	22
31	Terahertz properties of fluorinated liquid crystals. <i>Liquid Crystals</i> , 2013, 40, 1586-1590.	0.9	21
32	Interplay between Crystallization and Glass Transition in Nematic Liquid Crystal 2,7-Bis(4-pentylphenyl)-9,9-diethyl-9H-fluorene. <i>Journal of Physical Chemistry B</i> , 2018, 122, 10627-10636.	1.2	21
33	Dielectric properties of selected laterally fluoro-substituted 4,4'-dialkyl, dialkoxy and alkyl-alkoxy [1:1'-4:4'-1'-2'-2']terphenyls. <i>Liquid Crystals</i> , 2010, 37, 1321-1330.	0.9	19
34	The influence of the dialkylphenyltolane's difluorosubstitution on mesomorphic and dielectric properties. <i>Liquid Crystals</i> , 2018, 45, 1460-1469.	0.9	19
35	On the relaxation dynamics of a double glass-forming antiferroelectric liquid crystal. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 8673-8688.	1.3	19
36	Birefringence, permittivity, elasticity and rotational viscosity of ambient temperature, high birefringent nematic liquid crystal mixtures. <i>Liquid Crystals</i> , 2014, 41, 591-596.	0.9	18

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37	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
38	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.	2.7	17
39	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.	0.7	17
40	Vibrational Dynamics of a Chiral Smectic Liquid Crystal Undergoing Vitrification and Cold Crystallization. <i>Crystals</i> , 2020, 10, 655.	1.0	17
41	Synthesis and properties of new non-symmetric 2,5-bis(4-alkylphenylethynyl)thiophenes. <i>Liquid Crystals</i> , 2014, 41, 1647-1652.	0.9	16
42	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.	2.3	16
43	On the influence of the chiral side linking bridge type upon the synclinic vs. anticlinic balance in the case of 2,3-difluoro-terphenyl derivatives. <i>Liquid Crystals</i> , 2013, 40, 256-266.	0.9	14
44	Fast-response halogenated 4-alkyl-4-cyano-p-terphenyls as dual frequency addressing nematics. <i>Fluid Phase Equilibria</i> , 2020, 522, 112770.	1.4	14
45	Realizing Optical Persistent Spin Helix and Stern-Gerlach Deflection in an Anisotropic Liquid Crystal Microcavity. <i>Physical Review Letters</i> , 2021, 127, 190401.	2.9	14
46	Perdeuterated liquid crystals for near infrared applications. <i>Optical Materials</i> , 2016, 60, 209-213.	1.7	13
47	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.	0.9	13
48	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.	0.9	12
49	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.	0.9	12
50	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.	0.9	12
51	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.	2.3	11
52	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.	1.3	11
53	Non-conventional Alignment Surfaces for Antiferroelectric Liquid Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 2004, 422, 37-45.	0.4	10
54	High Birefringence and Low Viscosity Liquid Crystals with Negative Dielectric Anisotropy. <i>Molecular Crystals and Liquid Crystals</i> , 2009, 509, 47/[789]-59/[801].	0.4	10

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55	Pyrimidine-based ferroelectric mixtures – The influence of oligophenyl based chiral doping system. <i>Journal of Molecular Liquids</i> , 2020, 303, 112693.	2.3	10
56	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.	0.2	10
57	Optical properties of cubic blue phase liquid crystal in photonic microstructures. <i>Optics Express</i> , 2019, 27, 14270.	1.7	10
58	Insight into cold- and melt crystallization phenomena of a smectogenic liquid crystal. <i>CrystEngComm</i> , 2022, 24, 3074-3087.	1.3	10
59	Determination of Order Parameters in Laterally Fluorosubstituted Terphenyls by <sup>19</sup> F-NMR, Optical and Dielectric Anisotropies. <i>Molecular Crystals and Liquid Crystals</i> , 2011, 541, 104/[342]-117/[355].	0.4	9
60	Liquid crystals for IR: Part I – synthesis and properties of perfluoroalkyl or perfluoroalkoxy terminated oligophenyls. <i>Liquid Crystals</i> , 2020, 47, 2122-2143.	0.9	8
61	Liquid crystals for IR: Part II synthesis and properties of perfluoroalkyl- or perfluoroalkoxy-terminated tolanes. <i>Liquid Crystals</i> , 2020, 47, 2144-2160.	0.9	8
62	Modification of High Tilted Antiferroelectric Mixture for Display Applications. <i>Molecular Crystals and Liquid Crystals</i> , 2009, 509, 336/[1078]-348/[1090].	0.4	7
63	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.	1.0	7
64	The synthesis of chiral fluorinated 4-alkyl-4'-[(4-alkylphenyl)ethynyl]biphenyls. <i>Tetrahedron Letters</i> , 2013, 54, 3621-3623.	0.7	7
65	Dielectric investigation of the liquid crystal compound with the direct SmA* – SmC<sub>A</sub>* phase transition. <i>Liquid Crystals</i> , 2016, 43, 654-663.	0.9	7
66	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, .	1.5	7
67	A direct assessment of refractive indices of nematic liquid crystals at broad VIS - MWIR range. <i>Liquid Crystals</i> , 2018, 45, 703-714.	0.9	6
68	Electro-Optical and Photo Stabilization Study of Nematic Ternary Mixture. <i>Materials</i> , 2021, 14, 2283.	1.3	6
69	X-ray Investigation of Smectic Layers in Homologous Series of Chiral Three Ring Esters. <i>Molecular Crystals and Liquid Crystals</i> , 2007, 475, 137-149.	0.4	5
70	Powdered activated carbon and carbon paste electrodes: comparison of electrochemical behaviour. <i>Journal of Applied Electrochemistry</i> , 2009, 39, 593-600.	1.5	5
71	New low polar tolane cholesterics designed for infrared applications. <i>RSC Advances</i> , 2016, 6, 84231-84235.	1.7	5
72	Liquid crystal based tunable spurline filters with notch frequencies at 50 and 85 GHz. <i>Microwave and Optical Technology Letters</i> , 2018, 60, 672-679.	0.9	5

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73	Electro-Steering Tapered Fiber-Optic Device with Liquid Crystal Cladding. Journal of Sensors, 2019, 2019, 1-11.	0.6	5
74	A new mesogenic fluorene derivative: 2,7-bis(4-pentylphenyl)-9,9-diethyl-9H-fluorene. Liquid Crystals, 2019, 46, 543-549.	0.9	5
75	Orthoconic antiferroelectric liquid crystalline materials. Journal of Optical Technology (A) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5	0.2	4
76	The effect of partially fluorinated chain length on the mesomorphic properties of chiral 2,3-difluoroterphenylates. Liquid Crystals, 2020, 47, 2332-2340.	0.9	4
77	Liquid Crystals for IR: Part III - Bi- and multicomponent mixtures based on perfluoroalkyl or perfluoroalkoxy terminated oligophenyls and tolanes. Liquid Crystals, 2020, 47, 2161-2170.	0.9	4
78	Deuterated Liquid Crystals – practical synthesis of deuterium labeled 4-alkyl-4-isothiocyanato-[1,1',4',1']terphenyls. Journal of Molecular Liquids, 2022, 345, 117847.	2.3	4
79	NIR and MWIR transparent liquid crystals. , 2014, , .		3
80	Solc filters in a reflective geometry. Journal of Optics (United Kingdom), 2017, 19, 045703.	1.0	3
81	Mid-wave infrared liquid crystal shutter for breathalyzer applications. Opto-electronics Review, 2017, 25, 103-109.	2.4	3
82	Refractive index matched liquid crystal cell for laser metrology application. Liquid Crystals, 2018, 45, 1690-1698.	0.9	3
83	Multifrequency Driven Nematics. Crystals, 2019, 9, 275.	1.0	3
84	Synthesis, Mesomorphism and the Optical Properties of Alkyl-deuterated Nematogenic 4-[(2,6-Difluorophenyl)ethynyl]biphenyls. Materials, 2021, 14, 4653.	1.3	3
85	New Ferroelectric Liquid Crystalline Materials with Properties Suitable for Surface Stabilized and Deformed Helix Effects. Zhidkie Kristally I Ikh Prakticheskoe Ispol'zovanie, 2021, 21, 61-73.	0.0	3
86	Induction of the smectic A phase in liquid crystalline mixtures formulated using non-chiral compounds with positive and negative dielectric anisotropy. Phase Transitions, 2022, 95, 523-536.	0.6	3
87	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.	0.4	2
88	Long Term Stability of Polymer Stabilized Blue Phase Liquid Crystals. Journal of Display Technology, 2015, 11, 703-708.	1.3	2
89	Phase behaviour and crystal structures of 2,3-difluorinated <i>p</i> -terphenyl derivatives. Acta Crystallographica Section C, Structural Chemistry, 2021, 77, 435-440.	0.2	2
90	Light-emitting high birefringence chlorinated bistolanenes. Journal of Molecular Liquids, 2021, 341, 117267.	2.3	2

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91	The influence of orienting layers on blue phase liquid crystals in rectangular geometries. Photonics Letters of Poland, 2018, 10, 100.	0.2	2
92	Investigation of Kerr effect in a blue phase liquid crystal using wedge-cell technique. Photonics Letters of Poland, 2017, 9, 54.	0.2	2
93	UV Dichroism in Vertically Aligned Nematic Displays. Molecular Crystals and Liquid Crystals, 2008, 494, 205-212.	0.4	1
94	Application of retardation-modulation polarimetry in studies of nanocomposite materials. , 2018, , .		1
95	Thermal, optical, and volumetric studies on mixing properties of binary nematic mixtures of 9CHBT/11CHBT. Journal of Molecular Liquids, 2022, 360, 119411.	2.3	1
96	<title>Thermodynamic studies of induced antiferroelectric phases in chiral and racemic systems</title>. , 2004, , .		0
97	See-through Passive Antiferroelectric Helmet-Mounted Liquid Crystal Display. , 2007, , .		0
98	A 4k projection display for D-cinema, medical imaging and simulation. , 2007, , .		0
99	High birefringence liquid crystalline materials. , 2008, , .		0
100	66.1: High Birefringence and Negative Dielectric Anisotropy Liquid Crystal Mixtures for Vertical Alignment Applications. Digest of Technical Papers SID International Symposium, 2009, 40, 992-995.	0.1	0
101	Spectroscopic investigation of the far-infrared properties of liquid crystals. , 2013, , .		0
102	Properties of 2,3, and 2,3,3-difluorosubstituted 4-alkyl[1,1'-4,4'-terphenyl-4-yl alkyl carbonates with SmC phase. Phase Transitions, 2014, 87, 814-819.	0.6	0
103	Hybrid Young interferometer for high resolution measurement of dynamic speckle using high birefringence liquid crystal. Proceedings of SPIE, 2015, , .	0.8	0
104	Molecular Ordering of Nematic Liquid Crystals in Tubular Nanopores: Tailoring of Optical Anisotropy at the Nanoscale by Polymer Pore-surface Grafting. , 2018, , .		0
105	Polarization properties of an optical fiber biconical taper with a liquid crystal cladding. , 2019, , .		0
106	Fluorophenol-Containing Hydrogen-Bond Acidic Polysiloxane for Gas Sensing-Synthesis and Characterization. Polymers, 2022, 14, 1147.	2.0	0