

# Geoffrey R Luckhurst

## List of Publications by Year in descending order

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66  
papers

2,485  
citations

218677

26  
h-index

214800

47  
g-index

74  
all docs

74  
docs citations

74  
times ranked

1057  
citing authors

#	ARTICLE	IF	CITATIONS
1	Understanding the twist-bend nematic phase: the characterisation of 1-(4-cyanobiphenyl-4-yl)hexane (CB6OCB) and comparison with CB7CB. <i>Soft Matter</i> , 2016, 12, 6827-6840.	2.7	173
2	A missing phase found at last?. <i>Nature</i> , 2004, 430, 413-414.	27.8	149
3	The Chirality of a Twist-Bend Nematic Phase Identified by NMR Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2012, 116, 7940-7951.	2.6	129
4	Liquid crystal dimers and oligomers: Experiment and theory. <i>Macromolecular Symposia</i> , 1995, 96, 1-26.	0.7	118
5	Molecular geometry, twist-bend nematic phase and unconventional elasticity: a generalised Maier-Saupe theory. <i>Soft Matter</i> , 2014, 10, 9318-9323.	2.7	117
6	Crucial role of molecular curvature for the bend elastic and flexoelectric properties of liquid crystals: mesogenic dimers as a case study. <i>Journal of Materials Chemistry</i> , 2011, 21, 12303.	6.7	113
7	On the twist-bend nematic phase formed directly from the isotropic phase. <i>Liquid Crystals</i> , 2016, 43, 2-12.	2.2	94
8	Liquid crystal trimers. The synthesis and characterisation of the 4,4'-bis[4-(4-cyanobiphenyl-4-yl)alkoxy]biphenyls. <i>Journal of Materials Chemistry</i> , 1998, 8, 1339-1343.	6.7	93
9	Symmetric and non-symmetric liquid crystal dimers with branched terminal alkyl chains: racemic and chiral. <i>Journal of Materials Chemistry</i> , 1997, 7, 9-17.	6.7	83
10	Director deformation of a twisted chiral nematic liquid crystal cell with weak anchoring boundaries. <i>Physical Review E</i> , 1995, 52, 681-689.	2.1	79
11	A Comparison of the Conformational Distributions of the Achiral Symmetric Liquid Crystal Dimer CB7CB in the Achiral Nematic and Chiral Twist-Bend Nematic Phases. <i>Journal of Physical Chemistry B</i> , 2013, 117, 6547-6557.	2.6	78
12	Toward the Biaxial Nematic Phase of Low Molar Mass Thermotropic Mesogens: A Substantial Molecular Biaxiality in Covalently Linked Rod-Disk Dimers. <i>Journal of the American Chemical Society</i> , 2001, 123, 10115-10116.	13.7	76
13	V-Shaped Molecules: New Contenders for the Biaxial Nematic Phase. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 2834-2836.	13.8	75
14	Raman scattering studies of order parameters in liquid crystalline dimers exhibiting the nematic and twist-bend nematic phases. <i>Journal of Materials Chemistry C</i> , 2015, 3, 10007-10016.	5.5	71
15	Liquid crystals: a chemical physicist's view. <i>Liquid Crystals</i> , 2005, 32, 1335-1364.	2.2	67
16	Twist, tilt, and orientational order at the nematic to twist-bend nematic phase transition of 1,9-bis(4-cyanobiphenyl-4-yl) nonane: A dielectric, $H$ and NMR, and calorimetric study. <i>Physical Review E</i> , 2015, 92, 062505.	2.1	66
17	Enantiotopic discrimination and director organization in the twist-bend nematic phase. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 14961.	2.8	57
18	Biradicals as Spin Probes. , 1976, , 133-181.		54

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19	Interpretation of biradical electron resonance spectra. Journal of the American Chemical Society, 1970, 92, 4738-4739.	13.7	45
20	Studies of translational diffusion in the smectic A phase of a Gayâ€Berne mesogen using molecular dynamics computer simulation. Journal of Chemical Physics, 2004, 120, 394-403.	3.0	43
21	On the flexoelectric coefficients of liquid crystal monomers and dimers: a computational methodology bridging length-scales. Journal of Materials Chemistry, 2007, 17, 1039.	6.7	43
22	Pretransitional behaviour in liquid crystals. The roles of nuclear magnetic resonance spectroscopy and molecular field theory. Journal of the Chemical Society, Faraday Transactions 2, 1988, 84, 961.	1.1	38
23	Chiral solutes can seed the formation of enantiomorphic domains in a twist-bend nematic liquid crystal. Physical Review E, 2013, 87, 040501.	2.1	38
24	Molecular-field-theory approach to the Landau theory of liquid crystals: Uniaxial and biaxial nematics. Physical Review E, 2012, 85, 031705.	2.1	37
25	Specific molecular interactions in Pd(II) complexes identify a new approach to the biaxial nematic phase. Chemical Communications, 2001, , 2248-2249.	4.1	36
26	The search for thermotropic biaxial nematics. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 3177.	1.7	34
27	End-on and Side-on Nematic Liquid Crystal Dendrimers. Macromolecules, 2004, 37, 9386-9394.	4.8	28
28	The surface-induced static director distribution in thin nematic liquid crystal films: A deuterium nuclear magnetic resonance spectroscopy study. Journal of Chemical Physics, 2001, 114, 10493-10503.	3.0	25
29	X-ray scattering patterns of model liquid crystals from computer simulation: Calculation and analysis. Journal of Chemical Physics, 2003, 118, 6605-6614.	3.0	25
30	On the molecular organisation within the nematic phase of liquid crystal dimers. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 3289.	1.7	24
31	A Deuterium Nuclear Magnetic Resonance Investigation of Field Induced Director Dynamics in a Nematic Slab Subject to Magnetic and Pulsed Electric Fields. Molecular Crystals and Liquid Crystals, 2000, 347, 167-178.	0.3	24
32	Biaxiality-driven twist-bend to splay-bend nematic phase transition induced by an electric field. Science Advances, 2020, 6, .	10.3	23
33	Determination of the Maier-Saupe strength parameter from dielectric relaxation experiments: a molecular dynamics simulation study. Molecular Physics, 2001, 99, 1365-1371.	1.7	22
34	Biaxial nematics composed of flexible molecules: a molecular field theory. Liquid Crystals, 2009, 36, 1295-1308.	2.2	20
35	Molecular field theory for biaxial nematic liquid crystals composed of molecules with $C_{2v}$ group symmetry. Physical Review E, 2011, 84, 011704.	2.1	20
36	Deuterium NMR investigations of field-induced director alignment in nematic liquid crystals. Progress in Nuclear Magnetic Resonance Spectroscopy, 2016, 94-95, 37-74.	7.5	19

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37	Setting things straight in "The twist-bend nematic: a case of mistaken identity"™. <i>Liquid Crystals</i> , 2020, 47, 2098-2115.	2.2	18
38	The determination of a temperature-dependent tilt angle in a smectic C liquid crystal by electron resonance spectroscopy. <i>Molecular Physics</i> , 1971, 21, 349-352.	1.7	16
39	Electric Field-Induced Alignment of the Directors in the Smectic A Phase of 4-Octyl-4'-Cyanobiphenyl. A Deuterium NMR Study. <i>Molecular Crystals and Liquid Crystals</i> , 2000, 347, 147-156.	0.3	16
40	Synthesis and Liquid Crystal Phase Behaviour of 2-(4-Cyanophenyl)-7-n-alkylfluorenes: Luminescent Mesogens. <i>Chemistry Letters</i> , 2002, 31, 60-61.	1.3	16
41	Twist-bend nematic phase of the liquid crystal dimer CB7CB: orientational order and conical angle determined by <sup>129</sup> Xe and <sup>2</sup> H NMR spectroscopy. <i>Liquid Crystals</i> , 0, , 1-14.	2.2	16
42	Deuterium NMR investigation of field-induced director dynamics: the role of backflow. <i>Thin Solid Films</i> , 2001, 393, 399-406.	1.8	14
43	Biaxial nematics: computer simulation studies of a generic rod-disc dimer model. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 2821.	2.8	13
44	Deuterium NMR spectra of a monodomain nematic: Angular dependence of the linewidths. <i>Thin Solid Films</i> , 2008, 517, 1394-1401.	1.8	10
45	Structural insights into the twist-bend nematic phase from the integration of 2H-NMR data and modelling: CB7CB and CB6OCB as case studies. <i>Liquid Crystals</i> , 2018, 45, 2361-2375.	2.2	10
46	DEUTERIUM NMR SPECTROSCOPY AND FIELD-INDUCED DIRECTOR DYNAMICS IN LIQUID CRYSTALS. <i>Molecular Crystals and Liquid Crystals</i> , 2003, 402, 117-125.	0.9	9
47	Field-Induced Director Dynamics of Nematic 4-OCTYL-4'-Cyanobiphenyl: A Study By Deuterium NMR Spectroscopy. <i>Molecular Crystals and Liquid Crystals</i> , 2003, 398, 235-248.	0.9	9
48	A Deuterium Nuclear Magnetic Resonance Investigation of the Director Distribution in a Thin Nematic Liquid Crystal Slab. <i>Molecular Crystals and Liquid Crystals</i> , 2000, 347, 53-63.	0.3	8
49	Molecular dynamics of a binary mixture of twist-bend nematic liquid crystal dimers studied by dielectric spectroscopy. <i>Physical Review E</i> , 2016, 93, 062705.	2.1	8
50	Nematic-isotropic pretransitional behaviour in dimers with odd and even spacer lengths. <i>Liquid Crystals</i> , 1991, 9, 831-838.	2.2	7
51	Field-Induced Director Dynamics in the Nematic Phase of 4-Octyl-4'-Cyanobiphenyl. A Deuterium Nmr Investigation. <i>Molecular Crystals and Liquid Crystals</i> , 2003, 394, 77-91.	0.9	6
52	THE ALIGNMENT OF THE SMECTIC A PHASE OF 4-OCTYL-4'-CYANOBIPHENYL INDUCED BY AN ELECTRIC FIELD. A TIME-RESOLVED DEUTERIUM NMR STUDY. <i>Molecular Crystals and Liquid Crystals</i> , 2003, 402, 103-116.	0.9	6
53	Electric field-driven director oscillations in nematic liquid crystals. <i>Liquid Crystals</i> , 2005, 32, 1449-1463.	2.2	6
54	Angular dependence of <sup>2</sup> H-NMR longitudinal spin relaxation in aligned nematic 4-n-pentyl-4'-cyanobiphenyl: molecular rotation and director fluctuations. <i>Liquid Crystals</i> , 2010, 37, 773-784.	2.2	6

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55	The director and molecular dynamics of the field-induced alignment of a Gay-Berne nematic phase: An isothermal-isobaric nonequilibrium molecular dynamics simulation study. <i>Journal of Chemical Physics</i> , 2010, 132, .	3.0	6
56	Electric-field effects in the twist-bend nematic phase. , 2018, , .		6
57	On orientational order in nematic and twist-bend nematic phases: a <sup>2</sup> H-NMR study of binary mixtures of the odd dimer, 1,9-bis(4-cyanobiphenyl-4-yl) nonane, (CB9CB), and the monomer, 4-pentyl-4-cyanobiphenyl, (5CB-d <sub>2</sub> ). <i>Liquid Crystals</i> , 2018, 45, 1913-1928.	2.2	5
58	Exploring the behaviour of the twist-bend nematic phase using NMR with a variety of spin probes. <i>Liquid Crystals</i> , 2020, 47, 2074-2091.	2.2	4
59	Pretransitional behaviour of nematogenic mixtures 2H NMR investigation. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1997, 93, 3099-3105.	1.7	3
60	Macroscopic order in a nematic liquid crystal: Perturbation by spontaneous director fluctuations. <i>Physical Review E</i> , 2015, 91, 062502.	2.1	2
61	Explanation of the static and dynamic director orientation in thin nematic liquid crystal films using deuterium NMR spectroscopy. , 2003, , 313-349.		1
62	V-Shaped Molecules: New Contenders for the Biaxial Nematic Phase. <i>ChemInform</i> , 2005, 36, no.	0.0	0
63	A study of the director distribution using deuterium NMR spectroscopy and simultaneous in situ observation of the light transmittance for a nematic subject to magnetic, electric and surface fields. <i>Current Applied Physics</i> , 2006, 6, 891-896.	2.4	0
64	The 2017 Luckhurst-Samulski Prize. <i>Liquid Crystals</i> , 2018, 45, 1723-1725.	2.2	0
65	The 2019 Luckhurst-Samulski Prize. <i>Liquid Crystals</i> , 2020, 47, 2117-2119.	2.2	0
66	The 2020 Luckhurst-Samulski Prize. <i>Liquid Crystals</i> , 2021, 48, 2073-2075.	2.2	0