

# Helen F Gleeson

## List of Publications by Year in descending order

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99  
papers

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citations

230014

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325983

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103  
all docs

103  
docs citations

103  
times ranked

1711  
citing authors

#	ARTICLE	IF	CITATIONS
1	Infrared triggered smart contact lens for the treatment of presbyopia. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 210001.	1.3	3
2	Chiral nematic liquid crystal droplets as a basis for sensor systems. <i>Molecular Systems Design and Engineering</i> , 2022, 7, 607-621.	1.7	15
3	Toward <i>In Silico</i> Design of Highly Tunable Liquid Crystal Elastomers. <i>Macromolecules</i> , 2022, 55, 4320-4330.	2.2	7
4	Ferroelectric Smectic Liquid Crystals as Electrocaloric Materials. <i>Crystals</i> , 2022, 12, 809.	1.0	1
5	Early Career Stars of the Decade. <i>Crystals</i> , 2021, 11, 52.	1.0	0
6	Production of giant unilamellar vesicles and encapsulation of lyotropic nematic liquid crystals. <i>Soft Matter</i> , 2021, 17, 2234-2241.	1.2	15
7	Liquid Crystal Elastomers for Biological Applications. <i>Nanomaterials</i> , 2021, 11, 813.	1.9	40
8	A Fluorescence Sensor for Pb <sup>2+</sup> Detection Based on Liquid Crystals and Aggregation-Induced Emission Luminogens. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 22361-22367.	4.0	49
9	Understanding the physics of the auxetic response in a liquid crystal elastomer. <i>Physical Review Research</i> , 2021, 3, .	1.3	17
10	Textures of Nematic Liquid Crystal Cylindric-Section Droplets Confined by Chemically Patterned Surfaces. <i>Crystals</i> , 2021, 11, 65.	1.0	5
11	Development of Advanced Terahertz Optics Using Liquid Crystals. , 2021, , .		1
12	Robust and Flexible Optically Active 2D Membranes Based on Encapsulation of Liquid Crystals in Graphene Oxide Pockets. <i>Advanced Materials Interfaces</i> , 2021, 8, 2101432.	1.9	6
13	Influence of Liquid Crystallinity and Mechanical Deformation on the Molecular Relaxations of an Auxetic Liquid Crystal Elastomer. <i>Molecules</i> , 2021, 26, 7313.	1.7	5
14	Textile materials inspired by structural colour in nature. <i>RSC Advances</i> , 2020, 10, 24362-24367.	1.7	2
15	Protein Microgel-Stabilized Pickering Liquid Crystal Emulsions Undergo Analyte-Triggered Configurational Transition. <i>Langmuir</i> , 2020, 36, 10091-10102.	1.6	15
16	Control of Director Fields in Phospholipid-Coated Liquid Crystal Droplets. <i>Langmuir</i> , 2020, 36, 6436-6446.	1.6	20
17	Isotropic Liquid Crystal Elastomers as Exceptional Photoelastic Strain Sensors. <i>Macromolecules</i> , 2020, 53, 3709-3718.	2.2	25
18	Toward Programmed Complex Stress-Induced Mechanical Deformations of Liquid Crystal Elastomers. <i>Crystals</i> , 2020, 10, 315.	1.0	3

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19	Anomalies in the twist elastic behaviour of mixtures of calamitic and bent-core liquid crystals. <i>Liquid Crystals</i> , 2020, 47, 895-907.	0.9	5
20	Understanding liquid crystal order parameters deduced from different vibrations in polarised Raman spectroscopy. <i>Liquid Crystals</i> , 2019, 46, 219-233.	0.9	2
21	Mechanical deformations of a liquid crystal elastomer at director angles between $0^\circ$ and $90^\circ$ : Deducing an empirical model encompassing anisotropic nonlinearity. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2019, 57, 1367-1377.	2.4	20
22	Lipid coated liquid crystal droplets for the on-chip detection of antimicrobial peptides. <i>Lab on A Chip</i> , 2019, 19, 1082-1089.	3.1	65
23	Efficiency improvements in a dichroic dye-doped liquid crystal Fresnel lens. <i>Optics Express</i> , 2019, 27, 26799.	1.7	5
24	Novel devices with photosensitive elements. , 2019, , .		0
25	New insights into the nature of semi-soft elasticity and mechanical-Fr�edericksz transitions in liquid crystal elastomers. <i>Soft Matter</i> , 2018, 14, 1301-1310.	1.2	34
26	Anomalously low twist and bend elastic constants in an oxadiazole-based bent-core nematic liquid crystal and its mixtures; contributions of spontaneous chirality and polarity. <i>Journal of Materials Chemistry C</i> , 2018, 6, 980-988.	2.7	24
27	Coincident molecular auxeticity and negative order parameter in a liquid crystal elastomer. <i>Nature Communications</i> , 2018, 9, 5095.	5.8	53
28	Self-assembling, macroscopically oriented, polymer filaments; a doubly nematic organogel. <i>Soft Matter</i> , 2018, 14, 9159-9167.	1.2	4
29	Switchable Liquid Crystal Contact Lenses for the Correction of Presbyopia. <i>Crystals</i> , 2018, 8, 29.	1.0	46
30	Creation and topological charge switching of defect loops on a long fibre in the nematic liquid crystal. <i>Liquid Crystals</i> , 2018, 45, 2294-2305.	0.9	1
31	All-optical responsive azo-doped liquid crystal laser protection filter. <i>Optics Express</i> , 2018, 26, 34179.	1.7	7
32	Observing the emergence of phase biaxiality in a polar smectic A system via polarised Raman spectroscopy. <i>Journal of Materials Chemistry C</i> , 2017, 5, 1195-1205.	2.7	5
33	Electric-field-induced transport of microspheres in the isotropic and chiral nematic phase of liquid crystals. <i>Physical Review E</i> , 2017, 95, 022703.	0.8	8
34	Design considerations for liquid crystal contact lenses. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 485401.	1.3	16
35	Tuneable and switchable liquid crystal laser protection system. <i>Applied Optics</i> , 2017, 56, 8061.	0.9	12
36	Liquid crystal contact lenses with graphene electrodes and switchable focus. <i>MRS Advances</i> , 2016, 1, 3509-3515.	0.5	0

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37	Second-harmonic generation and the influence of flexoelectricity in the nematic phases of bent-core oxadiazoles. <i>Liquid Crystals</i> , 2016, 43, 1315-1332.	0.9	11
38	Understanding the unusual reorganization of the nanostructure of a dark conglomerate phase. <i>Physical Review E</i> , 2015, 91, 042504.	0.8	22
39	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.	2.7	71
40	Flexoelectricity in an oxadiazole bent-core nematic liquid crystal. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	18
41	The Nematic Phases of Bent-Core Liquid Crystals. <i>ChemPhysChem</i> , 2014, 15, 1251-1260.	1.0	79
42	Unusual electric-field-induced transformations in the dark conglomerate phase of a bent-core liquid crystal. <i>Liquid Crystals</i> , 2014, 41, 800-811.	0.9	32
43	Field induced transitions and interlayer interactions in intermediate smectic phases. <i>Journal of Materials Chemistry C</i> , 2014, 2, 147-157.	2.7	8
44	Electrically tunable refractive index in the dark conglomerate phase of a bent-core liquid crystal. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	21
45	The influence of structure on the elastic, optical and dielectric properties of nematic phases formed from bent-core molecules. <i>Journal of Materials Chemistry C</i> , 2013, 1, 6667.	2.7	44
46	The magnitude and temperature dependence of the Kerr constant in liquid crystal blue phases and the dark conglomerate phase. <i>Liquid Crystals</i> , 2013, 40, 1446-1454.	0.9	13
47	The elastic and optical properties of a bent-core thiadiazole nematic liquid crystal: the role of the bend angle. <i>Journal of Materials Chemistry C</i> , 2013, 1, 2416.	2.7	47
48	Understanding the distinctive elastic constants in an oxadiazole bent-core nematic liquid crystal. <i>Physical Review E</i> , 2012, 86, 041703.	0.8	67
49	Field-Induced Transitions Between Antiferroelectric and Ferrielectric Phases. <i>Ferroelectrics</i> , 2012, 431, 40-47.	0.3	10
50	Reorientation mechanisms in smectic A liquid crystals. <i>Liquid Crystals</i> , 2012, 39, 1261-1275.	0.9	8
51	A field-induced ferrielectric liquid crystal phase. <i>Applied Physics Letters</i> , 2011, 98, 043501.	1.5	27
52	Comment on "Raman Scattering Study of Phase Biaxiality in a Thermotropic Bent-Core Nematic Liquid Crystal". <i>Physical Review Letters</i> , 2011, 107, 109801; author reply 109802.	2.9	8
53	Optical measurements of orientational order in uniaxial and biaxial nematic liquid crystals. <i>Liquid Crystals</i> , 2010, 37, 949-959.	0.9	29
54	Stable field-induced ferrielectric liquid crystal phases in devices. <i>Applied Physics Letters</i> , 2009, 94, 153507.	1.5	8

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55	Revealing the uniaxial to biaxial nematic liquid crystal phase transition via distinctive electroconvection. <i>Applied Physics Letters</i> , 2009, 94, 193507.	1.5	48
56	Formation of Monolayer Graphene by Annealing Sacrificial Nickel Thin Films. <i>Journal of Physical Chemistry C</i> , 2009, 113, 16565-16567.	1.5	68
57	Unusual properties of a bent-core liquid-crystalline fluid. <i>Soft Matter</i> , 2009, 5, 463-471.	1.2	126
58	Thermotropic biaxial nematic order parameters and phase transitions deduced by Raman scattering. <i>Europhysics Letters</i> , 2008, 82, 56001.	0.7	84
59	Continuously rotating chiral liquid crystal droplets in a linearly polarized laser trap. <i>Optics Express</i> , 2008, 16, 6877.	1.7	45
60	Accurate modelling of multilayer chiral nematic devices through the Berreman 4 $\times$ 4 matrix methods. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 3579-3586.	1.3	17
61	Using the full Raman depolarisation in the determination of the order parameters in liquid crystal systems. <i>European Physical Journal E</i> , 2007, 24, 119-127.	0.7	36
62	Remarkably wide four-layer smectic phases in mixtures of liquid crystals and highly chiral dopants. <i>Journal of Materials Chemistry</i> , 2006, 16, 3753.	6.7	32
63	An experimental investigation of discrete changes in pitch in a thin, planar chiral nematic device. <i>Liquid Crystals</i> , 2006, 33, 503-510.	0.9	28
64	Examination of the interlayer strength of smectic liquid crystals through the study of partially fluorinated and branched fluorinated end-groups. <i>Journal of Materials Chemistry</i> , 2006, 16, 2181.	6.7	27
65	Resonant X-ray Scattering: A Tool for Structure Elucidation in Liquid Crystals. <i>ChemPhysChem</i> , 2006, 7, 321-328.	1.0	37
66	Laser manipulation in liquid crystals: an approach to microfluidics and micromachines. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2006, 364, 2789-2805.	1.6	55
67	Mechanisms of switching in an antiferroelectric liquid crystal device revealed by time-resolved X-ray scattering. <i>Liquid Crystals</i> , 2006, 33, 451-457.	0.9	4
68	Investigation into the Effects of Optical Tilt Angle Profile, Biaxiality and Dispersion of the Optic Axis on the Calculation of Reflection Spectra of SmC* Liquid Crystal Films. <i>Ferroelectrics</i> , 2005, 315, 205-211.	0.3	0
69	Optical Bragg Scattering from a Polymer-Stabilized Anti-Ferroelectric Liquid Crystal. <i>Ferroelectrics</i> , 2005, 321, 53-61.	0.3	3
70	The Effect of Polymer Stabilization on Phase Transitions in a Series of Antiferroelectric Heterocyclic Esters. <i>Molecular Crystals and Liquid Crystals</i> , 2005, 439, 135/[2001]-145/[2011].	0.4	1
71	The Effect of Electric Fields on Selective Reflection in the SmC* Phase of Two Antiferroelectric Liquid Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 2005, 439, 125/[1991]-133/[1999].	0.4	1
72	Phase Behaviour of an Antiferroelectric Liquid Crystal Studied by Raman Spectroscopy. <i>Ferroelectrics</i> , 2004, 311, 59-66.	0.3	6

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73	Mechanisms of optical angular momentum transfer to nematic liquid crystalline droplets. Applied Physics Letters, 2004, 84, 4292-4294.	1.5	53
74	Optical Properties of Cholesteric Materials used in Surface Stabilised Cholesteric Texture Devices. Molecular Crystals and Liquid Crystals, 2004, 411, 57-70.	0.4	9
75	On the temperature dependence of the tilt and spontaneous polarisation in high tilt antiferroelectric liquid crystals Electronic supplementary information (ESI) available: derivation of the expression for the free energy expansion in the biaxial SmC* phase. See <a href="http://www.rsc.org/suppdata/jm/b3/b314747a/">http://www.rsc.org/suppdata/jm/b3/b314747a/</a> . Journal of Materials Chemistry, 2004, 14, 1480.	6.7	31
76	Liquid Crystals, the Visual System and Polarization Sensitivity. Liquid Crystals Today, 2004, 13, 1-7.	2.3	0
77	The transverse trapping force of an optical trap: Factors affecting its measurement. Journal of Modern Optics, 2003, 50, 1521-1532.	0.6	9
78	An experimental and theoretical investigation into the reflection spectra of SmC* and SmCA* phases. Journal of Materials Chemistry, 2003, 13, 353-359.	6.7	12
79	STRUCTURES AND ELECTRIC FIELD EFFECTS IN FERRO-, FERRI- AND ANTIFERRO-ELECTRIC LIQUID CRYSTAL DEVICES. Molecular Crystals and Liquid Crystals, 2003, 401, 97-109.	0.4	3
80	Optical Bragg Reflections from a Series of Antiferroelectric Heterocyclic Esters. Ferroelectrics, 2002, 277, 153-167.	0.3	11
81	Elastic Constants of an Achiral Smectic-C Material. Ferroelectrics, 2002, 277, 35-45.	0.3	8
82	Laser-induced concentric colour domains in a cholesteric liquid crystal mixture containing a nematic azobenzene dopant. Liquid Crystals, 2002, 29, 19-26.	0.9	41
83	An electrically addressed liquid crystal filter for tunable lasers. Optics Communications, 2002, 212, 165-168.	1.0	5
84	The Synthesis and Mesomorphic Properties of Some Novel Antiferroelectric Liquid Crystals. Molecular Crystals and Liquid Crystals, 2001, 365, 213-220.	0.3	6
85	An Examination of the Drug Transport Properties of Liquid Crystal Embedded Membranes. Molecular Crystals and Liquid Crystals, 2001, 367, 435-443.	0.3	6
86	Effects of Pulsed Electric Fields on a Nematic Device with a Ferroelectric Ceramic Substrate. Molecular Crystals and Liquid Crystals, 2001, 368, 9-15.	0.3	1
87	Phase Behaviour of Polymer-Liquid Crystal and Polymer-Polymer Blends. Molecular Crystals and Liquid Crystals, 2001, 365, 297-304.	0.3	3
88	A Comparison of the Optical and Steric Tilt in Antiferroelectric Liquid Crystals. Molecular Crystals and Liquid Crystals, 1999, 330, 449-456.	0.3	1
89	A Study of Photochromic Azobenzene Liquid Crystals as Controlled Release Drug Delivery Systems. Molecular Crystals and Liquid Crystals, 1999, 331, 375-382.	0.3	8
90	The Interaction of Poled Thin Film Ferroelectrics with Nematic Liquid Crystals. Molecular Crystals and Liquid Crystals, 1999, 329, 491-498.	0.3	1

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91	Study of Optical Switching and Reorientation in Liquid Crystals of Homologous Series of 4-n-butyl-4'-n-alkoxyazobenzenes. <i>Molecular Crystals and Liquid Crystals</i> , 1998, 320, 433-444.	0.3	8
92	Evolution of irreversible layer deformations in FLC devices caused by high electric field treatment. <i>Ferroelectrics</i> , 1998, 214, 35-42.	0.3	10
93	Time Resolved FT-IR Study of the Switching Dynamics of FLC Devices. <i>Molecular Crystals and Liquid Crystals</i> , 1997, 302, 41-46.	0.3	1
94	Heterocyclic Esters Exhibiting Frustrated Liquid Crystal Phases. <i>Molecular Crystals and Liquid Crystals</i> , 1997, 299, 19-25.	0.3	43
95	Novel Features in Blue Phase Kossel Diagrams. <i>Molecular Crystals and Liquid Crystals</i> , 1997, 302, 145-150.	0.3	1
96	Apparatus for simultaneous observation of the electro-optic response and small angle x-ray scattering in liquid crystals. <i>Review of Scientific Instruments</i> , 1995, 66, 3563-3568.	0.6	13
97	Dielectric permittivity properties of a fulgide dye guest-host liquid crystal. <i>Liquid Crystals</i> , 1995, 19, 421-425.	0.9	30
98	Liquid crystal blue phases: stability, field effects and alignment. <i>Liquid Crystals</i> , 0, , 1-12.	0.9	13
99	From understanding structures in antiferro-ferri and ferroelectric liquid crystals to an unusual electro-optic effect in a bent-core nematic; a celebration of innovative materials. <i>Liquid Crystals</i> , 0, , 1-10.	0.9	0