

# Alejandro D Rey

## List of Publications by Year in descending order

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191  
papers

3,651  
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196777

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194  
docs citations

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times ranked

1961  
citing authors

#	ARTICLE	IF	CITATIONS
1	Piezoelasticity and stability limits of monocrystal methane gas hydrates: Atomistic-continuum characterization. Canadian Journal of Chemical Engineering, 2023, 101, 639-650.	0.9	7
2	Thermal fluctuation spectrum of flexoelectric viscoelastic semiflexible filaments and polymers: A line liquid crystal model. Canadian Journal of Chemical Engineering, 2022, 100, 3162-3173.	0.9	3
3	Wrinkling pattern formation with periodic nematic orientation: From egg cartons to corrugated surfaces. Physical Review E, 2022, 105, 034702.	0.8	4
4	TinyLev acoustically levitated water: Direct observation of collective, inter-droplet effects through morphological and thermal analysis of multiple droplets. Journal of Colloid and Interface Science, 2022, 619, 84-95.	5.0	4
5	Complex Nanowrinkling in Chiral Liquid Crystal Surfaces: From Shaping Mechanisms to Geometric Statistics. Nanomaterials, 2022, 12, 1555.	1.9	0
6	Shape and structural relaxation of colloidal tactoids. Nature Communications, 2022, 13, 2778.	5.8	7
7	Structure and Pattern Formation in Biological Liquid Crystals: Insights From Theory and Simulation of Self-Assembly and Self-Organization. , 2022, 2, .		2
8	Recent advances in density functional theory and molecular dynamics simulation of mechanical, interfacial, and thermal properties of natural gas hydrates in Canada. Canadian Journal of Chemical Engineering, 2022, 100, 2557-2571.	0.9	2
9	Dynamic viscosity of methane hydrate systems from non-Einsteinian, plasma-functionalized carbon nanotube nanofluids. Nanoscale, 2022, 14, 10211-10225.	2.8	7
10	Multiscale Piezoelasticity of Methane Gas Hydrates: From Bonds to Cages to Lattices. Energy & Fuels, 2022, 36, 10591-10600.	2.5	10
11	Nucleation and growth of cholesteric collagen tactoids: A time-series statistical analysis based on integration of direct numerical simulation (DNS) and long short-term memory recurrent neural network (LSTM-RNN). Journal of Colloid and Interface Science, 2021, 582, 859-873.	5.0	21
12	Biaxial nanowrinkling in cholesteric surfaces: Egg carton surfaces through chiral anchoring. Colloids and Interface Science Communications, 2021, 41, 100372.	2.0	7
13	First-Principles Elastic and Anisotropic Characteristics of Structure-H Gas Hydrate under Pressure. Crystals, 2021, 11, 477.	1.0	9
14	Equation of state modeling and force field-based molecular dynamics simulations of supercritical polyethylene-hexane-ethylene systems. Journal of Molecular Graphics and Modelling, 2020, 100, 107709.	1.3	0
15	Heat Capacity, Thermal Expansion Coefficient, and Grüneisen Parameter of CH <sub>4</sub> , CO <sub>2</sub> , and C <sub>2</sub> H <sub>6</sub> Hydrates and Ice Ih via Density Functional Theory and Phonon Calculations. Crystal Growth and Design, 2020, 20, 5947-5955.	1.4	14
16	Elastic properties and anisotropic behavior of structure-H (sH) gas hydrate from first principles. Chemical Engineering Science, 2020, 227, 115948.	1.9	18
17	Rate of Entropy Production in Evolving Interfaces and Membranes under Astigmatic Kinematics: Shape Evolution in Geometric-Dissipation Landscapes. Entropy, 2020, 22, 909.	1.1	8
18	Relaxation dynamics in bio-colloidal cholesteric liquid crystals confined to cylindrical geometry. Nature Communications, 2020, 11, 4616.	5.8	32

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19	From Infrared Spectra to Macroscopic Mechanical Properties of sH Gas Hydrates through Atomistic Calculations. <i>Molecules</i> , 2020, 25, 5568.	1.7	12
20	Mechanogeometry of nanowrinkling in cholesteric liquid crystal surfaces. <i>Physical Review E</i> , 2020, 101, 062705.	0.8	6
21	THF Hydrates as Model Systems for Natural Gas Hydrates: Comparing Their Mechanical and Vibrational Properties. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 16588-16596.	1.8	20
22	Multiscale Modeling and Simulation of Water and Methane Hydrate Crystal Interface. <i>Crystal Growth and Design</i> , 2019, 19, 5142-5151.	1.4	18
23	Structural properties of sH hydrate: a DFT study of anisotropy and equation of state. <i>Molecular Simulation</i> , 2019, 45, 1524-1537.	0.9	15
24	Molecular Dynamics Study of the Effect of L-Alanine Chiral Dopants on Diluted Chromonic Solutions. <i>Journal of Physical Chemistry B</i> , 2019, 123, 8995-9010.	1.2	6
25	Characterization of nucleation of methane hydrate crystals: Interfacial theory and molecular simulation. <i>Journal of Colloid and Interface Science</i> , 2019, 557, 556-567.	5.0	21
26	Thermodynamic modelling of acidic collagenous solutions: from free energy contributions to phase diagrams. <i>Soft Matter</i> , 2019, 15, 1833-1846.	1.2	18
27	Effects of Sodium and Magnesium Cations on the Aggregation of Chromonic Solutions Using Molecular Dynamics. <i>Journal of Physical Chemistry B</i> , 2019, 123, 1718-1732.	1.2	9
28	Theoretical Platform for Liquid-Crystalline Self-Assembly of Collagen-Based Biomaterials. <i>Frontiers in Physics</i> , 2019, 7, .	1.0	15
29	Surface Anchoring Effects on the Formation of Two-Wavelength Surface Patterns in Chiral Liquid Crystals. <i>Crystals</i> , 2019, 9, 190.	1.0	8
30	Molecular dynamics characterization of the water-methane, ethane, and propane gas mixture interfaces. <i>Chemical Engineering Science</i> , 2019, 208, 114769.	1.9	20
31	Hydrogen-bonded LC nanocomposites: characterisation of nanoparticle-LC interactions by solid-state NMR and FTIR spectroscopies. <i>Liquid Crystals</i> , 2019, 46, 1067-1078.	0.9	5
32	Infrared Spectra of Gas Hydrates from First-Principles. <i>Journal of Physical Chemistry B</i> , 2019, 123, 936-947.	1.2	19
33	Extracting shape from curvature evolution in moving surfaces. <i>Soft Matter</i> , 2018, 14, 1465-1473.	1.2	9
34	Molecular Dynamics Characterization of Temperature and Pressure Effects on the Water-Methane Interface. <i>Colloids and Interface Science Communications</i> , 2018, 24, 75-81.	2.0	24
35	Electrorheological Model Based on Liquid Crystals Membranes with Applications to Outer Hair Cells. <i>Fluids</i> , 2018, 3, 35.	0.8	8
36	Multi-step modeling of liquid crystals using ab initio molecular packing and hybrid quantum mechanics/molecular mechanics simulations. <i>Journal of Theoretical and Computational Chemistry</i> , 2017, 16, 1750012.	1.8	1

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37	Generalized Boussinesq-Scriven surface fluid model with curvature dissipation for liquid surfaces and membranes. <i>Journal of Colloid and Interface Science</i> , 2017, 503, 103-114.	5.0	11
38	Molecular dynamics of dilute binary chromonic liquid crystal mixtures. <i>Molecular Systems Design and Engineering</i> , 2017, 2, 223-234.	1.7	11
39	Morphology of elastic nematic liquid crystal membranes. <i>Soft Matter</i> , 2017, 13, 5366-5380.	1.2	16
40	Two negative minima of the first normal stress difference in a cellulose-based cholesteric liquid crystal: Helix uncoiling. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2017, 55, 821-830.	2.4	16
41	Effect of Guest Size on the Mechanical Properties and Molecular Structure of Gas Hydrates from First-Principles. <i>Crystal Growth and Design</i> , 2017, 17, 6407-6416.	1.4	33
42	Molecular mobility in carbon dioxide hydrates. <i>Molecular Systems Design and Engineering</i> , 2017, 2, 500-506.	1.7	7
43	Biological plywood film formation from para-nematic liquid crystalline organization. <i>Soft Matter</i> , 2017, 13, 8076-8088.	1.2	20
44	Nanoscale interfacial defect shedding in a growing nematic droplet. <i>Physical Review E</i> , 2017, 96, 022707.	0.8	3
45	The twist-to-bend compliance of the <i>Rheum rhabarbarum</i> petiole: integrated computations and experiments. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2017, 20, 343-354.	0.9	7
46	Atomistic modeling of structure II gas hydrate mechanics: Compressibility and equations of state. <i>AIP Advances</i> , 2016, 6, .	0.6	31
47	Hydrogen-Bonded Liquid Crystal Nanocomposites. <i>Langmuir</i> , 2016, 32, 8442-8450.	1.6	14
48	Theory and Simulation of Cholesteric Film Formation Flows of Dilute Collagen Solutions. <i>Langmuir</i> , 2016, 32, 11799-11812.	1.6	19
49	Geometric reconstruction of biological orthogonal plywoods. <i>Soft Matter</i> , 2016, 12, 1184-1191.	1.2	8
50	Nematic Liquid Crystals under Conical Capillary Confinement: Theoretical Study of Geometry Effects on Disclination Lines. <i>Molecular Crystals and Liquid Crystals</i> , 2015, 612, 56-63.	0.4	0
51	DFT Study of Gold Surfaces' Ligand Interactions: Alkanethiols versus Halides. <i>Journal of Physical Chemistry C</i> , 2015, 119, 11909-11913.	1.5	5
52	Theory and simulation of ovoidal disclination loops in nematic liquid crystals under conical confinement. <i>Liquid Crystals</i> , 2015, 42, 506-519.	0.9	3
53	Ideal Strength of Methane Hydrate and Ice I <sub>h</sub> from First-Principles. <i>Crystal Growth and Design</i> , 2015, 15, 5301-5309.	1.4	39
54	Nano-scale surface wrinkling in chiral liquid crystals and plant-based plywoods. <i>Soft Matter</i> , 2015, 11, 1127-1139.	1.2	18

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55	<i>Ab initio</i> DFT study of structural and mechanical properties of methane and carbon dioxide hydrates. <i>Molecular Simulation</i> , 2015, 41, 572-579.	0.9	35
56	Structure characterisation method for ideal and non-ideal twisted plywoods. <i>Soft Matter</i> , 2014, 10, 9446-9453.	1.2	14
57	Computational study of the elastic properties of Rheum rhabarbarum tissues via surrogate models of tissue geometry. <i>Journal of Structural Biology</i> , 2014, 185, 285-294.	1.3	17
58	Structure and dynamics of biological liquid crystals. <i>Liquid Crystals</i> , 2014, 41, 430-451.	0.9	31
59	Stress Sensor Device Based on Flexoelectric Liquid Crystalline Membranes. <i>ChemPhysChem</i> , 2014, 15, 1405-1412.	1.0	14
60	Dynamic wetting model for the isotropic-to-nematic transition over a flat substrate. <i>Soft Matter</i> , 2014, 10, 1611.	1.2	9
61	Theoretical predictions of disclination loop growth for nematic liquid crystals under capillary confinement. <i>Physical Review E</i> , 2014, 90, 042501.	0.8	10
62	Self-assembly via branching morphologies in nematic liquid-crystal nanocomposites. <i>Physical Review E</i> , 2014, 90, 020501.	0.8	11
63	Nanostructured free surfaces in plant-based plywoods driven by chiral capillarity. <i>Colloids and Interface Science Communications</i> , 2014, 1, 23-26.	2.0	18
64	Actuation of flexoelectric membranes in viscoelastic fluids with applications to outer hair cells. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20130369.	1.6	19
65	Chiral graded structures in biological plywoods and in the beetle cuticle. <i>Colloids and Interface Science Communications</i> , 2014, 3, 18-22.	2.0	11
66	Oscillating fronts produced by spinodal decomposition of metastable ordered phases. <i>Soft Matter</i> , 2013, 9, 10335.	1.2	2
67	Defect textures in polygonal arrangements of cylindrical inclusions in cholesteric liquid crystal matrices. <i>Soft Matter</i> , 2013, 9, 1054-1065.	1.2	14
68	Bioinspired model of mechanical energy harvesting based on flexoelectric membranes. <i>Physical Review E</i> , 2013, 87, 022505.	0.8	19
69	<i>Ab initio</i> DFT study of 6-mercapto-hexane SAMs: effect of Au surface defects on the monolayer assembly. <i>Molecular Simulation</i> , 2013, 39, 292-298.	0.9	7
70	A Multiscale Mechanical Model for Plant Tissue Stiffness. <i>Polymers</i> , 2013, 5, 730-750.	2.0	17
71	Disclination Shape Analysis for Nematic Liquid Crystals under Micron-range Capillary Confinement. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1526, 1.	0.1	1
72	Hierarchical Microstructure and Elastic Properties of Leaf Petiole Tissue in <i>Philodendron melinonii</i> . <i>Materials Research Society Symposia Proceedings</i> , 2012, 1420, 67.	0.1	1

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73	Phase equilibrium and structure formation in gold nanoparticlesâ€”nematic liquid crystal composites: experiments and theory. <i>Soft Matter</i> , 2012, 8, 2860.	1.2	33
74	Thermodynamic Modelling of Phase Equilibrium in Nanoparticles â€” Nematic Liquid Crystals Composites. <i>Molecular Crystals and Liquid Crystals</i> , 2012, 553, 118-126.	0.4	14
75	Characterization of Pressure Effects on the Cohesive Properties and Structure of Hexane and Polyethylene Using Molecular Dynamics Simulations. <i>Macromolecular Theory and Simulations</i> , 2012, 21, 535-543.	0.6	7
76	Linear oscillatory dynamics of flexoelectric membranes embedded in viscoelastic media with applications to outer hair cells. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2012, 185-186, 1-17.	1.0	22
77	Theory and modeling of nematic disclination branching under capillary confinement. <i>Soft Matter</i> , 2012, 8, 11135.	1.2	12
78	Hedgehog defects in mixtures of a nematic liquid crystal and a non-nematogenic component. <i>Soft Matter</i> , 2012, 8, 1395-1403.	1.2	11
79	Modelling complex liquid crystal mixtures: from polymer dispersed mesophase to nematic nanocolloids. <i>Molecular Simulation</i> , 2012, 38, 735-750.	0.9	26
80	Liquid crystal models of biological materials and silk spinning. <i>Biopolymers</i> , 2012, 97, 374-396.	1.2	50
81	A model for mesophase wetting thresholds of sheets, fibers and fiber bundles. <i>Soft Matter</i> , 2011, 7, 5002.	1.2	13
82	Microfibril organization modes in plant cell walls of variable curvature: a model system for two dimensional anisotropic soft matter. <i>Soft Matter</i> , 2011, 7, 7078.	1.2	10
83	A good and computationally efficient polynomial approximation to the Maierâ€™Saupe nematic free energy. <i>Liquid Crystals</i> , 2011, 38, 201-205.	0.9	11
84	Faceted particles embedded in a nematic liquid crystal matrix: Textures, stability and filament formation. <i>Soft Matter</i> , 2011, 7, 8592.	1.2	11
85	Mechanical model for fiber-laden membranes. <i>Continuum Mechanics and Thermodynamics</i> , 2011, 23, 45-61.	1.4	9
86	Thermodynamic Model of Structure and Shape in Rigid Polymerâ€”Laden Membranes. <i>Macromolecular Theory and Simulations</i> , 2010, 19, 113-126.	0.6	4
87	Structure and rheology of fiber-laden membranes via integration of nematodynamics and membranodynamics. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2010, 165, 32-44.	1.0	16
88	Modeling Textural Processes during Self-Assembly of Plant-Based Chiral-Nematic Liquid Crystals. <i>Polymers</i> , 2010, 2, 766-785.	2.0	26
89	Towards understanding palladium doping of carbon supports: a first-principles molecular dynamics investigation. <i>Journal of Materials Chemistry</i> , 2010, 20, 6859.	6.7	2
90	Liquid crystal models of biological materials and processes. <i>Soft Matter</i> , 2010, 6, 3402.	1.2	193

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91	Micromechanics Model of Liquid Crystal Anisotropic Triple Lines with Applications to Self-Assembly. <i>Langmuir</i> , 2010, 26, 13033-13037.	1.6	9
92	Energetics and dynamics of hydrogen adsorption, desorption and migration on a carbon-supported palladium cluster. <i>Journal of Materials Chemistry</i> , 2010, 20, 10503.	6.7	15
93	Edge dislocation core structure in lamellar smectic-A liquid crystals. <i>Soft Matter</i> , 2010, 6, 1117.	1.2	10
94	Thermodynamic Modeling of Polymer Solution Interface. <i>Macromolecular Theory and Simulations</i> , 2009, 18, 127-137.	0.6	13
95	Interfacial properties of compressible polymer solutions. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2009, 47, 640-654.	2.4	8
96	Thermodynamics, Transition Dynamics, and Texturing in Polymer-Dispersed Liquid Crystals with Mesogens Exhibiting a Direct Isotropic/Smectic-A Transition. <i>Macromolecules</i> , 2009, 42, 9486-9497.	2.2	35
97	Thermodynamic modelling of carbonaceous mesophase mixtures. <i>Liquid Crystals</i> , 2009, 36, 75-92.	0.9	11
98	Metastable Nematic Preordering in Smectic Liquid Crystalline Phase Transitions. <i>Macromolecules</i> , 2009, 42, 3841-3844.	2.2	11
99	Shape-dynamic growth, structure, and elasticity of homogeneously oriented spherulites in an isotropic/smectic-A mesophase transition. <i>Liquid Crystals</i> , 2009, 36, 1125-1137.	0.9	8
100	Non-classical scaling for forced wetting of a nematic fluid on a polymeric fiber. <i>Soft Matter</i> , 2009, 5, 2277.	1.2	4
101	Linear viscoelastic model for bending and torsional modes in fluid membranes. <i>Rheologica Acta</i> , 2008, 47, 861-871.	1.1	19
102	Mechanical Model for Filament Buckling and Growth by Phase Ordering. <i>Langmuir</i> , 2008, 24, 662-665.	1.6	4
103	Entropic Behavior of Binary Carbonaceous Mesophases. <i>Entropy</i> , 2008, 10, 183-199.	1.1	10
104	Ringlike cores of cylindrically confined nematic point defects. <i>Journal of Chemical Physics</i> , 2007, 126, 094907.	1.2	28
105	Point and ring defects in nematics under capillary confinement. <i>Journal of Chemical Physics</i> , 2007, 127, 104902.	1.2	41
106	Computational modelling of nematic phase ordering by film and droplet growth over heterogeneous substrates. <i>Liquid Crystals</i> , 2007, 34, 1397-1413.	0.9	16
107	Capillary models for liquid crystal fibers, membranes, films, and drops. <i>Soft Matter</i> , 2007, 3, 1349.	1.2	85
108	Nanoscale Analysis of Defect Shedding from Liquid Crystal Interfaces. <i>Nano Letters</i> , 2007, 7, 1474-1479.	4.5	37

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109	Growth and structure of nematic spherulites under shallow thermal quenches. <i>Continuum Mechanics and Thermodynamics</i> , 2007, 19, 37-58.	1.4	26
110	Mechanical Model for Anisotropic Curved Interfaces with Applications to Surfactant-Laden Liquid~Liquid Crystal Interfaces. <i>Langmuir</i> , 2006, 22, 219-228.	1.6	31
111	Anisotropic Fluctuation Model for Surfactant-Laden Liquid~Liquid Crystal Interfaces. <i>Langmuir</i> , 2006, 22, 3491-3493.	1.6	13
112	Computational thermodynamics of multiphase polymer~liquid crystal materials. <i>Computational Materials Science</i> , 2006, 38, 325-339.	1.4	11
113	Polar fluid model of viscoelastic membranes and interfaces. <i>Journal of Colloid and Interface Science</i> , 2006, 304, 226-238.	5.0	21
114	Magnetic Field-Induced Shape Transitions in Multiphase Polymer-Liquid Crystal Blends. <i>Macromolecular Theory and Simulations</i> , 2006, 15, 469-486.	0.6	11
115	Liquid crystal model of membrane flexoelectricity. <i>Physical Review E</i> , 2006, 74, 011710.	0.8	27
116	Dynamic interactions between nematic point defects in the spinning extrusion duct of spiders. <i>Journal of Chemical Physics</i> , 2006, 124, 144904.	1.2	11
117	Interfacial nematodynamics of heterogeneous curved isotropic-nematic moving fronts. <i>Journal of Chemical Physics</i> , 2006, 124, 244902.	1.2	30
118	Optical and structural modeling of disclination lattices in carbonaceous mesophases. <i>Journal of Chemical Physics</i> , 2005, 122, 034902.	1.2	12
119	Texture Rules for Concentrated Filled Nematics. <i>Physical Review Letters</i> , 2005, 95, 127802.	2.9	30
120	Mechanics of soft-solid~liquid-crystal interfaces. <i>Physical Review E</i> , 2005, 72, 011706.	0.8	23
121	Steady state and transient rheological behavior of mesophase pitch, Part II: Theory. <i>Journal of Rheology</i> , 2005, 49, 175-195.	1.3	13
122	Thermodynamics of soft anisotropic contact lines. <i>Journal of Chemical Physics</i> , 2004, 121, 2390-2402.	1.2	4
123	Line tension vector thermodynamics of anisotropic contact lines. <i>Physical Review E</i> , 2004, 69, 041707.	0.8	9
124	Thermodynamics of soft anisotropic interfaces. <i>Journal of Chemical Physics</i> , 2004, 120, 2010-2019.	1.2	29
125	Texture formation under phase ordering and phase separation in polymer-liquid crystal mixtures. <i>Journal of Chemical Physics</i> , 2004, 121, 9733-9743.	1.2	40
126	Impact of texture on stress growth in thermotropic liquid crystalline polymers subjected to step-shear. <i>Rheologica Acta</i> , 2004, 44, 135-149.	1.1	9



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127	Interfacial Thermodynamics of Polymeric Mesophases. <i>Macromolecular Theory and Simulations</i> , 2004, 13, 686-696.	0.6	9
128	Chiral front propagation in liquid-crystalline materials: Formation of the planar monodomain twisted plywood architecture of biological fibrous composites. <i>Physical Review E</i> , 2004, 69, 011706.	0.8	38
129	Thermodynamic Model of Surfactant Adsorption on Soft Liquid Crystal Interfaces. <i>Langmuir</i> , 2004, 20, 11473-11479.	1.6	21
130	Texture dependence of capillary instabilities in nematic liquid crystalline fibres. <i>Liquid Crystals</i> , 2004, 31, 1271-1284.	0.9	15
131	Computational modelling of multi-phase equilibria of mesogenic mixtures. <i>Computational Materials Science</i> , 2004, 29, 152-164.	1.4	13
132	Transient rheology of discotic mesophases. <i>Rheologica Acta</i> , 2003, 42, 590-604.	1.1	24
133	A Model of Capillary Rise of Nematic Liquid Crystals. <i>Langmuir</i> , 2003, 19, 3677-3685.	1.6	12
134	Shear-induced textural transitions in flow-aligning liquid crystal polymers. <i>Physical Review E</i> , 2003, 68, 061704.	0.8	28
135	Theoretical and Computational Rheology for Discotic Nematic Liquid Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 2003, 391, 57-94.	0.4	28
136	Nematostatics of triple lines. <i>Physical Review E</i> , 2003, 67, 011706.	0.8	18
137	Simulation of texture formation processes in carbonaceous mesophase fibres. <i>Liquid Crystals</i> , 2003, 30, 377-389.	0.9	12
138	Cahn-Hoffman capillarity vector thermodynamics for liquid crystal interfaces. <i>Physical Review E</i> , 2002, 66, 021704.	0.8	27
139	Generalized cholesteric permeation flows. <i>Physical Review E</i> , 2002, 65, 022701.	0.8	20
140	Cahn-Hoffman capillarity vector thermodynamics for curved liquid crystal interfaces with applications to fiber instabilities. <i>Journal of Chemical Physics</i> , 2002, 117, 5062-5071.	1.2	32
141	Defect Nucleation and Annihilation in Sheared Polymeric Liquid Crystals. <i>Materials Research Society Symposia Proceedings</i> , 2002, 734, 441.	0.1	1
142	Simulation of chiral liquid crystal self-assembly: analogies with the structural formation of biological fibrous composites. <i>Materials Research Society Symposia Proceedings</i> , 2002, 735, 741.	0.1	0
143	DYNAMICAL PHENOMENA IN LIQUID-CRYSTALLINE MATERIALS. <i>Annual Review of Fluid Mechanics</i> , 2002, 34, 233-266.	10.8	187
144	Simple shear and small amplitude oscillatory rectilinear shear permeation flows of cholesteric liquid crystals. <i>Journal of Rheology</i> , 2002, 46, 225-240.	1.3	31

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145	Capillary Thermodynamics of Nematic Polymer Interfaces. <i>Macromolecular Theory and Simulations</i> , 2002, 11, 944-952.	0.6	3
146	Capillary instabilities in a thin nematic liquid crystalline fiber embedded in a viscous matrix. <i>Continuum Mechanics and Thermodynamics</i> , 2002, 14, 263-279.	1.4	6
147	Generalized Young-Laplace Equation for Nematic Liquid Crystal Interfaces and its Application to Free-Surface Defects. <i>Molecular Crystals and Liquid Crystals</i> , 2001, 369, 63-74.	0.3	10
148	Mechanical Theory for Nematic Thin Films. <i>Langmuir</i> , 2001, 17, 1922-1927.	1.6	7
149	Computational Modelling of Mesophase Pitches <sup>TM</sup> Shear Rheology. <i>Materials Research Society Symposia Proceedings</i> , 2001, 709, 1.	0.1	0
150	Capillary Instabilities in a Thin Nematic Liquid Crystalline Fiber Embedded in a Viscous Matrix. <i>Materials Research Society Symposia Proceedings</i> , 2001, 709, 1.	0.1	0
151	Theory and Simulation of Texture Transformations in Chiral Systems: Applications to Biological Fibrous Composites. <i>Materials Research Society Symposia Proceedings</i> , 2001, 709, 1.	0.1	1
152	Mechanical theory of structural disjoining pressure in liquid crystal films. <i>Physical Review E</i> , 2000, 61, 4632-4635.	0.8	6
153	Young's Laplace equation for liquid crystal interfaces. <i>Journal of Chemical Physics</i> , 2000, 113, 10820-10822.	1.2	25
154	Viscoelastic theory for nematic interfaces. <i>Physical Review E</i> , 2000, 61, 1540-1549.	0.8	44
155	Theory of linear viscoelasticity of cholesteric liquid crystals. <i>Journal of Rheology</i> , 2000, 44, 855-869.	1.3	34
156	Nematic contact lines and the Neumann and Young equations for liquid crystals. <i>Journal of Chemical Physics</i> , 1999, 111, 7675-7684.	1.2	13
157	Tension gradients and Marangoni flows in nematic interfaces. <i>Physical Review E</i> , 1999, 60, 1077-1080.	0.8	9
158	Marangoni flow in liquid crystal interfaces. <i>Journal of Chemical Physics</i> , 1999, 110, 9769-9770.	1.2	39
159	Analysis of Liquid Crystalline Fiber Coatings. <i>Molecular Crystals and Liquid Crystals</i> , 1999, 333, 15-23.	0.3	3
160	Nemato-capillarity theory and the orientation-induced Marangoni flow. <i>Liquid Crystals</i> , 1999, 26, 913-917.	0.9	21
161	Recent advances in theoretical liquid crystal rheology. <i>Macromolecular Theory and Simulations</i> , 1998, 7, 623-639.	0.6	76
162	Computational Modeling of Multiple Domain Pattern Formation. <i>Materials Research Society Symposia Proceedings</i> , 1998, 538, 197.	0.1	1

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163	Recent advances in theoretical liquid crystal rheology. , 1998, 7, 623.		4
164	Theory and Simulation of Gas Diffusion in Cholesteric Liquid Crystal Films. Molecular Crystals and Liquid Crystals, 1997, 293, 87-109.	0.3	14
165	Stability Analysis of Catenoidal Shaped Liquid Crystalline Polymer Networks. Macromolecules, 1997, 30, 7582-7587.	2.2	2
166	Thermodynamic Stability Analysis of Liquid-Crystalline Polymer Fibers. Industrial & Engineering Chemistry Research, 1997, 36, 1114-1121.	1.8	10
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