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List of Publications by Year in Descending Order

125 papers	7,370 citations	45 h-index	84 g-index
141 ext. papers	8,413 ext. citations	9.4 avg, IF	6.62 L-index

#	Paper	IF	Citations
125	Fast Self-Assembly of Scalable Photonic Cellulose Nanocrystal and Hybrid Films via Electrophoresis.. *Advanced Materials*, **2022**, e2109170	24	2
124	Electro-osmotic Actuators from Cellulose Nanocrystals and Nanocomposite Hydrogels. *ACS Applied Polymer Materials*, **2022**, 4, 598-606	4.3	0
123	A rheological investigation of oil-in-water Pickering emulsions stabilized by cellulose nanocrystals. *Journal of Colloid and Interface Science*, **2021**, 608, 2820-2820	9.3	3
122	Chiral Nematic Cellulose Nanocrystal/Germania and Carbon/Germania Composite Aerogels as Supercapacitor Materials. *Chemistry of Materials*, **2021**, 33, 5197-5209	9.6	4
121	Concentric chiral nematic polymeric fibers from cellulose nanocrystals. *Nanoscale Advances*, **2021**, 3, 5111-5121	5.1	2
120	Moisture-tunable, ionic strength-controlled piezoelectric effect in cellulose nanocrystal films. *Applied Materials Today*, **2021**, 24, 101082	6.6	2
119	Sustainable biochars from carbonization of cellulose filaments and nanocrystals. *Bioresource Technology Reports*, **2021**, 100838	4.1	0
118	Effect of thermal treatments on chiral nematic cellulose nanocrystal films. *Carbohydrate Polymers*, **2021**, 272, 118404	10.3	1
117	Thermal annealing of iridescent cellulose nanocrystal films. *Carbohydrate Polymers*, **2021**, 272, 118468	10.3	5
116	Synthesis of Chiral Nematic Mesoporous Metal and Metal Oxide Nanocomposites and their Use as Heterogeneous Catalysts. *European Journal of Inorganic Chemistry*, **2020**, 2020, 3937-3943	2.3	6
115	Improving Thin-Film Properties of Poly(vinyl alcohol) by the Addition of Low-Weight Percentages of Cellulose Nanocrystals. *Langmuir*, **2020**, 36, 3550-3557	4	9
114	Plant-Inspired Polyaleuritate Nanocellulose Composite Photonic Films. *ACS Applied Polymer Materials*, **2020**, 2, 1528-1534	4.3	6
113	Tunable Diffraction Gratings from Biosourced Lyotropic Liquid Crystals. *Advanced Materials*, **2020**, 32, e1907376	24	18
112	Iridescent Cellulose Nanocrystal Films Modified with Hydroxypropyl Cellulose. *Biomacromolecules*, **2020**, 21, 1295-1302	6.9	20
111	Host Guest Chemistry Within Cellulose Nanocrystal Gel Receptors. *Angewandte Chemie*, **2020**, 132, 4735-4740	3.6	0
110	Host-Guest Chemistry Within Cellulose Nanocrystal Gel Receptors. *Angewandte Chemie - International Edition*, **2020**, 59, 4705-4710	16.4	8
109	Retrieving the Coassembly Pathway of Composite Cellulose Nanocrystal Photonic Films from their Angular Optical Response. *Advanced Materials*, **2020**, 32, e1906889	24	20

108	Cellulose Nanocrystal Elastomers with Reversible Visible Color. *Angewandte Chemie*, **2020**, 132, 232-237	3.6	11
107	Cellulose Nanocrystal Elastomers with Reversible Visible Color. *Angewandte Chemie - International Edition*, **2020**, 59, 226-231	16.4	60
106	Microsuspension Polymerization of Styrene Using Cellulose Nanocrystals as Pickering Emulsifiers: On the Evolution of Latex Particles. *Langmuir*, **2020**, 36, 796-809	4	16
105	Guest-conditioned multicolor writing on cellulose nanocrystal canvases. *Materials Advances*, **2020**, 1, 2536-2541	3.3	1
104	Properties and stabilization mechanism of oil-in-water Pickering emulsions stabilized by cellulose filaments. *Carbohydrate Polymers*, **2020**, 248, 116775	10.3	8
103	Thermal Degradation of Cellulose Filaments and Nanocrystals. *Biomacromolecules*, **2020**, 21, 3374-3386	6.9	22
102	Unwinding a spiral of cellulose nanocrystals for stimuli-responsive stretchable optics. *Nature Communications*, **2019**, 10, 510	17.4	113
101	Chiral Photonic Aerogels: Pressure-Responsive Hierarchical Chiral Photonic Aerogels (Adv. Mater. 21/2019). *Advanced Materials*, **2019**, 31, 1970153	24	1
100	Post-modification of Cellulose Nanocrystal Aerogels with Thiol-Ene Click Chemistry. *Biomacromolecules*, **2019**, 20, 2779-2785	6.9	16
99	Self-Assembly Route to TiO2 and TiC with a Liquid Crystalline Order. *Chemistry of Materials*, **2019**, 31, 2174-2181	9.6	20
98	Liquid Crystalline Tactoidal Microphases in Ferrofluids: Spatial Positioning and Orientation by Magnetic Field Gradients. *CheM*, **2019**, 5, 681-692	16.2	8
97	Pressure-Responsive Hierarchical Chiral Photonic Aerogels. *Advanced Materials*, **2019**, 31, e1808186	24	36
96	Freeze‐Thaw Gelation of Cellulose Nanocrystals. *ACS Macro Letters*, **2019**, 486-491	6.6	31
95	Black Titania with Nanoscale Helicity. *Advanced Functional Materials*, **2019**, 29, 1904639	15.6	32
94	Critical insights into the reinforcement potential of cellulose nanocrystals in polymer nanocomposites. *Current Opinion in Solid State and Materials Science*, **2019**, 23, 100761	12	45
93	Stimuli-Responsive Anisotropic Materials Based on Unidirectional Organization of Cellulose Nanocrystals in an Elastomer. *Macromolecules*, **2019**, 52, 5317-5324	5.5	31
92	Growing the Bioeconomy: Advances in the Development of Applications for Cellulose Filaments and Nanocrystals. *Industrial Biotechnology*, **2019**, 15, 133-137	1.3	9
91	Solid-state Na NMR spectroscopy studies of ordered and disordered cellulose nanocrystal films. *Solid State Nuclear Magnetic Resonance*, **2019**, 97, 31-39	3.1	7

90	Boundary Geometry Effects on the Coalescence of Liquid Crystalline Tactoids and Formation of Topological Defects. *Journal of Physical Chemistry Letters*, **2019**, 10, 278-282	6.4	14
89	Iridescent Chiral Nematic Mesoporous Organosilicas with Alkylene Spacers. *Advanced Optical Materials*, **2018**, 6, 1800163	8.1	10
88	Current characterization methods for cellulose nanomaterials. *Chemical Society Reviews*, **2018**, 47, 2609-2679	36.5	436
87	Size-Selective Exclusion Effects of Liquid Crystalline Tactoids on Nanoparticles: A Separation Method. *Angewandte Chemie*, **2018**, 130, 3418-3423	3.6	2
86	Size-Selective Exclusion Effects of Liquid Crystalline Tactoids on Nanoparticles: A Separation Method. *Angewandte Chemie - International Edition*, **2018**, 57, 3360-3365	16.4	14
85	Aerogel materials with periodic structures imprinted with cellulose nanocrystals. *Nanoscale*, **2018**, 10, 3805-3812	7.7	40
84	Tactoid Annealing Improves Order in Self-Assembled Cellulose Nanocrystal Films with Chiral Nematic Structures. *Langmuir*, **2018**, 34, 646-652	4	57
83	CO2-Switchable Cellulose Nanocrystal Hydrogels. *Chemistry of Materials*, **2018**, 30, 376-385	9.6	42
82	Investigation of the formation mechanisms in high internal phase Pickering emulsions stabilized by cellulose nanocrystals. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2018**, 376,	3	21
81	Hydrogen-Bonded Liquid Crystals in Confined Spaces□oward Photonic Hybrid Materials. *Advanced Functional Materials*, **2018**, 28, 1800207	15.6	20
80	Aerogel templating on functionalized fibers of nanocellulose networks. *Materials Chemistry Frontiers*, **2018**, 2, 1655-1663	7.8	5
79	Stable and sensitive stimuli-responsive anisotropic hydrogels for sensing ionic strength and pressure. *Materials Horizons*, **2018**, 5, 1076-1081	14.4	56
78	Fabrication of Cellulose Nanocrystal Films through Differential Evaporation for Patterned Coatings. *ACS Applied Nano Materials*, **2018**, 1, 3098-3104	5.6	26
77	Broadband Circular Polarizing Film Based on Chiral Nematic Liquid Crystals. *Advanced Optical Materials*, **2018**, 6, 1800412	8.1	22
76	Chiroptical luminescent nanostructured cellulose films. *Materials Chemistry Frontiers*, **2017**, 1, 979-987	7.8	35
75	Transparent Depolarizing Organic and Inorganic Films for Optics and Sensors. *Advanced Materials*, **2017**, 29, 1606083	24	56
74	Cellulose Nanocrystals and Nanofibrils in Advanced Applications **2017**, 799-832		1
73	Surface modification of lignin for applications in polypropylene blends. *Journal of Applied Polymer Science*, **2017**, 134, 45103	2.9	21

72	Controlling lignin particle size for polymer blend applications. *Journal of Applied Polymer Science*, **2017**, 134,	2.9	18
71	Photopatterning Freestanding Chiral Nematic Mesoporous Organosilica Films. *Advanced Functional Materials*, **2017**, 27, 1703346	15.6	13
70	Chiroptical, morphological and conducting properties of chiral nematic mesoporous cellulose/polypyrrole composite films. *Journal of Materials Chemistry A*, **2017**, 5, 19184-19194	13	57
69	Near-IR-Sensitive Upconverting Nanostructured Photonic Cellulose Films. *Advanced Optical Materials*, **2017**, 5, 1600514	8.1	25
68	**2017**,		22
67	Polymer and Mesoporous Silica Microspheres with Chiral Nematic Order from Cellulose Nanocrystals. *Angewandte Chemie - International Edition*, **2016**, 55, 12460-4	16.4	50
66	Alkenylation of cellulose nanocrystals (CNC) and their applications. *Polymer*, **2016**, 101, 338-346	3.9	23
65	Flexible Photonic Cellulose Nanocrystal Films. *Advanced Materials*, **2016**, 28, 10042-10047	24	153
64	Structure and transformation of tactoids in cellulose nanocrystal suspensions. *Nature Communications*, **2016**, 7, 11515	17.4	156
63	Shape Memory Cellulose-Based Photonic Reflectors. *ACS Applied Materials & Interfaces*, **2016**, 8, 31935-31940	9.5	54
62	Photonic metal-polymer resin nanocomposites with chiral nematic order. *Chemical Communications*, **2016**, 52, 7810-3	5.8	9
61	Emulsion-polymerized flexible semi-conducting CNCsPANIDBSA nanocomposite films. *RSC Advances*, **2016**, 6, 65494-65503	3.7	13
60	Chiral nematic mesoporous magnetic ferrites. *Journal of Materials Chemistry C*, **2016**, 4, 11382-11386	7.1	6
59	Polymer and Mesoporous Silica Microspheres with Chiral Nematic Order from Cellulose Nanocrystals. *Angewandte Chemie*, **2016**, 128, 12648-12652	3.6	5
58	Shear rheology of polylactide (PLA)ellulose nanocrystal (CNC) nanocomposites. *Cellulose*, **2016**, 23, 1885-1897	5.5	84
57	Hard Photonic Glasses and Corundum Nanostructured Films from Aluminothermic Reduction of Helicoidal Mesoporous Silicas. *Chemistry of Materials*, **2016**, 28, 2581-2588	9.6	18
56	Magnetic Mesoporous Photonic Cellulose Films. *Langmuir*, **2016**, 32, 9329-34	4	12
55	In-situ production of polyethylene/cellulose nanocrystal composites. *Canadian Journal of Chemical Engineering*, **2016**, 94, 2107-2113	2.3	10

54	In-situ polymerized cellulose nanocrystals (CNC)-poly(l-lactide) (PLLA) nanomaterials and applications in nanocomposite processing. *Carbohydrate Polymers*, **2016**, 153, 549-558	10.3	66
53	Hydrothermal Gelation of Aqueous Cellulose Nanocrystal Suspensions. *Biomacromolecules*, **2016**, 17, 2747-54	6.9	72
52	Hard-templating of Prussian blue analogues in mesoporous silica and organosilica. *Dalton Transactions*, **2015**, 44, 14724-31	4.3	13
51	Chiral nematic porous germania and germanium/carbon films. *Nanoscale*, **2015**, 7, 13215-23	7.7	25
50	Optically tunable chiral nematic mesoporous cellulose films. *Soft Matter*, **2015**, 11, 4686-94	3.6	48
49	Photonic and Semiconductor Materials Based on Cellulose Nanocrystals. *Advances in Polymer Science*, **2015**, 287-328	1.3	11
48	Chiral nematic cellulose-gold nanoparticle composites from mesoporous photonic cellulose. *Chemical Communications*, **2015**, 51, 530-3	5.8	82
47	Magnesiothermic Reduction of Thin Films: Towards Semiconducting Chiral Nematic Mesoporous Silicon Carbide and Silicon Structures. *Advanced Functional Materials*, **2015**, 25, 2175-2181	15.6	24
46	Photonic patterns printed in chiral nematic mesoporous resins. *Angewandte Chemie - International Edition*, **2015**, 54, 4304-8	16.4	62
45	Photonic Patterns Printed in Chiral Nematic Mesoporous Resins. *Angewandte Chemie*, **2015**, 127, 4378-4382	3.6	19
44	Tuning the photonic properties of chiral nematic mesoporous organosilica with hydrogen-bonded liquid-crystalline assemblies. *Journal of Materials Chemistry C*, **2015**, 3, 1537-1545	7.1	25
43	Tunable mesoporous bilayer photonic resins with chiral nematic structures and actuator properties. *Advanced Materials*, **2014**, 26, 2323-8	24	79
42	Antimicrobial nanocomposite films made of poly(lactic acid)-cellulose nanocrystals (PLA-CNC) in food applications: part A□effect of nisin release on the inactivation of Listeria monocytogenes in ham. *Cellulose*, **2014**, 21, 1837-1850	5.5	83
41	Antimicrobial nanocomposite films made of poly(lactic acid)□cellulose nanocrystals (PLA□CNC) in food applications□part B: effect of oregano essential oil release on the inactivation of Listeria monocytogenes in mixed vegetables. *Cellulose*, **2014**, 21, 4271-4285	5.5	102
40	Ionic strength effects on the microstructure and shear rheology of cellulose nanocrystal suspensions. *Cellulose*, **2014**, 21, 3347-3359	5.5	131
39	Responsive mesoporous photonic cellulose films by supramolecular cotemplating. *Angewandte Chemie - International Edition*, **2014**, 53, 8880-4	16.4	125
38	CdS Quantum Dots Encapsulated in Chiral Nematic Mesoporous Silica: New Iridescent and Luminescent Materials. *Advanced Functional Materials*, **2014**, 24, 777-783	15.6	96
37	The development of chiral nematic mesoporous materials. *Accounts of Chemical Research*, **2014**, 47, 1088-96	24.9	223

36	Mechanically tunable nanocomposite hydrogels based on functionalized cellulose nanocrystals. *Nordic Pulp and Paper Research Journal*, **2014**, 29, 95-104	1.1	13
35	Responsive Mesoporous Photonic Cellulose Films by Supramolecular Cotemplating. *Angewandte Chemie*, **2014**, 126, 9026-9030	3.6	14
34	Biopolymer Templated Glass with a Twist: Controlling the Chirality, Porosity, and Photonic Properties of Silica with Cellulose Nanocrystals. *Advanced Functional Materials*, **2014**, 24, 327-338	15.6	99
33	Responsive photonic hydrogels based on nanocrystalline cellulose. *Angewandte Chemie - International Edition*, **2013**, 52, 8912-6	16.4	266
32	Thermal switching of the reflection in chiral nematic mesoporous organosilica films infiltrated with liquid crystals. *ACS Applied Materials & Interfaces*, **2013**, 5, 6854-9	9.5	57
31	Influence of degree of sulfation on the rheology of cellulose nanocrystal suspensions. *Rheologica Acta*, **2013**, 52, 741-751	2.3	101
30	Imprinting of Photonic Patterns with Thermosetting Amino-Formaldehyde-Cellulose Composites. *ACS Macro Letters*, **2013**, 2, 818-821	6.6	75
29	Novel PPV/mesoporous organosilica composites: influence of the host chirality on a conjugated polymer guest. *Langmuir*, **2013**, 29, 12579-84	4	22
28	Flexible mesoporous photonic resins with tunable chiral nematic structures. *Angewandte Chemie - International Edition*, **2013**, 52, 8921-4	16.4	137
27	Iridescent Chiral Nematic Cellulose Nanocrystal/Polymer Composites Assembled in Organic Solvents.. *ACS Macro Letters*, **2013**, 2, 1016-1020	6.6	98
26	Tuning the iridescence of chiral nematic cellulose nanocrystals and mesoporous silica films by substrate variation. *Chemical Communications*, **2013**, 49, 11296-8	5.8	74
25	Cellulose reinforced polymer composites and nanocomposites: a critical review. *Cellulose*, **2013**, 20, 2221-2262	5.5	437
24	Effects of emulsion droplet size on the structure of electrospun ultrafine biocomposite fibers with cellulose nanocrystals. *Biomacromolecules*, **2013**, 14, 3801-7	6.9	39
23	Large, Crack-Free Freestanding Films with Chiral Nematic Structures. *Advanced Optical Materials*, **2013**, 1, 295-299	8.1	60
22	Flexible Mesoporous Photonic Resins with Tunable Chiral Nematic Structures. *Angewandte Chemie*, **2013**, 125, 9089-9092	3.6	30
21	Responsive Photonic Hydrogels Based on Nanocrystalline Cellulose. *Angewandte Chemie*, **2013**, 125, 9080-9084	3.6	22
20	Flexible and iridescent chiral nematic mesoporous organosilica films. *Journal of the American Chemical Society*, **2012**, 134, 867-70	16.4	172
19	Rheology of nanocrystalline cellulose aqueous suspensions. *Langmuir*, **2012**, 28, 17124-33	4	217

18	Chiral nematic stained glass: controlling the optical properties of nanocrystalline cellulose-templated materials. *Langmuir*, **2012**, 28, 17256-62	4	68
17	Analysis of fibre deformation processes in high-consistency refining based on Raman microscopy and X-ray diffraction. *Holzforschung*, **2012**, 66, 711-716	2	7
16	New insights into nano-crystalline cellulose structure and morphology based on solid-state NMR. *Cellulose*, **2012**, 19, 1619-1629	5.5	45
15	Hard Templating of Nanocrystalline Titanium Dioxide with Chiral Nematic Ordering. *Angewandte Chemie*, **2012**, 124, 6992-6996	3.6	23
14	Hard templating of nanocrystalline titanium dioxide with chiral nematic ordering. *Angewandte Chemie - International Edition*, **2012**, 51, 6886-90	16.4	132
13	Chiral nematic assemblies of silver nanoparticles in mesoporous silica thin films. *Journal of the American Chemical Society*, **2011**, 133, 3728-31	16.4	145
12	The use of nanocrystalline cellulose for the binding and controlled release of drugs. *International Journal of Nanomedicine*, **2011**, 6, 321-30	7.3	196
11	Chiral Nematic Mesoporous Carbon Derived From Nanocrystalline Cellulose. *Angewandte Chemie*, **2011**, 123, 11183-11187	3.6	37
10	Chiral nematic mesoporous carbon derived from nanocrystalline cellulose. *Angewandte Chemie - International Edition*, **2011**, 50, 10991-5	16.4	186
9	Free-standing mesoporous silica films with tunable chiral nematic structures. *Nature*, **2010**, 468, 422-5	50.4	723
8	Parameters Affecting the Chiral Nematic Phase of Nanocrystalline Cellulose Films. *Macromolecules*, **2010**, 43, 3851-3858	5.5	178
7	Structure□process□ield interrelations in nanocrystalline cellulose extraction. *Canadian Journal of Chemical Engineering*, **2010**, 88, n/a-n/a	2.3	80
6	On the Development and Applications of Cellulosic Nanofibrillar and Nanocrystalline Materials. *Canadian Journal of Chemical Engineering*, **2008**, 84, 513-519	2.3	102
5	Cellulosic Materials **2002**,		8
4	Some microrheological aspects of wood-pulp fibres subjected to fatigue loading. *Cellulose*, **1997**, 4, 51-56	5.5	19
3	Microstructural cumulative material degradation and fatigue-failure micromechanisms in wood-pulp fibres. *Cellulose*, **1995**, 2, 159-177	5.5	10
2	Shape-Memory Photonic Thermoplastics from Cellulose Nanocrystals. *Advanced Functional Materials*,2103268	15.6	9
1	Cellulose Nanocrystal Chiral Nematic Composites with Wet Mechanical Adaptability. *Chemistry of Materials*,	9.6	1