

Masafumi Yoshio

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3085915/publications.pdf>

Version: 2024-02-01

94
papers

5,817
citations

81743

39
h-index

76769

74
g-index

103
all docs

103
docs citations

103
times ranked

4139
citing authors

#	ARTICLE	IF	CITATIONS
1	One-Dimensional Ion Transport in Self-Organized Columnar Ionic Liquids. <i>Journal of the American Chemical Society</i> , 2004, 126, 994-995.	6.6	448
2	One-Dimensional Ion-Conductive Polymer Films: Alignment and Fixation of Ionic Channels Formed by Self-Organization of Polymerizable Columnar Liquid Crystals. <i>Journal of the American Chemical Society</i> , 2006, 128, 5570-5577.	6.6	395
3	Transport of ions and electrons in nanostructured liquid crystals. <i>Nature Reviews Materials</i> , 2017, 2, .	23.3	333
4	Self-assembly of functional columnar liquid crystals. <i>Chemical Communications</i> , 2009, , 729.	2.2	299
5	Self-Organization of Room-Temperature Ionic Liquids Exhibiting Liquid-Crystalline Bicontinuous Cubic Phases: Formation of Nano-Ion Channel Networks. <i>Journal of the American Chemical Society</i> , 2007, 129, 10662-10663.	6.6	257
6	Layered Ionic Liquids: Anisotropic Ion Conduction in New Self-Organized Liquid-Crystalline Materials. <i>Advanced Materials</i> , 2002, 14, 351.	11.1	213
7	Noncovalent Approach to One-Dimensional Ion Conductors: Enhancement of Ionic Conductivities in Nanostructured Columnar Liquid Crystals. <i>Journal of the American Chemical Society</i> , 2008, 130, 1759-1765.	6.6	181
8	3D Interconnected Ionic Nano-Channels Formed in Polymer Films: Self-Organization and Polymerization of Thermotropic Bicontinuous Cubic Liquid Crystals. <i>Journal of the American Chemical Society</i> , 2011, 133, 2163-2169.	6.6	170
9	Self-Organized Liquid-Crystalline Nanostructured Membranes for Water Treatment: Selective Permeation of Ions. <i>Advanced Materials</i> , 2012, 24, 2238-2241.	11.1	156
10	Induction of Thermotropic Bicontinuous Cubic Phases in Liquid-Crystalline Ammonium and Phosphonium Salts. <i>Journal of the American Chemical Society</i> , 2012, 134, 2634-2643.	6.6	143
11	Nanostructured Anisotropic Ion-Conductive Films. <i>Journal of the American Chemical Society</i> , 2003, 125, 3196-3197.	6.6	142
12	Nanostructured ion-conductive films: Layered assembly of a side-chain liquid-crystalline polymer with an imidazolium ionic moiety. <i>Journal of Polymer Science Part A</i> , 2003, 41, 3486-3492.	2.5	124
13	3D Anhydrous Proton-Transporting Nanochannels Formed by Self-Assembly of Liquid Crystals Composed of a Sulfobetaine and a Sulfonic Acid. <i>Journal of the American Chemical Society</i> , 2013, 135, 15286-15289.	6.6	124
14	Macroscopic Photocontrol of Ion-Transporting Pathways of a Nanostructured Imidazolium-Based Photoresponsive Liquid Crystal. <i>Journal of the American Chemical Society</i> , 2014, 136, 9552-9555.	6.6	116
15	Liquid-Crystalline Electrolytes for Lithium-Ion Batteries: Ordered Assemblies of a Mesogen-Containing Carbonate and a Lithium Salt. <i>Advanced Functional Materials</i> , 2015, 25, 1206-1212.	7.8	104
16	Columnar Liquid-Crystalline Imidazolium Salts. Effects of Anions and Cations on Mesomorphic Properties and Ionic Conductivities. <i>Bulletin of the Chemical Society of Japan</i> , 2007, 80, 1836-1841.	2.0	102
17	A Planarized Triphenylborane Mesogen: Discotic Liquid Crystals with Ambipolar Charge-Carrier Transport Properties. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 6922-6925.	7.2	91
18	Macroscopically Ordered Polymer/CaCO ₃ Hybrids Prepared by Using a Liquid-Crystalline Template. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 2800-2803.	7.2	89

#	ARTICLE	IF	CITATIONS
19	Electric-Field-Responsive Lithium-Ion Conductors of Propylenecarbonate-Based Columnar Liquid Crystals. <i>Advanced Materials</i> , 2009, 21, 1591-1594.	11.1	85
20	Viologen-Based Redox-Active Ionic Liquid Crystals Forming Columnar Phases. <i>Organic Letters</i> , 2007, 9, 4271-4274.	2.4	83
21	Self-Assembly of Giant Spherical Liquid-Crystalline Complexes and Formation of Nanostructured Dynamic Gels that Exhibit Self-Healing Properties. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14085-14089.	7.2	81
22	Self-Assembled Amphiphilic Diketopyrrolopyrrole-Based Oligothiophenes for Field-Effect Transistors and Solar Cells. <i>Chemistry of Materials</i> , 2011, 23, 2285-2288.	3.2	80
23	Development of Nanostructured Water Treatment Membranes Based on Thermotropic Liquid Crystals: Molecular Design of Sub-Nanoporous Materials. <i>Advanced Science</i> , 2018, 5, 1700405.	5.6	73
24	Functional Liquid-Crystalline Polymers for Ionic and Electronic Conduction. , 2007, , 151-179.		72
25	Zwitterionic liquid crystals as 1D and 3D lithium ion transport media. <i>Journal of Materials Chemistry A</i> , 2015, 3, 11232-11238.	5.2	71
26	Liquid-Crystalline Dye-Sensitized Solar Cells: Design of Two-Dimensional Molecular Assemblies for Efficient Ion Transport and Thermal Stability. <i>Chemistry of Materials</i> , 2016, 28, 6493-6500.	3.2	70
27	Liquid-Crystalline Assemblies Containing Ionic Liquids: An Approach to Anisotropic Ionic Materials. <i>Chemistry Letters</i> , 2002, 31, 320-321.	0.7	68
28	Nanostructured Two-Component Liquid-Crystalline Electrolytes for High-Temperature Dye-Sensitized Solar Cells. <i>Chemistry of Materials</i> , 2014, 26, 6496-6502.	3.2	68
29	Ionic Switch Induced by a Rectangular-Hexagonal Phase Transition in Benzenammonium Columnar Liquid Crystals. <i>Journal of the American Chemical Society</i> , 2015, 137, 13212-13215.	6.6	68
30	Electric Field-Assisted Alignment of Self-Assembled Fibers Composed of Hydrogen-Bonded Molecules Having Laterally Fluorinated Mesogens. <i>Journal of the American Chemical Society</i> , 2009, 131, 6763-6767.	6.6	67
31	Anisotropic ion conduction in a unique smectic phase of self-assembled amphiphilic ionic liquids. <i>Chemical Communications</i> , 2005, , 1333.	2.2	64
32	π - π Stacks of Discrete Aromatic Stacks in Solution. <i>Journal of the American Chemical Society</i> , 2010, 132, 9555-9557.	6.6	63
33	Mechanoresponsive liquid crystals exhibiting reversible luminescent color changes at ambient temperature. <i>Journal of Materials Chemistry C</i> , 2016, 4, 2752-2760.	2.7	62
34	Effect of Methyl Groups onto Imidazolium Cation Ring on Liquid Crystallinity and Ionic Conductivity of Amphiphilic Ionic Liquids. <i>Chemistry Letters</i> , 2004, 33, 1630-1631.	0.7	60
35	Ionic Liquid Crystals: Self-assembly of Imidazolium Salts Containing an α -Glutamic Acid Moiety. <i>Chemistry Letters</i> , 2008, 37, 538-539.	0.7	52
36	Ion conductive behaviour in a confined nanostructure: NMR observation of self-diffusion in a liquid-crystalline bicontinuous cubic phase. <i>Chemical Communications</i> , 2010, 46, 728-730.	2.2	52

#	ARTICLE	IF	CITATIONS
37	Co-organisation of ionic liquids with amphiphilic diethanolamines: construction of 3D continuous ionic nanochannels through the induction of liquidâ€“crystalline bicontinuous cubic phases. <i>Chemical Science</i> , 2012, 3, 2001.	3.7	47
38	SELF-ASSEMBLY OF AN IONIC LIQUID AND A HYDROXYL-TERMINATED LIQUID CRYSTAL: ANISOTROPIC ION CONDUCTION IN LAYERED NANOSTRUCTURES. <i>Molecular Crystals and Liquid Crystals</i> , 2004, 413, 99-108.	0.4	46
39	2D assemblies of ionic liquid crystals based on imidazolium moieties: formation of ion-conductive layers. <i>New Journal of Chemistry</i> , 2015, 39, 4471-4477.	1.4	43
40	Columnar liquid-crystalline assemblies of X-shaped pyreneâ€“oligothiophene conjugates: photoconductivities and mechanochromic functions. <i>Journal of Materials Chemistry C</i> , 2016, 4, 5073-5080.	2.7	42
41	Designer lyotropic liquid-crystalline systems containing amino acid ionic liquids as self-organisation media of amphiphiles. <i>Chemical Communications</i> , 2013, 49, 11746.	2.2	38
42	Uniaxially Parallel Alignment of a Smectic A Liquid-Crystalline Rodâ€“Coil Molecule and Its Lithium Salt Complexes Using Rubbed Polyimides. <i>Macromolecules</i> , 2007, 40, 4874-4878.	2.2	37
43	Alignment of photoconductive self-assembled fibers composed of ï€-conjugated molecules under electric fields. <i>Journal of Materials Chemistry</i> , 2010, 20, 173-179.	6.7	34
44	Polymerizable Photocleavable Columnar Liquid Crystals for Nanoporous Water Treatment Membranes. <i>ACS Macro Letters</i> , 2019, 8, 1303-1308.	2.3	34
45	Supramolecular approach to the formation of magneto-active physical gels. <i>Chemical Science</i> , 2012, 3, 3007.	3.7	32
46	Nanostructured Virus Filtration Membranes Based on Two-Component Columnar Liquid Crystals. <i>ACS Macro Letters</i> , 2019, 8, 24-30.	2.3	32
47	A columnar liquid-crystalline shape-persistent macrocycle having a nanosegregated structure. <i>Organic and Biomolecular Chemistry</i> , 2009, 7, 3205.	1.5	31
48	Bisphenylsulfone-based molecular assemblies: polar columnar liquid crystals aligned in electric fields and fibrous aggregates in organic solvents. <i>New Journal of Chemistry</i> , 2013, 37, 143-147.	1.4	31
49	Noncovalent Approach to Liquid-Crystalline Ion Conductors: High-Rate Performances and Room-Temperature Operation for Li-Ion Batteries. <i>ACS Omega</i> , 2018, 3, 159-166.	1.6	29
50	Guanineâ€“oligothiophene conjugates: liquid-crystalline properties, photoconductivities and ion-responsive emission of their nanoscale assemblies. <i>Chemical Science</i> , 2018, 9, 576-585.	3.7	28
51	Self-healing and shape memory functions exhibited by supramolecular liquid-crystalline networks formed by combination of hydrogen bonding interactions and coordination bonding. <i>Chemical Science</i> , 2021, 12, 6091-6098.	3.7	27
52	Spiropyran-based liquid crystals: the formation of columnar phases via acid-induced spiroâ€“merocyanine isomerisation. <i>Chemical Communications</i> , 2006, , 4703-4705.	2.2	26
53	Selfâ€“Assembly of Giant Spherical Liquidâ€“Crystalline Complexes and Formation of Nanostructured Dynamic Gels that Exhibit Selfâ€“Healing Properties. <i>Angewandte Chemie</i> , 2017, 129, 14273-14277.	1.6	25
54	Ionic Diffusion and Salt Dissociation Conditions of Lithium Liquid Crystal Electrolytes. <i>Journal of Physical Chemistry B</i> , 2005, 109, 11563-11571.	1.2	23

#	ARTICLE	IF	CITATIONS
55	Liquid-crystalline gels exhibiting electrooptical light scattering properties: fibrous polymerized network of a lysine-based gelator having acrylate moieties. <i>Polymer Journal</i> , 2012, 44, 594-599.	1.3	22
56	A Comprehensive Study on Lyotropic Liquidâ€“Crystalline Behavior of an Amphiphile in 20 Kinds of Amino Acid Ionic Liquids. <i>Chemistry - an Asian Journal</i> , 2016, 11, 520-526.	1.7	22
57	Induction of Columnar and Smectic Phases for Spiropyran Derivatives: Effects of Acidichromism and Photochromism. <i>Chemistry - an Asian Journal</i> , 2008, 3, 534-541.	1.7	21
58	Use of a protic salt for the formation of liquid-crystalline proton-conductive complexes with mesomorphic diols. <i>Journal of Materials Chemistry A</i> , 2015, 3, 22656-22662.	5.2	21
59	Columnar nanostructured polymer films containing ionic liquids in supramolecular oneâ€“dimensional nanochannels. <i>Journal of Polymer Science Part A</i> , 2015, 53, 366-371.	2.5	20
60	Self-organization of Protonated 2-heptadecylimidazole as an Effective Ion Conductive Matrix. <i>Electrochemistry</i> , 2005, 73, 623-626.	0.6	19
61	Tuning of luminescence color of Î€-conjugated liquid crystals through co-assembly with ionic liquids. <i>Journal of Materials Chemistry C</i> , 2017, 5, 9972-9978.	2.7	19
62	Multiâ€“Color Photoluminescence Based on Mechanically and Thermally Induced Liquidâ€“Crystalline Phase Transitions of a Hydrogenâ€“Bonded Benzodithiophene Derivative. <i>ChemPhysChem</i> , 2020, 21, 328-334.	1.0	19
63	Self-assembled N-Alkylimidazolium Perfluorooctanesulfonates. <i>Chemistry Letters</i> , 2005, 34, 442-443.	0.7	17
64	Selfâ€“Assembled Fibers Containing Stable Organic Radical Moieties: Alignment and Magnetic Properties in Liquid Crystals. <i>Chemistry - A European Journal</i> , 2016, 22, 8872-8878.	1.7	16
65	Induction of bicontinuous cubic liquid-crystalline assemblies for polymerizable amphiphiles via tailor-made design of ionic liquids. <i>Chemical Communications</i> , 2016, 52, 13861-13864.	2.2	16
66	Development of functional nanoporous membranes based on photocleavable columnar liquid crystals â€“ Selective adsorption of ionic dyes. <i>European Polymer Journal</i> , 2020, 134, 109859.	2.6	16
67	Selfâ€“Assembled Liquidâ€“Crystalline Ion Conductors in Dyeâ€“Sensitized Solar Cells: Effects of Molecular Sensitizers on Their Performance. <i>ChemPlusChem</i> , 2017, 82, 834-840.	1.3	15
68	Mechanochromic Photoluminescent Liquid Crystals Containing 5,5â€“Bis(2-phenylethynyl)-2,2â€“bithiophene. <i>Molecular Crystals and Liquid Crystals</i> , 2014, 594, 112-121.	0.4	14
69	Liquid Crystalline Ionic Liquids. , 2005, , 307-320.		13
70	Columnar Liquid Crystalline Imidazolium Salts: Self-Organized One-Dimensional Ion Conductors. <i>ACS Symposium Series</i> , 2007, , 161-171.	0.5	13
71	Selfâ€“assembly of liquid crystalline triphenyleneâ€“oligo(ethylene oxide)â€“triphenylene molecules and their complexes with lithium triflate. <i>Liquid Crystals</i> , 2007, 34, 107-112.	0.9	13
72	Ferroelectric Liquid-Crystalline Binary Mixtures Based on Achiral and Chiral Trifluoromethylphenylterthiophenes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 53029-53038.	4.0	13

#	ARTICLE	IF	CITATIONS
73	Fabrication of solution-processable OFET memory using a nano-floating gate based on a phthalocyanine-cored star-shaped polymer. <i>Materials Advances</i> , 2022, 3, 3128-3134.	2.6	13
74	Liquid-crystalline stereoregular polyketone prepared from a mesogenic vinylarene and carbon monoxide. <i>Journal of Polymer Science Part A</i> , 2003, 41, 3556-3563.	2.5	12
75	1-Alkyl-2,3,5,6,7,8-hexasilabicyclo[2.2.2]octanes: Unconventional Class of Mesomorphic Columnar Compounds. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 3055-3058.	7.2	12
76	Design of Dication-Type Amino Acid Ionic Liquids and Their Application to Self-Assembly Media of Amphiphiles. <i>Bulletin of the Chemical Society of Japan</i> , 2018, 91, 1-5.	2.0	11
77	Redox-active Supramolecular Fibers of a Nitronyl Nitroxide-based Gelator. <i>Chemistry Letters</i> , 2016, 45, 863-865.	0.7	9
78	One-dimensional supramolecular hybrids: self-assembled nanofibrous materials based on a sugar gelator and calcite developed along an unusual axis. <i>CrystEngComm</i> , 2017, 19, 1580-1584.	1.3	9
79	Switching of ionic conductivities in columnar liquid-crystalline anilinium salts: effects of alkyl chains, ammonium cations and counter anions on thermal properties and switching temperatures. <i>Molecular Systems Design and Engineering</i> , 2019, 4, 342-347.	1.7	9
80	Functional Soft Materials: Nanostructured Liquid Crystals and Self-Assembled Fibrous Aggregates. <i>Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry</i> , 2010, 68, 1169-1174.	0.0	9
81	Self-Assembled Liquid-Crystalline Ion Conductors: Odd-Even Effects of Flexible Spacers Binding a Carbonate Moiety and an Aliphatic Rod-Like Core on Phase Transition Properties and Ion Conductivities. <i>Bulletin of the Chemical Society of Japan</i> , 2019, 92, 1226-1233.	2.0	8
82	Low-Voltage-Driven Actuators Using Photo-Cross-Linked Ionic Columnar Liquid-Crystalline Polymer Films. , 2022, 4, 153-158.		8
83	Enthalpy Relaxation Behavior of Liquid-Crystalline Glasses of an Esterified Cholesterol Derivative and its Complex Salts with Aliphatic Amines. <i>Molecular Crystals and Liquid Crystals</i> , 2001, 357, 27-42.	0.3	7
84	Columnar liquid-crystalline assemblies composed of spiropyran derivatives and sulfonic acids. <i>Polymers for Advanced Technologies</i> , 2008, 19, 1362-1368.	1.6	7
85	Liquid Crystals: Liquid-Crystalline Electrolytes for Lithium-Ion Batteries: Ordered Assemblies of a Mesogen-Containing Carbonate and a Lithium Salt (<i>Adv. Funct. Mater.</i> 8/2015). <i>Advanced Functional Materials</i> , 2015, 25, 1205-1205.	7.8	2
86	Liquid-crystalline behavior and ion transport properties of block-structured molecules containing a perfluorinated ethylene oxide moiety complexed with a lithium salt. <i>Polymer Journal</i> , 2018, 50, 889-898.	1.3	2
87	Ion-Conductive Nanostructured Polymer Films Formed by Photopolymerization of Lyotropic Columnar Liquid-Crystalline Monomers, Composed of a Zwitterionic Compound and a Protic Ionic Liquid. <i>Crystals</i> , 2020, 10, 276.	1.0	2
88	Liquid Crystals: Self-Organized Liquid-Crystalline Nanostructured Membranes for Water Treatment: Selective Permeation of Ions (<i>Adv. Mater.</i> 17/2012). <i>Advanced Materials</i> , 2012, 24, 2218-2218.	11.1	1
89	Liquid-Crystalline Formation and Functionalization of Ionic Liquids through Self-Organization Processes. <i>Hyomen Kagaku</i> , 2007, 28, 318-321.	0.0	1
90	Oxidation-degree-dependent moisture-induced actuation of a graphene oxide film. <i>RSC Advances</i> , 2022, 12, 3372-3379.	1.7	1

#	ARTICLE	IF	CITATIONS
91	Effect of Methyl Groups onto Imidazolium Cation Ring on Liquid Crystallinity and Ionic Conductivity of Amphiphilic Ionic Liquids.. ChemInform, 2005, 36, no.	0.1	0
92	The Influence of Hydrogen Bonding on Generation and Stabilization of Self-Assembled Layer Structure of 6-[4-(<i>trans</i> -4-pentylcyclohexyl)phenoxy]hexane-1,2-diol. Molecular Crystals and Liquid Crystals, 2008, 490, 43-51.	0.4	0
93	Development of Gyroid Structures through the Design of Self-organizing Ionic Liquids and Their Application. Nihon Kessho Gakkaishi, 2015, 57, 184-190.	0.0	0
94	Function of Liquid Crystals. , 2014, , 357-410.		0