

Matthias Lehmann

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108
papers

3,878
citations

35
h-index

60
g-index

120
ext. papers

4,121
ext. citations

7
avg, IF

5.45
L-index

#	Paper	IF	Citations
108	Charge transport properties in discotic liquid crystals: a quantum-chemical insight into structure-property relationships. <i>Journal of the American Chemical Society</i> , 2004 , 126, 3271-9	16.4	432
107	Tailoring Discotic Mesophases: Columnar Order Enforced with Hydrogen Bonds. <i>Advanced Materials</i> , 2003 , 15, 1614-1618	24	161
106	High charge-carrier mobility in pi-deficient discotic mesogens: design and structure-property relationship. <i>Chemistry - A European Journal</i> , 2005 , 11, 3349-62	4.8	160
105	Highly fluorescent crystalline and liquid crystalline columnar phases of pyrene-based structures. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 7653-9	3.4	157
104	Stilbenoid Dendrimers. <i>Angewandte Chemie - International Edition</i> , 1998 , 37, 643-645	16.4	146
103	Electronic delocalization in discotic liquid crystals: a joint experimental and theoretical study. <i>Journal of the American Chemical Society</i> , 2004 , 126, 11889-99	16.4	132
102	Stilbenoid dendrimers. <i>Chemistry - A European Journal</i> , 2000 , 6, 2462-9	4.8	105
101	Star mesogens (hekates)--tailor-made molecules for programming supramolecular functionality. <i>Chemistry - A European Journal</i> , 2009 , 15, 3638-51	4.8	98
100	Liquid crystalline metal-free phthalocyanines designed for charge and exciton transport. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 20315-23	3.4	94
99	Star-Shaped Conjugated Systems. <i>Materials</i> , 2010 , 3, 3218-3330	3.5	91
98	Supramolecular helical stacking of metallomesogens derived from enantiopure and racemic polycatenar oxazolines. <i>Journal of the American Chemical Society</i> , 2003 , 125, 4527-33	16.4	79
97	Star-shaped conjugated compounds forming nematic discotic systems. <i>Tetrahedron</i> , 2004 , 60, 6881-6888	4.4	77
96	A Columnar Liquid-Crystal Phase Formed by Hydrogen-Bonded Perylene Bisimide J-Aggregates. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 2162-2165	16.4	74
95	Shape-persistent V-shaped mesogensFormation of nematic phases with biaxial order. <i>Journal of Materials Chemistry</i> , 2006 , 16, 4326-4334		74
94	Discotic mesogens with potential electron carrier properties. <i>Chemical Communications</i> , 2001 , 2074-5	5.8	73
93	Star-shaped oligobenzoates: non-conventional mesogens forming columnar helical mesophases. <i>Chemistry - A European Journal</i> , 2008 , 14, 3562-76	4.8	71
92	Nonsymmetric bent-core liquid crystals based on a 1,3,4-thiadiazole core unit and their nematic mesomorphism. <i>Chemistry of Materials</i> , 2011 , 23, 2630-2636	9.6	65

91	Homeotropic Alignment of Columnar Liquid Crystals in Open Films by Means of Surface Nanopatterning. <i>Advanced Materials</i> , 2007 , 19, 815-820	24	64
90	Dendrimers consisting of stilbene or distyrylbenzene building blocks synthesis and stability. <i>Tetrahedron</i> , 1999 , 55, 13377-13394	2.4	64
89	Supramolecular order of stilbenoid dendrons: importance of weak interactions. <i>Journal of Materials Chemistry</i> , 2006 , 16, 441-451		63
88	Photochemistry and mobility of stilbenoid dendrimers in their neat phases. <i>Journal of the American Chemical Society</i> , 2004 , 126, 772-84	16.4	63
87	Synthesis and mesomorphic properties of new V-shaped shape-persistent nematogens containing a thiazole or a thiadiazole bending unit. <i>Journal of Materials Chemistry</i> , 2009 , 19, 1978		58
86	Semiflexible Star-Shaped Mesogens as Nonconventional Columnar Liquid Crystals. <i>Chemistry of Materials</i> , 2004 , 16, 374-376	9.6	55
85	Self-assembly of multi-stranded perylene dye J-aggregates in columnar liquid-crystalline phases. <i>Nature Communications</i> , 2018 , 9, 2646	17.4	54
84	A perfect match: fullerene guests in star-shaped oligophenylenevinylene mesogens. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 4110-4	16.4	53
83	Biaxial nematics from their prediction to the materials and the vicious circle of molecular design. <i>Liquid Crystals</i> , 2011 , 38, 1389-1405	2.3	52
82	Search for biaxiality in a shape-persistent bent-core nematic liquid crystal. <i>Soft Matter</i> , 2012 , 8, 8880	3.6	51
81	Self-Organization and Nanoscale Electronic Properties of Azatriphenylene-Based Architectures: A Scanning Probe Microscopy Study. <i>Advanced Materials</i> , 2006 , 18, 3313-3317	24	51
80	Columnar Mesophases with 3D Order from New Functional Nonconventional Star-Shaped Mesogens. <i>Advanced Materials</i> , 2008 , 20, 4414-4418	24	49
79	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	7.1	44
78	Recent advances in heterocycle-based metal-free calamitics. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 12308-12337	7.1	40
77	Stilbenoide Dendrimere. <i>Angewandte Chemie</i> , 1998 , 110, 666-669	3.6	38
76	Low-melting nematic V-shaped 1,3,4-thiadiazoles [phase engineering using small substituents and mixtures of flexible chains. <i>Liquid Crystals</i> , 2011 , 38, 407-422	2.3	36
75	Star-shaped oligobenzoates with a naphthalene chromophore as potential semiconducting liquid crystal materials?. <i>Journal of Materials Chemistry</i> , 2008 , 18, 2995		35
74	Synthesis and properties of oxadiazole based V-shaped, shape persistent nematogens. <i>Chemical Communications</i> , 2008 , 1768-70	5.8	35

73	Programming Star-Mesogens toward the Formation of Columnar or Cubic Phases. <i>Chemistry of Materials</i> , 2008 , 20, 5453-5456	9.6	33
72	Free Space in Liquid Crystals-Molecular Design, Generation, and Usage. <i>Accounts of Chemical Research</i> , 2019 , 52, 1653-1664	24.3	32
71	Shape-Persistent, Sterically Crowded Star Mesogens: From Exceptional Columnar Dimer Stacks to Supermesogens. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 9710-4	16.4	31
70	Homogeneous and homeotropic alignment of bent-core uniaxial and biaxial nematic liquid crystals. <i>Soft Matter</i> , 2011 , 7, 8770	3.6	30
69	Crown ethers with lateral ortho-terphenyl units: effect of ester groups and sodium salts on the mesomorphic properties. <i>Journal of Materials Chemistry</i> , 2009 , 19, 645-654		30
68	The solution structure of stilbenoid dendrimers: a small-angle scattering study. <i>ChemPhysChem</i> , 2006 , 7, 2097-104	3.2	30
67	Low temperature enantiotropic nematic phases from V-shaped, shape-persistent molecules. <i>Beilstein Journal of Organic Chemistry</i> , 2009 , 5, 73	2.5	28
66	New Star-shaped Mesogens with Three Different Arms on a 1,3,5-Benzene Core. <i>Molecular Crystals and Liquid Crystals</i> , 2004 , 411, 397-406	0.5	28
65	Biaxial nematic mesophases from shape-persistent mesogens with a fluorenone bending unit. <i>Chemistry - A European Journal</i> , 2010 , 16, 8275-9	4.8	27
64	Discotic Liquid Crystals as Electron Carrier Materials. <i>Molecular Crystals and Liquid Crystals</i> , 2003 , 396, 35-39	0.5	27
63	Templating Crystal Growth at the Nanometer-Scale with a Monotropic Columnar Mesophase. <i>Advanced Materials</i> , 2005 , 17, 671-676	24	25
62	Photoconductive Core-Shell Liquid-Crystals of a Perylene Bisimide J-Aggregate Donor-Acceptor Dyad. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 12979-12983	16.4	23
61	Nuclear magnetic resonance spectroscopic investigations of phase biaxiality in the nematic glass of a shape-persistent V-shaped mesogen. <i>Journal of Chemical Physics</i> , 2010 , 133, 174509	3.9	23
60	Star-shaped mesogens -- hekates: the most basic star structure with three branches. <i>Topics in Current Chemistry</i> , 2012 , 318, 193-223		22
59	Fullerene-Filled Liquid-Crystal Stars: A Supramolecular Click Mechanism for the Generation of Tailored Donor-Acceptor Assemblies. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 3610-3615	16.4	22
58	Body-centered cubic phase in 3-arm star mesogens: a torsional tapping AFM and GISAXS study. <i>Soft Matter</i> , 2010 , 6, 5390	3.6	21
57	Impact of core chirality on mesophase properties of perylene bisimides. <i>Journal of Materials Chemistry</i> , 2011 , 21, 7201		21
56	A Columnar Liquid-Crystal Phase Formed by Hydrogen-Bonded Perylene Bisimide J-Aggregates. <i>Angewandte Chemie</i> , 2017 , 129, 2194-2197	3.6	20

55	Self-Sorting Supramolecular Polymerization: Helical and Lamellar Aggregates of Tetra-Bay-Acyloxy Perylene Bisimide. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 17084-17090	16.4	20
54	Perfekte Raumfüllung [Fullerengitter in sternförmigen Oligophenylenvinylen-Mesogenen. <i>Angewandte Chemie</i> , 2015 , 127, 4183-4187	3.6	20
53	Dielectric technique to measure the twist elastic constant of liquid crystals: the case of a bent-core material. <i>Physical Review E</i> , 2012 , 85, 061704	2.4	20
52	Chiral hexacatenar metallocmesogens: supramolecular organization versus steric demand of chiral cores. <i>Journal of Materials Chemistry</i> , 2002 , 12, 1342-1350		20
51	Self-assembly of -bond assisted supramolecular architectures. <i>Soft Matter</i> , 2008 , 4, 303-310	3.6	19
50	New ABC core for the synthesis of nonsymmetric star molecules. <i>Organic Letters</i> , 2006 , 8, 721-3	6.2	17
49	Rigid Phenylene Ethynylene Units Linked by A V-shaped Centre. An Approach to Biaxial Nematogens?. <i>Molecular Crystals and Liquid Crystals</i> , 2004 , 411, 273-281	0.5	17
48	Crowded Star Mesogens: Guest-Controlled Stability of Mesophases from Unconventional Liquid-Crystal Molecules. <i>Chemistry - A European Journal</i> , 2017 , 23, 1060-1068	4.8	15
47	V-shaped nematogens with the "magic bent angle". <i>Chemical Communications</i> , 2011 , 47, 6680-2	5.8	15
46	Hexaazatriisothianaphthalenes: new electron-transport mesogens?. <i>Tetrahedron</i> , 2004 , 60, 3283-3291	2.4	15
45	A Star-shaped Oligo(phenylenevinylene) Liquid Crystal Host with an Anthracene Guest-A Double Nanosegregating Supermesogen. <i>Chemistry - A European Journal</i> , 2017 , 23, 1018-1022	4.8	14
44	Guest-Host Systems of 1,3,5-Tristyrylbenzenes. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2003 , 58, 775-781	1	14
43	Rigid Chiral Building Blocks for Copper(II)- and Palladium(II)-Containing Liquid Crystals. <i>Chemistry of Materials</i> , 2001 , 13, 4374-4381	9.6	14
42	To be or not to be [hematic liquid crystals from shape-persistent V-shaped nematogens with the [magic angle]. <i>Liquid Crystals</i> , 2018 , 45, 136-151	2.3	13
41	Formstabile, sterisch Belastete Sternmesogene [von ungewöhnlichen kolumnaren Dimerstapeln zu Supermesogenen. <i>Angewandte Chemie</i> , 2015 , 127, 9846-9850	3.6	12
40	At the Limits of Liquid Crystallinity: Stimuli Responsive 3D Columnar Liquid Crystals and Soft Crystals of Supramolecular Anthracene Mesogens. <i>Chemistry of Materials</i> , 2015 , 27, 8181-8184	9.6	11
39	Supramolecular click procedures in liquid crystals. <i>Liquid Crystals</i> , 2019 , 46, 1985-1994	2.3	10
38	Synthesis, Thermal, and Optical Properties of Tris(5-aryl-1,3,4-oxadiazol-2-yl)-1,3,5-triazines, New Star-Shaped Fluorescent Discotic Liquid Crystals. <i>Chemistry - A European Journal</i> , 2019 , 25, 15295-15304	4.8	10

37	Isomerisation of Liquid-Crystalline Tristriazolotriazines. <i>Chemistry - A European Journal</i> , 2018 , 24, 93-96	4.8	10
36	Semi-flexible star-shaped molecules: conformational analysis of nano-segregated mesogens forming columnar liquid-crystal phases. <i>International Journal of Materials Research</i> , 2005 , 96, 988-997	9	
35	Fullerene-Filled Stilbene Stars: The Balance between Isolated C Helices and 3D Networks in Liquid-Crystal Self-Assemblies. <i>Chemistry - A European Journal</i> , 2019 , 25, 3352-3361	4.8	9
34	Self-Sorting Supramolecular Polymerization: Helical and Lamellar Aggregates of Tetra-Bay-Acyloxy Perylene Bisimide. <i>Angewandte Chemie</i> , 2020 , 132, 17232-17238	3.6	8
33	Polymorphism in liquid crystals from star-shaped mesogens. <i>Philosophical Magazine Letters</i> , 2007 , 87, 883-891	1	7
32	Synthesis and Solid-state Structure of a Star-shaped Oligobenzoate. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2007 , 62, 988-994	1	7
31	Nanoscale Columnar Bundles Based on Multistranded Core-Shell Liquid Crystals of Perylene Bisimide J-Aggregate Donor-Acceptor Dyads for Photoconductivity Devices with Enhanced Performance Through Macroscopic Alignment. <i>ACS Applied Nano Materials</i> , 2020 , 3, 10234-10245	5.6	6
30	Photoconductive Core-Shell Liquid-Crystals of a Perylene Bisimide J-Aggregate Donor-Acceptor Dyad. <i>Angewandte Chemie</i> , 2019 , 131, 13113-13117	3.6	5
29	Filaments formed in the hexagonal columnar liquid crystal phase of star-shaped oligobenzoates. <i>Liquid Crystals</i> , 2013 , 40, 345-353	2.3	5
28	Mesogens and Mesophases 2011 , 277-357		5
27	Photoreactive Liquid Crystals in the Series of Dendritic and Cyclic Stilbenoid Compounds. <i>Molecular Crystals and Liquid Crystals</i> , 2000 , 352, 85-92		5
26	Liquid crystals from shape-persistent porphyrin stars with intrinsic free space. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 5562-5571	7.1	4
25	Star-Shaped Mesogens 2014 , 1-73		4
24	The dawn in the area of thermotropic biaxial nematics Symposium on Biaxial Liquid Crystals, Kent, 27-28 October 2008. <i>Liquid Crystals Today</i> , 2009 , 18, 31-34	1.9	4
23	Parallel Polar Dimers in the Columnar Self-Assembly of Umbrella-Shaped Subphthalocyanine Mesogens. <i>Advanced Functional Materials</i> , 2021 , 31, 2104217	15.6	4
22	Investigations of the Alignment Process of PBPMLG: H NMR Analysis Reveals a Thermoresponsive 90°Flip of the Polymer. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 21040-21046	16.4	4
21	Influence of the peripheral alkyl chains length on the mesomorphic properties of electron acceptor Extended HAT derivatives. <i>Synthetic Metals</i> , 2014 , 195, 222-227	3.6	3
20	Mesogenic origami [Four-armed, star-shaped mesogens as precursors for functional liquid crystal materials. <i>Liquid Crystals</i> , 2017 , 1-22	2.3	3

19	From molecular biaxiality of real board-shaped mesogens to phase biaxiality? On the hunt for the holy grail of liquid crystal science. <i>Soft Matter</i> , 2019 , 15, 8496-8511	3.6	3
18	The liquid crystal Click procedure for oligothiophene-tethered phthalocyanines I self-assembly, alignment and photocurrent. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 5689-5698	7.1	3
17	Tris(5-aryl-1,3,4-oxadiazolyl)benzotri thiophenes II Discotic Liquid Crystals with Enormous Mesophase Ranges. <i>European Journal of Organic Chemistry</i> , 2021 , 2021, 798-809	3.2	3
16	Click procedure of phthalocyanine star-shaped mesogens I the effect of size and spacer length. <i>Liquid Crystals</i> , 2020 , 47, 1214-1222	2.3	2
15	Controlling Supramolecular Structures of Drugs by Light. <i>Molecular Pharmaceutics</i> , 2020 , 17, 4704-4708	5.6	2
14	Impact of Substitution Pattern and Chain Length on the Thermotropic Properties of Alkoxy-Substituted Triphenyl-Tristriazolotriazines. <i>Molecules</i> , 2020 , 25,	4.8	2
13	Fulleren-gefüllte Flüssigkristall-Sterne: Ein supramolekularer Klick-Mechanismus zur Bildung von maßgeschneiderten Donor-Akzeptor-Strukturen. <i>Angewandte Chemie</i> , 2019 , 131, 3649-3654	3.6	2
12	Design of Biaxial Nematic Mesogens 2014 , 1-39		1
11	Low Molar Mass Thermotropic Systems 2015 , 333-367		1
10	Unfolding multi-stranded perylene bisimide LC columns - a mesogen design for efficient nanoscale multilayer self-assembly. <i>Chemical Communications</i> , 2020 , 56, 14015-14018	5.8	1
9	Columnar Liquid Crystals from Star-Shaped Conjugated Mesogens as Nano-Reservoirs for Small Acceptors. <i>ChemPlusChem</i> , 2020 , 85, 2219-2229	2.8	0
8	Trendbericht Organische Chemie. <i>Nachrichten Aus Der Chemie</i> , 2019 , 67, 46-78	0.1	0
7	Thermoreversible Gelation of Homopolyglutamates PBPMLG, PBPELG, and PBPHLG: Another Step toward de Novo RDC-Based Structure Elucidation. <i>Macromolecules</i> , 2022 , 55, 3430-3436	5.5	0
6	Organische Chemie 2016. <i>Nachrichten Aus Der Chemie</i> , 2017 , 65, 266-304	0.1	
5	Solid-state assisted synthesis of oligobenzoates. <i>Liquid Crystals</i> , 2015 , 42, 1444-1449	2.3	
4	Trendbericht Organische Chemie 2017. <i>Nachrichten Aus Der Chemie</i> , 2018 , 66, 249-280	0.1	
3	Metal Phthalocyanine-Fullerene Dyads: Promising Lamellar Columnar Donor-Acceptor Liquid Crystal Phases. <i>ChemPlusChem</i> , 2020 , 85, 1934-1938	2.8	
2	Investigations of the Alignment Process of PBPMLG: 2H NMR Analysis Reveals a Thermoresponsive 90°Flip of the Polymer. <i>Angewandte Chemie</i> , 2021 , 133, 21208-21214	3.6	

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