## Ammathnadu S Achalkumar

List of Publications by Year in descending order

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64 papers

1,932 citations

172207 29 h-index 276539 41 g-index

65 all docs

 $\begin{array}{c} 65 \\ \text{docs citations} \end{array}$ 

65 times ranked 1700 citing authors

#	Article	IF	Citations
1	Luminescent, Liquid Crystalline Tris ( $\langle i\rangle N\langle i\rangle$ -salicylideneaniline)s: Synthesis and Characterization. Journal of Organic Chemistry, 2009, 74, 3168-3171.	1.7	85
2	Functional Ionic Liquid Crystals. Langmuir, 2020, 36, 11702-11731.	1.6	82
3	Columnar self-assembly of star-shaped luminescent oxadiazole and thiadiazole derivatives. Journal of Materials Chemistry C, 2015, 3, 2940-2952.	2.7	79
4	Frustrated Liquid Crystals:Â Synthesis and Mesomorphic Behavior of Unsymmetrical Dimers Possessing Chiral and Fluorescent Entities. Chemistry of Materials, 2007, 19, 2463-2472.	3.2	77
5	A New Class of Discotic Mesogens Derived from Tris( $\langle i \rangle N \langle i \rangle$ -salicylideneaniline)s Existing in $\langle i \rangle C \langle i \rangle \langle sub \rangle 3 \langle sub \rangle \langle i \rangle \langle sub \rangle \langle i \rangle$ and $\langle i \rangle C \langle i \rangle \langle sub \rangle \langle i \rangle \rangle$ Keto-Enamine Forms. Journal of Organic Chemistry, 2007, 72, 8308-8318.	1.7	74
6	Perylene-Based Liquid Crystals as Materials for Organic Electronics Applications. Langmuir, 2019, 35, 2455-2479.	1.6	73
7	Self-Assembly of Hekates-Tris( <i>N</i> -salicylideneaniline)s into Columnar Structures: Synthesis and Characterization. Journal of Organic Chemistry, 2013, 78, 527-544.	1.7	69
8	Self-AssemblyÂofÂC3hÂandÂCsÂSymmetric Keto-enamineÂFormsÂofÂTris(N-salicyl-ideneanilines)ÂintoÂColumnarÂPhases:ÂAÂNewÂFamilyÂofÂDiscoticÂLiq Journal of the American Chemical Society, 2004, 126, 6506-6507.	uid <b>&amp;G</b> rysta	als.60
9	Aromatic π–π driven supergelation, aggregation induced emission and columnar self-assembly of star-shaped 1,2,4-oxadiazole derivatives. Journal of Materials Chemistry C, 2016, 4, 6546-6561.	2.7	56
10	Star-shaped fluorescent liquid crystals derived from s-triazine and 1,3,4-oxadiazole moieties. Journal of Materials Chemistry C, 2016, 4, 6117-6130.	2.7	51
11	Perylo[1,12- <i>b</i> , <i>c</i> , <i>d</i> ] Thiophene Tetraesters: A New Class of Luminescent Columnar Liquid Crystals. Langmuir, 2015, 31, 8092-8100.	1.6	46
12	A sensitive and selective sensor for picric acid detection with a fluorescence switching response. New Journal of Chemistry, 2018, 42, 5382-5394.	1.4	46
13	Multifunctional hexacatenar mesogen exhibiting supergelation, AIEE and its ability as a potential volatile acid sensor. Journal of Materials Chemistry C, 2016, 4, 9669-9673.	2.7	45
14	Self-assembly of luminescent N-annulated perylene tetraesters into fluid columnar phases. Soft Matter, 2015, 11, 3629-3636.	1.2	44
15	Tuning the self-assembly and photophysical properties of bi-1,3,4-thiadiazole derivatives through electron donor–acceptor interactions and their application in OLEDs. Journal of Materials Chemistry C, 2017, 5, 9345-9358.	2.7	44
16	Electroluminescent room temperature columnar liquid crystals based on bay-annulated perylene tetraesters. Journal of Materials Chemistry C, 2017, 5, 1767-1781.	2.7	42
17	Columnar Selfâ€Assembly of Electronâ€Deficient Dendronized <i>Bay</i> â€Annulated Perylene Bisimides. Chemistry - A European Journal, 2018, 24, 3566-3575.	1.7	42
18	Liquid Crystal Abrikosov Flux Phase:Â The Exclusive Wide Thermal Range Enantiotropic Occurrence. Chemistry of Materials, 2006, 18, 1076-1078.	3.2	41

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19	The first examples of optically active tris(N-salicylideneaniline)s: manifestation of chirality from molecules to fluid columnar phases. Journal of Materials Chemistry, 2007, 17, 4521.	6.7	41
20	Effect of regioisomerism on the self-assembly and photophysical behavior of 1,3,4-thiadiazole-based polycatenars. Journal of Materials Chemistry C, 2015, 3, 8166-8182.	2.7	40
21	Cholesterol-based anchors and tethers for phospholipid bilayers and for model biological membranes. Soft Matter, 2010, 6, 6036.	1.2	39
22	Tunable Chiral Reaction Media Based on Two-Component Liquid Crystals: Regio-, Diastereo-, and Enantiocontrolled Photodimerization of Anthracenecarboxylic Acids. Journal of the American Chemical Society, 2010, 132, 17435-17446.	6.6	38
23	Helical supramolecular polymers with rationally designed binding sites for chiral guest recognition. Nature Communications, 2020, 11, 2311.	5.8	37
24	Non-symmetric dimers comprising chalcone and cholesterol entities: an investigation on structure–property correlations. New Journal of Chemistry, 2014, 38, 4235-4248.	1.4	35
25	The first examples of discotic radicals: columnar mesomorphism in spin-carrying triphenylenes. Journal of Materials Chemistry, 2008, 18, 3433.	6.7	34
26	Monodispersive Linear Supermolecules Stabilizing Unusual Fluid Layered Phases. Organic Letters, 2007, 9, 2641-2644.	2.4	33
27	Heteroatom Bay-Annulated Perylene Bisimides: New Materials for Organic Field Effect Transistors. ACS Applied Electronic Materials, 2019, 1, 1378-1386.	2.0	31
28	Bayâ€Annulated Perylene Tetraesters: A New Class of Discotic Liquid Crystals. ChemPhysChem, 2016, 17, 859-872.	1.0	30
29	A Peryleneâ€Triazineâ€Based Starâ€Shaped Green Light Emitter for Organic Light Emitting Diodes. European Journal of Organic Chemistry, 2018, 2018, 1608-1613.	1.2	30
30	Controlling Liquid Crystal Alignment Using Photocleavable Cyanobiphenyl Self-Assembled Monolayers. ACS Applied Materials & Samp; Interfaces, 2010, 2, 3686-3692.	4.0	29
31	Photoluminescent discotic liquid crystals derived from tris( N -salicylideneaniline) and stilbene conjugates: Structure–property correlations. Dyes and Pigments, 2016, 132, 291-305.	2.0	29
32	Contrasting effects of heterocycle substitution and branched tails in the arms of star-shaped molecules. New Journal of Chemistry, 2017, 41, 4680-4688.	1.4	28
33	Improved Photoreaction Yields for Soft Ultraviolet Photolithography in Organothiol Self-Assembled Monolayers. Journal of Physical Chemistry C, 2009, 113, 21642-21647.	1.5	26
34	Guestâ€Responsive Covalent Frameworks by the Crossâ€Linking of Liquidâ€Crystalline Salts: Tuning of Lattice Flexibility by the Design of Polymerizable Units. Chemistry - A European Journal, 2011, 17, 14752-14762.	1.7	24
35	Effect of Atomicâ€Scale Differences on the Selfâ€Assembly of Thiopheneâ€based Polycatenars in Liquid Crystalline and Organogel States. Chemistry - A European Journal, 2016, 22, 17843-17856.	1.7	23
36	Liquid-Crystalline Star-Shaped Supergelator Exhibiting Aggregation-Induced Blue Light Emission. Langmuir, 2016, 32, 9301-9312.	1.6	22

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37	A Selfâ€assembly Route for Double Bilayer Lipid Membrane Formation. ChemPhysChem, 2010, 11, 569-574.	1.0	21
38	Room temperature columnar liquid crystalline self-assembly of acidochromic, luminescent, star-shaped molecules with cyanovinylene chromophores. Journal of Materials Chemistry C, 2018, 6, 1844-1852.	2.7	21
39	Columnar self-assembly of luminescent bent-shaped hexacatenars with a central pyridine core connected with substituted 1,3,4-oxadiazole and thiadiazoles. New Journal of Chemistry, 2018, 42, 3781-3798.	1.4	20
40	A Cholesterolâ€Based Tether for Creating Photopatterned Lipid Membrane Arrays on both a Silica and Gold Surface. Chemistry - A European Journal, 2009, 15, 6363-6370.	1.7	19
41	Nonsymmetrical cholesterol dimers constituting regioisomeric oxadiazole and thiadiazole cores: an investigation of the structure–property correlation. New Journal of Chemistry, 2017, 41, 879-888.	1.4	18
42	The effect of regioisomerism on the mesomorphic and photophysical behavior of oxadiazole-based tris(N-salicylideneaniline)s: synthesis and characterization. New Journal of Chemistry, 2017, 41, 9908-9917.	1.4	18
43	Synthesis and self-assembly of aroylhydrazone based polycatenars: A structure-property correlation. Journal of Molecular Liquids, 2019, 284, 282-290.	2.3	18
44	Room-Temperature Columnar Liquid Crystalline Materials Based on Pyrazino [2,3-g] quinoxaline for Bright Green Organic Light-Emitting Diodes. ACS Applied Electronic Materials, 2019, 1, 1959-1969.	2.0	17
45	Hexacatenars Exhibiting π-π Driven Supergelation, Aggregation Induced Blue Light Emission and Thermochromism. ChemistrySelect, 2016, 1, 5107-5120.	0.7	16
46	Microwave-Assisted Method for the Synthesis of Perylene Ester Imides as a Gateway Toward Unsymmetrical Perylene Bisimides. Journal of Organic Chemistry, 2018, 83, 6290-6300.	1.7	16
47	Star-shaped π-gelators based on oxadiazole and thiadiazoles: a structure–property correlation. Molecular Systems Design and Engineering, 2017, 2, 478-489.	1.7	15
48	First Example of White Organic Electroluminescence Utilizing Perylene Ester Imides. ChemistrySelect, 2018, 3, 5123-5129.	0.7	14
49	Giant enhancement and facile tuning of photoluminescence in a soft anisotropic magneto-gel. Nanoscale, 2018, 10, 15686-15695.	2.8	11
50	Experimental and theoretical investigations of acid sensing properties of pyrazino[2,3-g]quinoxaline derivatives. Journal of Molecular Structure, 2021, 1225, 129120.	1.8	10
51	Fast Photoluminescence Switching in the Nematic Phase of Calamitic–Discotic Composites. Advanced Optical Materials, 2015, 3, 1116-1124.	3.6	9
52	Glass-forming organic radical compounds with cholesterol and benzylideneamine cores. Tetrahedron Letters, 2005, 46, 6701-6703.	0.7	7
53	Substituted Aroylhydrazone Based Polycatenars: Tuning of Liquid Crystalline Selfâ€Assembly. ChemistrySelect, 2018, 3, 4027-4037.	0.7	7
54	Influence of lateral methyl/chloro substituents on the liquid crystalline and photoswitching behaviour of bent-core mesogens bearing azobenzene wings: synthesis and characterization. New Journal of Chemistry, 2020, 44, 5731-5738.	1.4	7

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55	Effect of Photonic Band Gap on Photoluminescence in a Dye-Doped Blue Phase Liquid Crystal. Journal of Physical Chemistry B, 2021, 125, 11582-11590.	1.2	7
56	Influence of inter- and intramolecular H-bonding on the mesomorphic and photoswitching behaviour of (E)-4-((4-(hexyloxy)phenyl)diazenyl)-N-phenyl benzamides. RSC Advances, 2020, 10, 20222-20230.	1.7	6
57	Structure–property relationships of quinoxaline-based liquid crystals. Soft Matter, 2021, 17, 8221-8257.	1.2	6
58	A New Class of Solution Processable Pyrazino[2,3â€g]quinoxaline Carbazole Derivative Based on D–A–D Architecture for Achieving High EQE in Yellow and White OLEDs. Advanced Optical Materials, 2022, 10, .	3.6	6
59	Room-Temperature, Deep-Red/NIR-Emissive, <i>C</i> <sub>3</sub> -Symmetric (n,ï∈-conjugated) Columnar Liquid Crystals: <i>C</i> <sub>3<i>h</i></sub> -Tris(keto-hydrazone)s. ACS Omega, 2021, 6, 3291-3306.	1.6	5
60	Reversible metallisation of soft UV patterned substrates. Journal of Materials Chemistry C, 2014, 2, 5916-5923.	2.7	4
61	Photoisomerization behavior of photochromic amide-based azobenzene dyes exhibiting H-bonding effect: Synthesis and characterization. Korean Journal of Chemical Engineering, 2016, 33, 1480-1488.	1.2	4
62	Metal-free Câ€"H functionalization of pyrrolidine to pyrrolinium-based room temperature ionic liquid crystals. New Journal of Chemistry, 2021, 45, 8064-8071.	1.4	3
63	Synthesis of nitrilotriacetic acid terminated tethers for the binding of His-tagged proteins to lipid bilayers and to gold. Tetrahedron, 2011, 67, 6246-6251.	1.0	O
64	Synthesis and Liquid Crystalline Properties of Low Molecular Weight Bis-Chalcone Compounds. Current Organic Synthesis, 2021, 18, .	0.7	0