V Ajay Mallia

List of Publications by Citations

41 papers	1,421 citations	22 h-index	37 g-index
45 ext. papers	1,523 ext. citations	7.2 avg, IF	4.51 L-index

#	Paper	IF	Citations
41	Design of chiral dimesogens containing cholesteryl groups; formation of new molecular organizations and their application to molecular photonics. *Chemical Society Reviews*, **2004**, 33, 76-84	58.5	148
40	In Situ Synthesis of Gold Nanoparticles Using Molecular Gels and Liquid Crystals from Vitamin-C Amphiphiles. *Chemistry of Materials*, **2007**, 19, 138-140	9.6	135
39	Robust organogels from nitrogen-containing derivatives of (R)-12-hydroxystearic acid as gelators: comparisons with gels from stearic acid derivatives. *Langmuir*, **2009**, 25, 8615-25	4	105
38	Reversible thermal and photochemical switching of liquid crystalline phases and luminescence in diphenylbutadiene-based mesogenic dimers. *Journal of the American Chemical Society*, **2006**, 128, 7692-8	16.4	100
37	Cooling rate effects on the microstructure, solid content, and rheological properties of organogels of amides derived from stearic and (R)-12-hydroxystearic acid in vegetable oil. *Langmuir*, **2013**, 29, 7642-54	4	67
36	Relationship Between Molecular Structure and Thermo-mechanical Properties of Candelilla Wax and Amides Derived from (R)-12-Hydroxystearic Acid as Gelators of Safflower Oil. *Food Biophysics*, **2010**, 5, 193-202	3.2	65
35	Self-assembly of esters of arjunolic acid into fibrous networks and the properties of their organogels. *Langmuir*, **2009**, 25, 8663-71	4	56
34	Photoresponsive vitrifiable chiral dimesogens: photo-thermal modulation of microscopic disordering in helical superstructure and glass-forming properties. *Journal of Materials Chemistry*, **2003**, 13, 219-224		56
33	Reversible phase transitions within self-assembled fibrillar networks of (R)-18-(n-alkylamino)octadecan-7-ols in their carbon tetrachloride gels. *Journal of the American Chemical Society*, **2011**, 133, 15045-54	16.4	52
32	Photochemical Phase Transition in Hydrogen-Bonded Liquid Crystals. *Chemistry of Materials*, **1999**, 11, 207-208	9.6	49
31	In situ synthesis and assembly of gold nanoparticles embedded in glass-forming liquid crystals. *Angewandte Chemie - International Edition*, **2007**, 46, 3269-74	16.4	46
30	Reversible Photochemical Phase Transition Behavior of Alkoxy-Cyano-Substituted Diphenylbutadiene Liquid Crystals *Chemistry of Materials*, **2003**, 15, 1057-1063	9.6	43
29	Correlations of properties and structures at different length scales of hydro- and organo-gels based on N-alkyl-(R)-12-hydroxyoctadecylammonium chlorides. *Journal of Physical Chemistry B*, **2011**, 115, 12401-14	3.4	39
28	Correlations between thixotropic and structural properties of molecular gels with crystalline networks. *Soft Matter*, **2016**, 12, 3665-76	3.6	39
27	Synthesis, Liquid-Crystalline Properties, and Photo-optical Studies of Photoresponsive Oligomeric Mesogens as Dopants in a Chiral Glassy Liquid Crystal. *Advanced Functional Materials*, **2006**, 16, 477-484	15.6	37
26	Self-assembled fibrillar networks and molecular gels employing 12-hydroxystearic acid and its isomers and derivatives. *Journal of Physical Organic Chemistry*, **2014**, 27, 310-315	2.1	36
25	Photochemically Driven Smectic Cholesteric Phase Transition in an Inherently Photoactive Dimesogen. *Chemistry of Materials*, **2003**, 15, 3237-3239	9.6	32

24	Novel supramolecular hydrogen-bonded cholesteric mesogens: liquid crystalline, thermoptical and glass-forming properties. *Journal of Materials Chemistry*, **2003**, 13, 1582		30
23	Butadienes as Novel Photochromes for Color Tuning of Cholesteric Glasses: Influence of Microscopic Molecular Reorganization within the Helical Superstructure. *Advanced Functional Materials*, **2004**, 14, 743-748	15.6	28
22	Self-assembly of ketals of arjunolic acid into vesicles and fibers yielding gel-like dispersions. *Langmuir*, **2013**, 29, 1766-78	4	25
21	Novel Azopyridine-Containing Silver Mesogens: Synthesis, Liquid-Crystalline, and Photophysical Properties. *Chemistry of Materials*, **2002**, 14, 2687-2692	9.6	25
20	Photoactive dimesogen having different pathways of light driven phase transitions at different temperatures. *Chemical Communications*, **2004**, 2538-9	5.8	23
19	Thermal hysteresis in the photoresponsivity of a langmuir film of amphiphilic spiropyran. *Journal of the American Chemical Society*, **2004**, 126, 1006-7	16.4	20
18	Synthesis and studies of some 4-substituted phenyl-4?-azopyridine-containing hydrogen-bonded supramolecular mesogens. *Liquid Crystals*, **2003**, 30, 135-141	2.3	20
17	Structural bases for mechano-responsive properties in molecular gels of (R)-12-hydroxy-N-(Ehydroxyalkyl)octadecanamides. Rates of formation and responses to destructive strain. *Soft Matter*, **2015**, 11, 5010-22	3.6	19
16	Influence of anions and alkyl chain lengths of N-alkyl-n-(R)-12-hydroxyoctadecyl ammonium salts on their hydrogels and organogels. *Langmuir*, **2013**, 29, 6476-84	4	19
15	Cholesterol Phenoxy Hexanoate Mesogens: Effect of meta Substituents on Their Liquid Crystalline Behavior and in Situ Metal Nanoparticle Synthesis. *Chemistry of Materials*, **2007**, 19, 5203-5206	9.6	14
14	Synthesis and Photoswitching Properties of Some Cholesterol Based Liquid Crystals. *Molecular Crystals and Liquid Crystals*, **2000**, 350, 125-139		13
13	Oscillatory Rheology and Surface Water Wave Effects on Crude Oil and Corn Oil Gels with (R)-12-Hydroxystearic Acid as Gelator. *Industrial & Engineering Chemistry Research*, **2016**, 55, 954-960	3.9	12
12	Insights and Initiatives While Teaching Organic Chemistry I and II with Laboratory Courses in the Time of COVID-19. *Journal of Chemical Education*, **2020**, 97, 3240-3245	2.4	12
11	Synthesis and studies of some cholest-5-en-3-ol-(3[4-phenylpyridylazo]carbonate-containing supramolecular hydrogen-bonded mesogens. *Liquid Crystals*, **2001**, 28, 259-264	2.3	11
10	Synthesis and study of novel azopyridine-containing hexacatenar silver mesogens. *Liquid Crystals*, **2004**, 31, 713-717	2.3	8
9	Chiral Nematic Glasses from Novel Hydrogen-Bonded Mesogens. *Chemistry Letters*, **2001**, 30, 752-753	1.7	8
8	Self-assembly in vegetable oils of ionic gelators derived from (R)-12-hydroxystearic acid. *Food Structure*, **2017**, 13, 56-69	4.3	6
7	Study of Chiral Dimesogens: Liquid Crystalline Properties, Effect of Smectic Cybotactic Domains in Controlling the Chiral Reflections and Glassy Liquid Crystal Forming Properties. *Molecular Crystals and Liquid Crystals*, **2006**, 454, 81/[483]-90/[492]	0.5	6

6	Thermal and photo optical properties of azoxybenzene/alkyloxy-azobenzene□cholesterol dimesogens with alkyl diacetylene linker. *Journal of Materials Research*, **2005**, 20, 3431-3438	2.5	5
5	Dissecting kinetic pathways to formation of the fibrillar objects in molecular gels using synchrotron FT-IR. *CrystEngComm*, **2015**, 17, 8085-8092	3.3	3
4	Study of unsymmetrical dimesogens containing 4-heptylazobenzene. *Journal of Physical Organic Chemistry*, **2007**, 20, 878-883	2.1	3
3	Structure-Property Comparison and Self-Assembly Studies of Molecular Gels Derived from (R)-12-Hydroxystearic Acid Derivatives as Low Molecular Mass Gelators. *ACS Symposium Series*, **2018**, 227-243	0.4	3
2	Cholesterol and Dihydrocholesterol are Simple Steroidal Molecular Gelators: How One Double Bond Controls the Structure and Mechanotropic Properties of Their Gels. *ChemistrySelect*, **2016**, 1, 4965-4972	1.8	1
1	Self-Assembly and Aggregation Studies of Simple Structural Derivatives of Stearic Acid. *ACS Symposium Series*, **2020**, 31-45	0.4	