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Title:	Star-shaped fluorescent liquid crystals derived from s-triazine and 1,3,4-oxadiazole moieties
Authors:	Gupta, Monika (/jspui/browse?type=author&value=Gupta%2C+Monika) Pal, S.K. (/jspui/browse?type=author&value=Pal%2C+S.K.)
Keywords:	Oxadiazole Photophysical properties Electrochemical s-triazine
Issue Date:	2016
Publisher:	Royal Society of Chemistry
Citation:	Journal of Materials Chemistry C, 4(25), pp. 6117-6130
Abstract:	Star-shaped molecules with a central triazine core appended with three 1,3,4-oxadiazole arms have been designed with the variation in the number, length and pattern of peripheral chain substitution. These compounds were investigated for their thermal, electrochemical and photophysical behavior. These nonconventional molecules stabilized wide range columnar phases and demonstrated how one can tune the liquid crystal self-assembly through simple structural modification. The photophysical properties of these star shaped molecules are extremely dependent on the number and pattern of peripheral chain substitution. These compounds exhibit blue and green luminescence in the solid/liquid crystal state. The ability to overcome aggregation induced quenching is due to the favorable packing of these molecules in the solid state. These solid-state emissive materials with good thermal stability and lower band gap may find applications in the construction of emissive displays and organic lasers.
Description:	Only IISERM authors are available in the record.
URI:	<a href="https://pubs.rsc.org/en/content/articlelanding/2016/tc/c6tc01260d#!divAbstract">https://pubs.rsc.org/en/content/articlelanding/2016/tc/c6tc01260d#!divAbstract</a> ( <a href="https://pubs.rsc.org/en/content/articlelanding/2016/tc/c6tc01260d#!divAbstract">https://pubs.rsc.org/en/content/articlelanding/2016/tc/c6tc01260d#!divAbstract</a> ) <a href="http://hdl.handle.net/123456789/2522">http://hdl.handle.net/123456789/2522</a> ( <a href="http://hdl.handle.net/123456789/2522">http://hdl.handle.net/123456789/2522</a> )
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