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Title: AIE-active mechanoluminescent discotic liquid crystals for applications in OLEDs and bio-imaging

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Keywords: AIE-active mechanoluminescent

liquid crystals OLEDs

Issue Date: 2020

Publisher: Royal Society of Chemistry

Citation: Chemical Communications, 56(91) pp. 14279-14282

Abstract: A multifunctional molecular design of fluorescent discotic liquid crystal (DLC) consisting of a

tetraphenylethylene core is reported, which is found to serve as an excellent solid-state emitter in OLED devices with EQE of 4.4% and tunable mechanochromism. X-ray diffraction studies unveiled that change in supramolecular self-assembly is the physical origin of mechanochromism. The luminescent DLC molecule has been shown to act as a highly selective probe for labelling acidic cellular compartments (such as lysosomes) in bio-imaging using HeLa cells. This journal is

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Description: Only IISERM authors are available in the record.

 $URI: \qquad \qquad https://pubs.rsc.org/en/content/articlelanding/2020/cc/d0cc05813k\#! divAbstract$

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