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Correction: Self-assembled blue-light emitting materials for their liquid crystalline and OLED applications: from a simple molecular design to supramolecular materials

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Correction for 'Self-assembled blue-light emitting materials for their liquid crystalline and OLED applications: from a simple molecular design to supramolecular materials' by Vinay S. Sharma *et al.*, *Mol. Syst. Des. Eng.*, 2020, 5, 1691–1705, DOI: 10.1039/D0ME00117A.

The authors regret that it was not clear in the original article that a *Journal of Materials Chemistry C* paper by Abhay Kumar Yadav *et al.*, based on thiadiazole core, was used as a template. Although the *Journal of Materials Chemistry C* article has been cited. The authors provide experimental details of section 3.8 Electroluminescence properties and fabrication of the device and also updates it in the ESI file. The authors wish to clarify that the design, synthesis of materials, presentation and results reported in this *Molecular Systems Design & Engineering* article and the *Journal of Materials Chemistry C* article¹ are different.

We have prepared a total of four blue-light emitting molecules with columnar self-assembly and columnar type mesophase, we also confirm the stability of the compounds and investigate the cone confirmation of all calixarene appended chalcone-amine based target compounds. We prepared compounds **7a** with butyloxy; **7b** with hexyloxy, **7c** with decyloxy and **7d** with hexadecyloxy groups. All four derivatives showed blue fluorescence in solution as well as in the solid thin film state. For the OLED device fabrication, compound **7d** with four different ratios used as the dopants and OLED devices were fabricated by a solution-processed method. The ITO substrates were rinsed with acetone and isopropyl alcohol using sonication for 10 min and further pre-cleaned by applying UV-ozone treatment for 15 min. After applying this surface treatment, further the anode and cathode were directly used and the film of PEDOT along with PSS was inbuilt onto the ITO surface by spin-coating method and then annealed for 30 min at 90 °C. Bathocuproine (Merck) used as the HBL, Alq3 used as the electron transporting layer on the emitting layer. The thermally evaporated deposition rates are 0.6 Å s⁻¹ for the organic based layer, and 0.1 Å s⁻¹ and 2 Å s⁻¹ for the LiF and Al electrodes. The devices were never exposed to air during the fabrication process. All the properties like electroluminescence spectra and current–voltage–luminescence (*J–V–L*) characteristics were measured using a spectrophotometer (Horibo) with computer control (Keithley 2400) with photodiode and picoammeter (Keithley). We provide the below references for the mentioned fabrication methods respectively.^{1–3}

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

References

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