

Blue emitting light-emitting electrochemical cells from an ionic small molecule

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Light-emitting electrochemical cells (LECs) are the future generation of flat-panel displays and solid state lighting sources. Compared to conventional solid state organic light-emitting diodes (OLEDs), LECs possess simple device architecture. Recently non-ionic small molecule light-emitting electrochemical cell were reported by Tang et al. The molecule which is an ionic apart from Ir-ΠIMCs has great attentions. We designed and synthesized an ionic small molecule having strong luminescence and good charge transporting capabilities. A complete structural, photophysical, electrochemical and electroluminescent properties were investigated. Blue light- emissions were achieved by applying the target compound in a LEC device.