Recent progress of Printable OLED materials

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Electroluminescent devices based on organic materials receive considerable attention due to the high potential and advantages they can offer for flat panel displays. The developments of printable materials that are suitable for the fabrication of high-speed integrated EL devices is presently a major focus of research in OLED. The topics are presented on recent progress in printable organic electroluminescent materials and devices. Printable materials are described with emphasis on their material issues pertaining to charge transport, color, and luminance efficiencies. The chemical and electronic nature of electrode/organic interfaces and its impact on the device performance are then discussed. Particular attention is paid to recent advances in interface engineering that is of paramount importance to modify the chemical and electronic structure of the interface. Important issues relating to the status of display development are briefly addressed as well.