

### High performance OLEDs with a organic/metal transferred under ambient conditions

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Organic light emitting devices (OLEDs) has been the subject of intensive research in the past decade and become one of the most promising techniques. Because of its potential applications for large area flat panel displays but for solid state lighting field, the fabrication of large-area devices and the use low-cost manufacturing technology will be the major issues. The fabrication of polymer OLEDs by processing the active materials form solution promises to be less expensive and faster than that of OLEDs, where deposition of the active layers requires the use of vacuum technology. But the problem of the solution process is that devices can't be made multilayer by this method because the solution will dissolve the formed layer .We added a ETL layer to improve the property of devices by transfer technique together with solution process to make multilayer devices. We firstly designed a single emitting layer OLEDs by the spin-coating using small molecular weight organic dyes mixed in polyvinylcarbazole(PVK) and then we try to make another layer by using transfer method .We have shown that if we add a ETL layer, it will greatly improve the device properties.