Dynamic Color Shifting of Green Organic Light-Emitting Diodes Utilizing Distributed Bragg Reflector Mirror Fabricated via Atomic Layer Deposition

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Graphical ABSTRACT

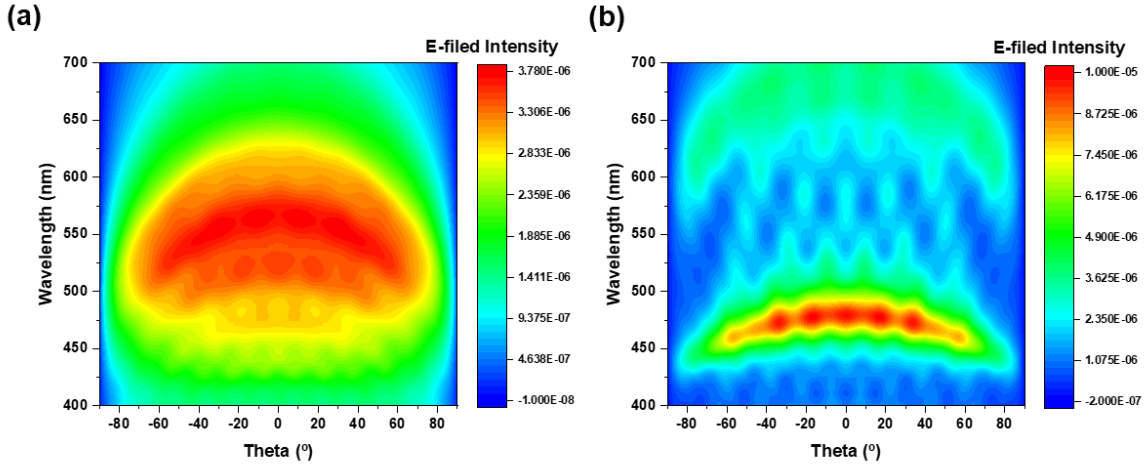
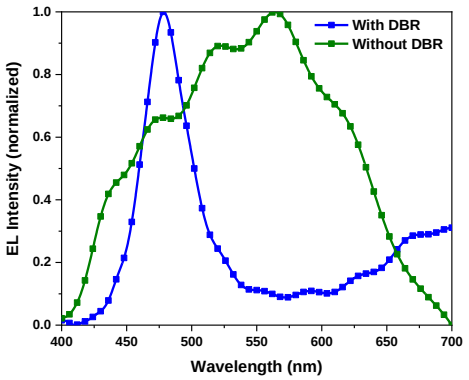


Fig. 1 The simulation results of the E2 far field without DBR (left) and with DBR (right).



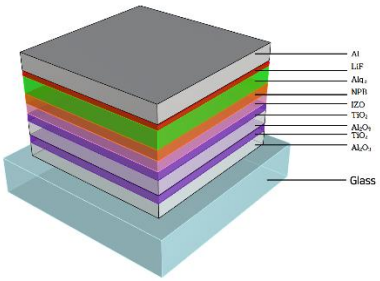


Fig. 2(Left) The image above shows a comparison of E-field intensity.

Fig. 3(Right) The image above is a schematic diagram of an OLED with DBR applied.

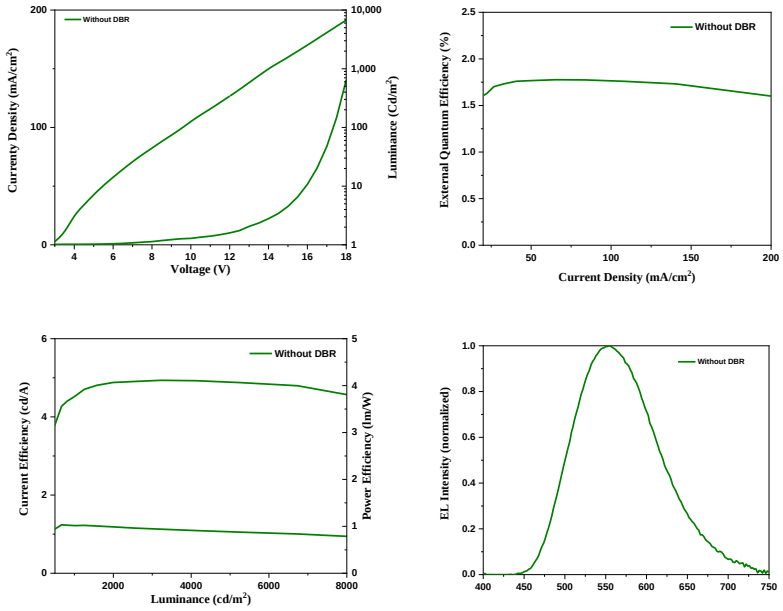


Fig. 4 The figure above are a summary of the green fluorescent OLED fabricated as a reference.

Keywords: OLED, Distributed Bragg reflector, Atomic Layer Deposition

Biography: Junbeom Song was born in Seoul, Korea, in 1997. He received a bachelor's degree in electrical engineering from Korea University in Seoul, Republic of Korea in 2023. After that he entered graduate school. He is currently a second-year M.S. student at the Display and Nanosensor laboratory in Korea university. His research interests are the improvement efficiency and lifetime through light extraction in organic light-emitting diodes (OLEDs), and the development of OLED process technologies such as thin film deposition. Additionally, he is interested in next-generation displays including flexible, transparent, and quantum dot (QD) displays.

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