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# Supporting Information

## Origin of Light Manipulating in Nano-honeycomb Structured Organic Light-emitting Diodes

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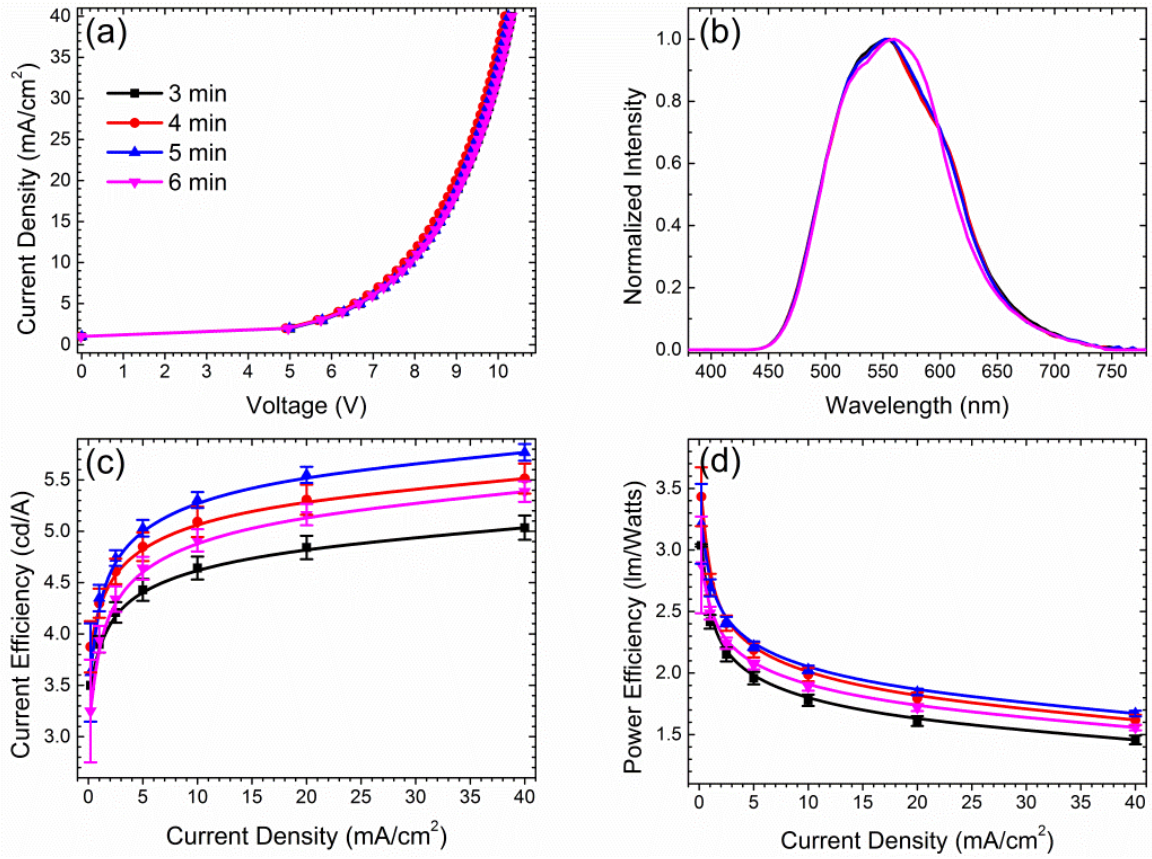


**Figure S1**. The average performance of OLED devices based on $Alq_3$ as emitters. The thickness of $MoO_x$ layer is **30 nm** and the $O_2$ plasma etching time varies from 3 to 6 min. (a) Current density-voltage curves; (b) EL spectra; (c) Current efficiency verse current density curves; (d) Power efficiency verse current density curves.

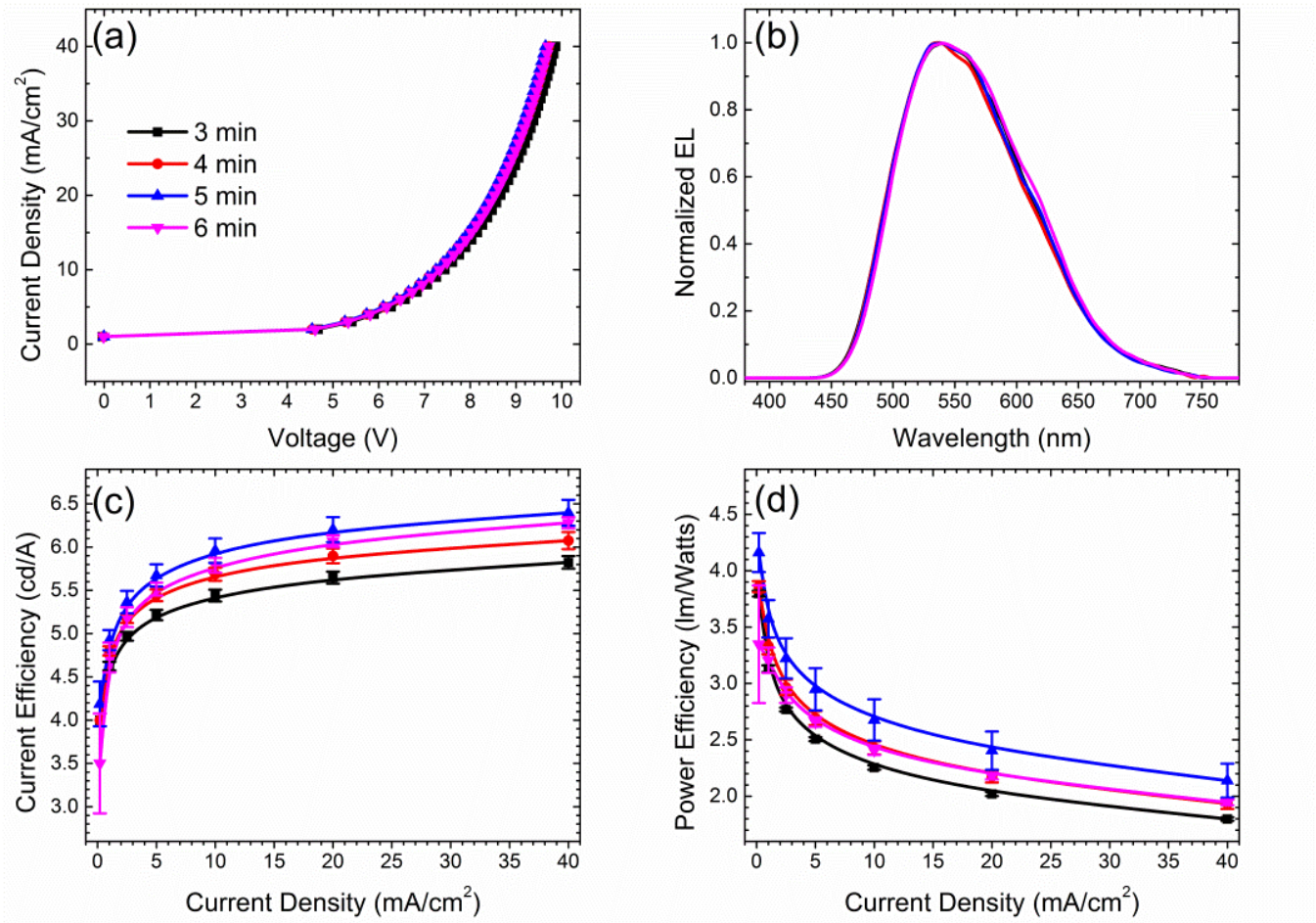


**Figure S2**. The average performance of OLED devices based on $Alq_3$ as emitters. The thickness of $MoO_x$ layer is **50 nm** and the $O_2$ plasma etching time varies from 3 to 6 min. (a) Current density-voltage curves; (b) EL spectra; (c) Current efficiency verse current density curves; (d) Power efficiency verse current density curves.

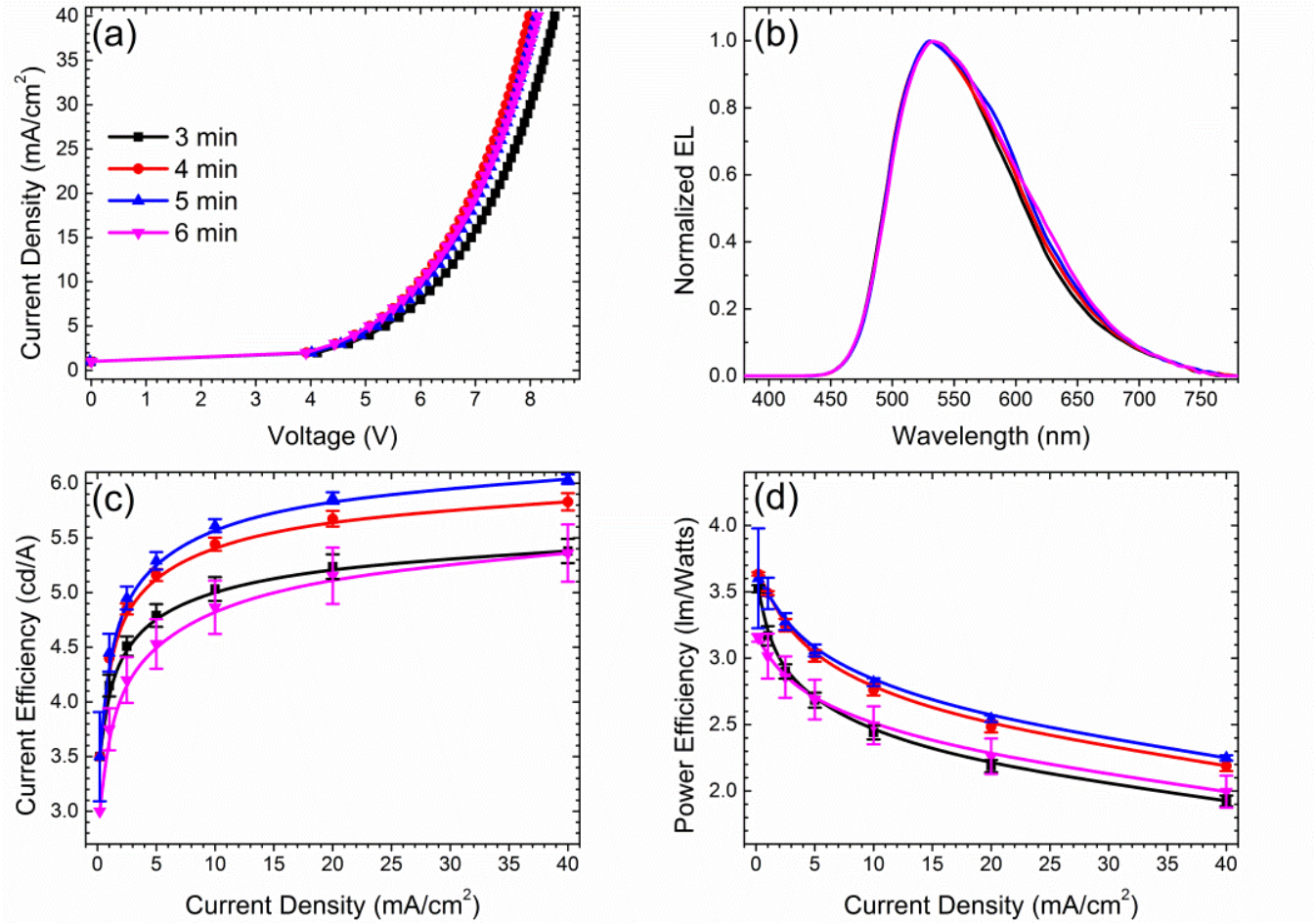


**Figure S3**. The average performance of OLED devices based on $Alq_3$ as emitters. The thickness of $MoO_x$ layer is **70 nm** and the $O_2$ plasma etching time varies from 3 to 6 min. (a) Current density-voltage curves; (b) EL spectra; (c) Current efficiency verse current density curves; (d) Power efficiency verse current density curves.

Figures S1-3 depict the average performance of honeycomb structure OLED devices based on $Alq_3$ as emitters. The thicknesses of $MoO_x$ layer are 30, 50, and 70 nm, while the $O_2$ plasma etching time varies from 3 to 6 min. An optimized performance is achieved when the thickness of $MoO_x$ layer is 50 nm and the MCC pattern of polystyrene spheres is etched for about 5 min, which corresponds to the best diffraction.