

Supporting Information

Wavelength-Tunable Green Light Sources Based on

ZnO:Ga Nanowire/p-InGaN Heterojunctions

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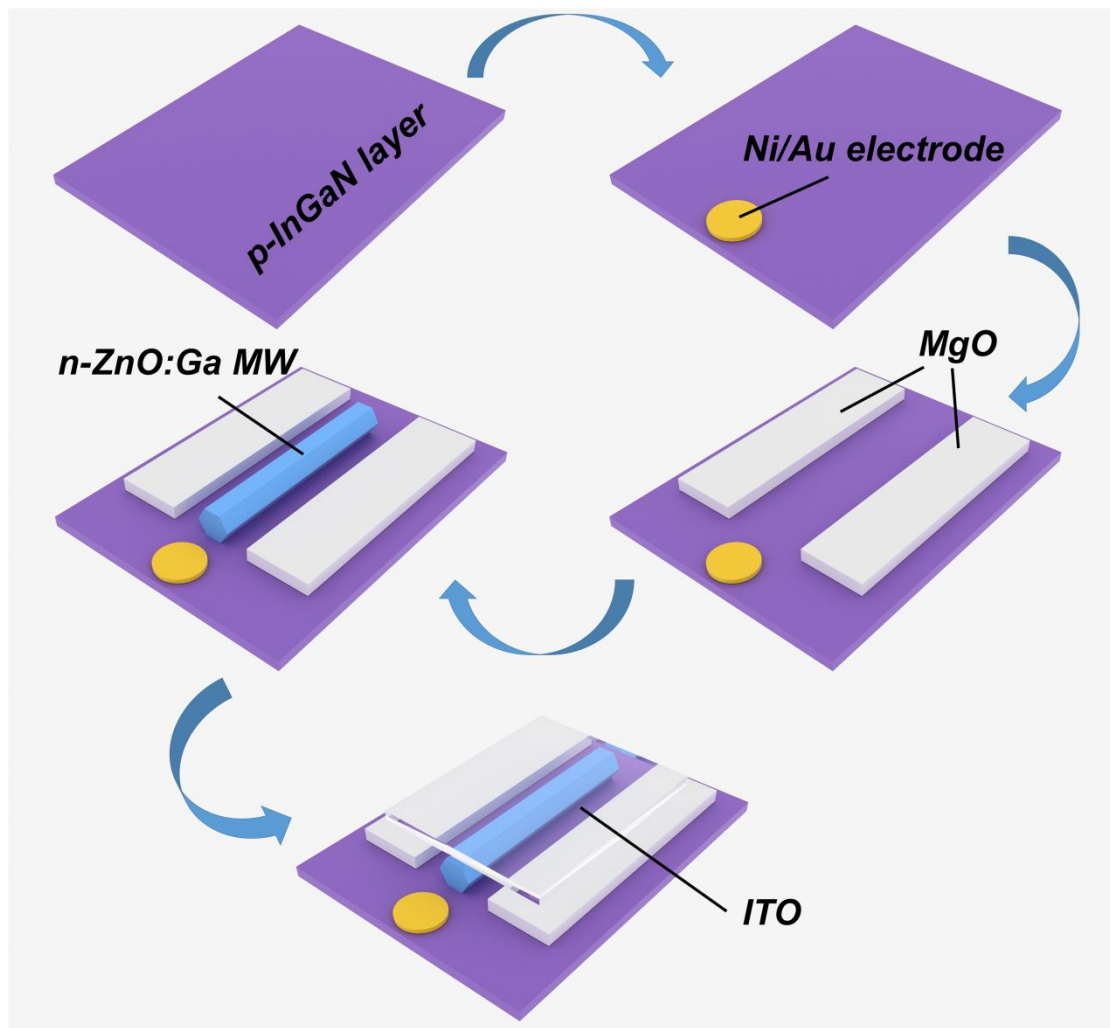


Figure S1. Brief preparation process of the n-ZnO:Ga MW/p-InGaN heterojunction LED.

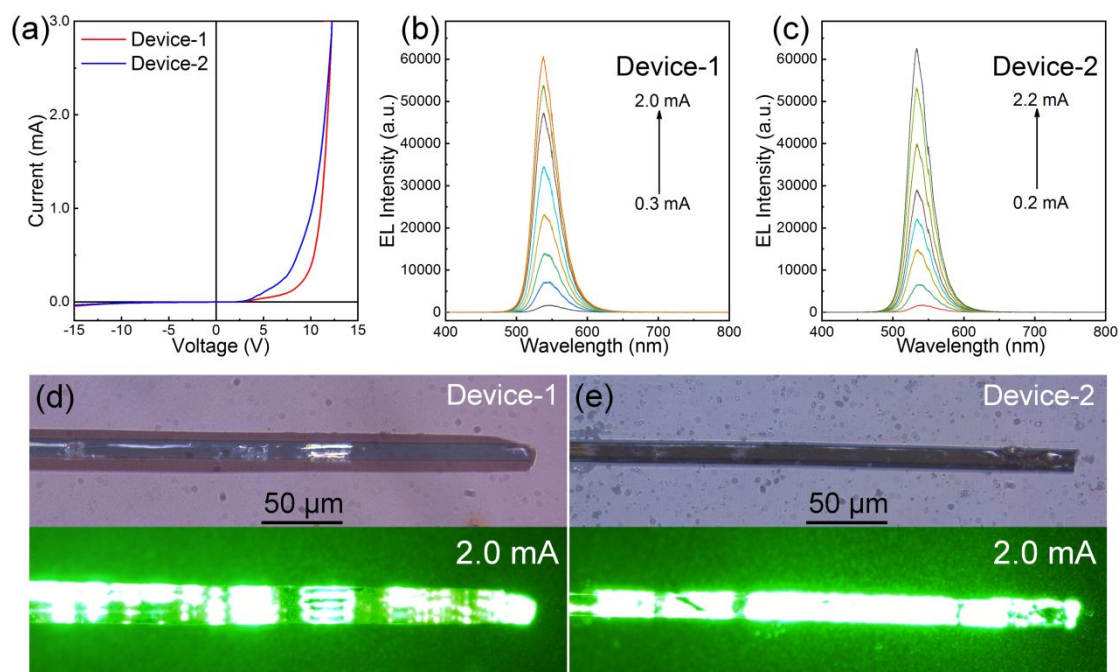


Figure S2. Device characterization of the as-constructed n-ZnO:Ga MW/p-InGaN heterojunction LEDs, with the MWs possessing hexagon-shaped cross section and different sizes. (a) I-V curves of Device-1 and Device-2, respectively. EL spectra of Device-1 (b), and Device-2 (c) under different injection current, respectively. Optical microscope EL images of Device-1 (d) and Device-2 (e), which being captured when the devices operated at an injection current of 2.0 mA.

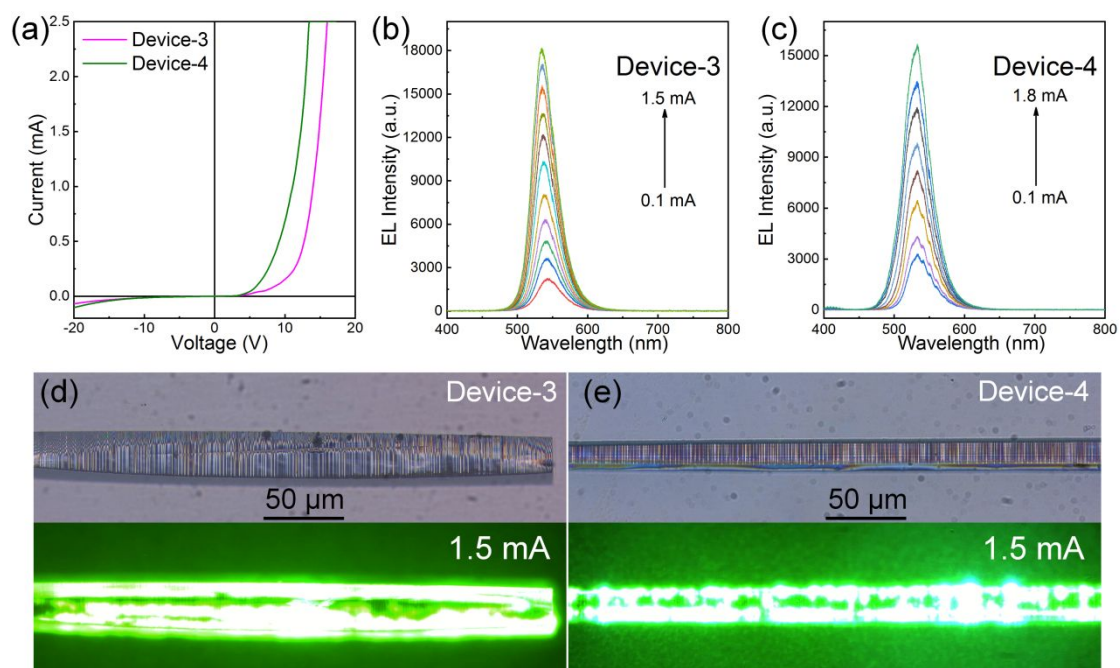


Figure S3. Device characterization of the as-constructed n-ZnO:Ga MW/p-InGaN heterojunction LEDs, with the MWs possessing quadrilateral cross section and different sizes. (a) I-V curves of the fabricated Device-3 and Device-4, respectively. EL spectra of Device-3 (b), and Device-4 (c) under different injection current, respectively. Optical microscope EL images of Device-3 (d) and Device-4 (e), which being captured when the devices operated at an injection current of 1.5 mA.

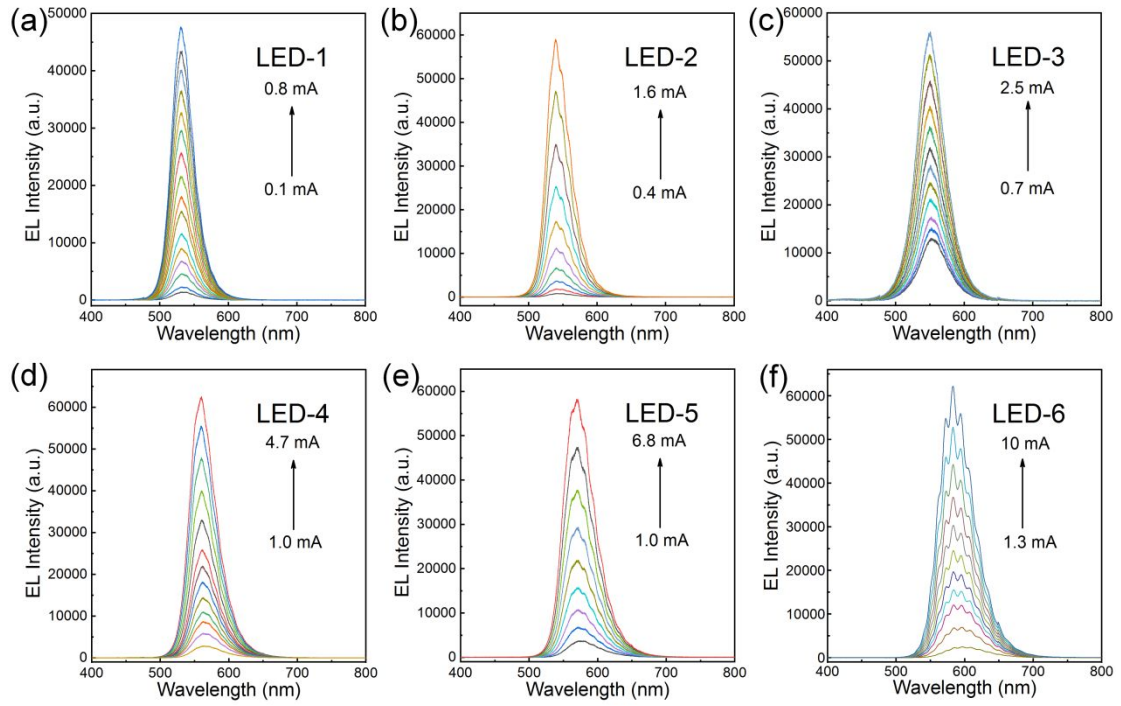


Figure S4. EL spectra of as-fabricated one-dimensional wired n-ZnO:Ga/p-InGaN heterojunction LEDs by varying injection current. (a) for LED-1; (b) for LED-2; (c) for LED-3; (d) for LED-4; (e) for LED-5; (f) for LED-6.

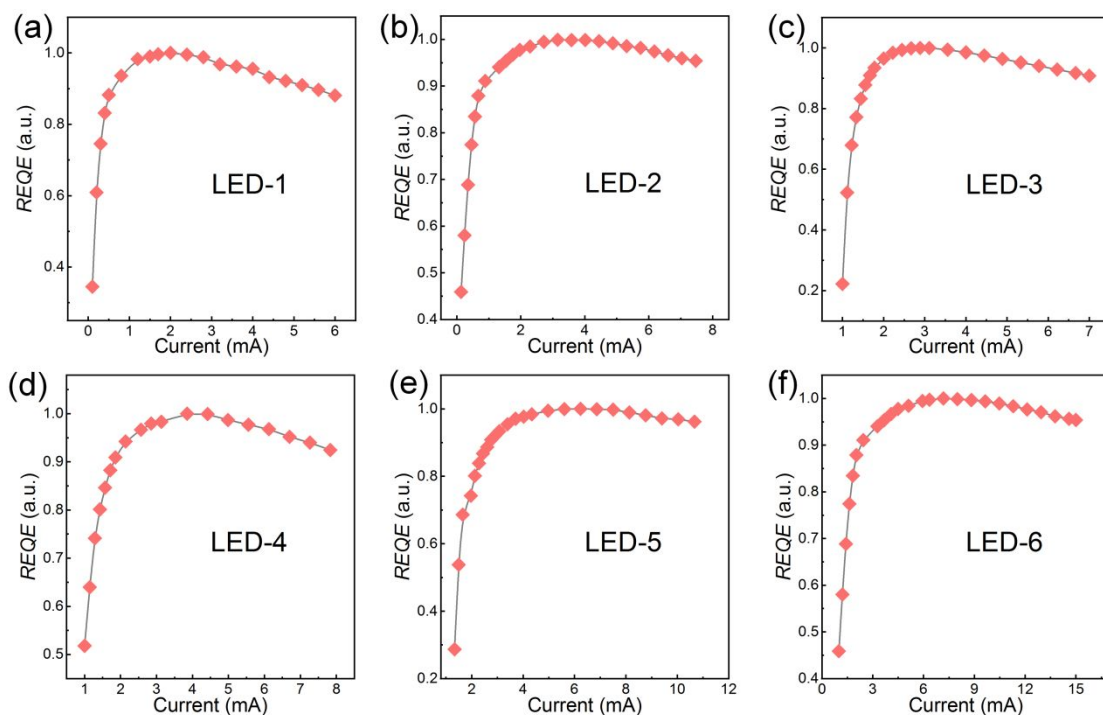


Figure S5. The calculated $REQE$ of as-fabricated one-dimensional wired n-ZnO:Ga/p-InGaN heterojunction LEDs. (a) for LED-1; (b) for LED-2; (c) for LED-3; (d) for LED-4; (e) for LED-5; (f) for LED-6.