## **Supporting Information**

## Photoresponses of InSnGaO and InGaZnO thin-film transistors

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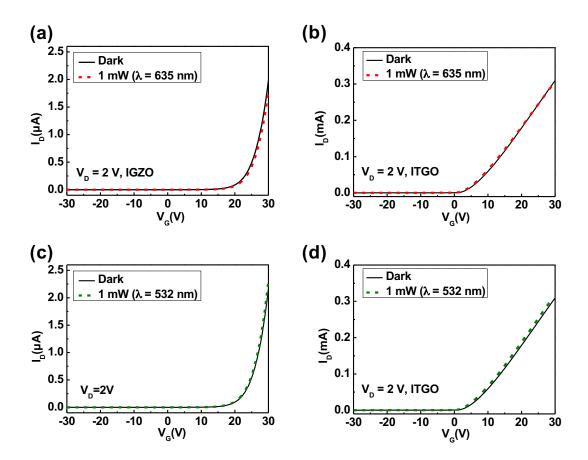
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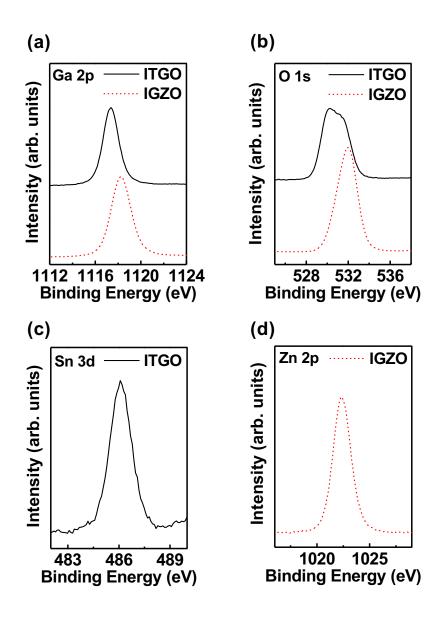
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Figure S1: Transfer characteristics of IGZO and ITGO TFTs under the illumination of 532 and 635 nm.



**Figure S1:** Typical transfer characteristics of IGZO and ITGO TFTs under the illumination of 532 and 635 nm laser source. (a) and (b) show transfer curves of IGZO and ITGO with/without the illumination of 634 nm light. (c) and (d) show transfer curves of IGZO and ITGO with/without the Illumination of 532 nm light.

Figure S2: XPS spectra of 10-nm-thick ITGO and IGZO films.



**Figure S2:** (a) Binding energies of Ga 2p were measured as 1117.4 eV (ITGO) and 1118.3 eV (IGZO). (b) O 1s binding energies were measured as 530.3 eV (ITGO) and 532 eV (IGZO). (c) Sn 3d peak of ITGO was measured as 486 eV. (d) Zn 2p peak of IGZO was measured as 1022.4 eV.