Improving electrical properties of InAs nanowire field effect transistors by covering $Y_2O_3/HfO_2$ layers

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Supporting Information

Figure S1. The output properties of group A devices (a), group B devices (b) and group C devices (c) in accordance with the devices in Figure 3.
Figure S2. The on-off ratio, threshold voltage and interface charge density of the devices in the three groups. (a) The on-off ratio of devices in group A. (b) The threshold voltage of devices in group A. (c) The interface charge density of devices in group A. (d) The on-off ratio of devices in group B. (e) The threshold voltage of devices in group B. (f) The interface charge density of devices in group B. (g) The on-off ratio of devices in group C. (h) The threshold voltage of devices in group C. (i) The interface charge density of devices in group C.

Figure S3. The EDS mapping of Hf (a) and O (b) at the same magnification from the
same area as in Figures 6 (c)-(f).

Figure S4. The STEM images of the cross section of device C5. The oxide layer is about 2 nm.