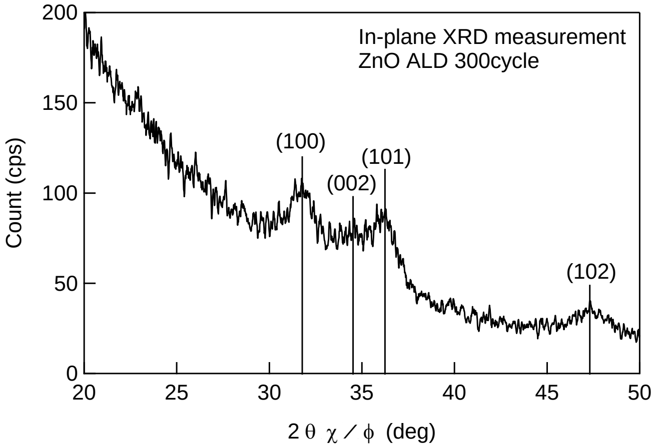

Fig. 1 In-plane X-ray diffraction pattern obtained from ZnO films deposited by the RT ALD at 300 cycles.

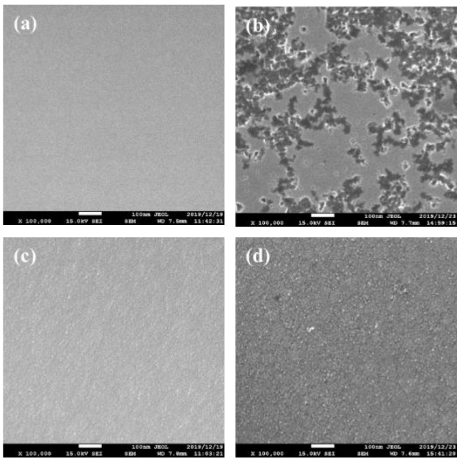

Fig. 3 Surface SEM images of RT-ALD deposited films before and after immersed in hot water with a temperature of 90 ℃ for 5 min. (a) RT deposited Al_2O_3 (b) RT deposited Al_2O_3 after immersion. (c) RT deposited ZnO on Al_2O_3. (d) RT deposited ZnO on Al_2O_3 after immersion.

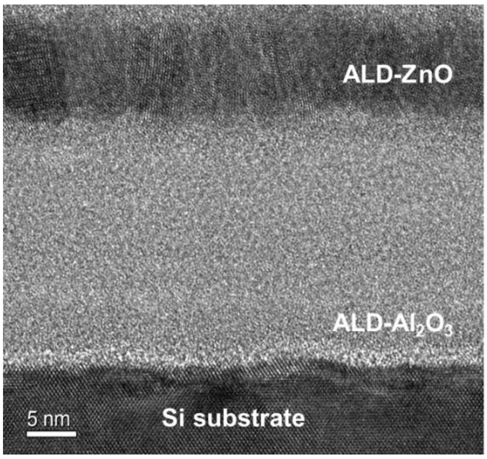

Fig. 2 HRTEM image of ZnO on Al_2O_3 with Si substrate. Crystallized ZnO grains are visible.