

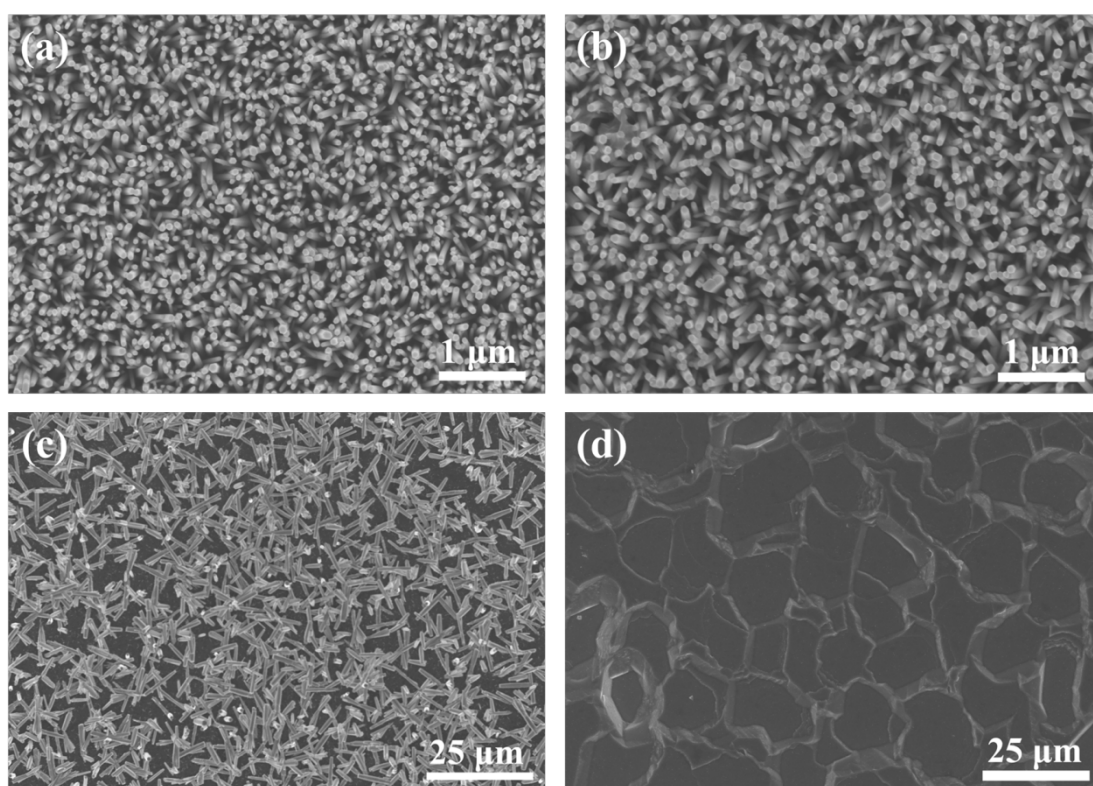
## Humidity-dependent piezoelectric output of Al-ZnO nanowire nanogenerator and its applications as self-powered active humidity sensor

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### Supplementary Information



**Fig. S1** SEM image shows that the diameter of nanowires increases with the Al-doping concentration increases. The concentrations of Al in the growth solution are referred as Al/Zn molar ratios, and are 0 (a), 0.5% (b), 3.0% (c), and 5.0% (d), respectively.