

Supplementary Information

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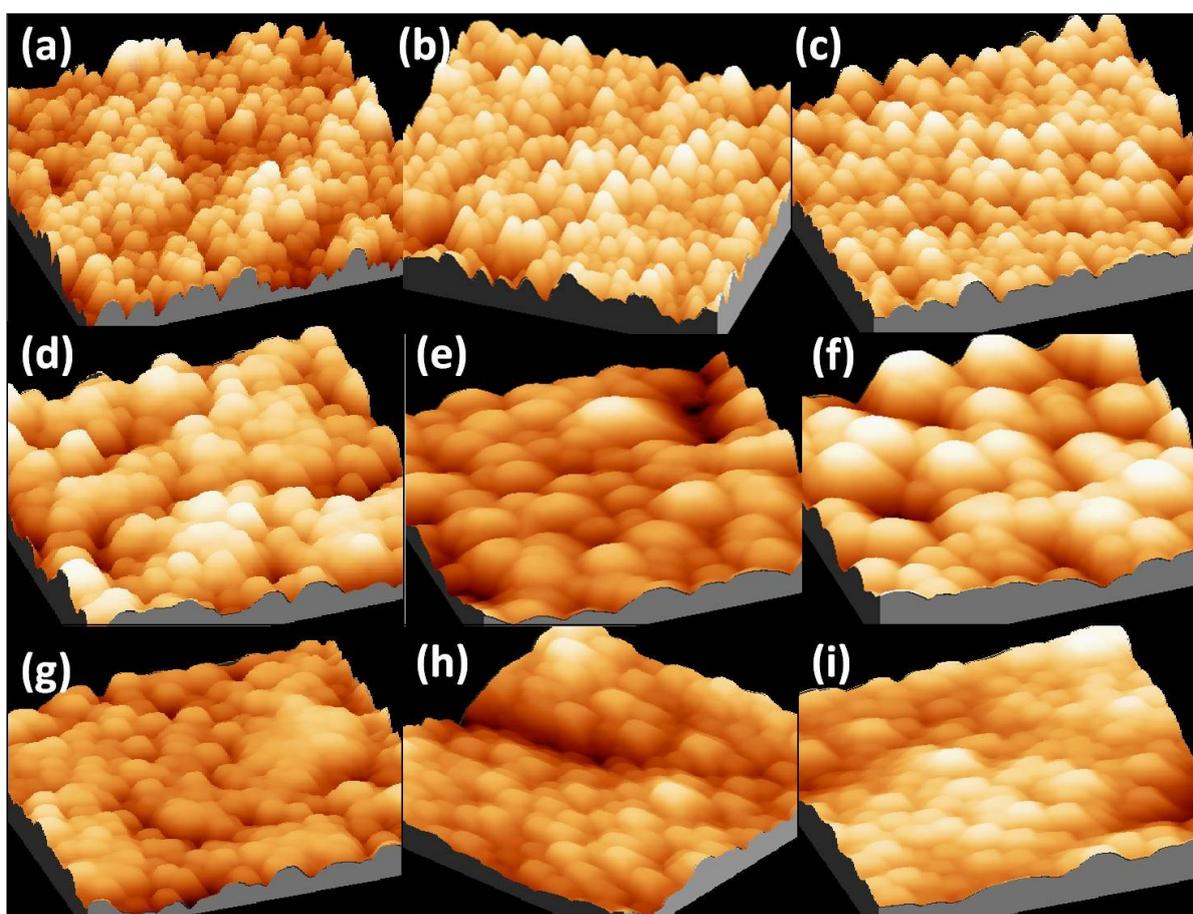


Fig. S1 AFM images of (a) bare ZnO NRs, (b) Z/F2min (c) Z/F5min (d) Z/F15min, (e) Z/F30min, (f) Z/F1h, (g) Z/F2h (h) Z/F6h (i) Z/F12h thin film samples.

Table S1: Particle size and Surface roughness with AFM analysis		
Sample	Particle Size (nm)	Surface Roughness (nm)
ZnO	120	94.29
Z/F2 min	133	82.46
Z/F5 min	145	71.78
Z/F15 min	175	61.32
Z/F30 min	250	61.11
Z/F1h	330	50.86
Z/F2h	347	67.25
Z/F6h	375	123.56
Z/F12h	390	131.94