

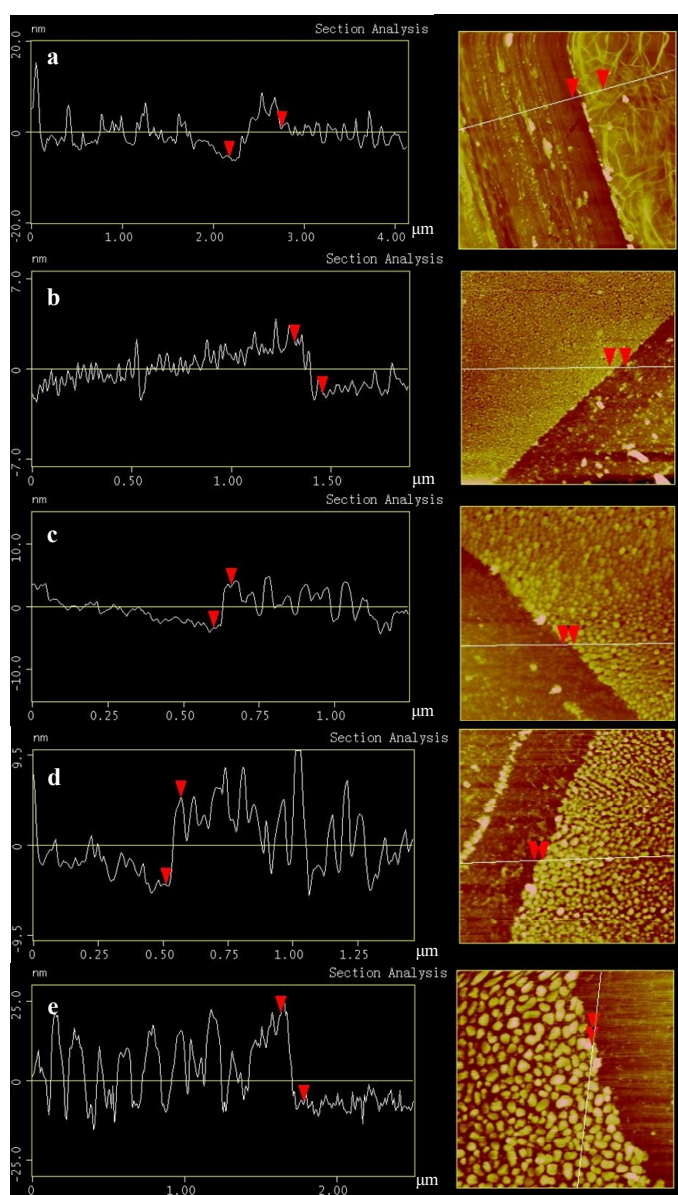
## Electronic Supplementary Information

### A fast room-temperature strategy for direct reduction of graphene oxide films towards flexible transparent conductive films

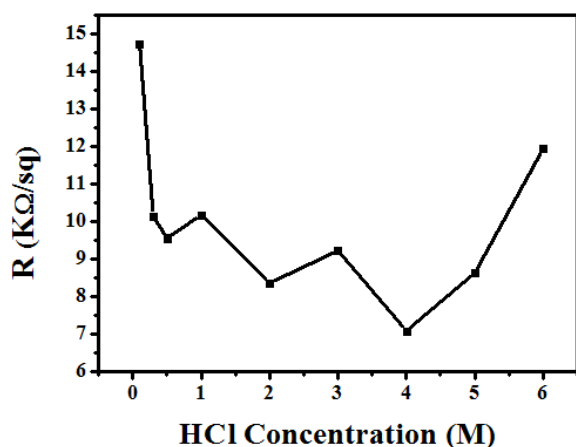
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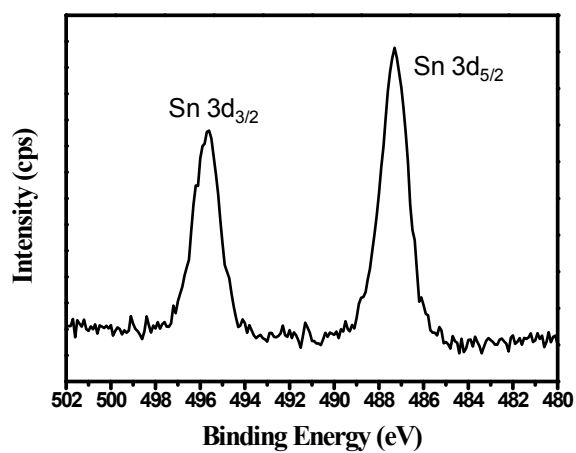
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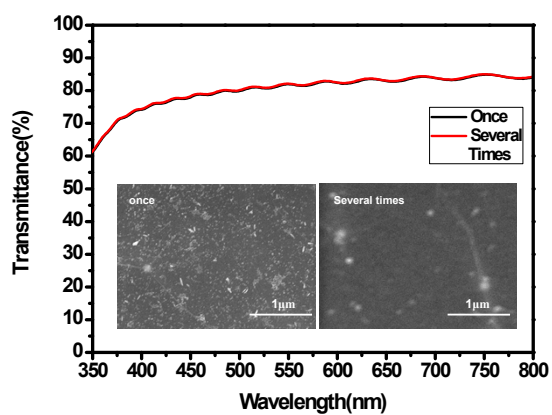
**Figure S1.** The AFM image of a) the GO film of 6.3nm, and b-e) the as-sputtered Sn nanoparticle layer of different thicknesses.



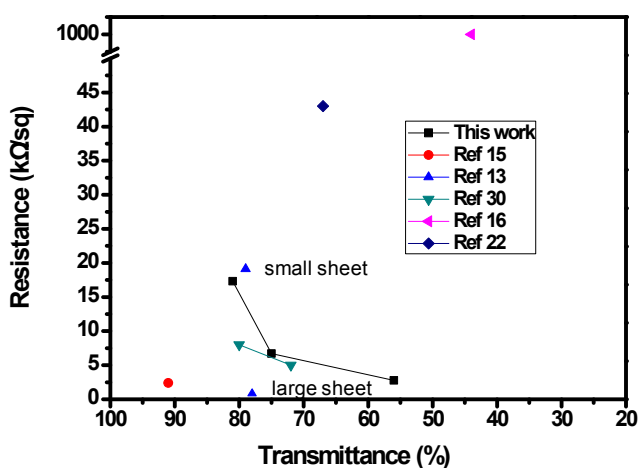
**Figure S2.** The influence of the concentration of the HCl solution to the conductivity of the rGO film.



**Figure S3.** Magnified XPS spectrum of Sn 3d in Sn-RGO sample.



**Figure S4.** The change of morphology and transmittance before and after constantly washing the film.



**Figure S5.** Comparison of the conductivity and transparency between the as prepared Sn-rGO and the rGO films fabricated in other methods on flexible substrates.

Sample	XPS*	XRD	Raman	TGA
	C/O ratios	d spacing (nm)	I <sub>D</sub> /I <sub>G</sub>	Total weight loss (%)
GO	3.1	0.773	0.9	60
Ref 24 (Zn)	21.2		1.22	3
Ref 25 (Fe)	2.6~7.9		0.32~1.02	7~34
Ref 29 (Al)	18.6	0.375	1.81	
Ref 23	6.67	0.362	1.10	12.05
Sn-rGO	17.2	0.373	1.14	15

**Table S1.** Comparison of the property results of the as prepared Sn-rGO film and that from other different reducing methods (mainly metal reduction).