

Electronic supporting information

Transparent and flexible capacitor fabricated using metal wire network as transparent conducting electrode

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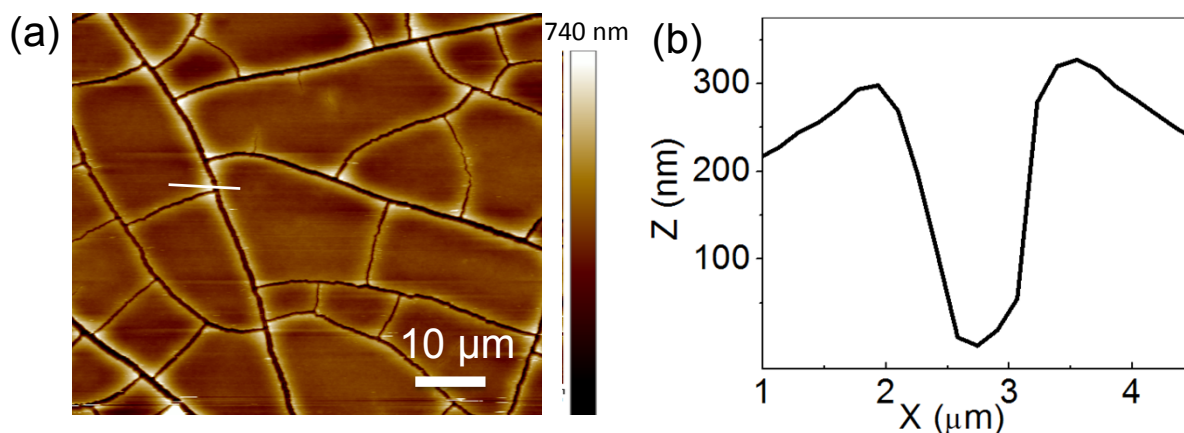


Figure S1: (a) AFM topography of the crackle grooves and corresponding (d) line profile (marked with a white line in 'a').

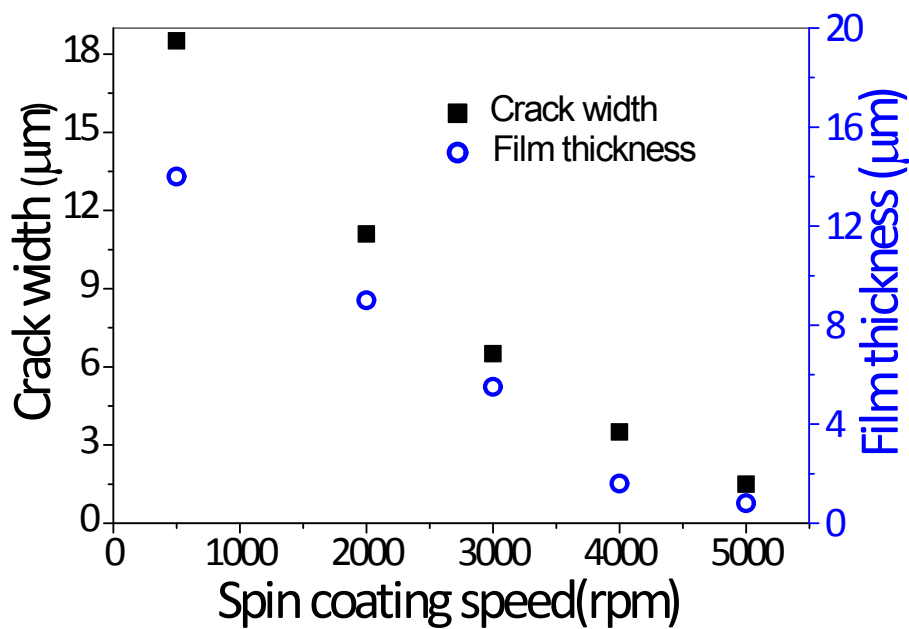


Figure S2: Crack width and film thickness as function of spin coating speed of the crackle precursor. Note: the wire width and cell sizes are different compared to that in Figure 1b.

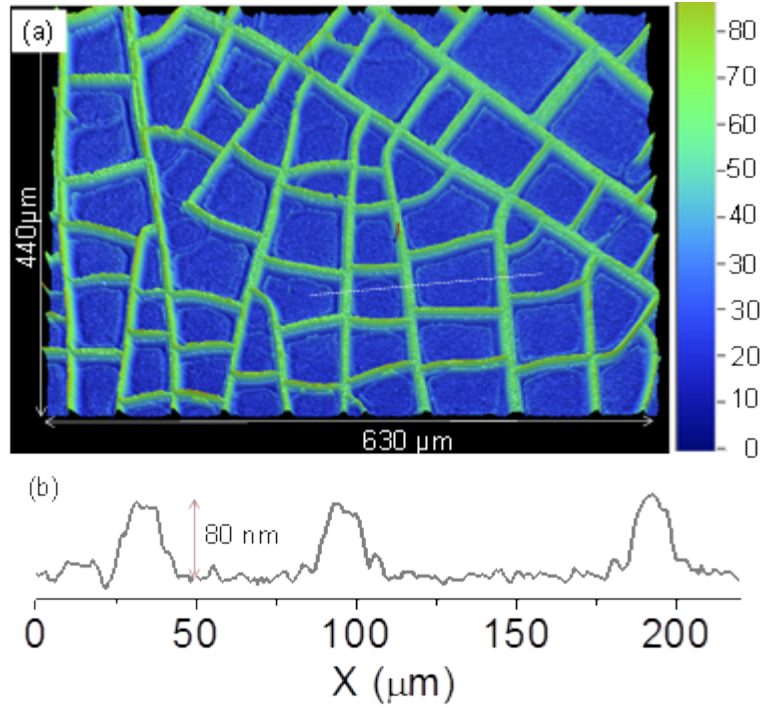


Figure S3: (a) 3D view of optical profilometry image and its corresponding (b) height profile along the line marked along with the topography of Au wire network.

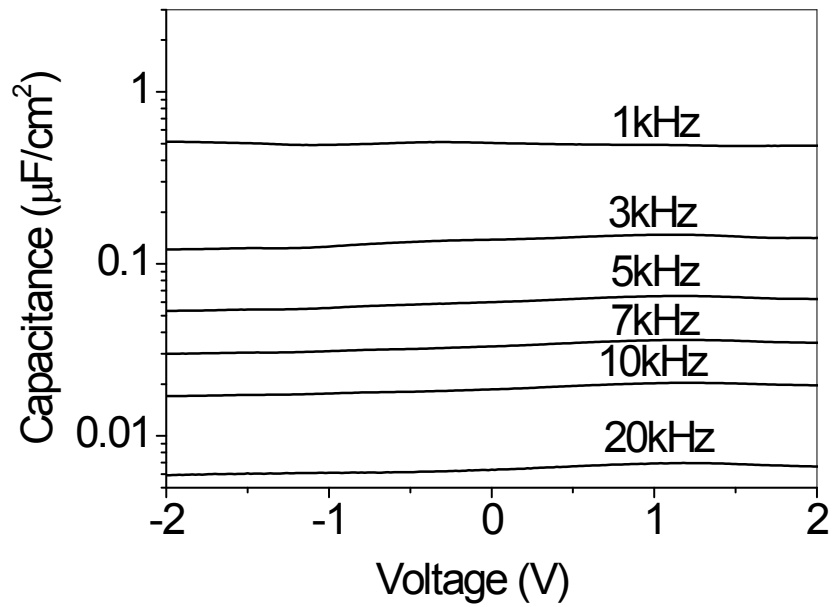


Figure S4: C-V curves of the transparent capacitor at different frequencies from 1-20 kHz.

Table S1: Literature table comparison with other transparent capacitors

S.No.	Dielectric	Dielectric thickness (μm)	Transparent electrode	Capacitance	Transmittance (%)	Flexible	Reference
1	Polyvinyl acetate	45-75	Single walled carbon nanotubes	0.1 nF/cm ²	74	yes	1
2	Bi ₂ Mg _{2/3} Nb _{4/3} O ₇	0.2	Graphene	2.2 nF/cm ² @ 1 kHz	70	yes	2
3	Bi ₂ Mg _{2/3} Nb _{4/3} O ₇	0.2	Al _{0.016} In _{0.003} Zn _{0.981} O	3.1 nF/cm ² @ 0.1 kHz	80	Perhaps	3
4	SU8 /Epoxy resin	45	Graphene	0.1 pF/cm ² @ 320 Hz	NA	yes	4
5	Ecoflex silicone elastomer	300	Single walled carbon nanotubes	0.8 μF /cm ²	NA	Perhaps	5
6	Ion-gel	~20	Au wire network	2 μF /cm ² @ 1 Hz	68	yes	Present work

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