Electronic Supplementary Material (ESI) for RSC Advances.

Direct-Writing of Low Cost Paper Based Flexible Electrode and Touch Pad Devices using Silver Nano-Ink and ZnO Nanoparticles

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Table S1. Percentage of settlement of ink after adding different stabilizing agent and stability over period of time

Stabilizer	Percentage of settling of ink				
	7 days	14 days	21 days	28 days	35 days
AgNPs/Ino+PVP	0.9	2.5	5.5	8.5	10.2
AgNPs/Ino+PVA	1.9	6.5	10.5	12.2	20.0
AgNPs/Ino+Chitosan	4.2	9.4	14.8	20.2	25.1

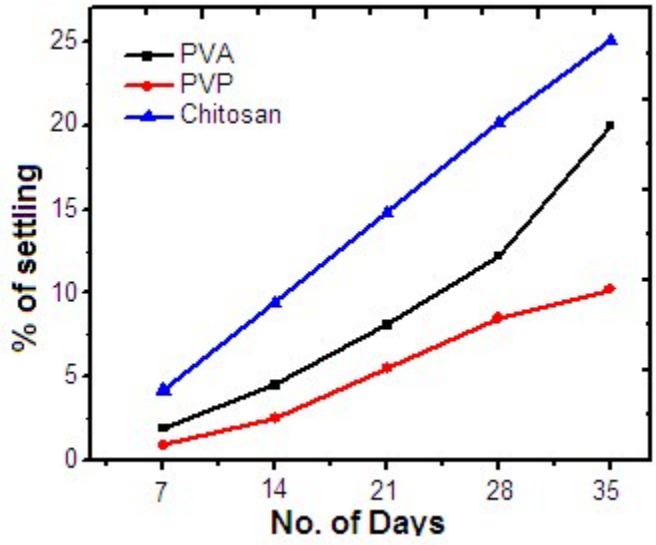

Fig. S1. The comparative study of settling down of ink stabilized by different stabilizers (PVA, PVP and chitosan) with time

Table. S2. Resistance values after varying the sintering temperature with 15 min of sintering time using photo paper of dimension 1x1 cm

Temp. (°C)	Measured Resistance (Ω)			
	AgNPs/Ino	AgNPs/Ino +PVP	AgNPs/Ino +PVA	AgNPs/Ino +Chitosan
25	16.4	16.8	16.8	16.9
40	1.2	1.7	3.2	3.8
60	4.3	4.2	4.7	5.2
80	4.9	5.3	7.8	8.6
100	5.8	6.4	8.6	9.3

Table S3. Resistance values after varying the sintering time with 40°C of temperature using photo paper of dimension 1x1 cm

Time	Measured Resistance (Ω)			
(min)	AgNPs/Ino	AgNPs/Ino +PVP	AgNPs/Ino +PVA	AgNPs/Ino +Chitosan
5	9.1	9.8	10.2	10.5
10	2.4	2.6	9.6	7.2
15	1.3	1.6	6.2	5.4
20	3.6	3.8	6.5	6.0
25	4.5	5.7	5.9	6.2
30	6.6	8.2	7.5	6.8