Electronic Supplementary Material

An electroconductive ink containing the reduced graphene oxide–metal oxide–carbon nanotube semiconductor applied to a flexible electronic circuit

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Table S1 Hall effect measurement results of RGO and RGB-*x* nanocomposites at two constant dual fields

Sample	R_H/($m^3 \cdot C^{-1}$)	N/m^{-3}	μ_H/($m^2 \cdot V \cdot s^{-1}$)	R_H/($m^3 \cdot C^{-1}$)	N/m^{-3}	μ_H/($m^2 \cdot V \cdot s^{-1}$)
	B = 1590 T	B = 1590 T	B = 1590 T	B = 1750 T	B = 1750 T	B = 1750 T
RGO	1.23×10^{-4}	1.30×10^{-15}	1.59×10^{-4}	8.67×10^{-5}	1.85×10^{-15}	1.11×10^{-4}
RGB-50	-3.67×10^{-4}	-4.36×10^{-14}	-1.85×10^{-4}	-3.63×10^{-4}	-4.16×10^{-14}	-1.85×10^{-4}
RGB-75	-3.05×10^{-3}	-5.26×10^{-14}	-2.23×10^{-4}	-3.15×10^{-3}	-5.56×10^{-14}	-2.23×10^{-4}
RGB-86	-3.27×10^{-3}	-4.36×10^{-13}	-2.66×10^{-4}	-3.22×10^{-3}	-5.94×10^{-13}	-1.95×10^{-4}
RGB-90	4.70×10^{-2}	5.26×10^{-12}	7.33×10^{-3}	4.01×10^{-3}	7.95×10^{-13}	4.84×10^{-5}
RGB-92	6.23×10^{-2}	8.14×10^{-12}	7.88×10^{-3}	-5.26×10^{-2}	-8.14×10^{-12}	-7.88×10^{-5}

Notes: R_H, Hall coefficient; N, carrier density; μ_H, carrier mobility.

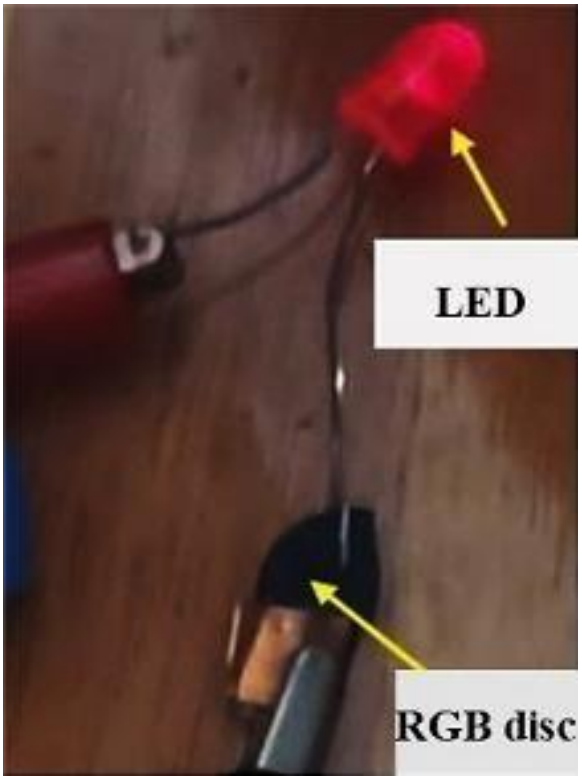

Fig. S1 Circuit illustrating the conductivity test for the RGB nanocomposite.

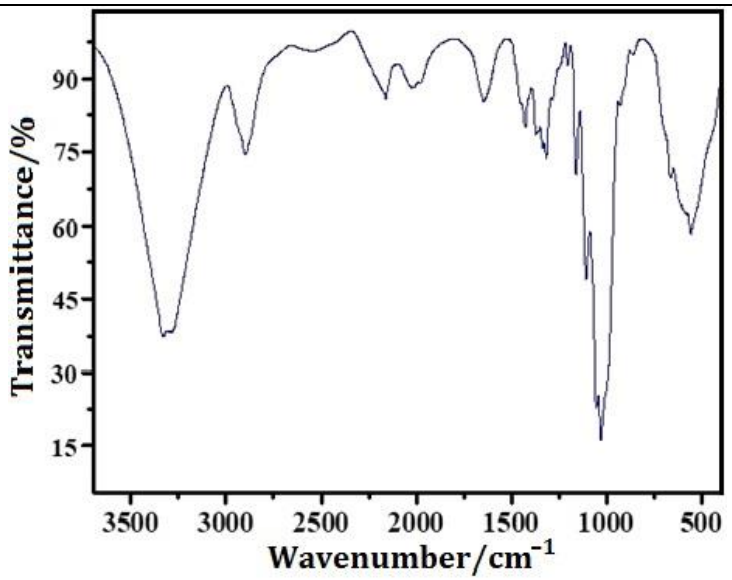

Fig. S2 ATR-FTIR spectrum of the NCC thin film substrate.

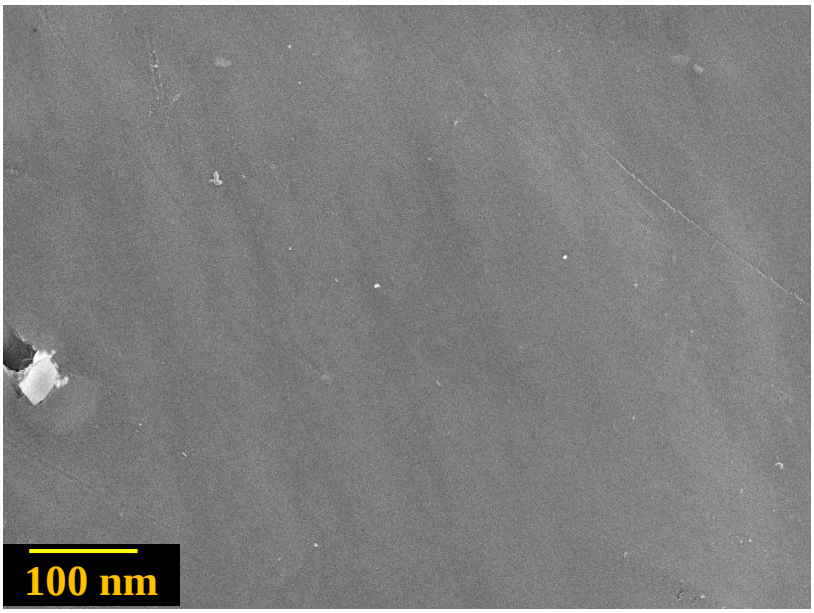

Fig. S3 SEM image of the NCC thin film substrate.

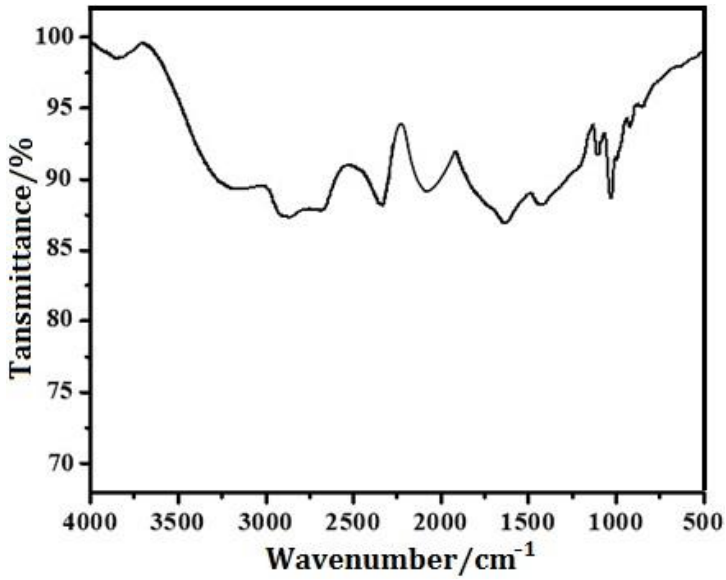

Fig. S4 ATR-FTIR spectrum of the RGBC conductive ink.

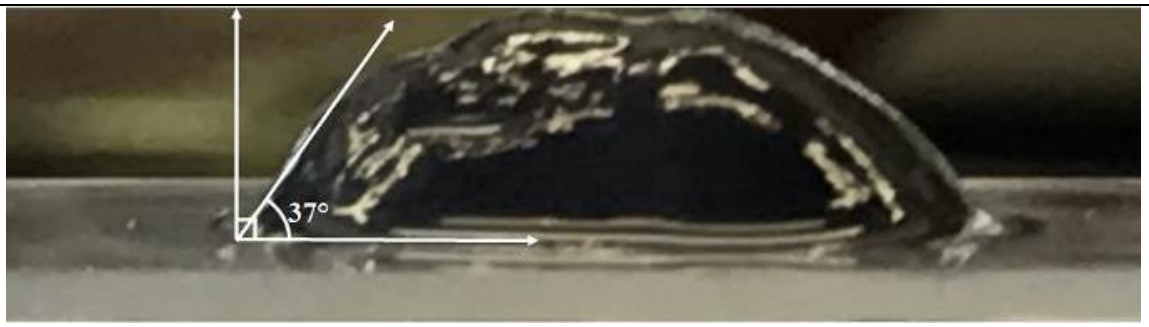

Fig. S5 Contact angle measurement of the RGBC electroconductive ink.

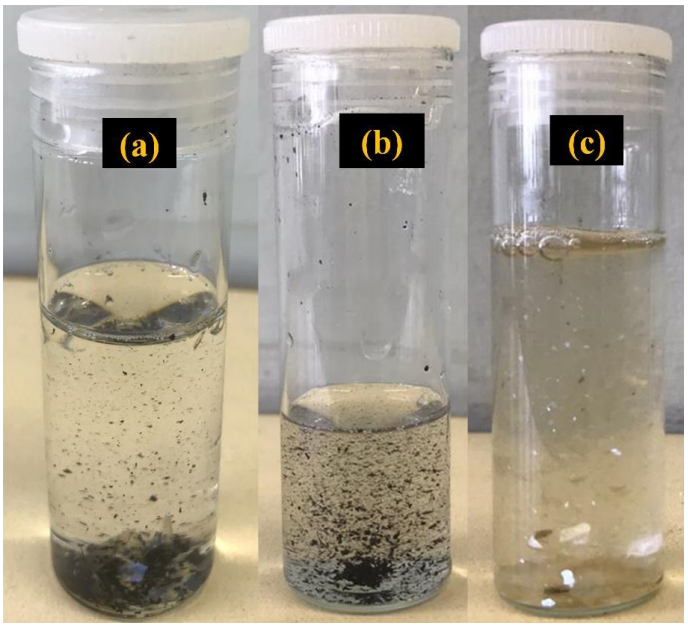

Fig. S6 (a) A disintegrated printed NCC substrate in DDW. **(b)** RGBC conductive ink suspension in ethanol after separation from NCC substrate. **(c)** Disintegrated NCC substrate separated from the flexible conductive circuit.