

Electronic Supplementary Information

Intelligent Light-driven Thermoelectric Conversion System through the Thermosensitive Phase Transition of Vanadium Dioxide

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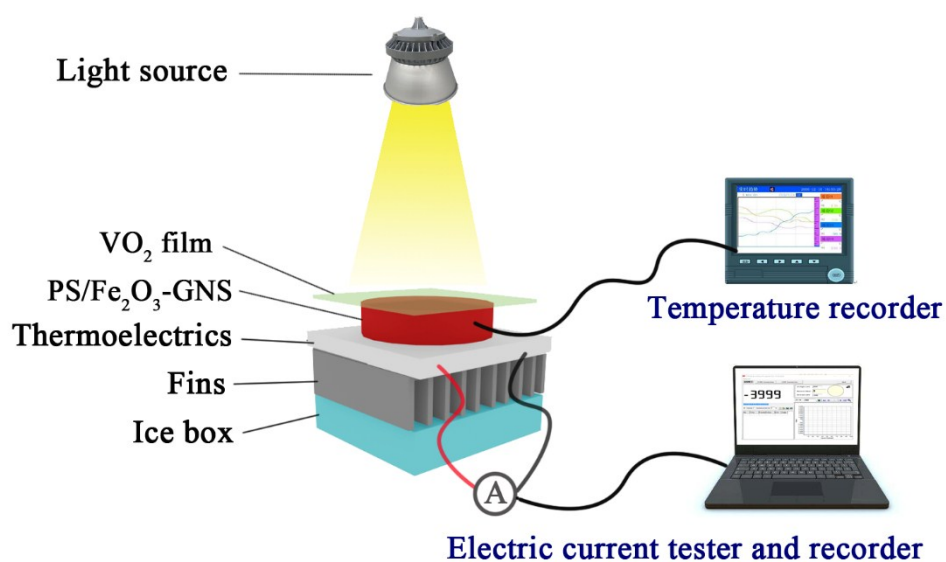


Figure S1 The device diagram of light-thermal-electric energy conversion tests

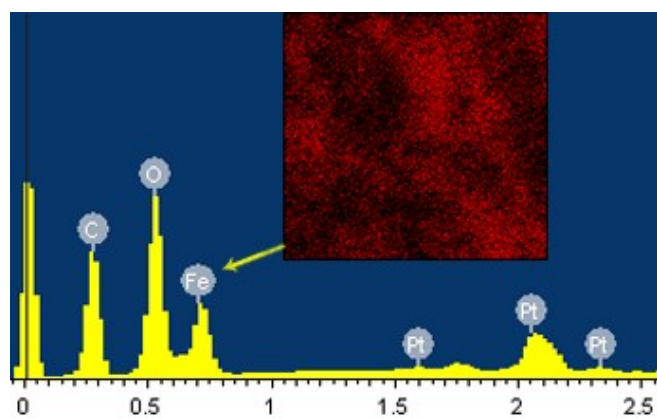


Figure S2 The corresponding EDS analysis of Fe_2O_3 -GNS

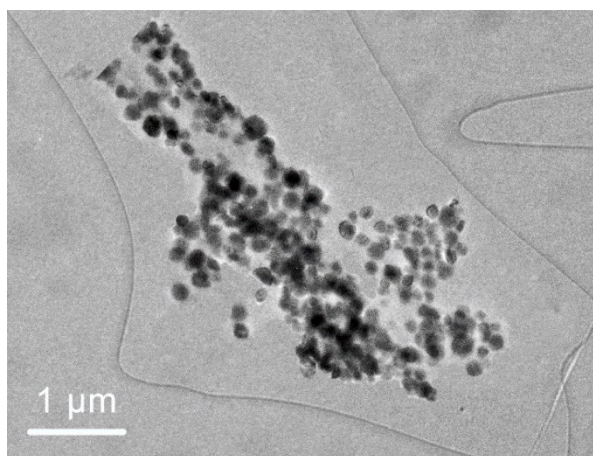


Figure S3 TEM image of PS/ Fe_2O_3 -GNS

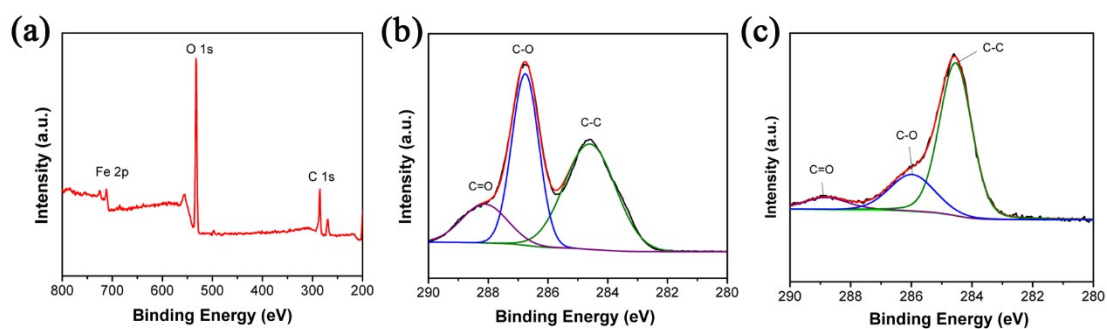


Figure S4 a) XPS survey spectrum of Fe_2O_3 -GNS. b) C 1s XPS spectra of GO. c) C 1s XPS spectra of Fe_2O_3 -GNS.

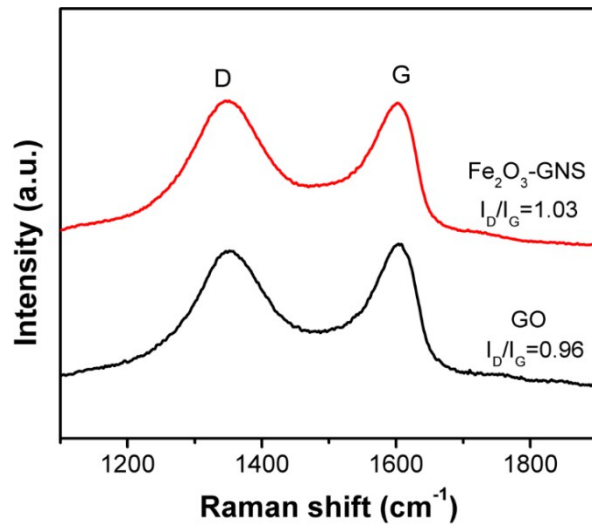


Figure S5 Raman spectra of GO (a) and Fe₂O₃-GNS (b)

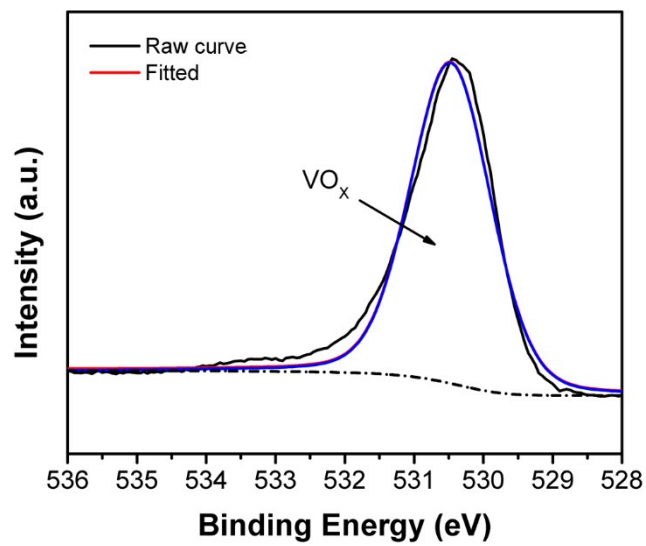


Figure S6 O 1s XPS spectra of VO₂ film

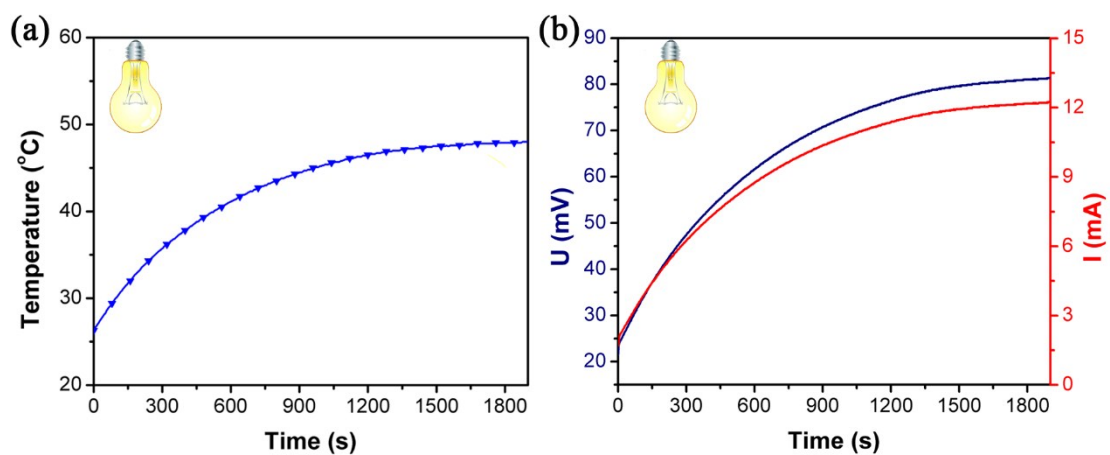


Figure S7 Light-thermal-electric energy conversion measurement of pure PS. a) The temperature-time curves of pure PS under simulated light source ($I=350 \text{ mW cm}^{-2}$). b) The voltage/current-time curves of pure PS under simulated light source ($I=350 \text{ mW cm}^{-2}$).