Supporting Information

Unexpected green-light emission and correlating room-temperature diluted magnetism in pristine non-magnetic closed-shell $4d^0$ yttria nanowires

Authors' names and Institution

Jian-Min Li *

Zhejiang Key Laboratory of Micro-Nano Quantum Chips and Quantum Control, School of Physics, Zhejiang University, Hangzhou 312007, China

ORCID ID Jian-Min Li: 0000-0002-3917-8653
*Email: phyjmli@zju.edu.cn

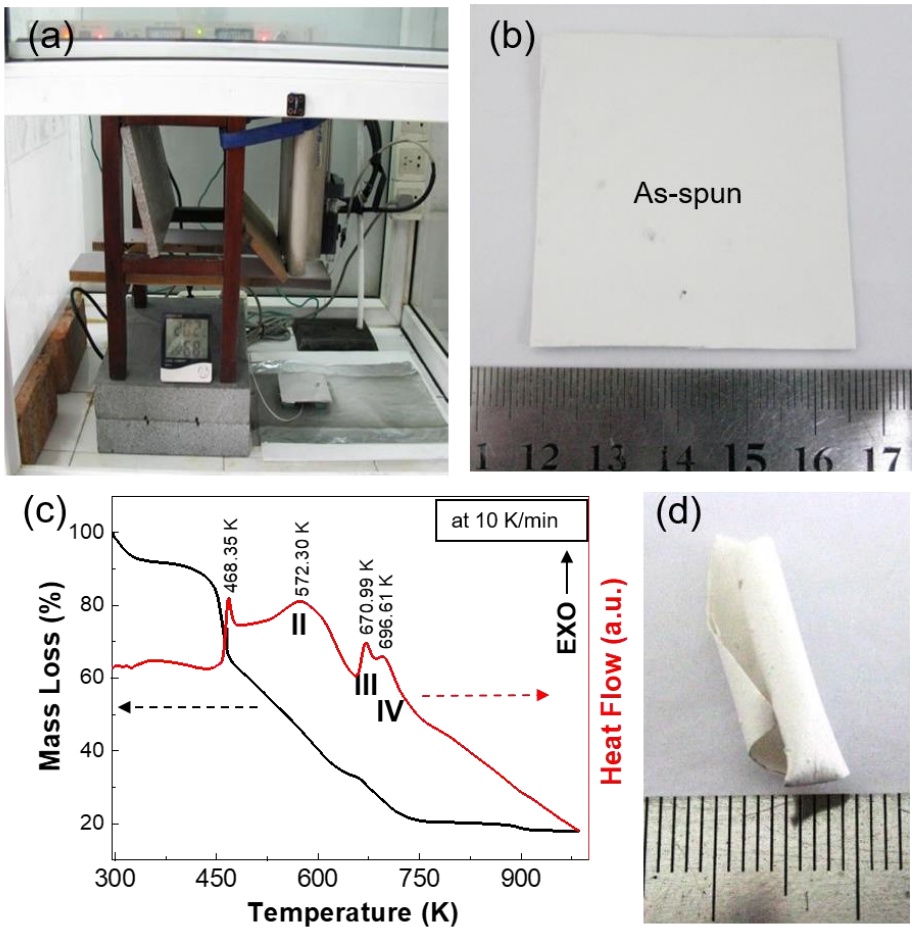

Fig. S1 (a) Home-made electrospinning setup. (b) Digital image of the as-spun PVA/Y_2O_3 composite fibers. (c) Differential thermal analysis-thermogravimetric analysis curves of the as-electrospun

composite fibers. As shown in Fig. S1(c), four exothermic peaks (red solid arrows) at 468 K, 572 K, 671 K, and 697 K in the DTA curves were observed, which may result from complete decomposition of PVA/Y_2O_3 composite fibers until 890 K. The crystallization starts from 680 K and finishes until 740 K. The four exothermic peaks concurrent with a significant weight loss of about ~ 82 wt % happens, indicating the complete removal of the organic component. (d) Digital image of the air-calcinated Y_2O_3 composite fibers.