Supporting Information

Controllable Synthesis of Uniform ZnO Nanorods and their Enhanced Dielectric and Absorption Properties

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Figure S1. The SEM images of the products synthesized with different amount of hydrazine hydrate: a) 6 ml; b) 8 ml; c) 12 ml; d) 20 ml; e) 25 ml; f) 30 ml.
Figure S2. The magnified images in the corresponding pictures of Figure 2: (a) and (b) of Figure 2a; (c) and (d) of Figure 2b; (e) and (f) of Figure 2c; (g) and (h) of Figure 2d.
Figure S3. Selected magnified connected part.

Figure S4. The photograph of the ZnO/PVDF film.
**Figure S5.** The image of used bulk ZnO.

**Figure S6.** Dielectric constants (a) and Dielectric loss (b) of the pure PVDF: At $10^2$ Hz, $10^3$ Hz, $10^4$ Hz and $10^5$ Hz vs. temperature.
Figure S7. The dielectric loss tangent of NR-ZnO/PVDF composites with different loadings.

Figure S8. RL value of pure PVDF, NR-ZnO/wax and NR-ZnO/PVDF.
Figure S9. The Cole–Cole semicircle of the composites with different filler content: (a) pure PVDF; (b) 5 wt%; (c) 10 wt%; (d) 15 wt%; (e) 20 wt%.