

Supporting Information

Significantly Enhanced Energy Density in Nanocomposite Capacitors

Combining the TiO₂ Nanorod Array with Poly(vinylidene fluoride)

Lingmin Yao^a, Zhongbin Pan^b, Shaohui Liu^b, Jiwei Zhai^{b}, Haydn H.D. Chen^{a*}*

^aInstitute of Applied Physics and Materials Engineering, Faculty of Science and Technology, University of Macau, Macao SAR 999078, China

^bKey Laboratory of Advanced Civil Engineering Materials of Ministry of Education, Functional Materials Research Laboratory, School of Materials Science & Engineering, Tongji University, 4800 Caoan Road, Shanghai 201804, China.

* haydnchen@umac.mo (Haydn H.D. Chen) and apzhai@tongji.edu.cn (Jiwei, Zhai)

Introduction

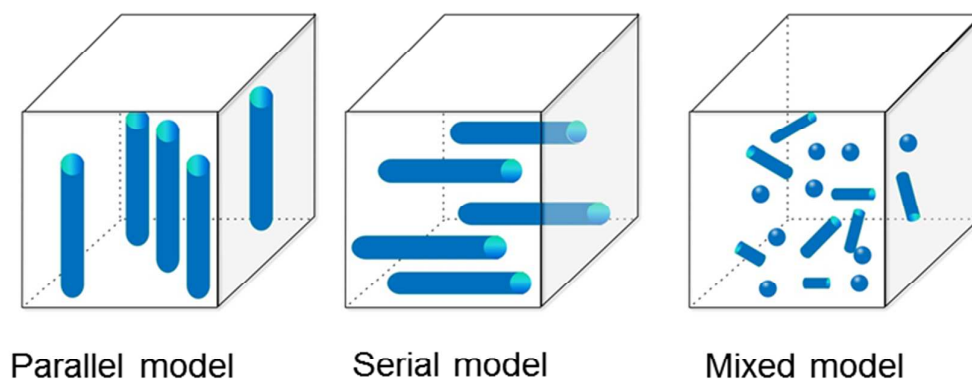
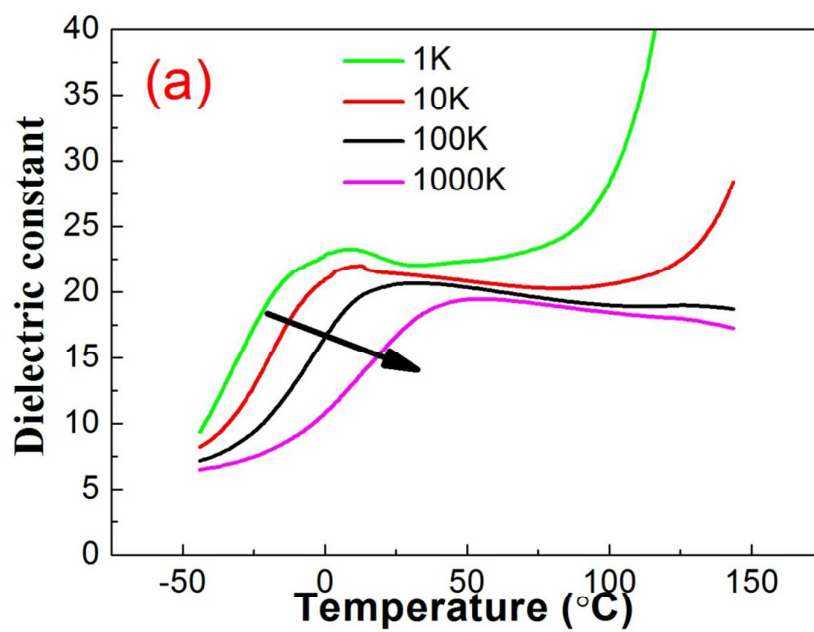
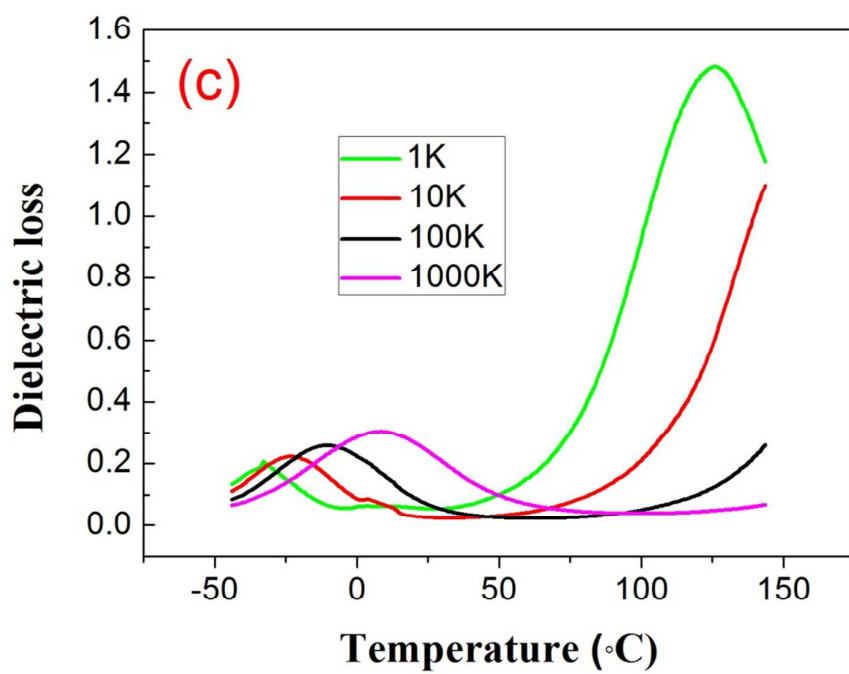
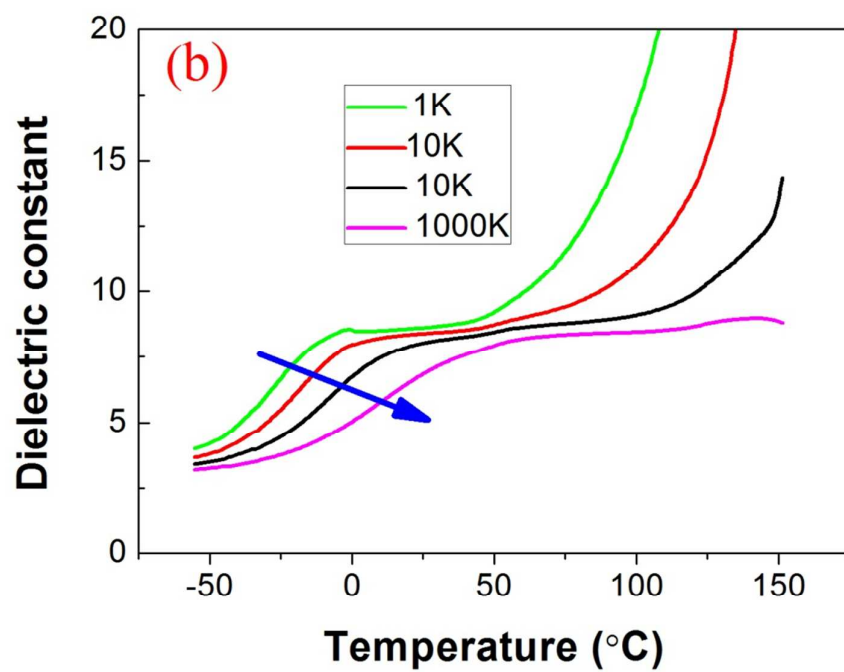


Figure S1 Common three models for the inorganic/organic nanocomposite

Results and discussion





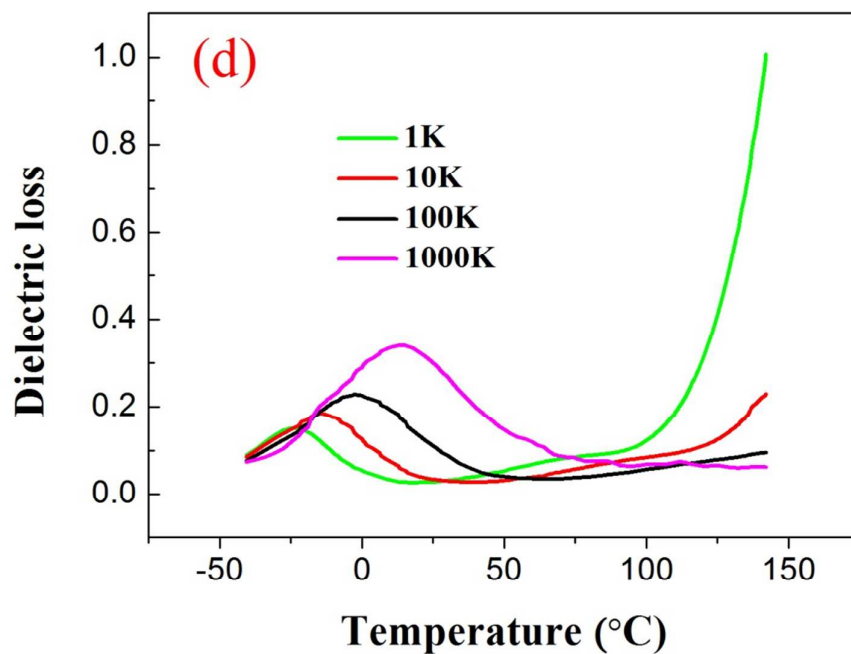


Figure S2 Temperature dependence of the dielectric constant and loss tangent measured from -50 to 130 °C.: (a) dielectric constant of TNA/PVDF composite with $h_{0.18}$; (b) dielectric constant of neat PVDF; (c) the loss tangent of TNA/PVDF composite with $h_{0.18}$; (d) the loss tangent of PVDF.