

**Core-shell Structured Poly(methyl methacrylate)/BaTiO₃
nanocomposites prepared by in situ atom transfer radical
polymerization: a route to high dielectric constant materials with the
inherent low loss of the base polymer**

Liyuan Xie, Xingyi Huang*, Chao Wu and Pingkai Jiang*

Department of Polymer Science and Engineering and Shanghai Key Lab of Electrical Insulation and Thermal Aging, Shanghai Jiao Tong University, Shanghai 200240, China, E-mail address: xyhuang@sjtu.edu.cn (X.Y. Huang), pkjiang@sjtu.edu.cn (P. K. Jiang)

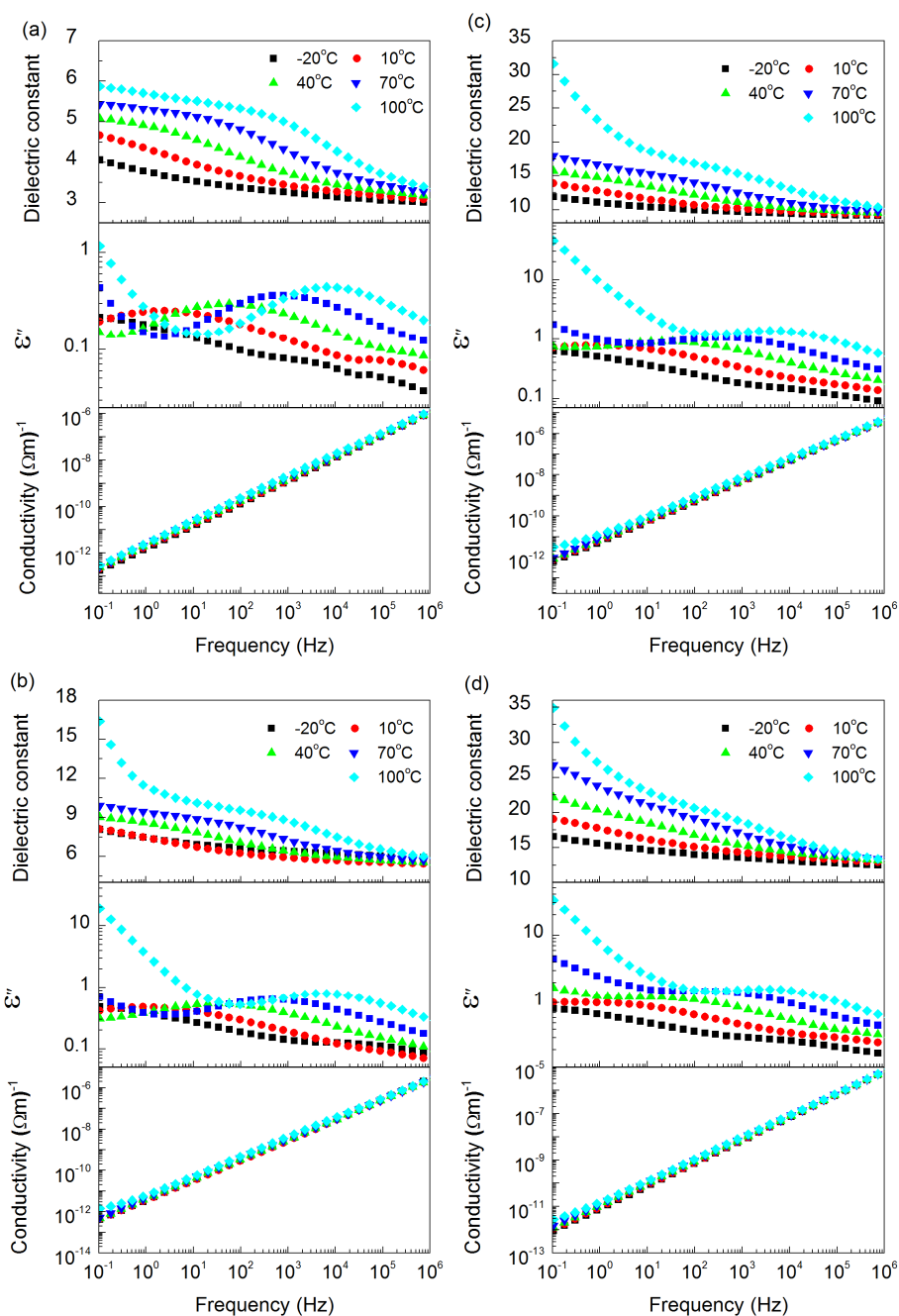


Fig. 1S Frequency dependence of dielectric parameters of the BaTiO₃-PMMA nanocomposites at various temperatures: (a) PMMA, (b) BaTiO₃-PMMA1, (c) BaTiO₃-PMMA2, (d) BaTiO₃-PMMA3.

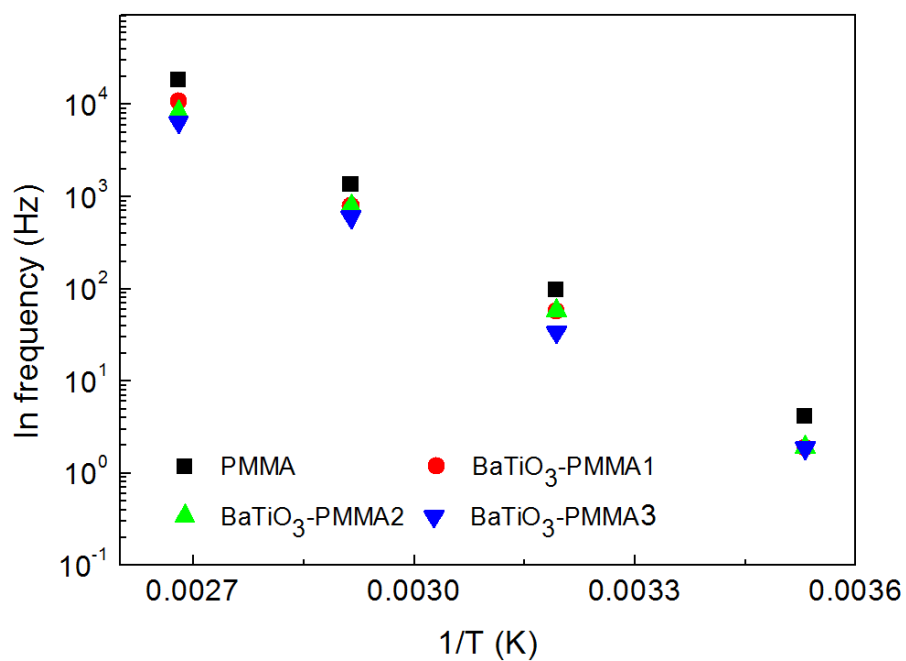


Fig. 2s Arrhenius plots of ln frequency versus reciprocal of temperature.