Electronic Supplementary Material (ESI) for RSC Advances

Supplementary information

Towards highly electrically conductive and thermally insulating graphene nanocomposites: Al_2O_3/graphene

Ondřej Jankovský[a], Petr Šimek[a], David Sedmidubský[a], Štěpán Huber[a], Martin Pumera[b] and Zdeněk Sofer[a,*]

[a] *Institute of Chemical Technology, Department of Inorganic Chemistry, 166 28 Prague 6, Czech Republic, E-mail:Zdenek.Sofer@vscht.cz; Fax: +420 22044-4049*

[b] *Division of Chemistry & Biological Chemistry, School of Physical and Mathematical Sciences, Nanyang Technological University, Singapore, 637371, Singapore. E-mail: pumera@ntu.edu.sg; Fax: +65 6791-1961*

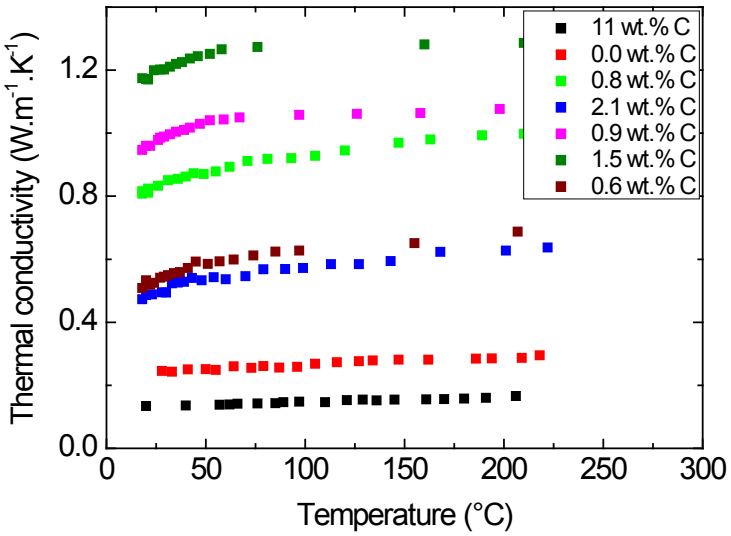

Figure S1. The thermal conductivity of alumina/graphene composite with various graphene percentages loading.

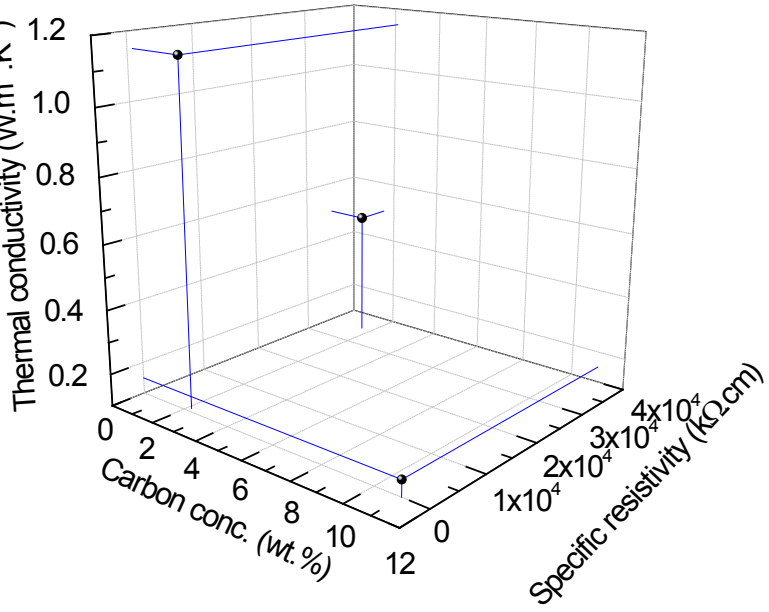

Figure S2. The dependence of thermal conductivity and electrical resistivity on graphene percentage loading in alumina/graphene composite material.