

Supporting Information

Tuneable Dielectric Properties Derived from Nitrogen doped Carbon Nanotubes in PVDF-based Nanocomposites

Shital Patangrao Pawar ^{a,†}, Mohammad Arjmand ^{b,†}, Petra Pötschke ^c, Beate Krause ^c,
Dieter Fischer ^c, Suryasarathi Bose ^{d,*}, Uttandaraman Sundararaj ^{a,*}

^a Department of Chemical and Petroleum Engineering, University of Calgary, T2N 1N4, AB, Canada.

^b School of Engineering, University of British Columbia, Kelowna, BC, Canada V1V 1V7.

^c Leibniz Institute of Polymer Research Dresden (IPF), Hohe Str. 6, 01069 Dresden, Germany.

^d Department of Materials Engineering, Indian Institute of Science, Bangalore-560012, India.

* Corresponding author Email: u.sundararaj@ucalgary.ca (US); sbose@iisc.ac.in (SB)

[†] SPP and MA made equal contribution to this work.

X-ray electron spectroscopy (XPS) of N-MWNTs:

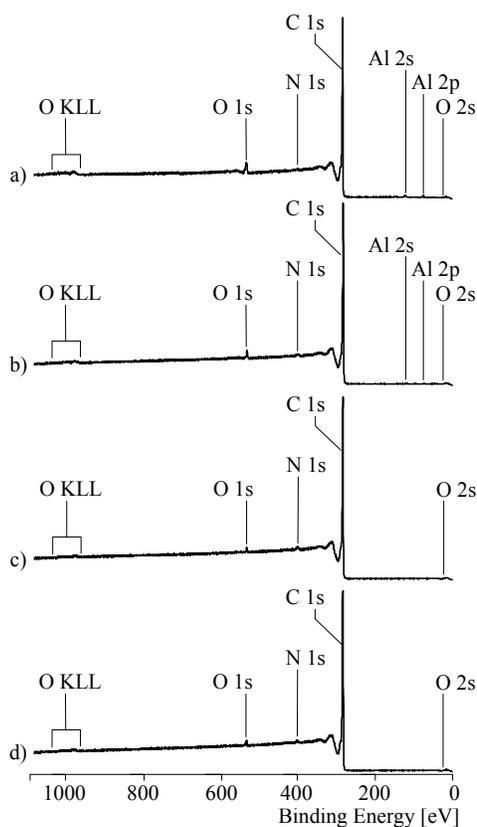


Figure S1: Wide-scan XPS spectra for N-MWNTs synthesized at different synthesis times (a) 0.5 h, (b) 1.0 h, (c) 2.0 and (d) 3.0 h.

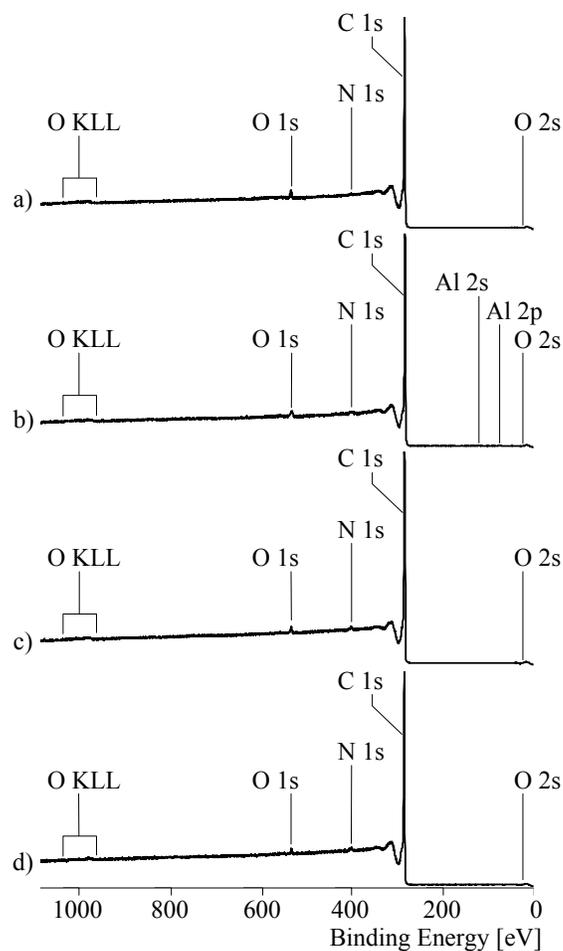


Figure S2: Wide-scan XPS spectra for N-MWNTs synthesized at different gas ratios (a) 50/80/20, (b) 50/20/80, (c) 70/70/70 and (d) 50/50/50.

Raman spectroscopy of N-MWNTs:

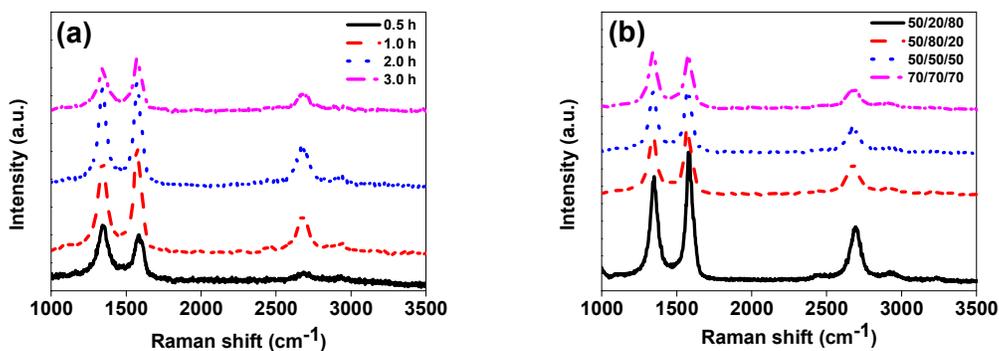


Figure S3: Raman spectra for N-MWNTs synthesized at different (a) synthesis times and (b) gas ratios.