Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Supporting Information for:

Incompletely Condensed POSS-based Spin-on-Glass Networks for Impeccable Ultra Low-*k* Integration

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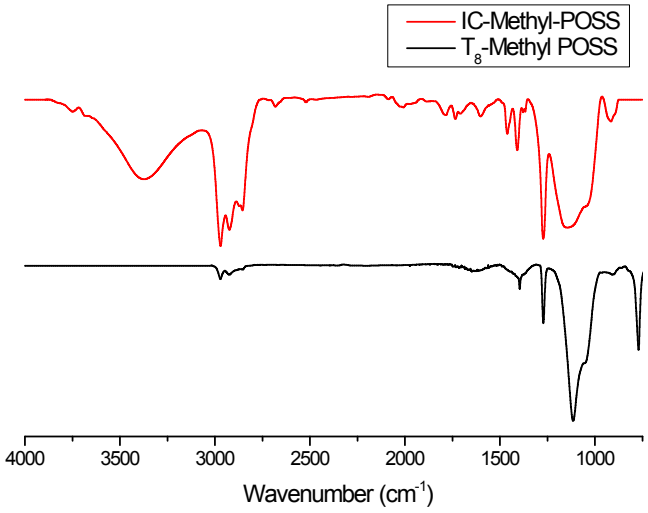
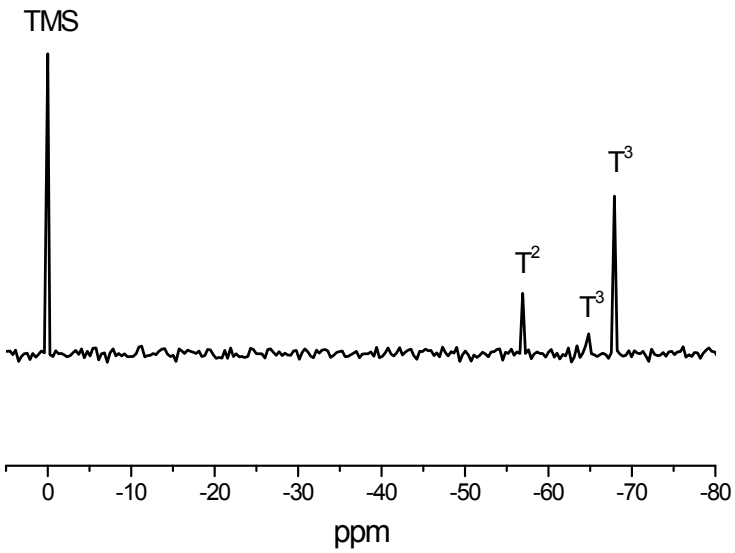
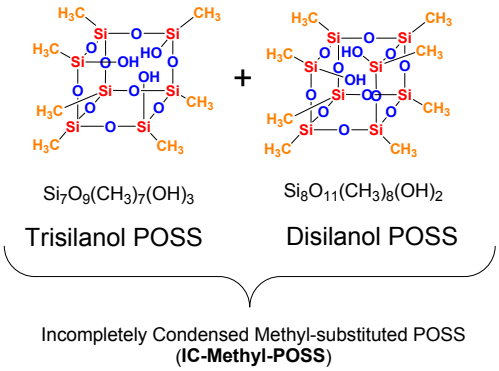


Supporting Figure S1. FTIR spectra for T8-Methyl POSS and IC-Methyl POSS



Supporting Figure S2. ^{29}Si NMR spectra for IC-Methyl-POSS

The ^{29}Si NMR spectra for IC-Methyl POSS revealed characteristic peaks of the fully condensed T^3 peaks at -68 ppm and -65 ppm, well as the incompletely condensed T^2 peak at -58 ppm.[1] The T^2 peak represents the formation of incompletely condensed silanols such as those of the disilanol POSS, as well as the T^3 peak at -65 ppm attributed to the trisilanol POSS T^3 silicons, which suggests a mixture of the products shown in Supporting Figure S3.



Supporting Figure S3. Chemical Structures of possible IC-Methyl POSS compounds

References

1. F.J. Feher, R. Terroba and J.W. Ziller, *Chem. Comm.*, **1999**, 2309.