Supporting Information

Fluoroalkyl POSS with Dual Functional Groups as a Molecular Filler for Lowering Refractive Indices and Improving Thermomechanical Properties of PMMA

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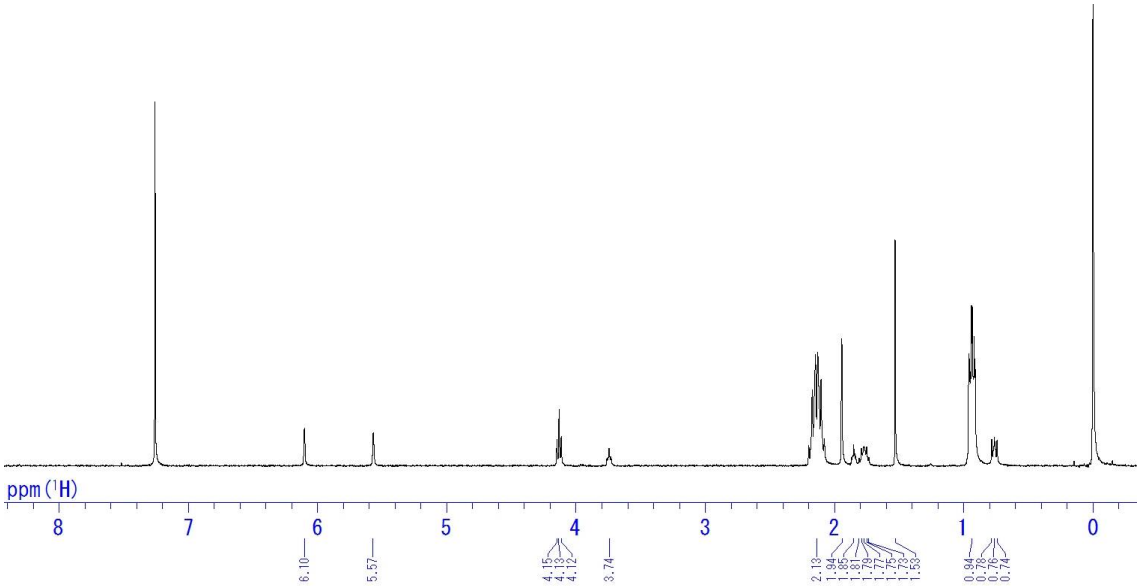

Chart S1. ^{1}H NMR spectrum of F+MMA POSS in $CDCl_3$.

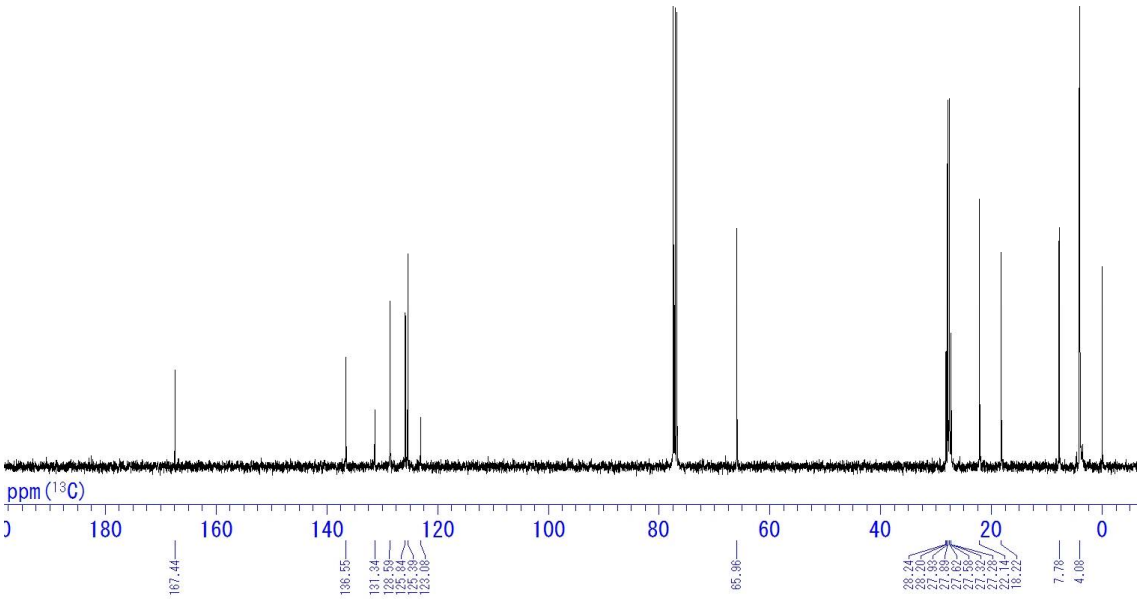

Chart S2. ^{13}C NMR spectrum of F+MMA POSS in $CDCl_3$.

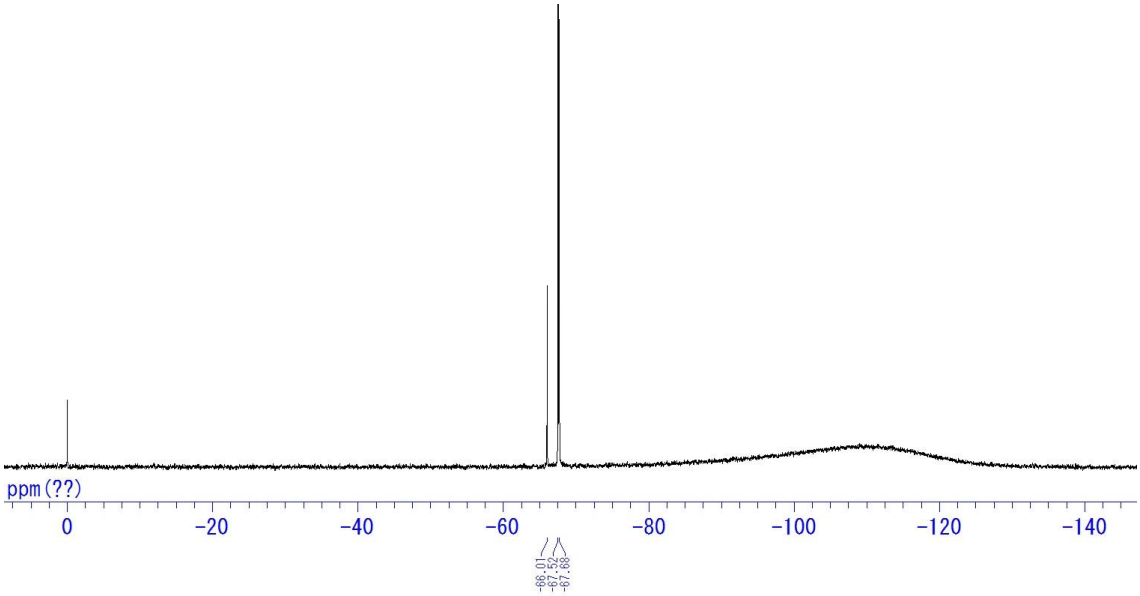

Chart S3. ^{29}Si NMR spectrum of F+MMA POSS in $CDCl_3$.

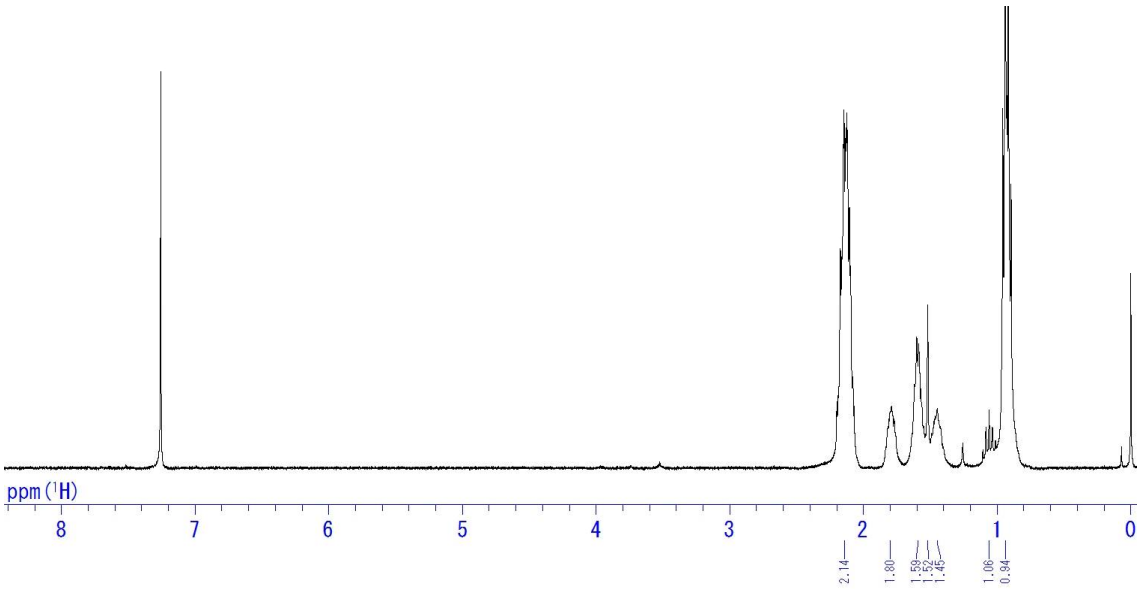

Chart S4. ^{1}H NMR spectrum of F+CP POSS in $CDCl_3$.

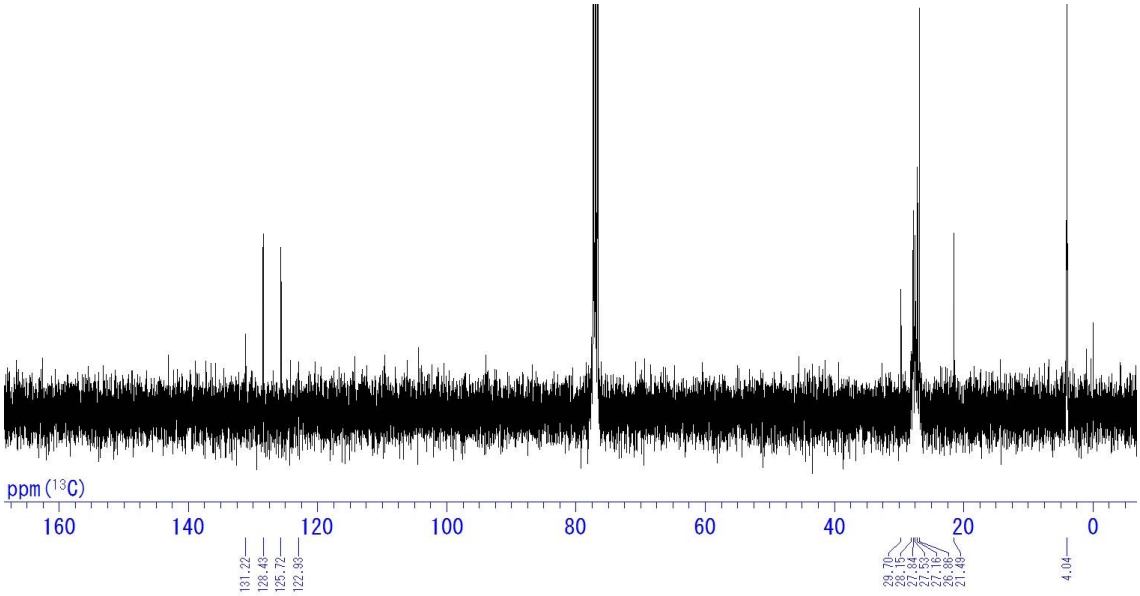

Chart S5. ^{13}C NMR spectrum of F+CP POSS in $CDCl_3$.

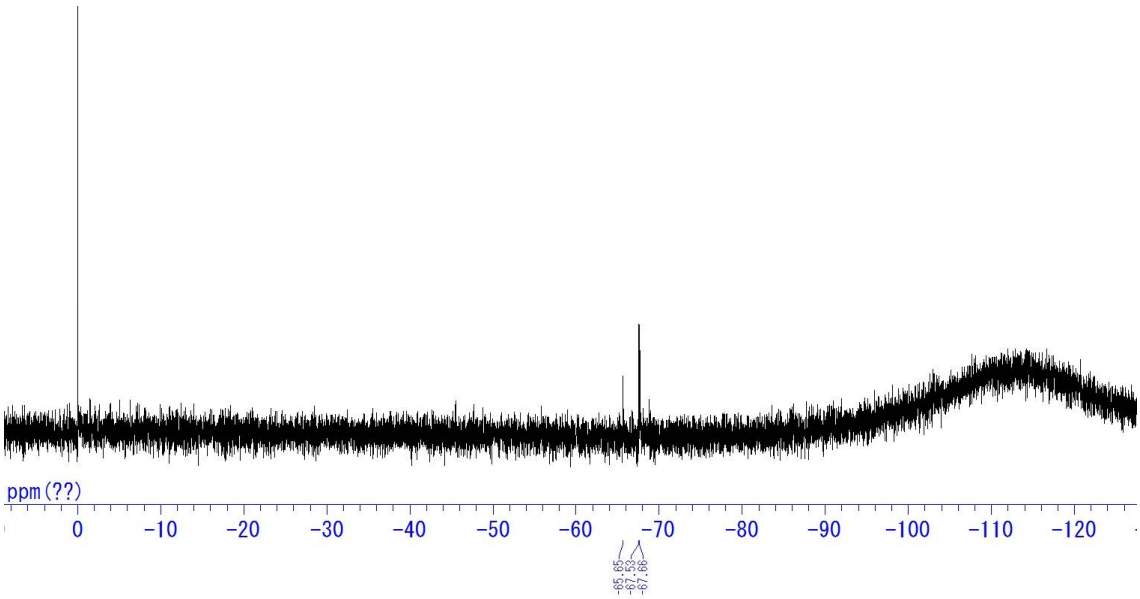

Chart S6. ^{29}Si NMR spectrum of F+CP POSS in $CDCl_3$.

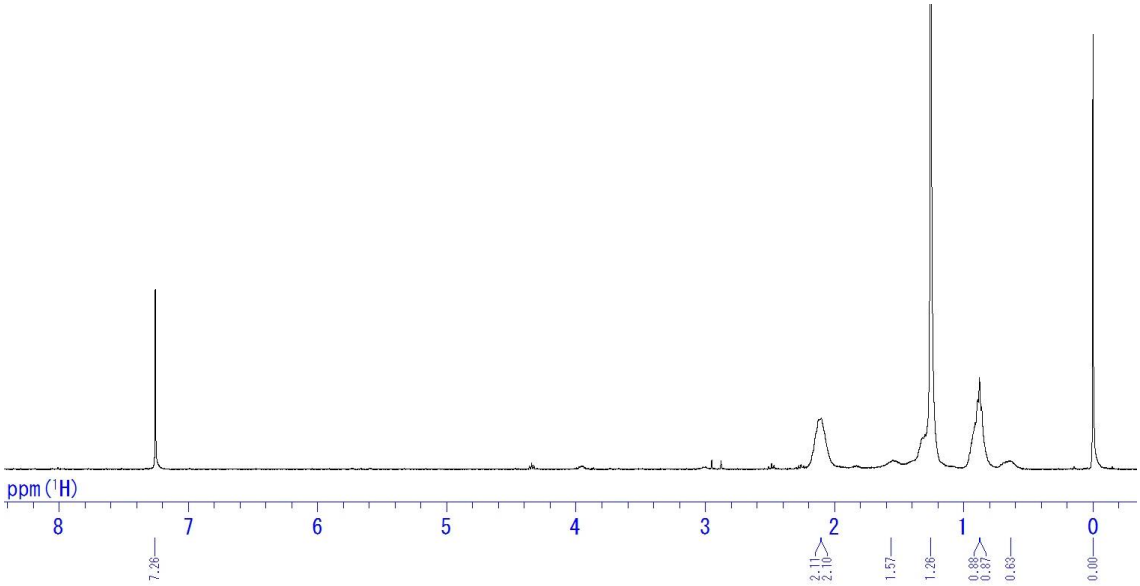

Chart S7. ^{1}H NMR spectrum of F+C18 POSS in $CDCl_3$.

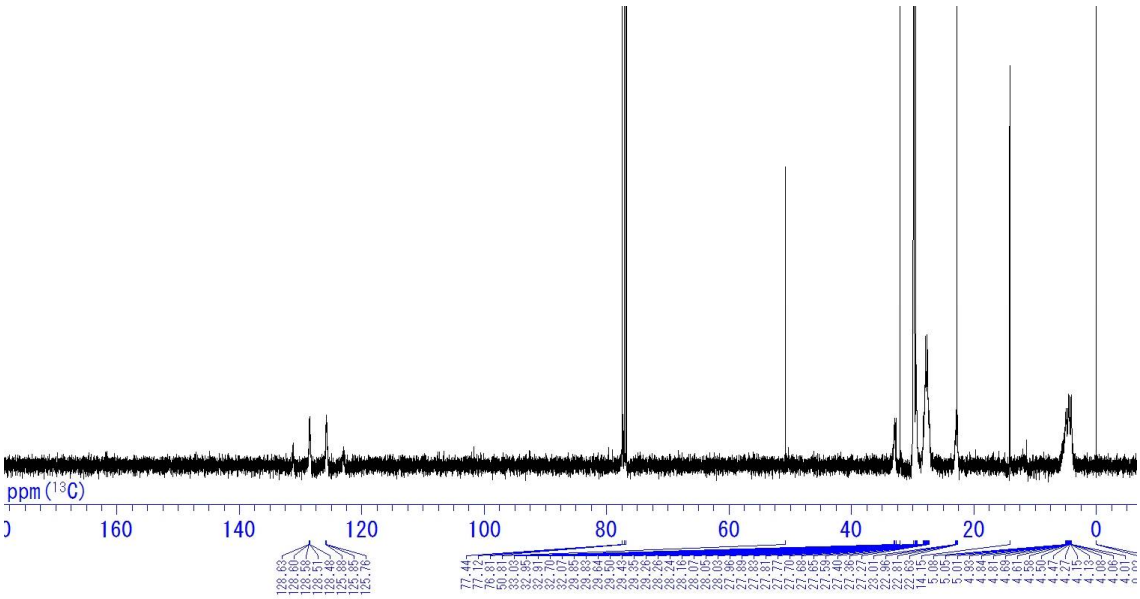

Chart S8. ^{13}C NMR spectrum of F+C18 POSS in $CDCl_3$.

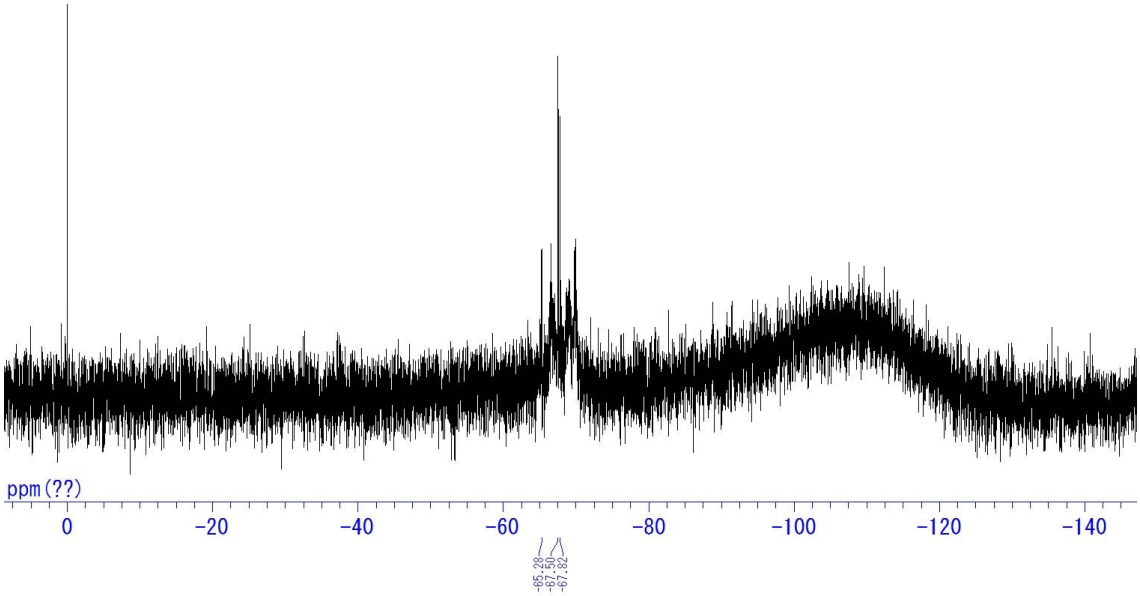

Chart S9. ^{29}Si NMR spectrum of F+C18 POSS in $CDCl_3$.

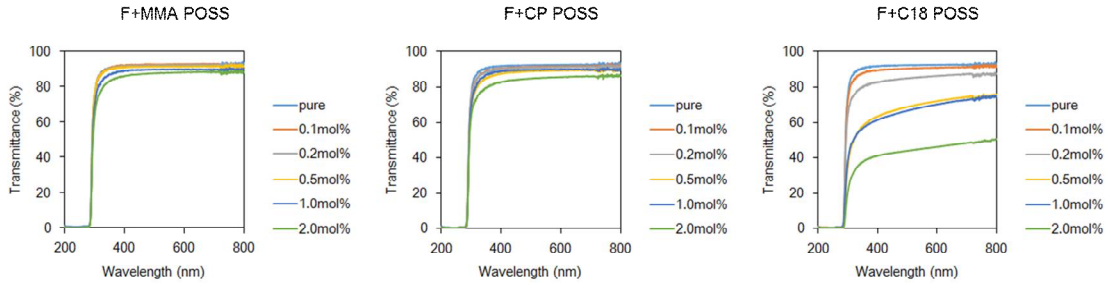

Figure S1. UV−vis transmittance spectra of PMMA hybrid films with variable concentrations of POSS fillers.

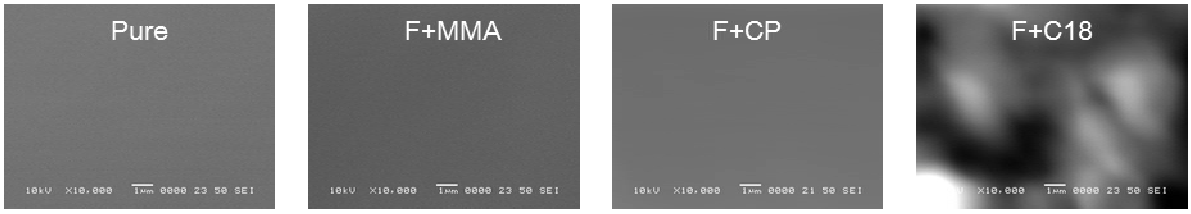

Figure S2 SEM images of PMMA hybrids containing POSS fillers (2 mol%). Scale bars represent 1 μm.

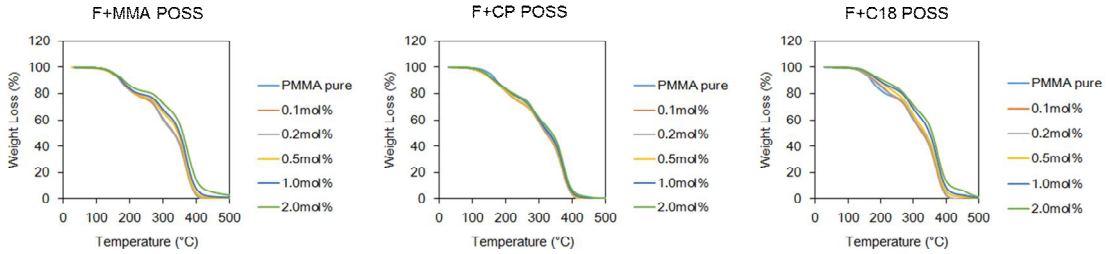

Figure S3. TGA thermograms of PMMA hybrids containing POSS fillers with a heating rate of 10 °C/min under nitrogen atmosphere.