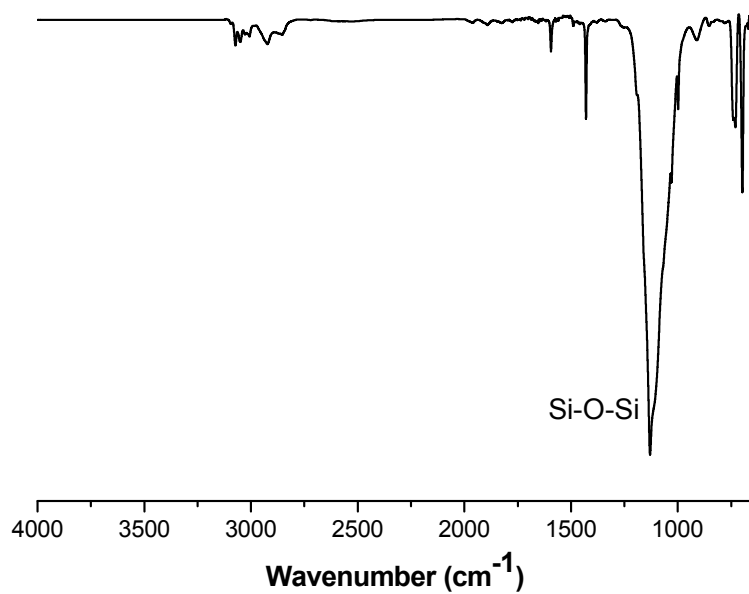
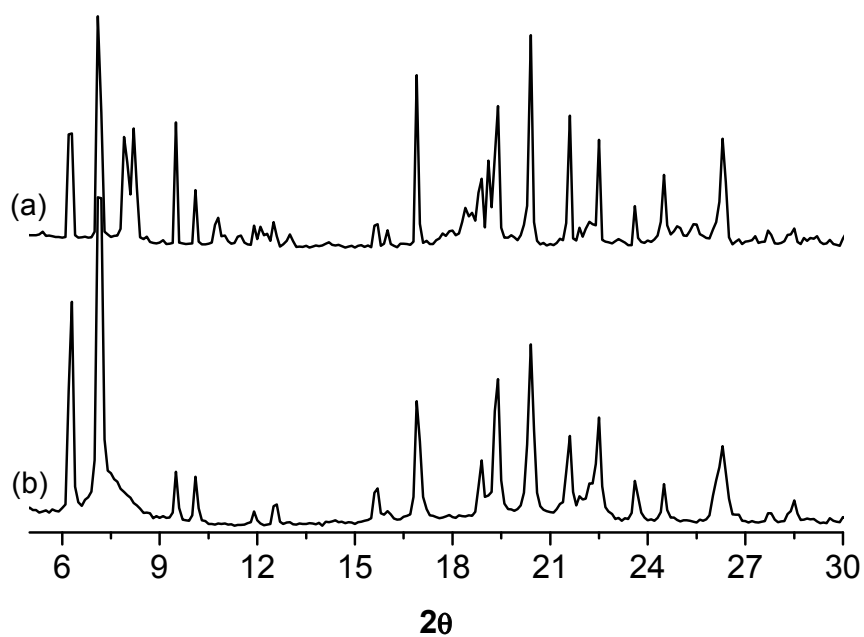


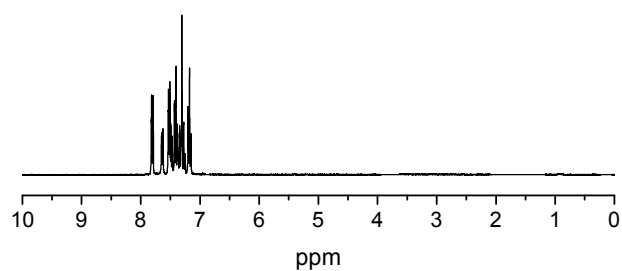
SUPPORTING INFORMATION



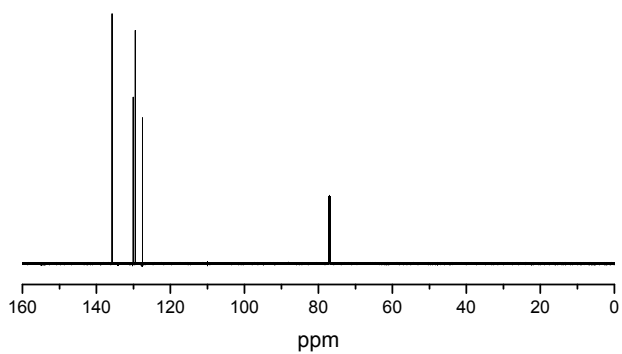
SUPPORTING FIGURE 1 FT-IR Spectrum of T12-Phenyl



SUPPORTING FIGURE 2. WAXD Patterns for T12-Phenyl (a) before recrystallization and (b) after recrystallization



SUPPORTING FIGURE 3. ^1H NMR Spectrum of T12-Phenyl



SUPPORTING FIGURE 4. ^{13}C NMR Spectrum of T12-Phenyl

Energy Parameter*	T8-Phenyl	T10-Phenyl	T12-Phenyl
Stretch	1.9471	2.0831	2.7053
Bend	38.1483	60.9962	19.9984
Stretch-Bend	-1.1622	-1.1390	-1.7339
Torsion	-44.1230	-54.0523	-64.9389
Non-1,4 VDW	-35.6200	-51.7202	-70.1164
1,4 VDW	22.6598	29.3158	32.0439
Dipole-Dipole	19.0714	18.4841	40.1438
Total Energy	0.9214	3.9677	-41.8978

*Units of energy are kcal/mol

SUPPORTING TABLE 1. MM2 Calculations of the Minimization Energies of T8, T10, and T12-Phenyl Cages