

Supporting Information for

A Novel One-pot Synthesis of Poly(propylene carbonate) Containing Cross-linked Networks by Copolymerization of Carbon Dioxide, Propylene Oxide, Maleic Anhydride and Furfuryl Glycidyl Ether

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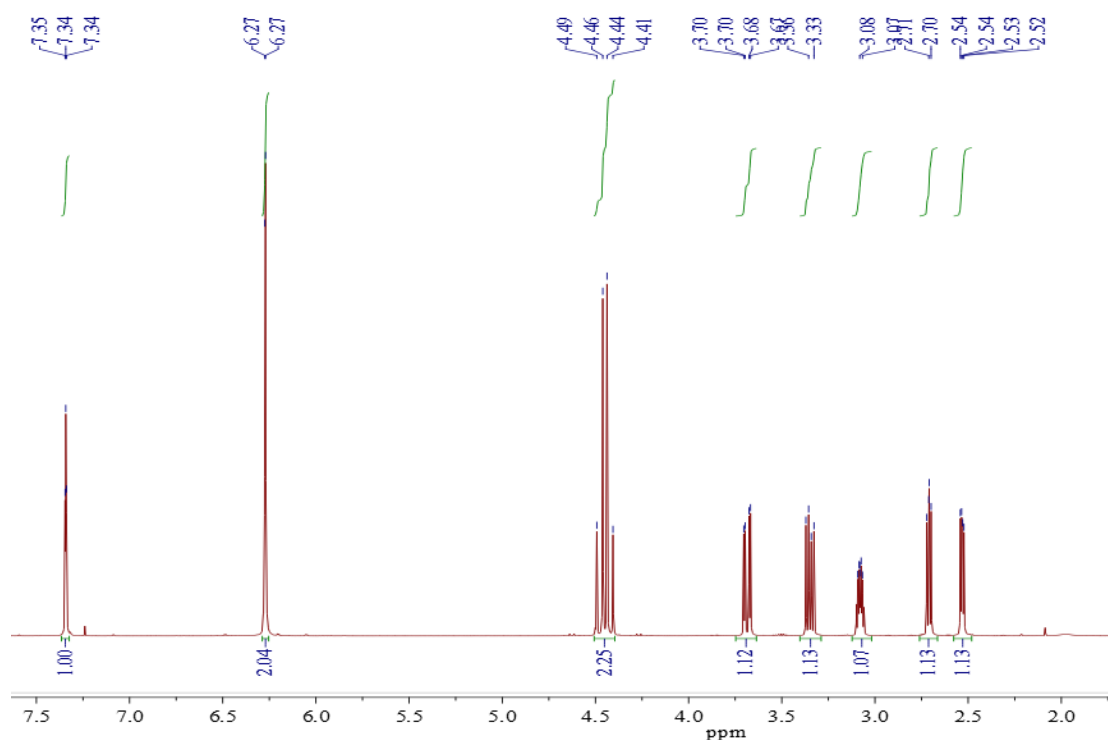


Figure S1. The ¹H NMR spectrum of FGE (CDCl₃, 400MHz).

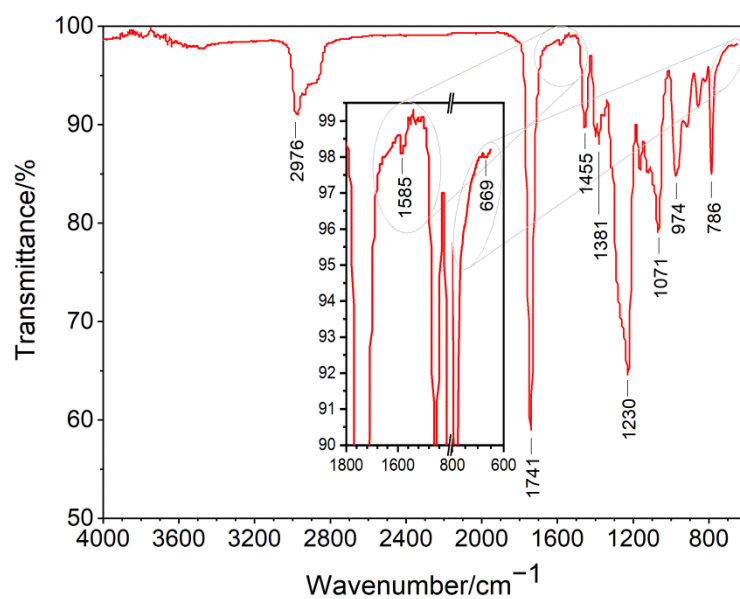


Figure S2. The FT-IR spectrum of PPC.

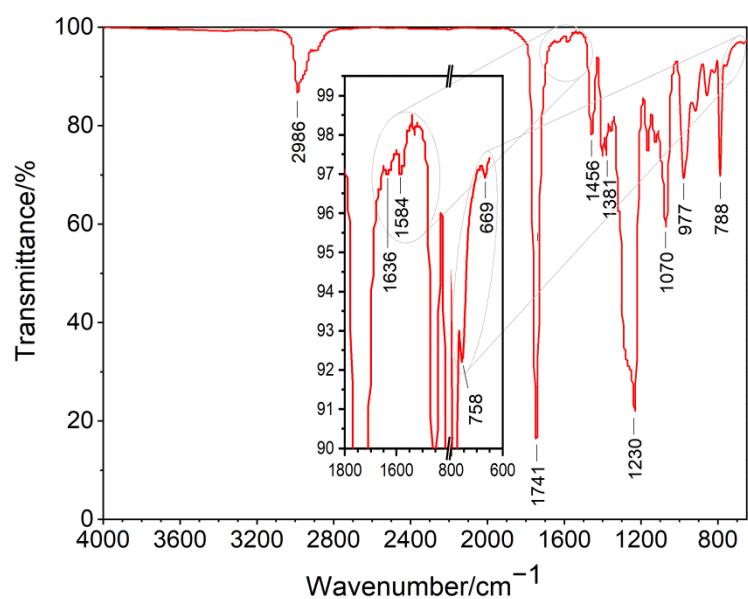


Figure S3. The FT-IR spectrum of PPC-MF-3.

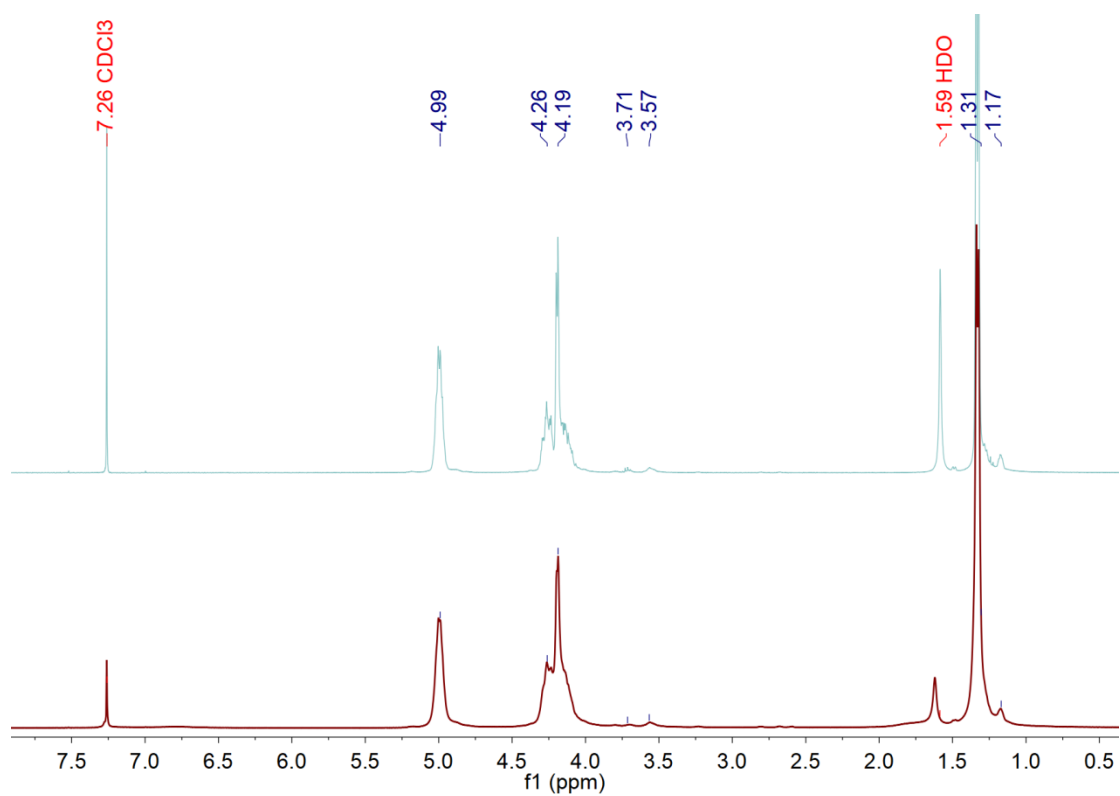


Figure S4. The ^1H NMR spectra of PPC (top) and PPC-MF-3 (below) (CDCl_3 , 400MHz).

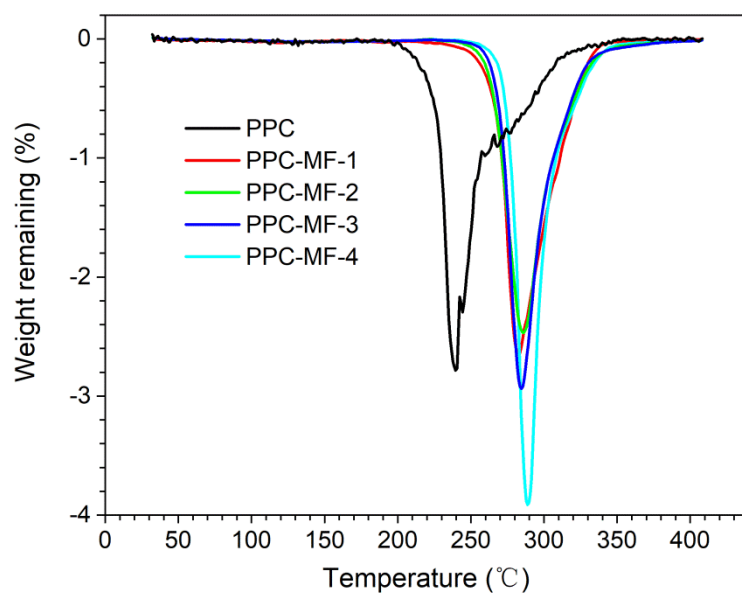


Figure S5. The DTG curves for PPC and PPC-MFs.

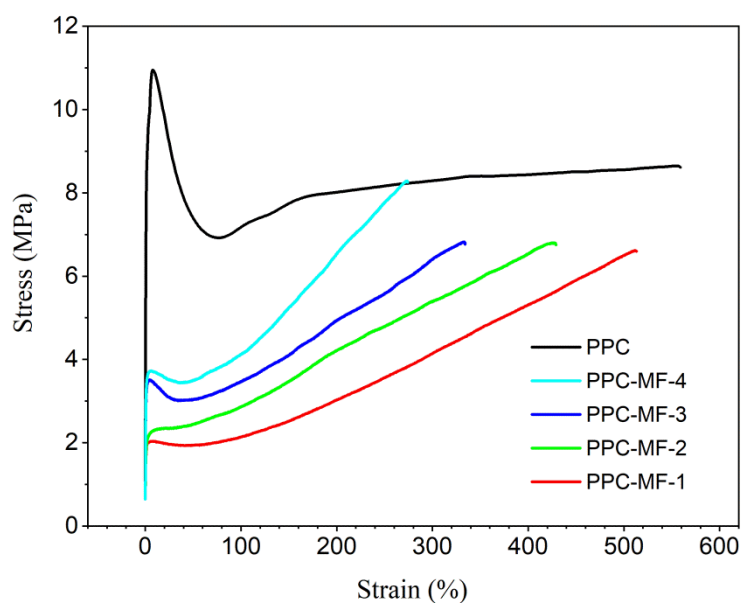


Figure S6. The stress–strain curves for PPC and PPC-MFs.

Table S1. The thermal properties of PPC and PPC-MFs.

Sample	$T_{d,-5\%}$ (°C)	$T_{d,max}$ (°C)	T_g (°C)
PPC	217.1	239.0, 254.2	25.3
PPC-MF-1	249.7	282.6	11.1
PPC-MF-2	262.5	284.4	12.2
PPC-MF-3	266.3	285.8	11.1
PPC-MF-4	271.3	288.6	13.4

Table S2. The results of the hot-set elongation tests.

Sample	Hot-set elongation (%)	Permanent deformation (%)
PPC	310.7	157.2
PPC-MF-1	377.5	56.5
PPC-MF-2	201.0	16.0
PPC-MF-3	90.0	11.0
PPC-MF-4	62.5	6.5