

Preparation and characterization of novel naphthyl epoxy resin containing 4-fluorobenzoyl side chains for low-*k* dielectrics application

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Supporting Information

Table S1. Chemical shift and integral area of the monomer DMNF.

Chemical shift (ppm)	7.82-7.87	7.51-7.58	7.34-7.40	3.72-3.78
Integral area	1	1.03	1.05	1.52

Table S2. Chemical shift and integral area of the monomer DHNF.

Chemical shift (ppm)	9.90-10.02	7.81-7.92	7.28-7.44	7.11-7.23
Integral area	1	2.05	2.12	2.04

Table S3. Chemical shift and integral area of the monomer DGENF.

Chemical shift (ppm)	7.82-7.92	7.50-7.62	7.30-7.42	4.30-4.42	3.92-4.03	2.92-3.04	2.60-2.68	2.36-2.45
Integral area	1	1.05	1.06	0.53	0.55	0.58	0.54	0.54

Table S4. Wavenumbers and structures of the monomer DGENF for FTIR.

Structure	naphthalene rings	carbonyl group	oxirane ring
Wavenumber (cm ⁻¹)	1500-1600	1740	912