

Supporting Information

Application of decarboxylation reactions on improvement of dielectric properties of methacrylic polymer

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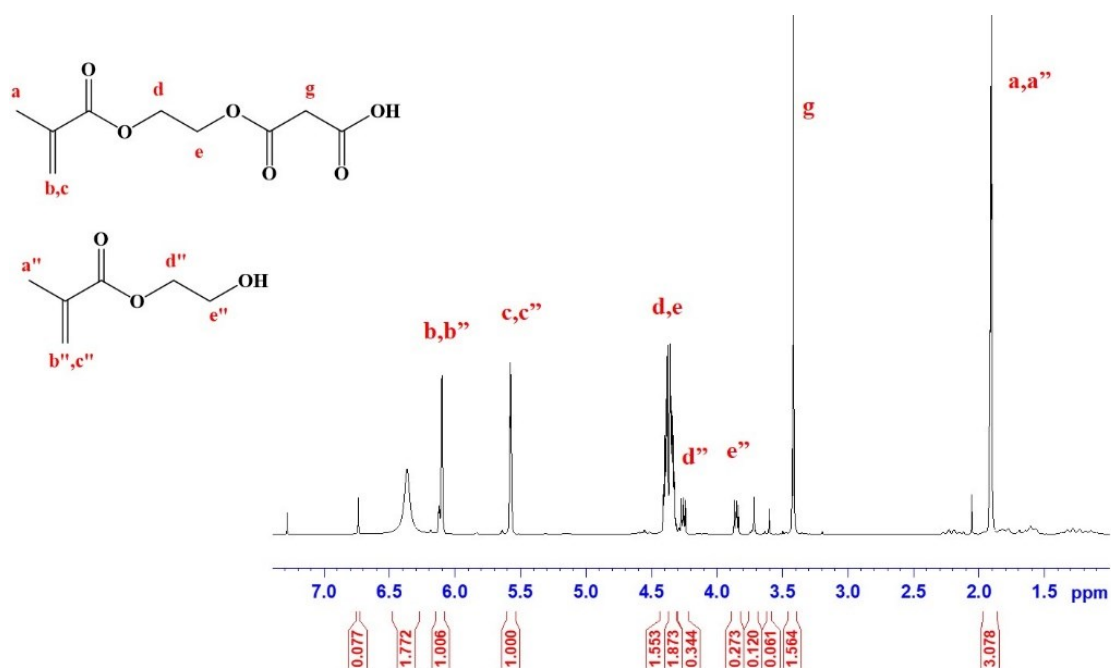


Figure S1 ¹H NMR spectrum of the obtained monomer product

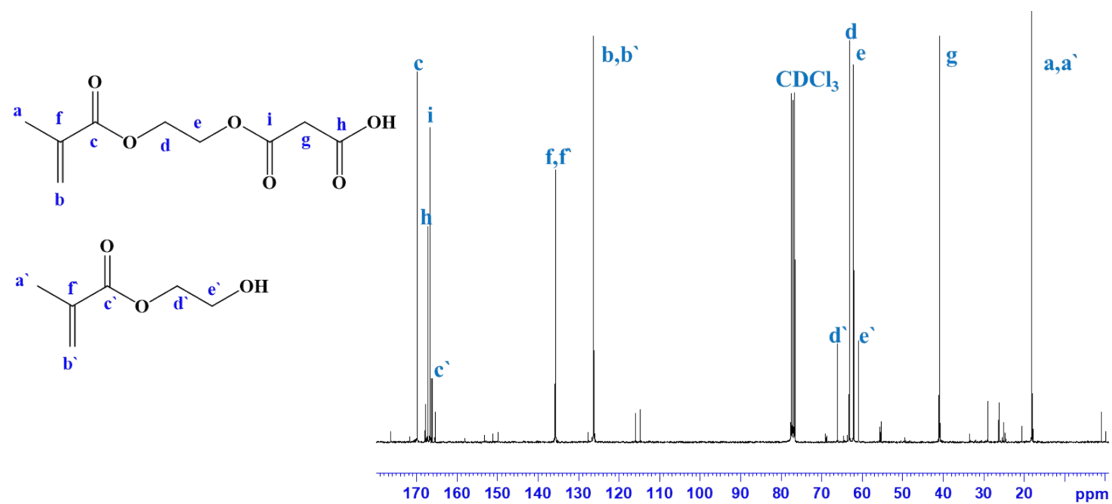


Figure S2 ^{13}C NMR spectrum of the obtained monomer product

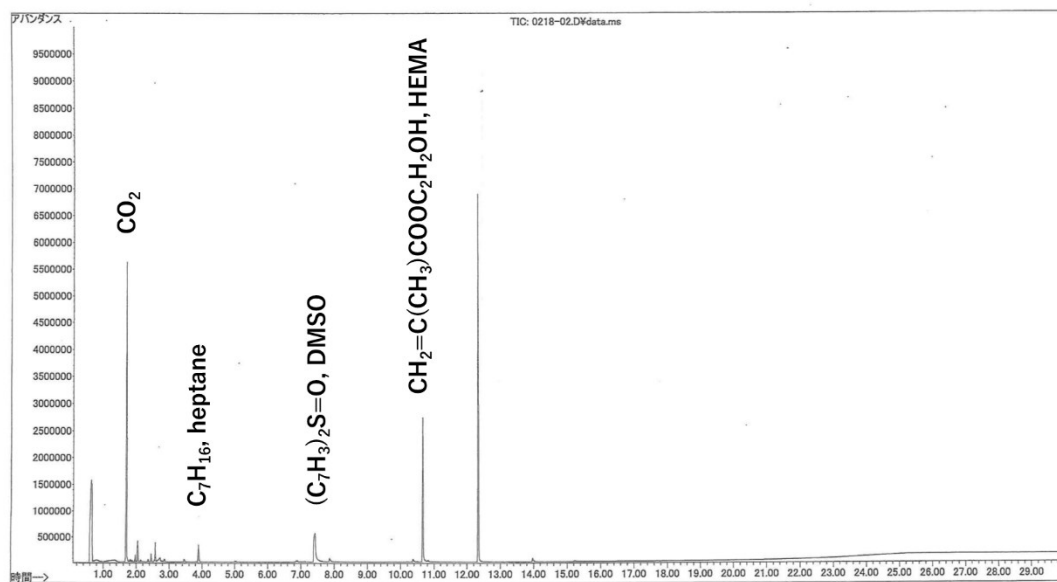


図1 PHEMA Malonate のガスクロマトグラム

Figure S3 The GC analysis of pyrolysis products of PHEMAMal powder

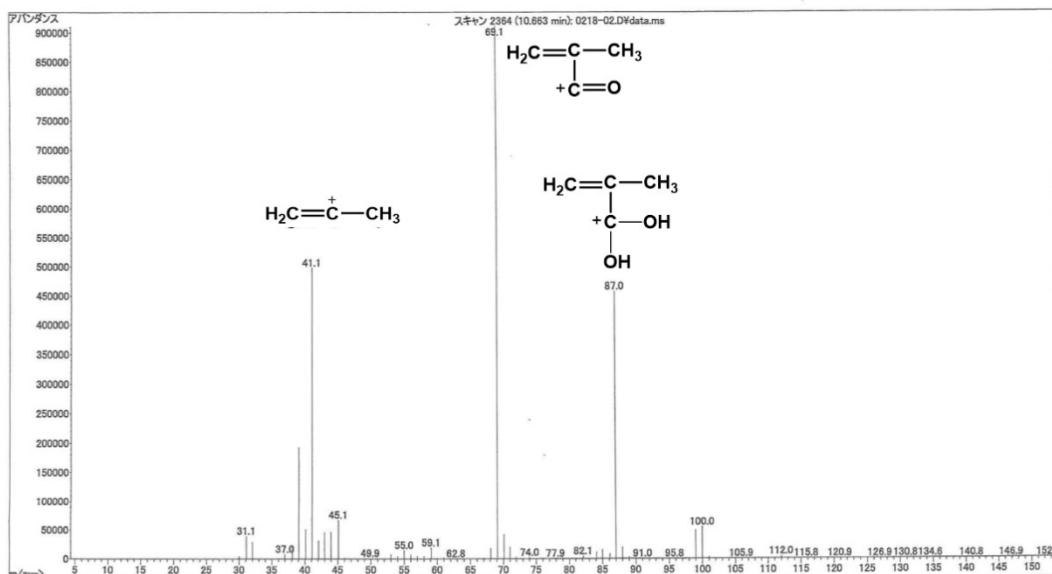


図3 保持時間 10.7 分の成分のマススペクトル

Figure S4 The MS spectrum of the component from GC at retention time of 10.7 min

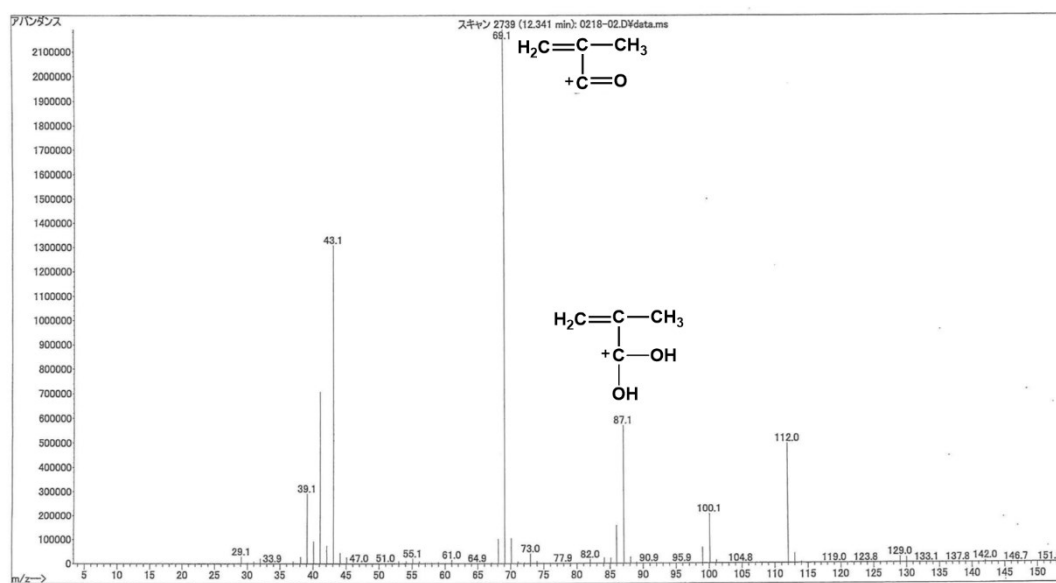


図4 保持時間 12.3 分の成分のマススペクトル

Figure S5 The MS spectrum of the component from GC at retention time of 12.3 min

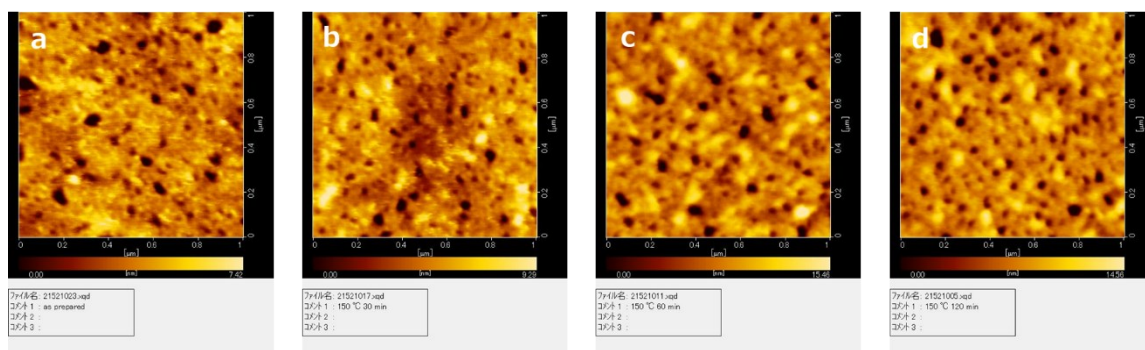


Figure S6 The SPM/AFM images of the prepared films [r.t., **surface topography**, 1 μm × 1 μm]: (a) before thermal treatment, and after thermal treatment at 150 °C for (b) 30 min. (c) 60 min., and (d) 120 min. respectively.

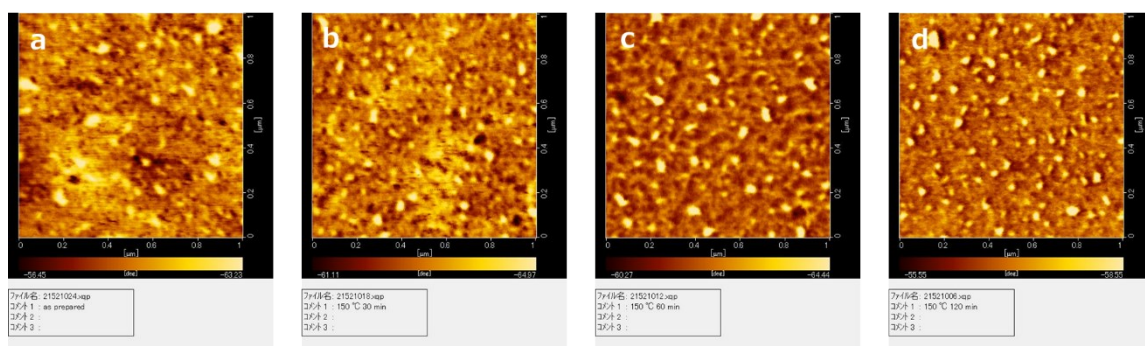




Figure S7 The SPM/AFM images of the prepared films [r.t., **phase mode**, $1\ \mu\text{m} \times 1\ \mu\text{m}$]: (a) before thermal treatment, and after thermal treatment at $150\ ^\circ\text{C}$ for (b) 30 min. (c) 60 min., and (d) 120 min. respectively.

Acknowledgement

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