## **Supporting Information**

## Engineering modifiers bearing benzophenone with enhanced reactivity to construct surface microstructure

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## Supporting figures and tables



Figure S1. Synthetic Routes of BPS and BPEG.



Figure S2. <sup>1</sup>H NMR spectrum of BPBriBU.



Figure S3. <sup>1</sup>H NMR spectrum of BPS.



**Figure S4.** <sup>1</sup>H NMR spectrum of BPEG.



**Figure S5.** 3D graphical representation of a 1.96 mm<sup>2</sup> area through surface profilometry, which is found along the dividing line between the irradiated region (left) and masked region (right) of PU coated with BPEG.