

Synthesis and Characterization of Bio-Based Transesterification Catalysts for Green 3D-Printable Dynamic Photopolymers

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1. NMR-spectra of the synthesized compounds

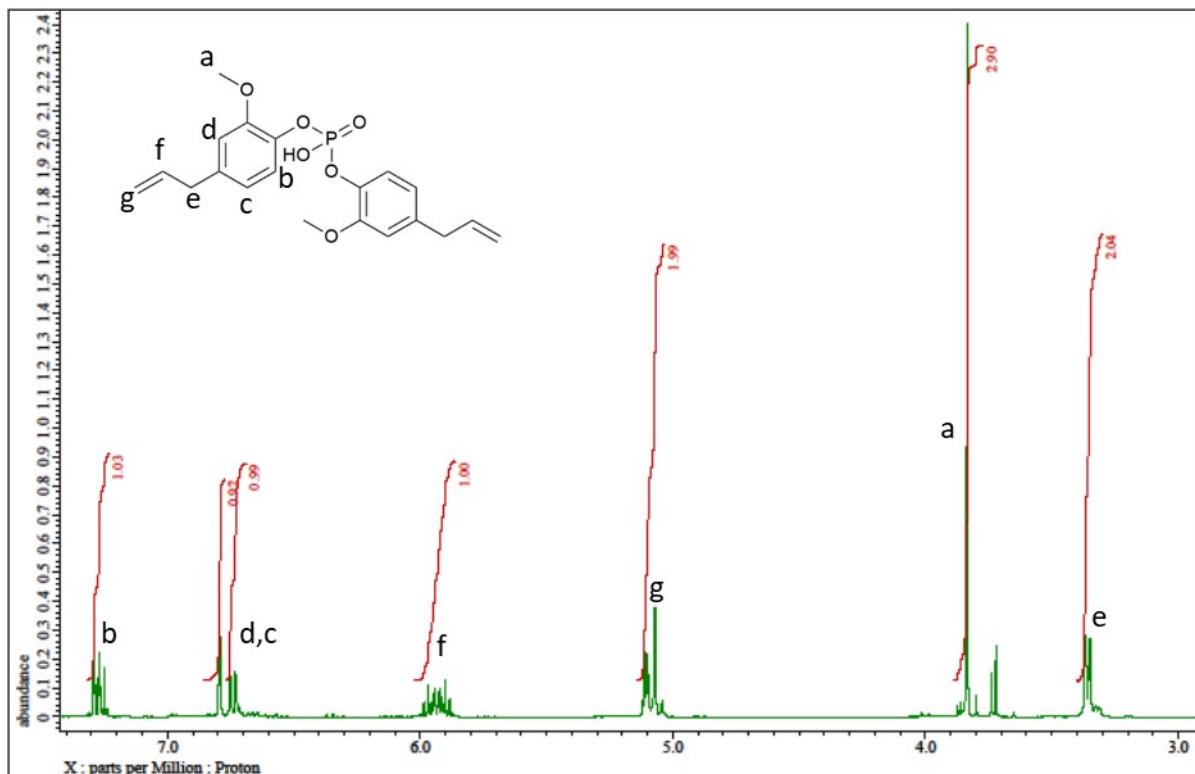


Figure S1: ¹H NMR spectrum of EUGP

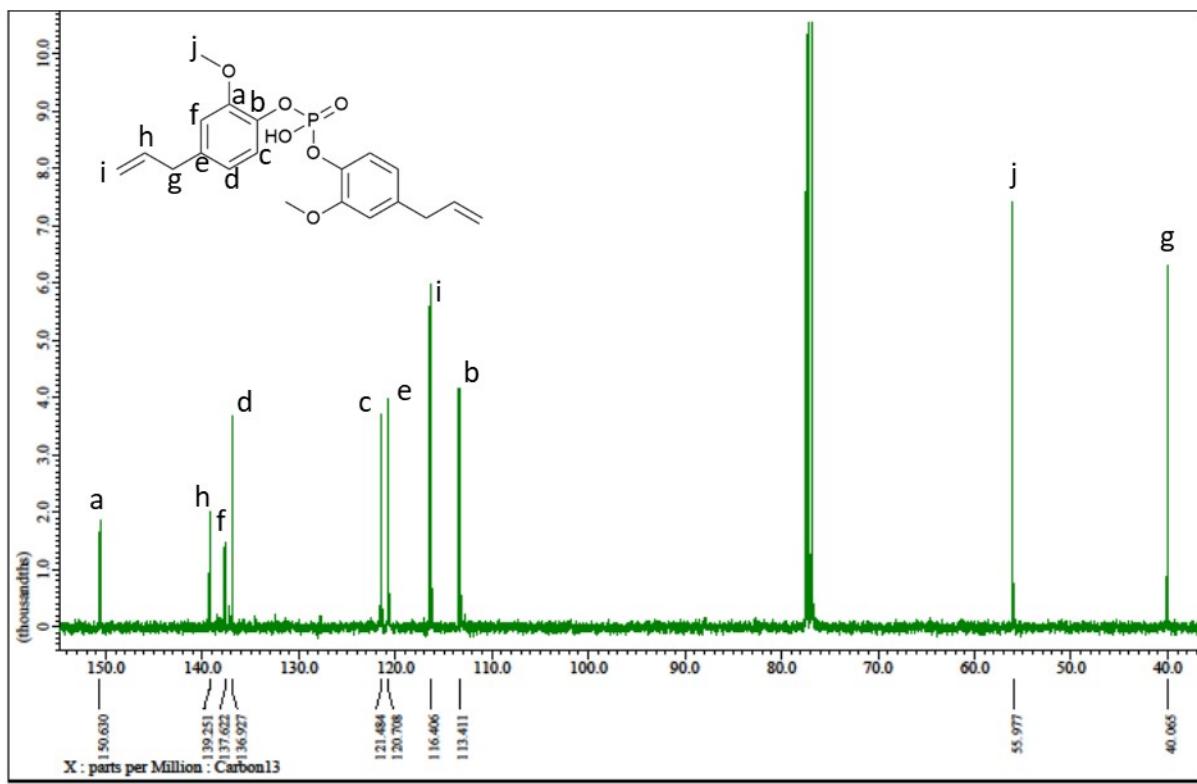


Figure S2: ^{13}C NMR spectrum of EUGP

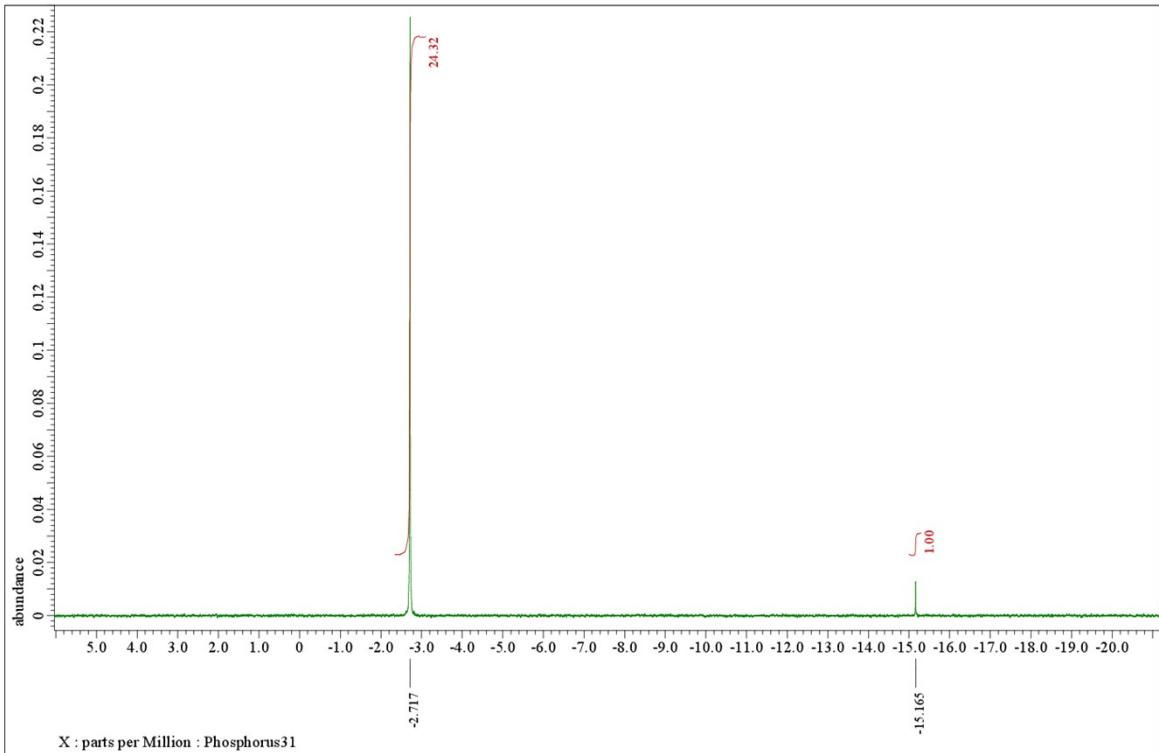


Figure S3: ^{31}P NMR spectrum of EUGP

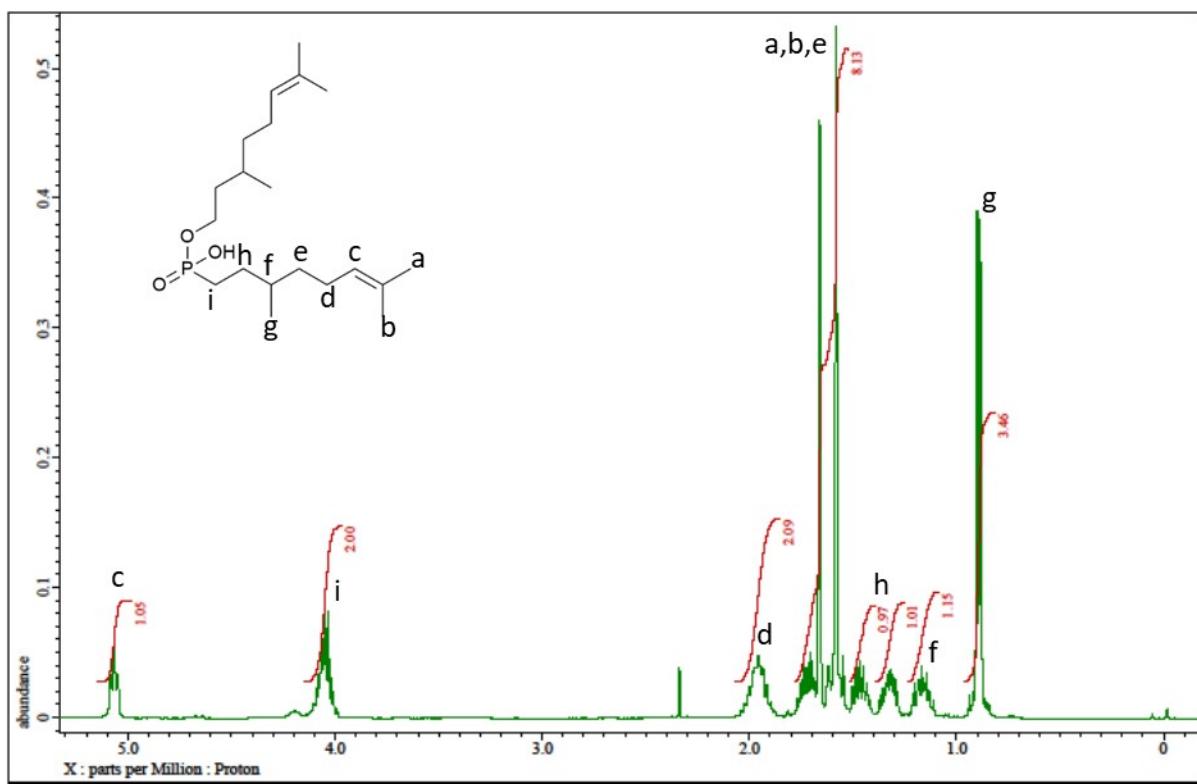


Figure S4: ^1H NMR spectrum of CitrP

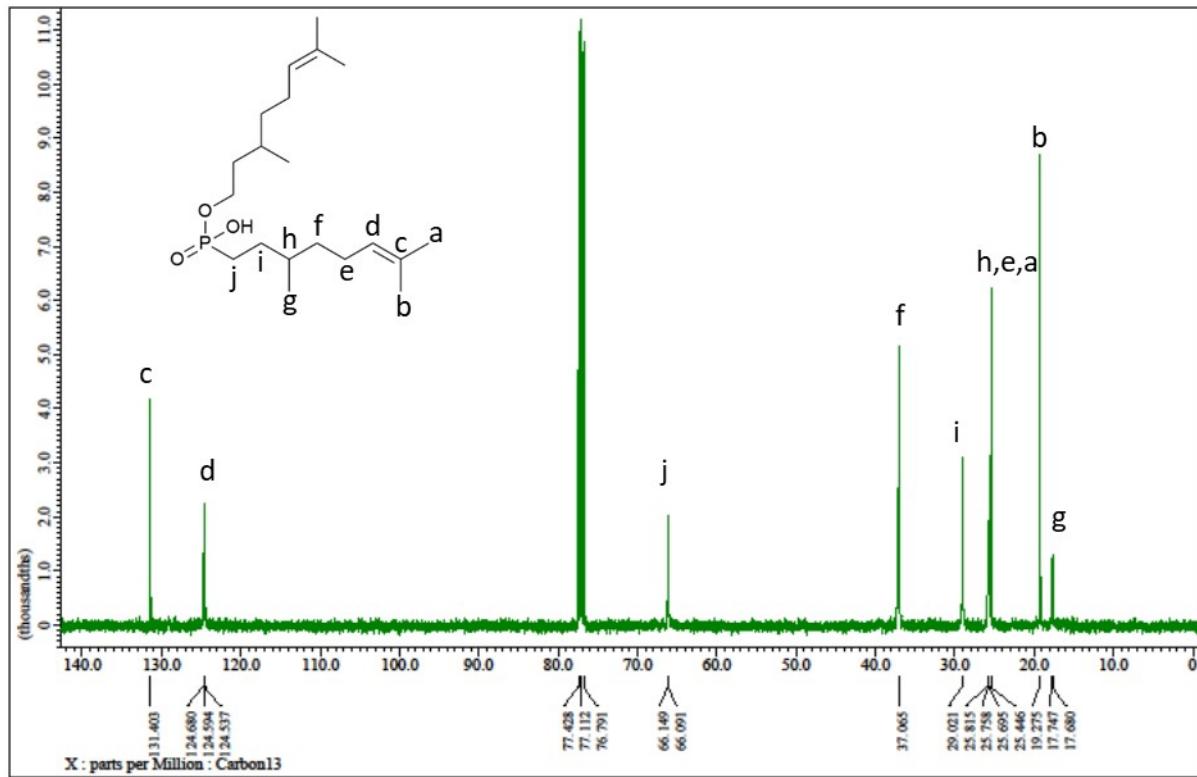


Figure S5: ^{13}C NMR spectrum of CitrP

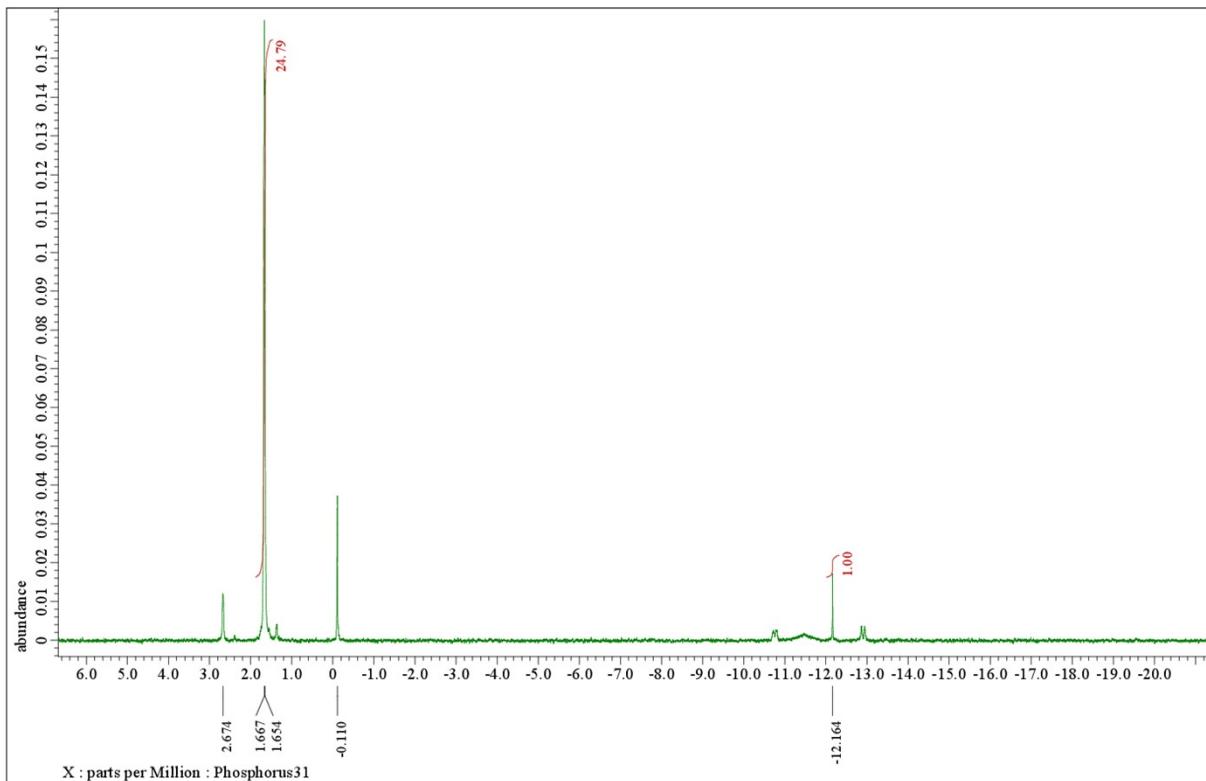


Figure S6: ^{31}P NMR spectrum of CitrP

2. MS-Data of synthesized compounds

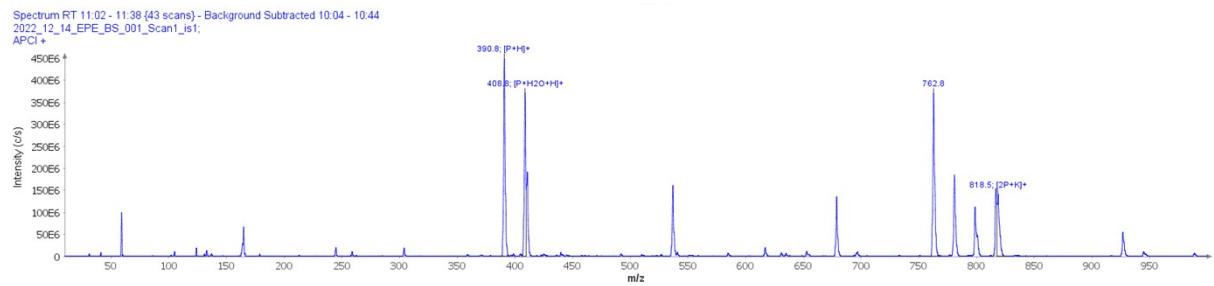


Figure S7: APCI MS spectrum (positive scan) of EUGP

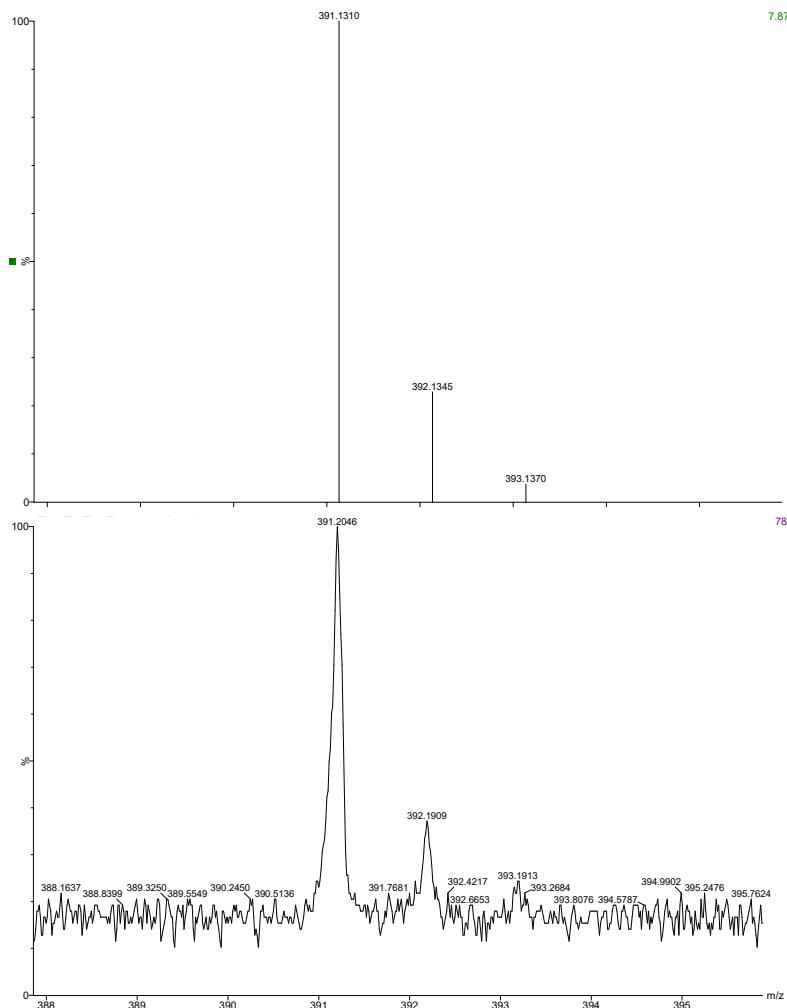


Figure S8: MALDI-MS spectrum of EUGP

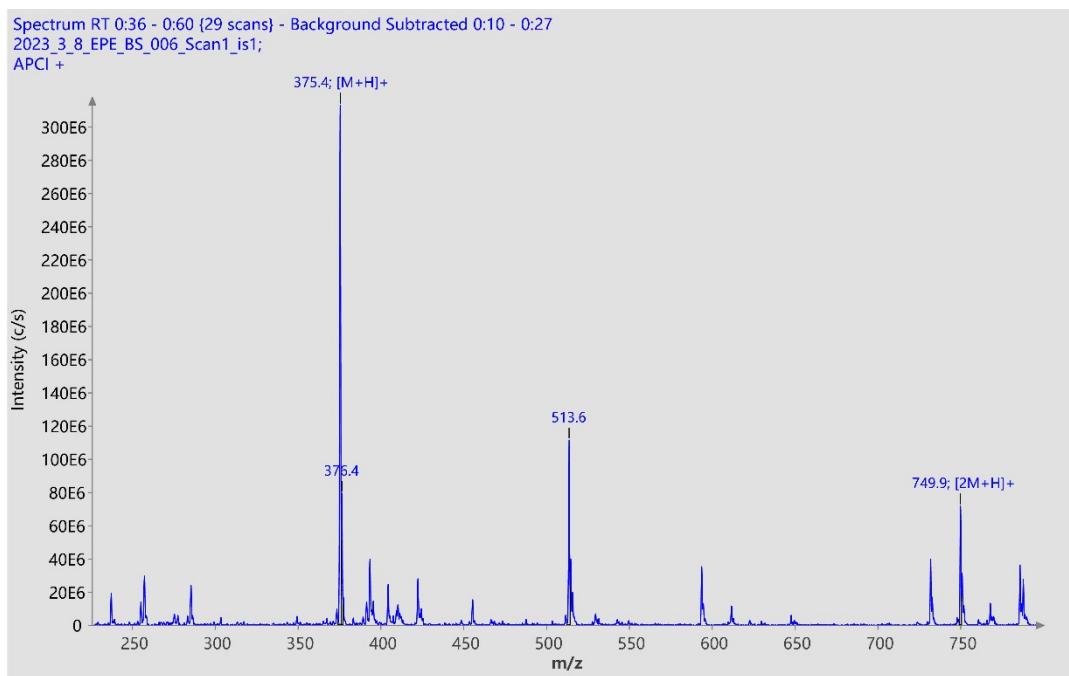


Figure S9: APCI MS spectrum (positive scan) of CitrP

3. FTIR-curing kinetics

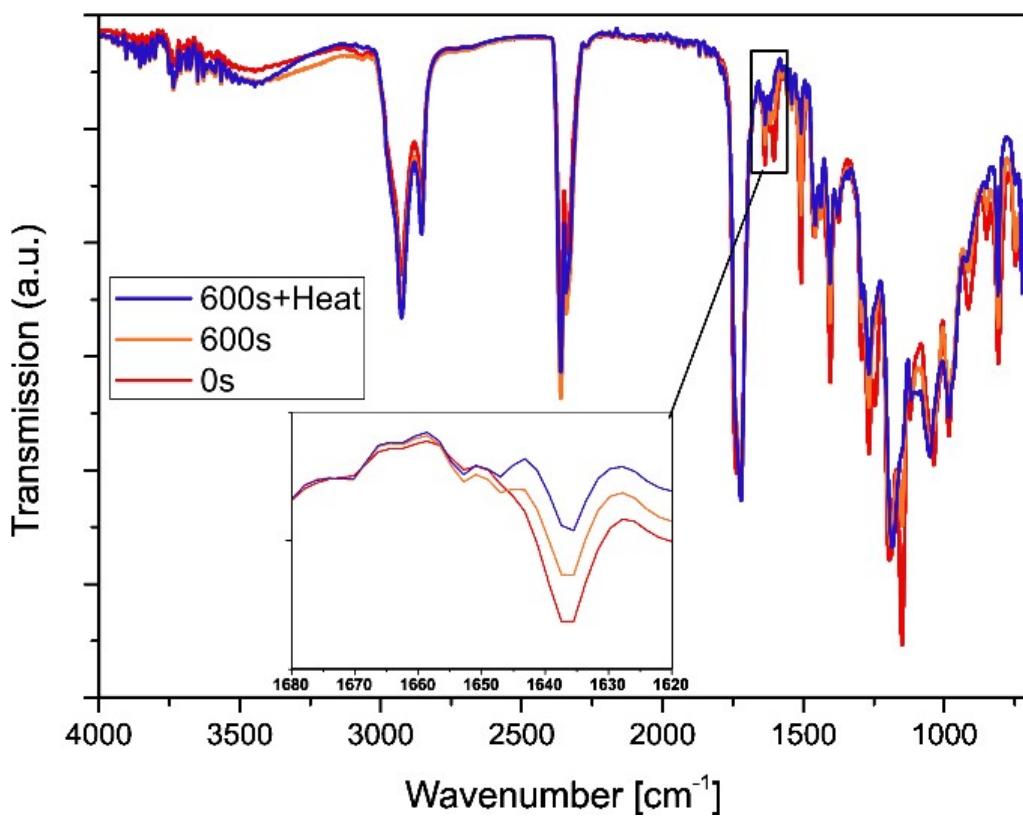


Figure S10: ATR FTIR spectra of uncured (0 s), cured (600 s under visible light) and thermally post treated (180 °C for 20 min) EUGP_A50:E50 resin. The inset plot presents the zoom-in image of the C=C absorption band.

4. Resolution testing

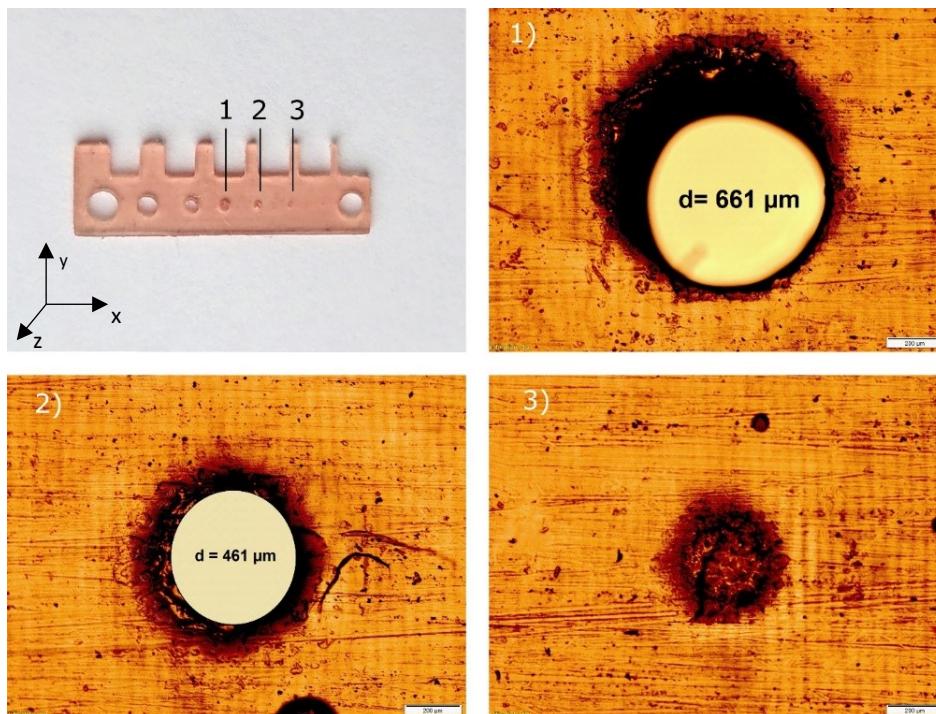


Figure S11: Testing the resolution of a DLP 3D-printed comb structure. (1-3) Optical micrographs of holes printed in different positions of the structure.

5. Spectra of the Light sources

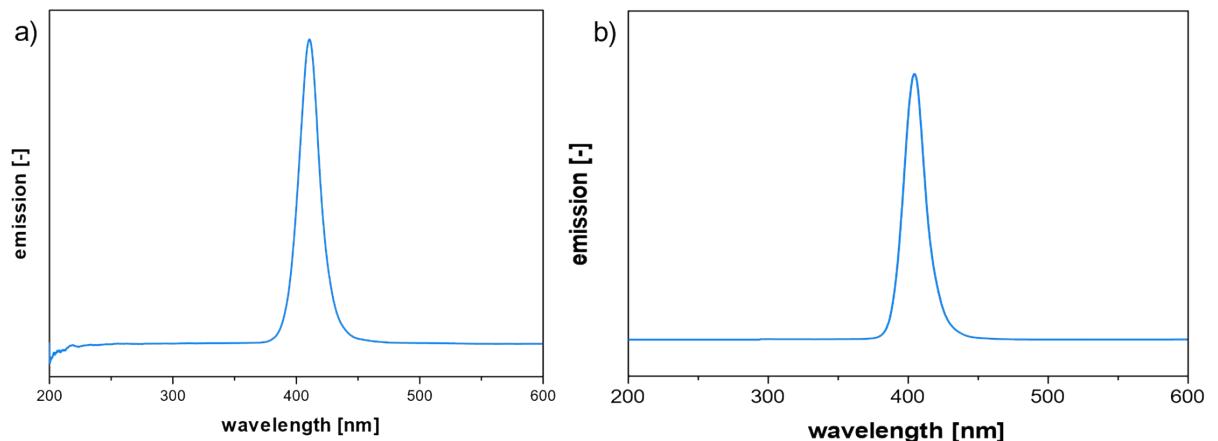


Figure S12: a) Emissionspectrum of the light source for IR-Measurements b) Emissionspectrum of the 3D printer