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Supporting Information (SI)

3D Printed and Stimulus Responsive Drug Delivery Systems based on Synthetic Polyelectrolyte Hydrogels manufactured by Digital Light Processing

Sonja Vaupel,[#a;b] Robert Mau,[#c;d] Selin Kara,[a] Hermann Seitz,[c;d] Udo Kragl[b;c] and Johanna Meyer[*a;b;c]

a Institute of Technical Chemistry, Leibniz University Hannover, Callinstraße 5, 30167 Hannover, Germany.
b Institute of Chemistry, University of Rostock, Albert-Einstein-Str. 3a, 18059, Rostock, Germany.
c Department Life, Light & Matter, Faculty for Interdisciplinary Research, University of Rostock, Albert-Einstein-Straße 25, 18059 Rostock, Germany.
d Microfluidics, University of Rostock, Justus-von-Liebig-Weg 6, 18059 Rostock, Germany.
# Authors contributed equally

E-mails: johanna.meyer@iftc.uni-hannover.de

1. Differential scanning calorimetry (DSC)

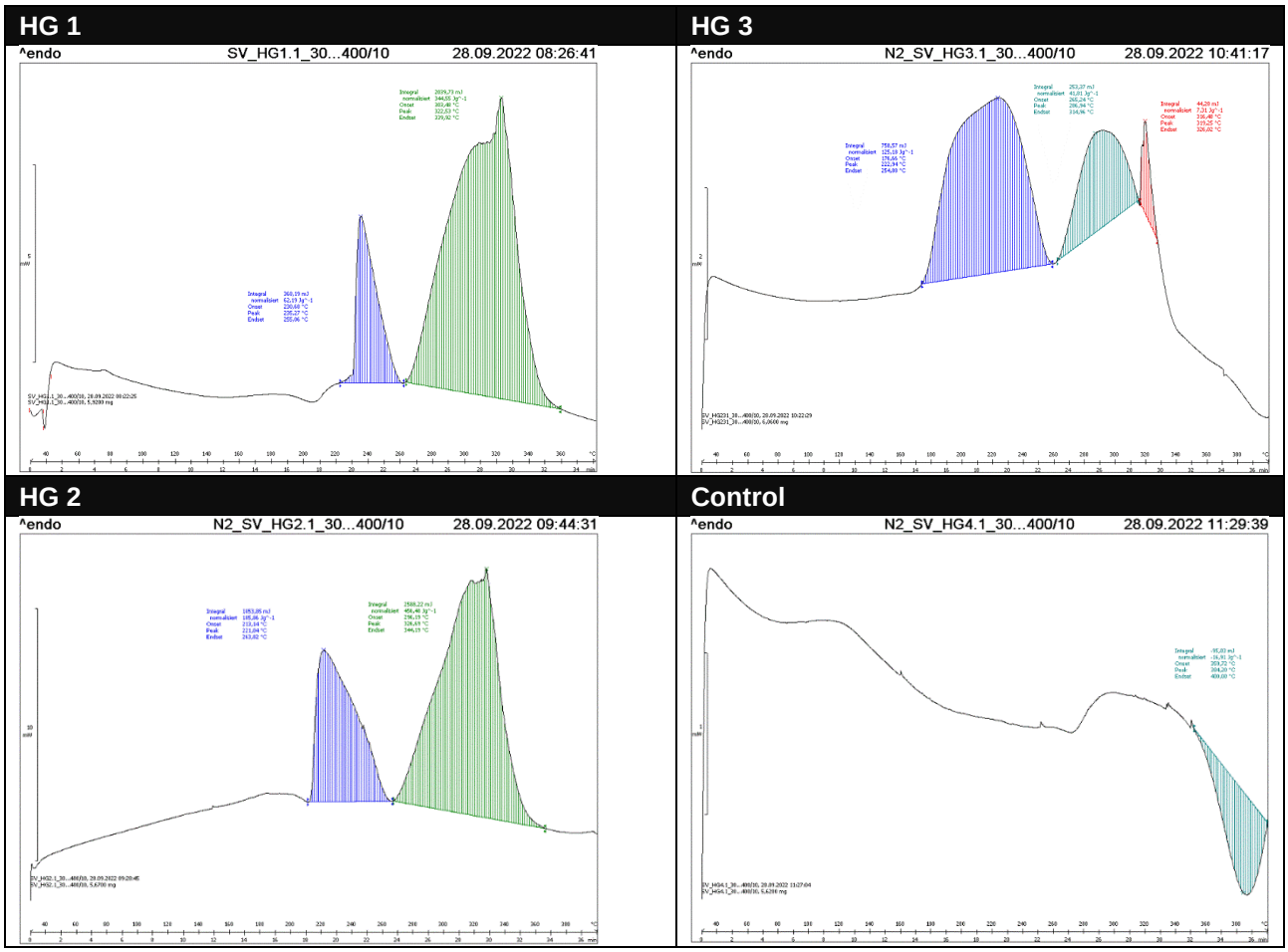

Figure S1. DSC measurements of every hydrogel composition.

2. ATR – measurements before and after UV-irradiation

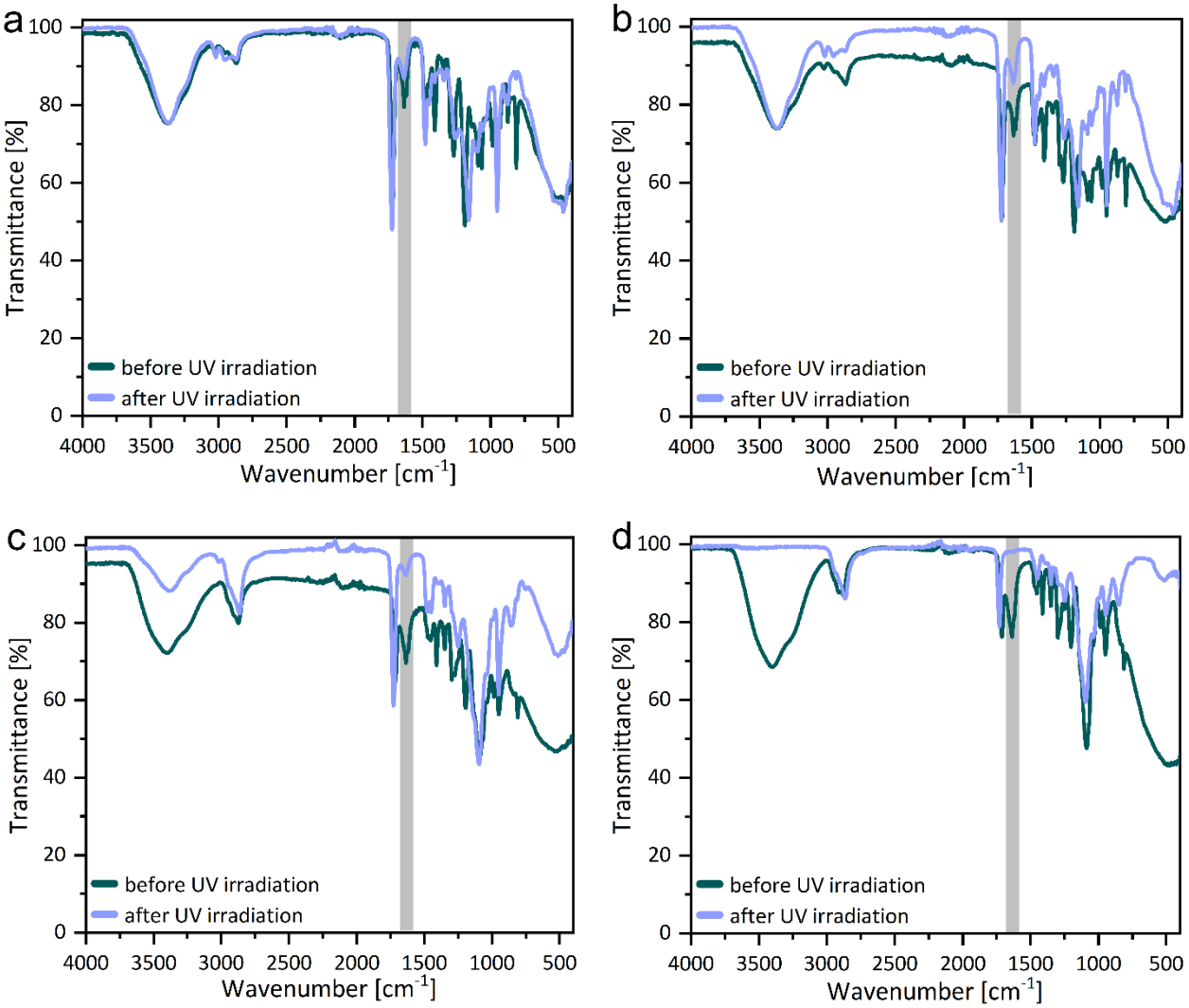

Figure S2. ATR measurements of every hydrogel composition before and after UV irradiation. Areas marked in gray are the bands of the stretching vibration of the C=C bond around 1680-1640 cm-1 (a HG 1; b HG 2; c HG 3; d Control).

3. ATR – Measurements of the different hydrogel samples

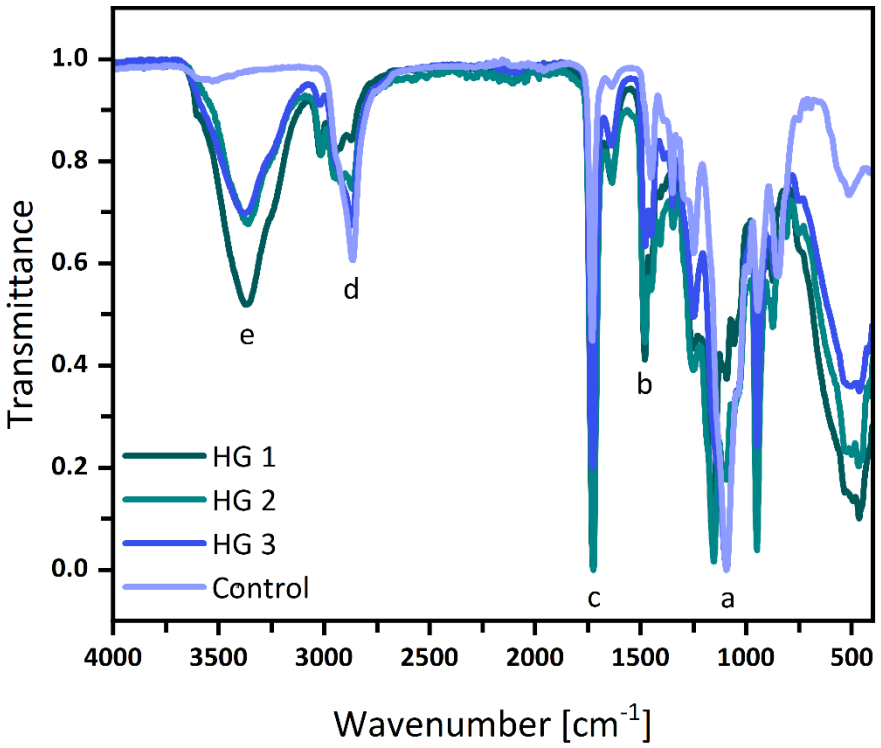

Figure S3. ATR measurements of every hydrogel composition. a *ν*(-C-O-C) (different ester groups of PEGDA and AETMA), b *δ*(-C-H) (saturated hydrocarbons), c *ν*(-C=O) (carbonyl groups), d *ν*(-C-H) (saturated hydrocarbons) and e *ν*(-OH) (moisture from the samples, HG 1, HG 2 and HG 3 were hydrophilic and quickly absorbed humidity from the surrounding environment).

4. Scanning electron microscope (SEM) images

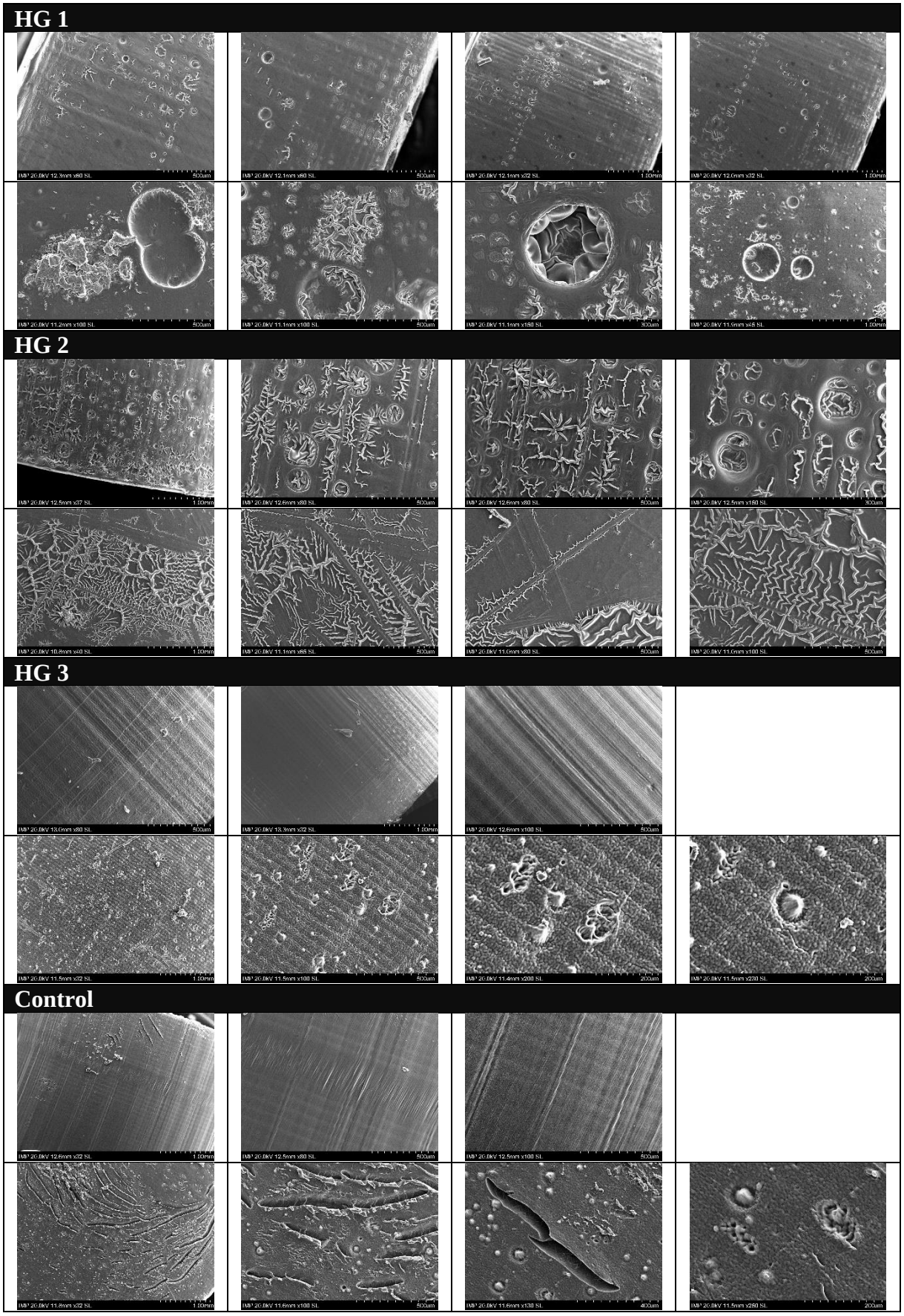

Figure S4. SEM photographs of (a) the lateral surface and (b) the base of the printed cylinders.

5. HPLC Calibration curve

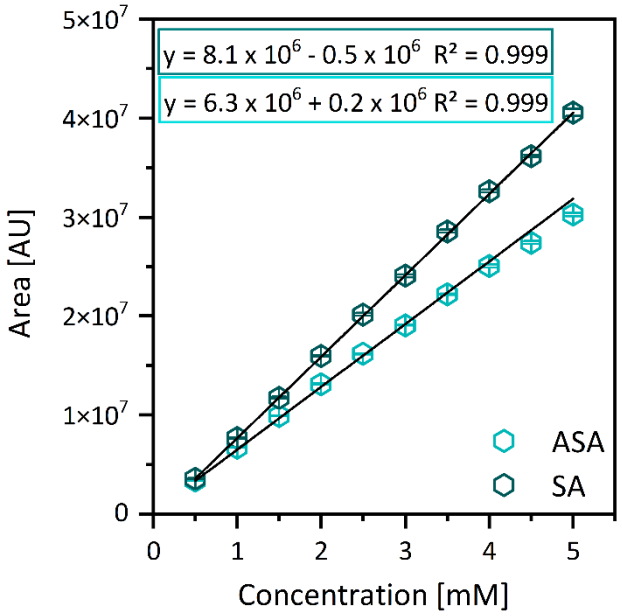

Figure S5. Calibration curve of ASA and SA for the HPLC.