

# Supplementary Materials: The Influence of Drug–Polymer Solubility on Laser-Induced In Situ Drug Amorphization Using Photothermal Plasmonic Nanoparticles

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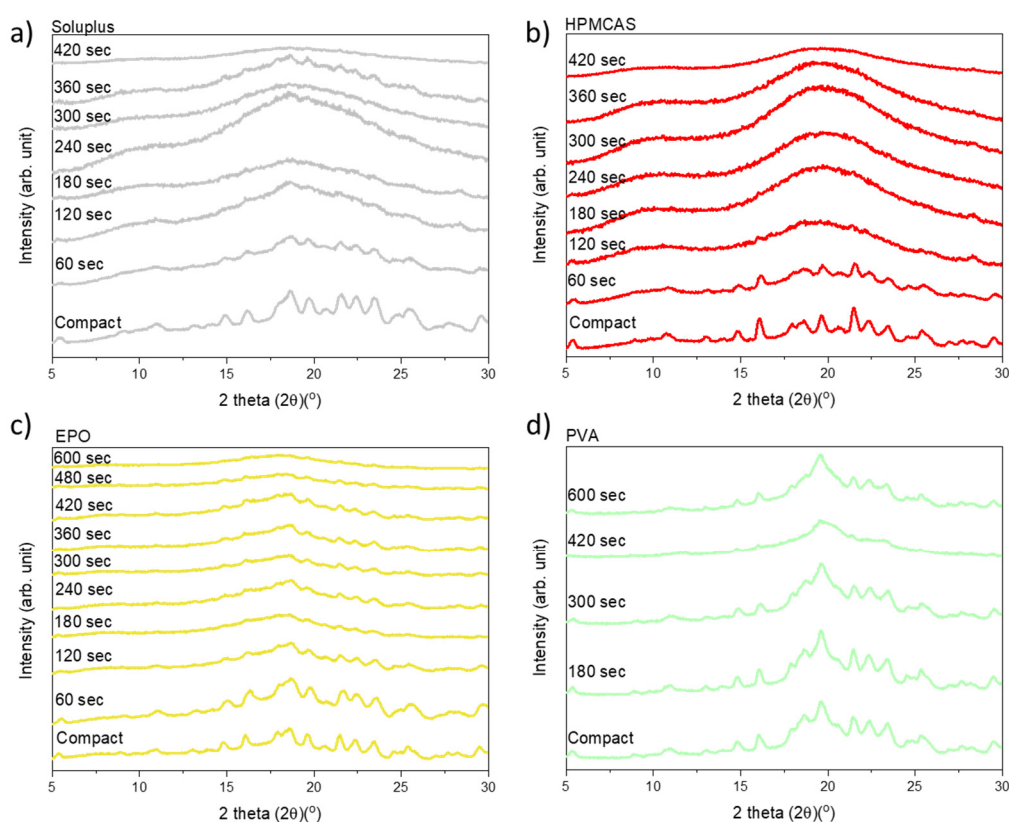
## S.1. Drug-Polymer Solubility

The respective graphs for each drug-polymer combination are shown in Figure 1.

**Table S1.** Solubility of CCX at 20 °C in the six different polymers given with the confidence interval.

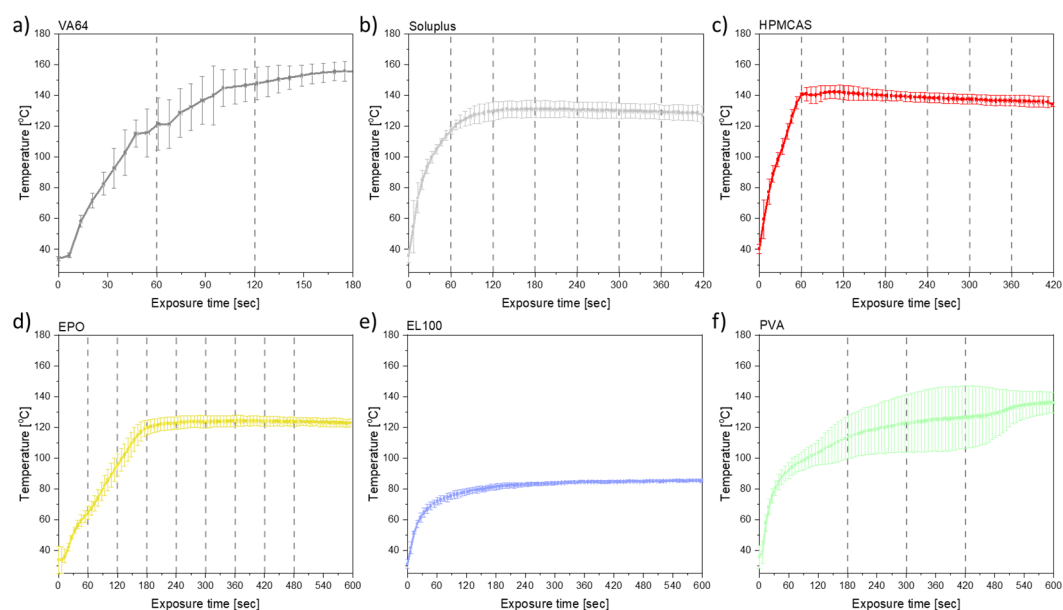
Polymer	Solubility [wt%]	t <sub>2.5</sub> [wt%]	t <sub>97.5</sub> [wt%]
VA64	31.8	27.6	35.0
Soluplus	22.5	7.3	34.6
HPMCAS	5.3	1.1	13.6
EPO	3.6	0.6	11.9
EL100	0	0	0
PVA	0	0	0

## S.2. XRPD Analysis



**Figure S1.** XRPD analysis after different exposure times to laser radiation [sec] and before exposure to laser radiation (compact) for the different compact compositions. **a)** 30 wt% CCX in Soluplus; **b)** 30 wt% CCX in HPMCAS; **c)** 30 wt% CCX in EPO; **d)** 30 wt% CCX in PVA. Note: Due to the scaling of the diffractograms, it is sometimes difficult to see small peaks in the figures. The remaining diffractograms are part of the main manuscript.

### S.3. Temperature Measurements



**Figure S2.** Temperature measured [°C] during exposure to laser radiation [sec] for the different compact compositions. **a)** 30 wt% CCX in VA64; **b)** 30 wt% CCX in Soluplus; **c)** 30 wt% CCX in HPMCAS; **d)** 30 wt% CCX in EPO; **e)** 30 wt% CCX in EL100; **f)** 30 wt% CCX in PVA. The dashed line indicate the different exposure times for XRPD analysis. Mean  $\pm$  SD ( $n=3$ ).