

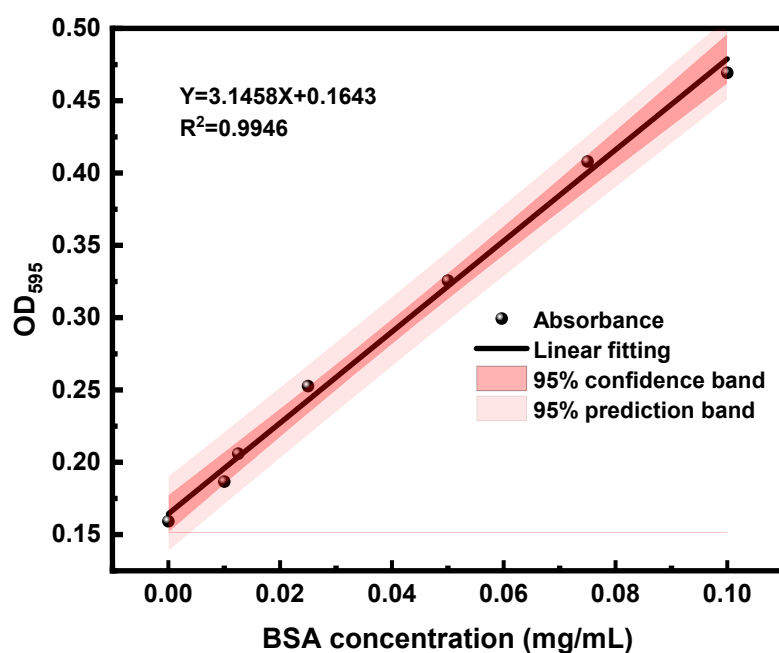


Fig. S1 BSA Protein Concentration Standard Curve.

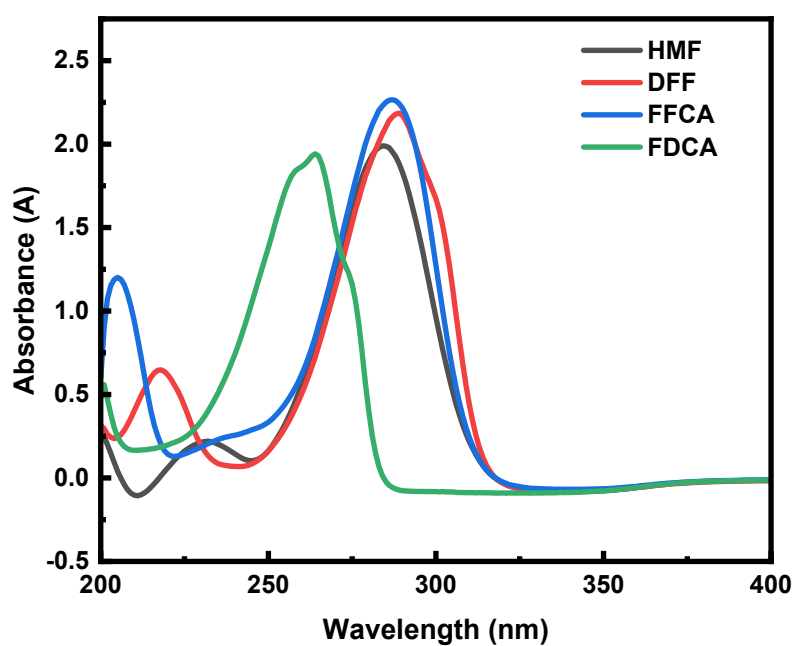


Fig. S2 Wavelength spectra for HMF, DFF, FFCA, and FDCA detection.

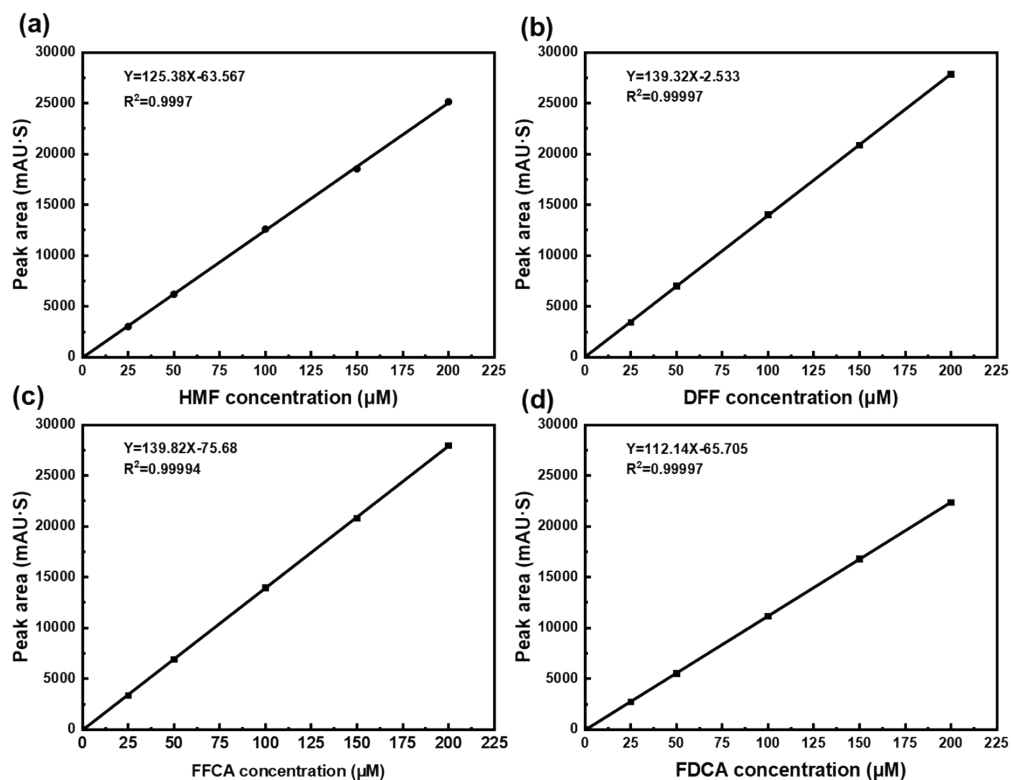


Fig. S3 Calibration curves (a) HMF, (b) DFF, (c) FFCA, and (d) FDCA.

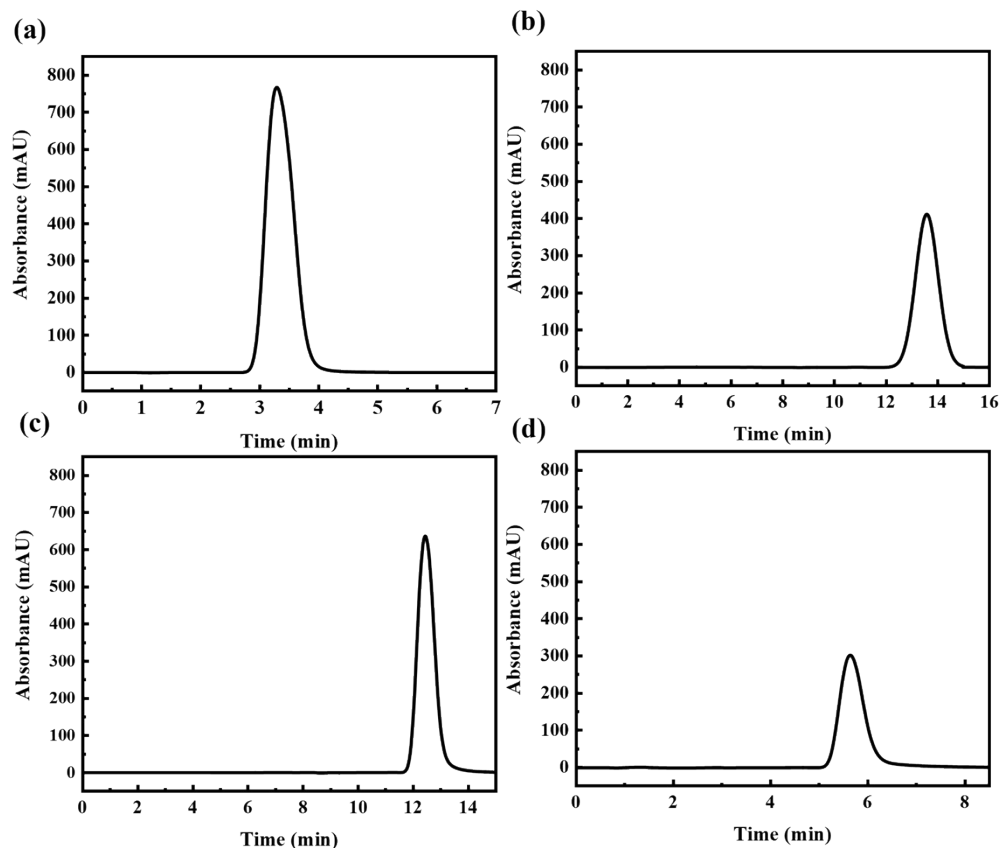


Fig S4. Retention times of each compound (a) HMF, (b) DFF, (c) FFCA, and (d) FDCA.

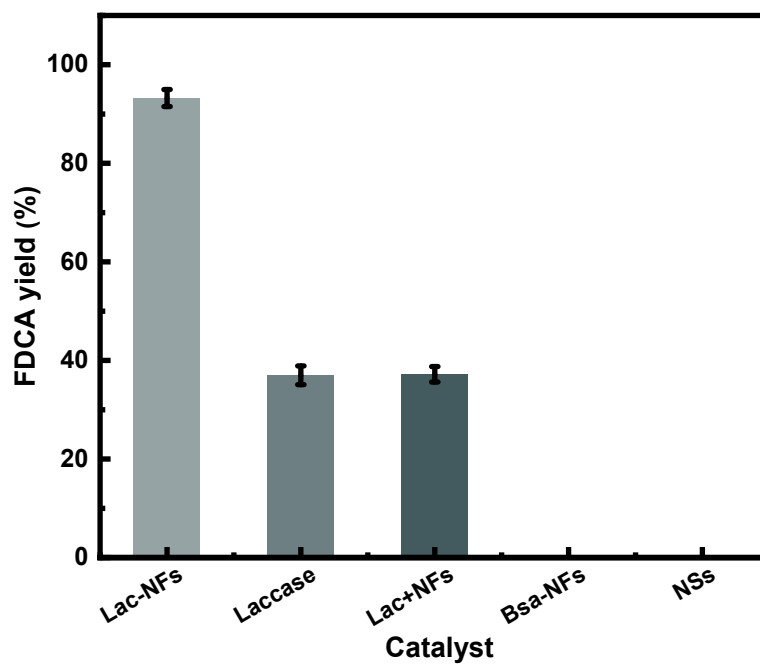


Fig. S5 Catalyst structural engineering effects on FDCA yield.

Table S1. Retention times of each compound

Compound	Retention times (min)	Wavelength (nm)
HMF	3.28	280
DFP	13.57	280
FFCA	9.83	280
FDCA	5.63	254