

# Hematene nanoplatelets with enhanced visible light absorption; the role of aromatic molecules

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## Supplementary Material

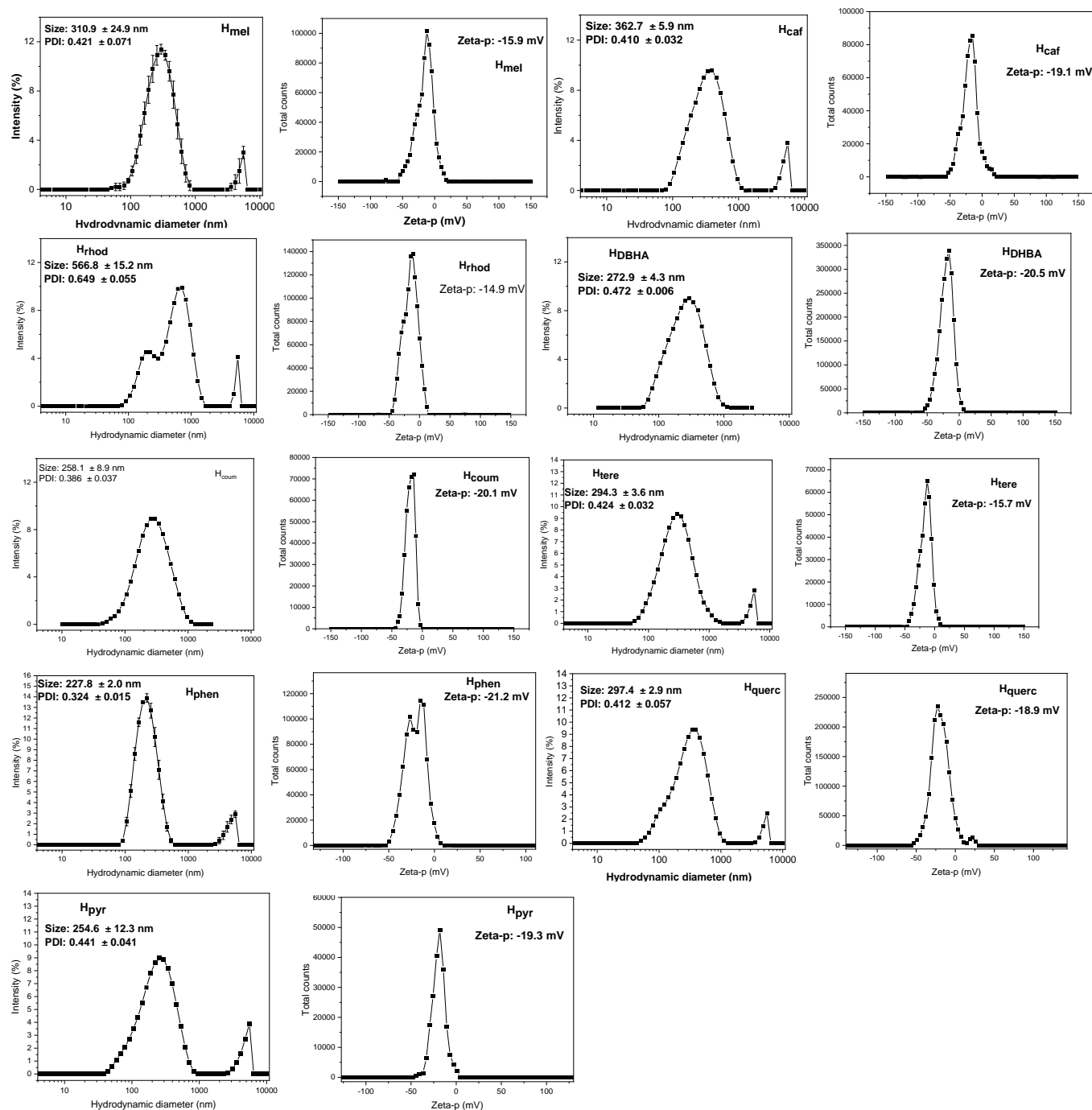


Figure S1. DLS and zeta potential measurements of the hematene products.

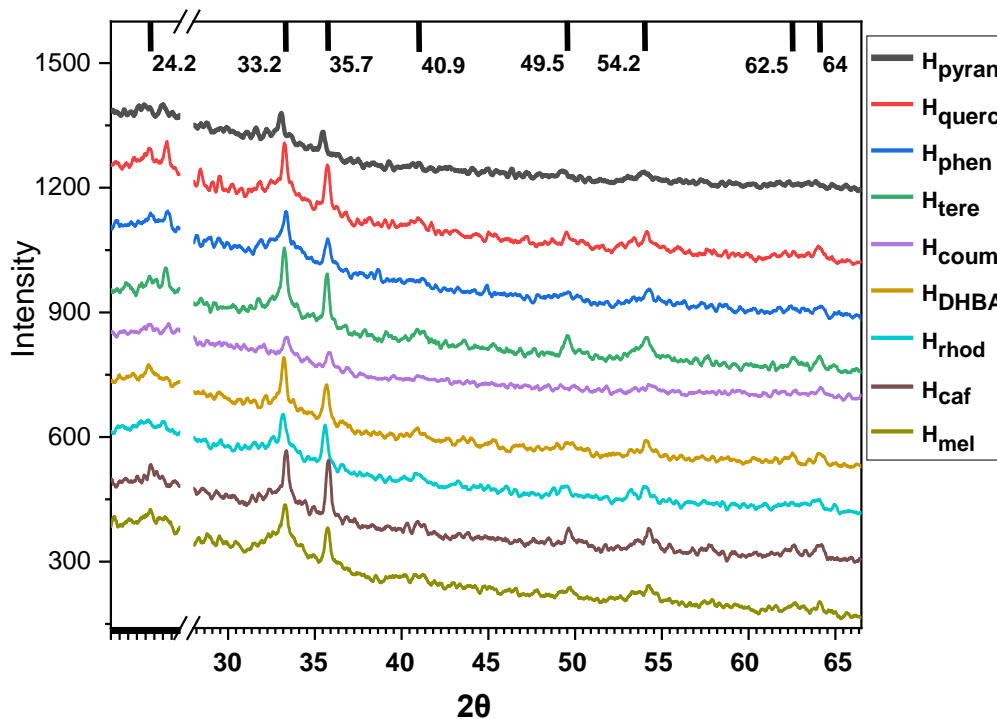
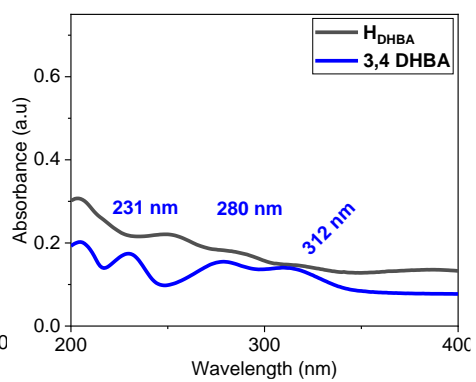
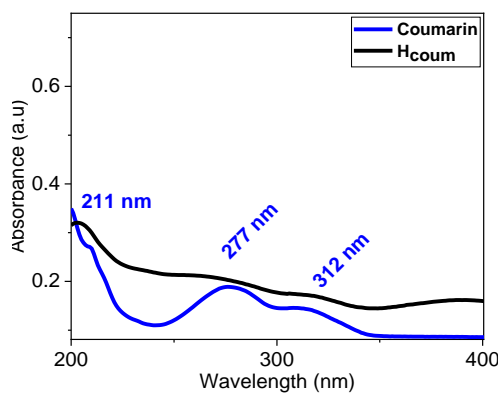
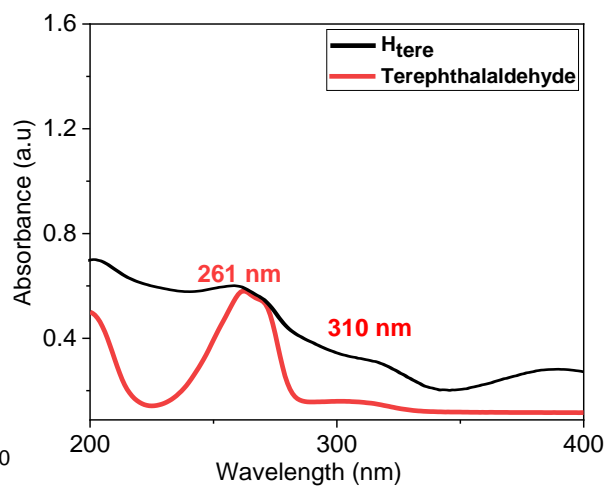
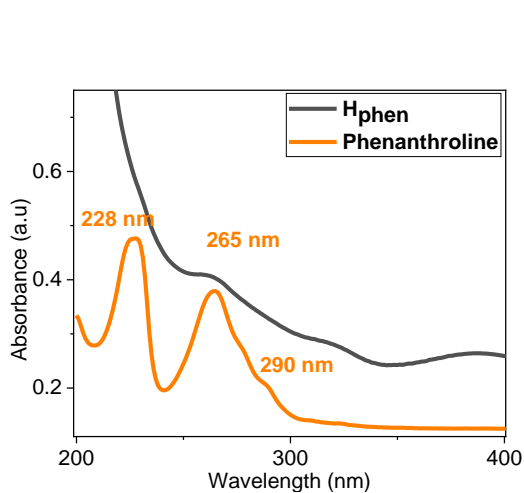
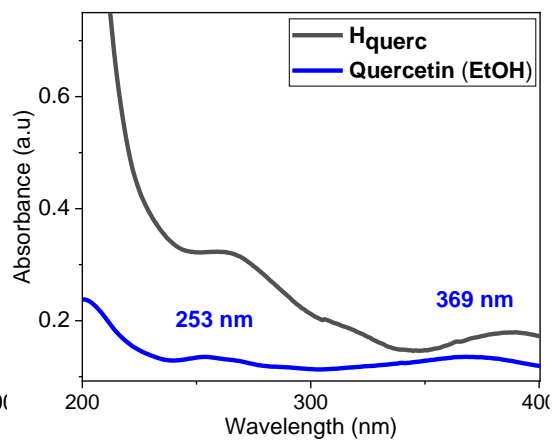
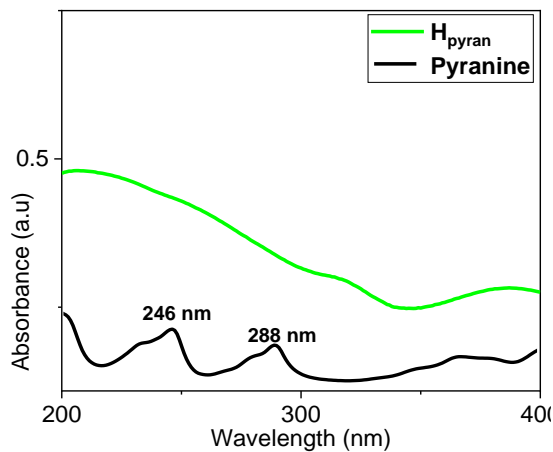


Figure S2. XRD diffraction patterns of the hematene products.

Table S1. The characteristic signals of the SRD diffraction patterns of the hematene products.

	(0,12)	<b>(104)</b>	<b>(110)</b>	(113)	(0,24)	(116)	(018)	(214)	(030)		FWHM
Hematite	24.2	33.27	35.7	40.9	49.5	54.1	57.6	62.5	64.14	72.1	0.14
H <sub>pyran</sub>	24.1	33	35.5		49.3	54					0.42
H <sub>auer</sub>	24.3	33.2	35.7	41	49.5	54			64		0.2
H <sub>phen</sub>	24.1	33.3	35.8			54.3					0.34
H <sub>tere</sub>		33.18	35.65	40.9	49.7	54.1	57.7	62.6	64		0.27
H <sub>coum</sub>	24.3	33.3	35.8	41		54			64.2		0.36
H <sub>DHBA</sub>	24.3	33.2	35.6	40.9	49.6	54		62.5	64		0.34
H <sub>rhod</sub>		33.19	35.66	41	49.5	54.2			64		0.32
H <sub>caf</sub>	24.3	33.3	35.8	41	49.6	54.2		62.4	64.1		0.31
H <sub>mel</sub>	24.3	33.3	35.7	41	49.7	54.2	57.7	62.7	64.2		0.35



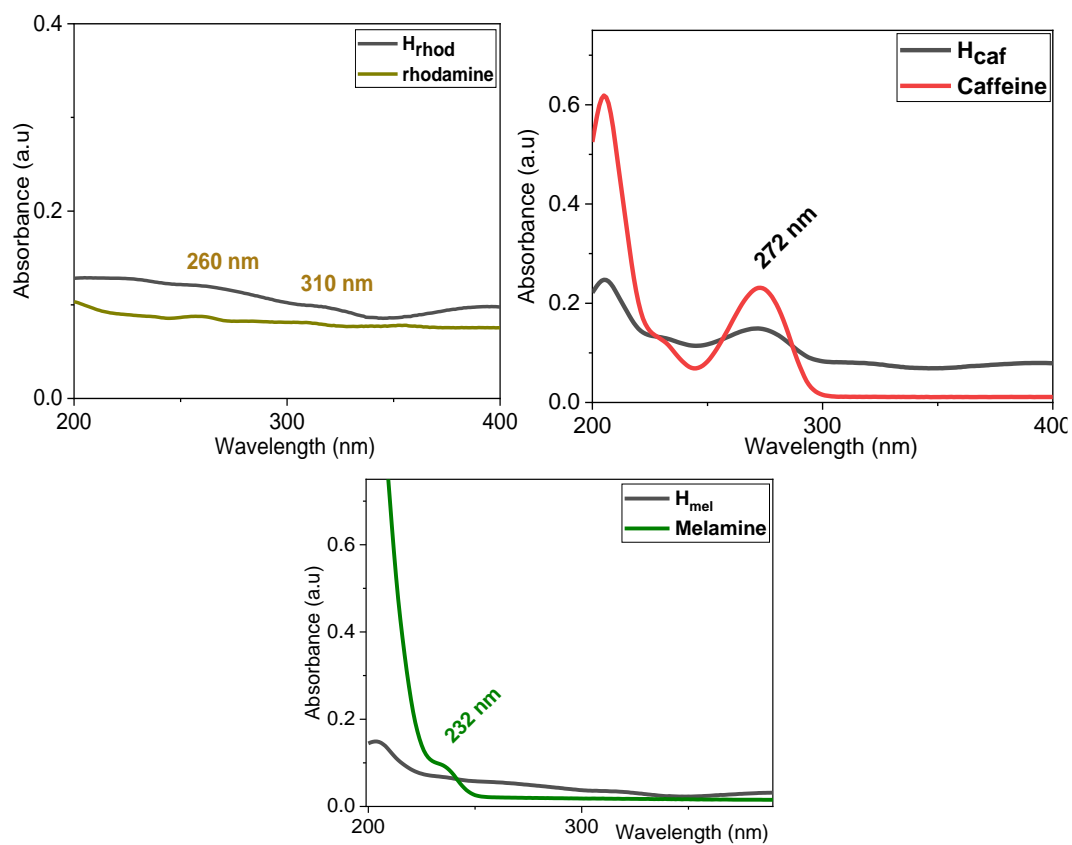


Figure S3. UV-Vis spectra of the hematene products and the organic aromatic compounds that were chemisorbed on the hematene surface after sonication.