V_2O_5 nanowires with an intrinsic iodination activity leading to the formation of self-assembled melanin-like biopolymers

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Supplementary Information

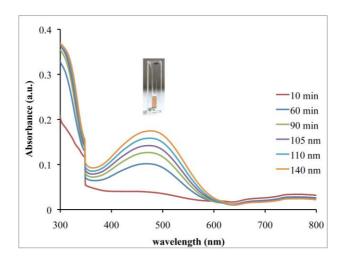


Figure S1.Time coursing of bulk V_2O_5 (1 mg/mL) that was mixed with KI (40 mM) and H_2O_2 (1 mM) in the presence of dopamine (10 mM). The reaction was carried out in aqueous solution at slightly basic pH values (pH 8.0) and monitored spectrophotometrically for 140 min (RT). *Inset*: digital images of the reaction vial after 140 min of reaction.

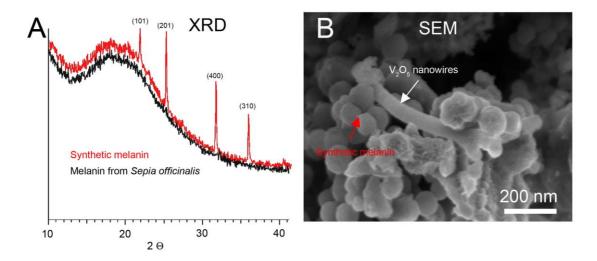


Figure S2. (A) XRD pattern of cuttlefish melanin (*Sepia officinalis*) (black line) and the black precipitate (red line) where reflections derived from the V_2O_5 nanowires can be observed. (B) SEM image of the black precipitate containing a V_2O_5 nanowire.