Electronic Supplementary Information

Fe$_2$O$_3$-TiO$_2$ nanosystems by an hybrid PE-CVD/ALD approach: controllable synthesis, growth mechanism, and photocatalytic properties

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Fig. S1. XRD patterns of \( \text{Fe}_2\text{O}_3\)-TiO\(_2\) specimens. Reflections pertaining to the FTO substrate are marked by vertical black bars. The observed signals could mainly be indexed with those pertaining to the rhombohedral hematite (H) phase.\(^1\) For the higher titania thickness [sample \( \text{Fe}_2\text{O}_3\)-TiO\(_2\) (H)], some reflections related to anatase (A) TiO\(_2\)\(^2\) were also detected.
Fig. S2. Representative AFM micrographs for: (a) Fe$_2$O$_3$-TiO$_2$ (L); (b) Fe$_2$O$_3$-TiO$_2$ (H) samples. RMS values are close to 15 nm for both specimens.
**Fig. S3.** SIMS depth profiles for (a) Fe$_2$O$_3$-TiO$_2$ (L) and (b) Fe$_2$O$_3$-TiO$_2$ (H) samples.
References