Supporting information

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From Maya Blue to Biomimetic Pigments: Durable Biomimetic Pigments with Self-Cleaning Property

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Fig. S1. XRD patterns of PAL, PAL/ABR and PAL/ABR@POS. \( C_{\text{HDTMS}} = 0.14 \) M and \( C_{\text{TEOS}} = 0.14 \) M.

Fig. S2. FTIR spectra of PAL/ABR@POS prepared with a \( C_{\text{HDTMS}} \) of (a) 0, (b) 0.14 and (c) 0.235 M. \( C_{\text{TEOS}} = 0.14 \) M.
**Fig. S3.** Digital images of the PAL/ABR@POS coatings prepared with different $C_{\text{TEOS}}$. $C_{\text{HDTMS}} = 0.14$ M.

**Movie S1.** Wetting behavior of the PAL/ABR and PAL/ABR@POS pigments. This video highlights the evident difference in wettability between PAL/ABR and PAL/ABR@POS.

**Movie S2.** Water jetting on the surface of the superhydrophobic PAL/ABR@POS pigment.

**Movie S3.** Self-cleaning property of the PAL/ABR@POS pigment.

**Movie S4.** Stability tests of the PAL/ABR and PAL/ABR@POS pigments using 98% $\text{H}_2\text{SO}_4$ and 60% NaOH. This video highlights the evident difference in stability between PAL/ABR and PAL/ABR@POS.