

SUPPLEMENTARY INFORMATION

for

Photoinduced Electron Transfer between Mo- and W-based Polyoxometalates

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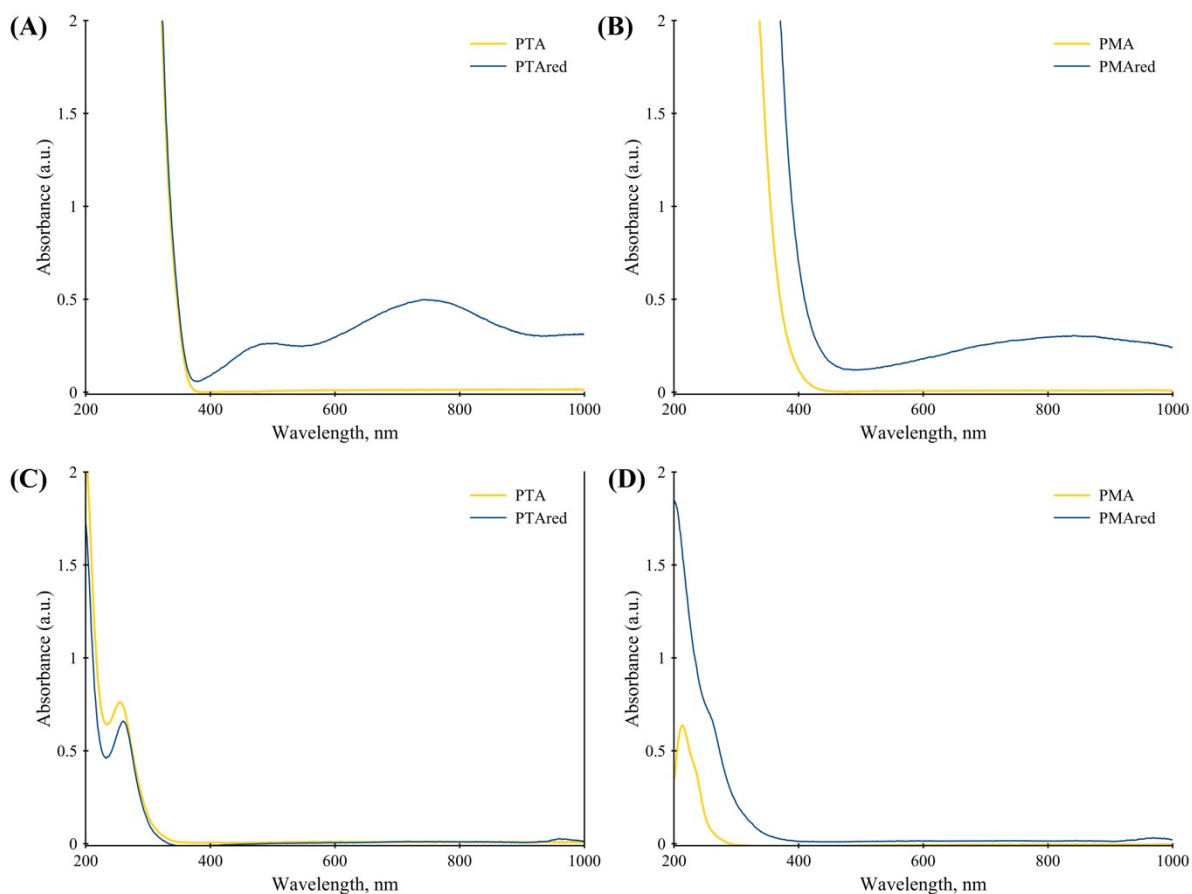


Figure S1. A) UV-vis spectra of PTA and photoreduced PTA^{red}. B) UV-vis spectra of PMA and PMA^{red}. C) UV-vis spectra obtained by dilution of PTA and photoreduced PTA^{red}. The band of PTA centered at 252 nm shifts to 260 nm when reduced. D) UV-vis spectra obtained by dilution of PMA and PMA^{red}. The band of PMA centered at 213 nm shifts to 280 nm when reduced.

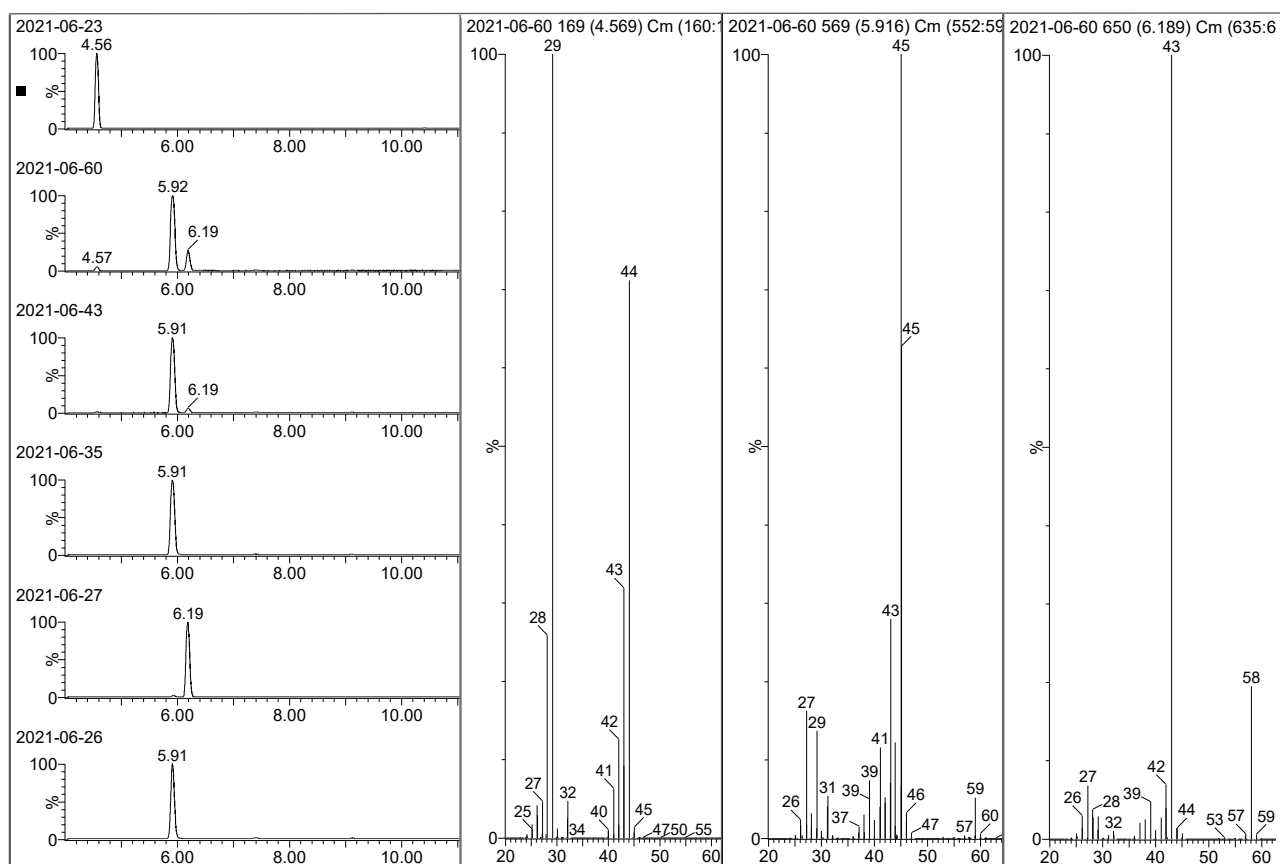


Figure S2. A) Gas chromatograms of UV irradiated (720 min) PTA:IPA/BQ/HQ/PMA system and patterns. B) Mass spectra of the peaks in the chromatogram: 4.56 min (AcH), 5.92 min. (IPA) and 6.19 min (acetone).

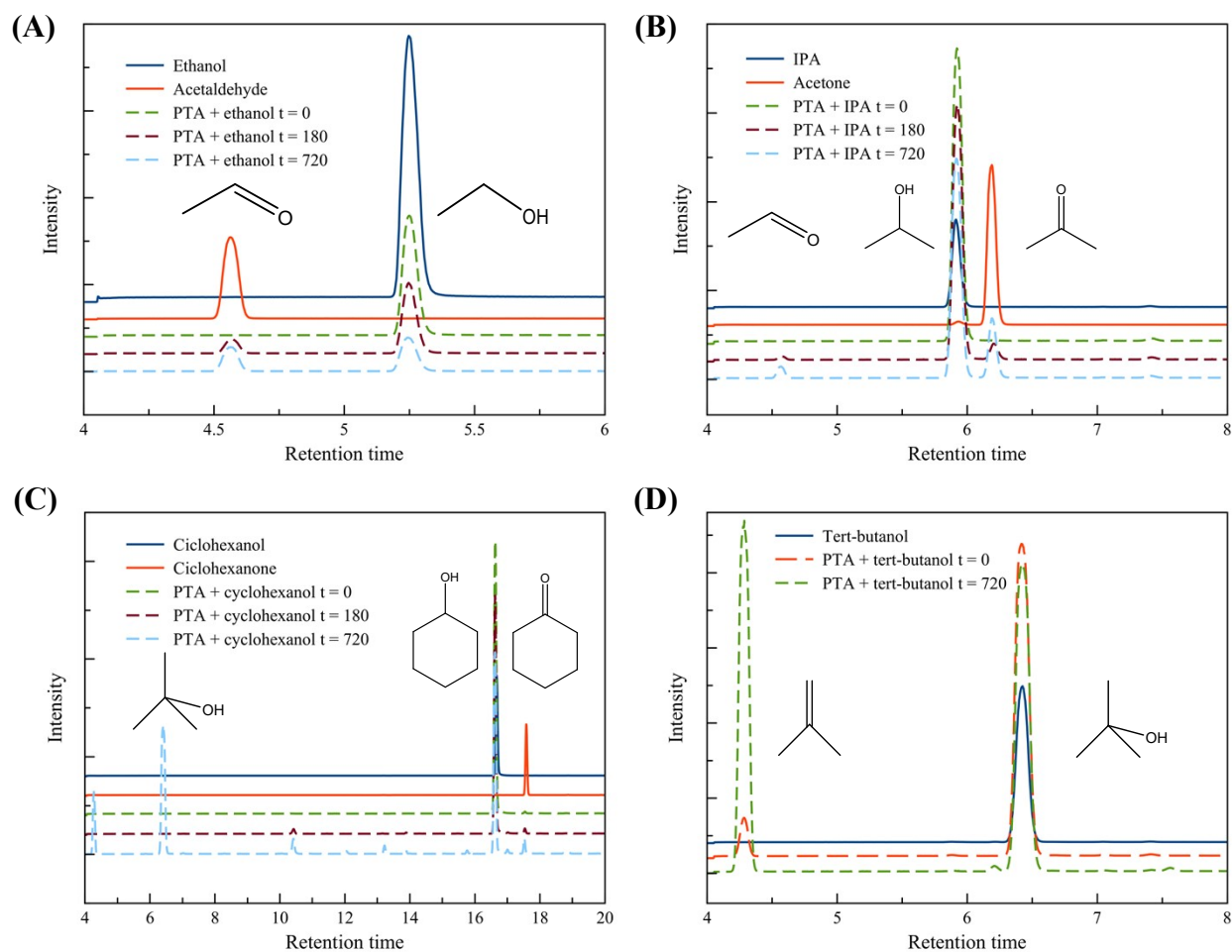


Figure S3. Gas chromatograms of PTA:EtOH/BQ/HQ/PMA (A), PTA:IPA/BQ/HQ/PMA (B), PTA:CyOH/BQ/HQ/PMA (C) and PTA:t-ButOH/BQ/HQ/PMA (D) samples and patterns. In the case of EtOH, (primary ROH), only acetaldehyde is produced. For IPA (secondary ROH), acetone and acetaldehyde are produced. For cyclohexanol (secondary and cyclic ROH), it was produced: cyclohexanone by oxidation (RT = 17.58 min), tert-butanol (RT = 6.42 min) by rearrangement and alkenes (C₄H₈) (RT = 4.28 min) by OH elimination. In the case of tert-butanol (tertiary ROH), OH elimination leads to alkene (see green line).