Supporting Information for

Arrangement effect of di-\(\mu\)-oxo dimanganese catalyst and \(\text{Ru(bpy)}_3^{2+}\) photoexcitation centers adsorbed in mica on visible-light-derived water oxidation

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**Figure S1.** UV-vis DR spectra of the mica adsorbates (20 mg). (a) Adsorbate A (mica / I / Ru(bpy)$_3^{2+}$) ($w_{\text{Mn}} = 164 \ \mu\text{mol g}^{-1}, w_{\text{Ru}} = 30 \ \mu\text{mol g}^{-1}$), (b) Adsorbate B (mica / Ru(bpy)$_3^{2+}$ / I) ($w_{\text{Mn}} = 164 \ \mu\text{mol g}^{-1}, w_{\text{Ru}} = 100 \ \mu\text{mol g}^{-1}$), and (c) Adsorbate C (mica / (I + Ru(bpy)$_3^{2+}$)) ($w_{\text{Mn}} = 164 \ \mu\text{mol g}^{-1}, w_{\text{Ru}} = 75 \ \mu\text{mol g}^{-1}$)
Figure S2. Time courses of the amount of O$_2$ evolved in photochemical water oxidation in an aqueous suspension of 0.2 M acetate buffer (2.0 ml, pH = 6.2) and 15 mM S$_2$O$_8^{2-}$ containing (a) Adsorbate A (mica / I / Ru(bpy)$_3^{2+}$) ($w_{\text{Mn}} = 164$ μmol g$^{-1}$, $w_{\text{Ru}}$ = 30 μmol g$^{-1}$, 20 mg mica), (b) Adsorbate B (mica / Ru(bpy)$_3^{2+}$ / I) ($w_{\text{Mn}} = 164$ μmol g$^{-1}$, $w_{\text{Ru}}$ = 100 μmol g$^{-1}$, 20 mg mica), and (c) Adsorbate C (mica / (I + Ru(bpy)$_3^{2+}$)) ($w_{\text{Mn}} = 164$ μmol g$^{-1}$, $w_{\text{Ru}}$ = 75 μmol g$^{-1}$, 20 mg mica). A 150 W halogen lamp with a UV-cut filter, ($\lambda > 420$ nm, 127 mW cm$^{-2}$) was used as a light source.