Supplementary Information

Double doping of NaTaO₃ photocatalysts with lanthanum and manganese for strongly enhanced visible-light absorption

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Figure S1. Scanning electron micrograph of NTO:La (8 mol%).



Figure S2. Annular dark-field image of NTO:La+Mn (20+20 mol%) with element maps.



Figure S3. XPS spectra of (a) NTO:La+Mn (20+20 mol%) and (b) LaMnO₃ in the Mn 2p region.



Figure S4. Raman spectra of (a) NTO:La+Mn (20+20 mol%) and (b) NTO:La+Cr (20+20 mol%).



Figure S5. Deconvoluted Raman spectra of (A) NTO:La+Mn (1+1 mol%), (B) NTO:La+Mn (4+4 mol%), (C) NTO:La+Mn (8+8 mol%), and (D) NTO:La+Mn (20+20 mol%). The 850 cm⁻¹ band is not recognized in NTO:La+Mn (1+1 mol%), probably due to the low level of doping.



Figure S6. (A) k^3 -weighted EXAFS oscillations and (B) radial distribution functions of La₂O₃. A comparison between the observed and fitted EXAFS spectra of La₂O₃ taken at the La *K*-edge in (C) *k* space and (D) *R* space.