

Solar Driven One-Compartment Hydrogen Peroxide-Photofuel Cell Using Bismuth Vanadate Photoanode

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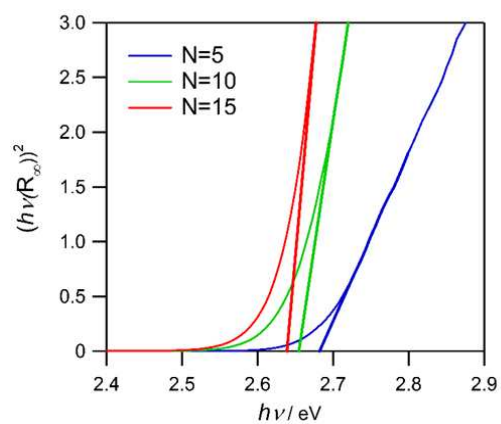


Figure S1. Tauc plots for *ms*-BiVO₄/FTO with varying *N*.

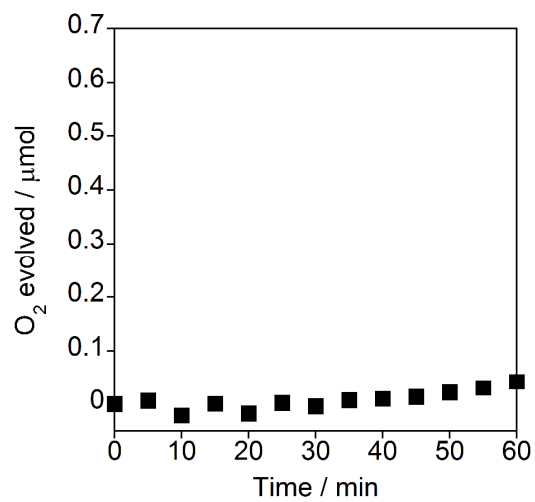


Figure S2. Time courses for O₂ generation from water in the presence of *ms*-BiVO₄ particles under illumination of simulated sunlight (AM 1.5, 19 mW cm⁻²).

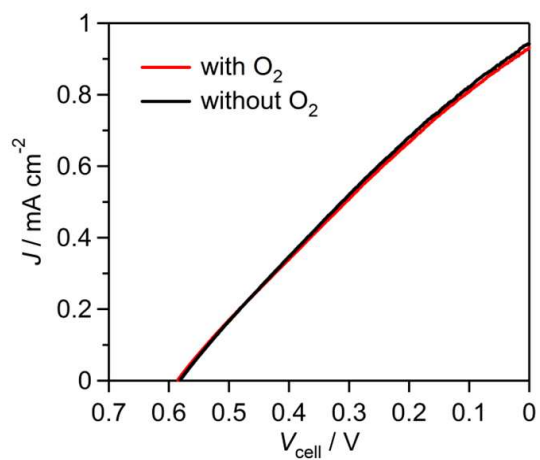


Figure S3. (A) J - V_{cell} curves for the two-electrode cell with the structure of BiVO_4/FTO photoanode | deaerated (black) and aerated (red) electrolyte solutions of 0.1 M NaClO_4 with 0.1 M H_2O_2 (pH 3) | PB/FTO cathode under the illumination of simulated solar light (AM 1.5, 100 mW cm^{-2} , one sun).

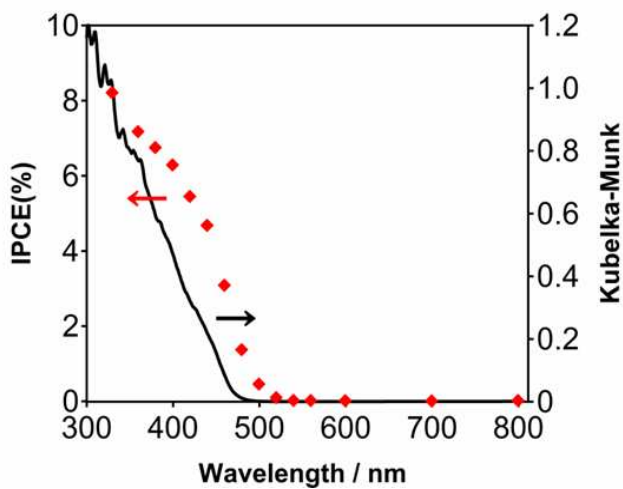


Figure S4. IPCE action spectrum for the two-electrode cell with the structure of BiVO_4/FTO photoanode ($N = 10$) | deaerated electrolyte solution of 0.1 M NaClO_4 with 0.1 M H_2O_2 (pH 3) | PB/FTO cathode under the illumination of simulated solar light (AM 1.5, 100 mW cm^{-2} , one sun).