Supplementary materials

Temperature Dependence of Reaction Kinetics in a Hybrid GaAs Solar-Fuel Cell Device

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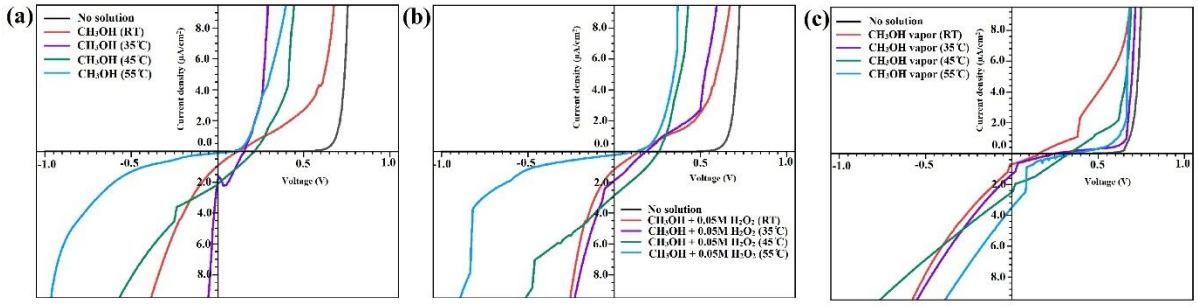

Figure S1: Linear J–V curves of the GaAs/GaInP cell in the dark under different temperatures with and without exposure to CH_3OH (a), CH_3OH+(0.05 M) H_2O_2 (b) and CH_3OH vapor (c).

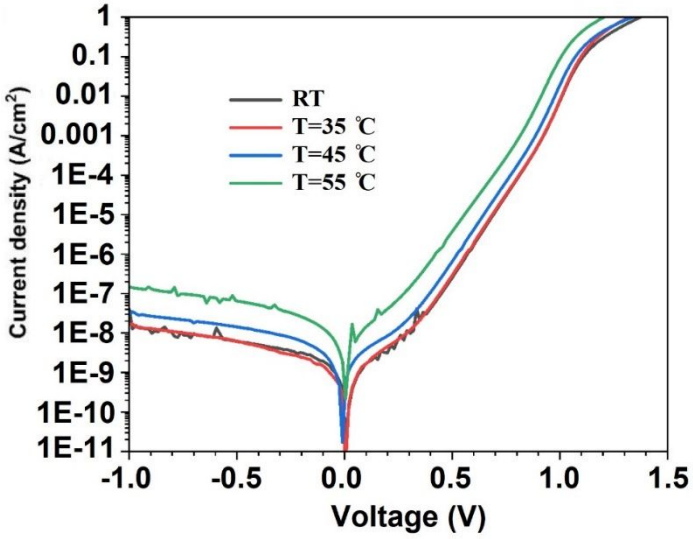

Figure S2: J–V curves of the GaAs/GaInP cell in the dark under different temperatures and without exposure to solution.

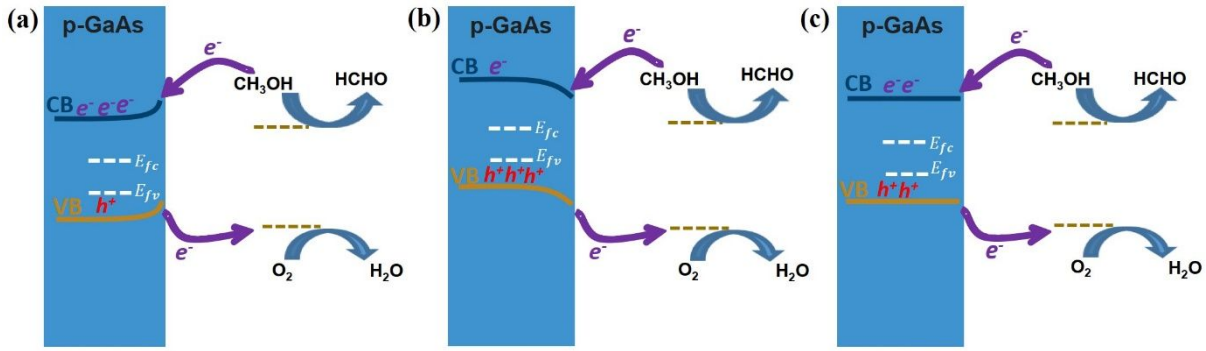

Figure S3: Schematic illustration of the band diagrams for upward band bending (a), downward band bending (b) and flat band conditions (c) and corresponding charge injections from the redox reactions.