

# Efficient Photosynthesis of Value-Added Chemicals by Electrocarboxylation of Bromobenzene with CO<sub>2</sub> Using a Solar Energy Conversion Device

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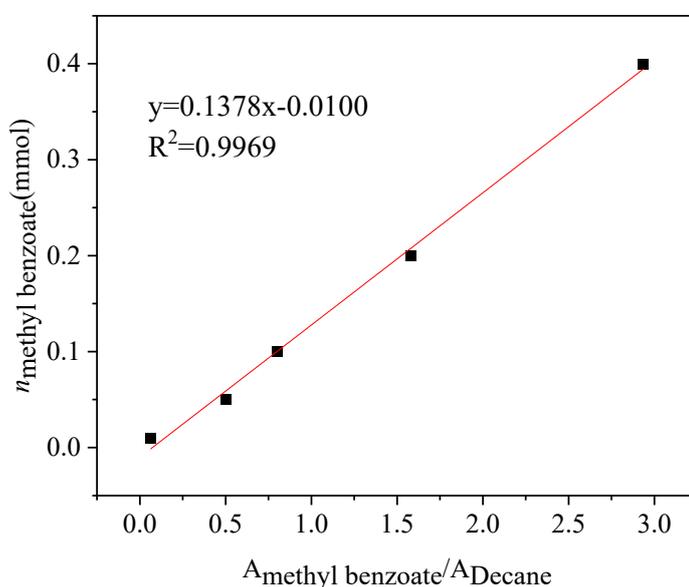


Figure S1. Standard curve for methyl benzoate quantitative analysis.

The standard curve of the carboxylation product methyl benzoate is shown in Figure S1. The mathematical expression of the standard curve is  $y = 0.1378x - 0.0100$  ( $R^2 = 0.9969$ ) and the linearity is good. Among them,  $y$  is the number of moles of methyl benzoate and  $x$  is the ratio of the peak area of methyl benzoate ( $A_{\text{methyl benzoate}}$ ) to decane ( $A_{\text{decane}}$ ) ( $A_{\text{methyl benzoate}}/A_{\text{decane}}$ ). According to the standard curve equation, the FE of the target product methyl benzoate can be calculated.