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“Artificial leaf for solar H₂ generation: An update on our recent progress”

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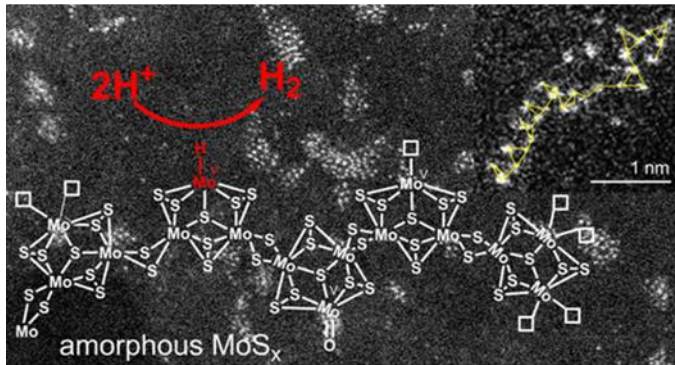
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Artificial leaf for solar H₂ generation: An update on our recent progress

Solar water splitting represents an attractive technology to harvest and store the abundant but intermittent solar energy in the form of chemical energy within the H₂ molecules. It can be realized by using an appropriate photoelectrochemical device, called artificial leaf. In the last two decades, several important advances have been achieved in the identification of suitable catalysts, light harvesting materials as well as artificial leaf engineering. Even though, enormous challenges remain that should be addressed in coming years to make this technology applicable for a viable large-scale production of H₂.

In this seminar, we first describe the current state-of-the-art of the solar water splitting research. We then discuss on our current progress in development of noble-metal free catalysts [1-4], nanostructured light harvesters [5] as well as the catalyst/ light harvester assemblage for artificial leaf construction [6].



References:

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6. Duc N. Nguyen, *unpublished data*