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Effect of TiO_2 on Pt-Ru-based anodes for methanol electroreforming

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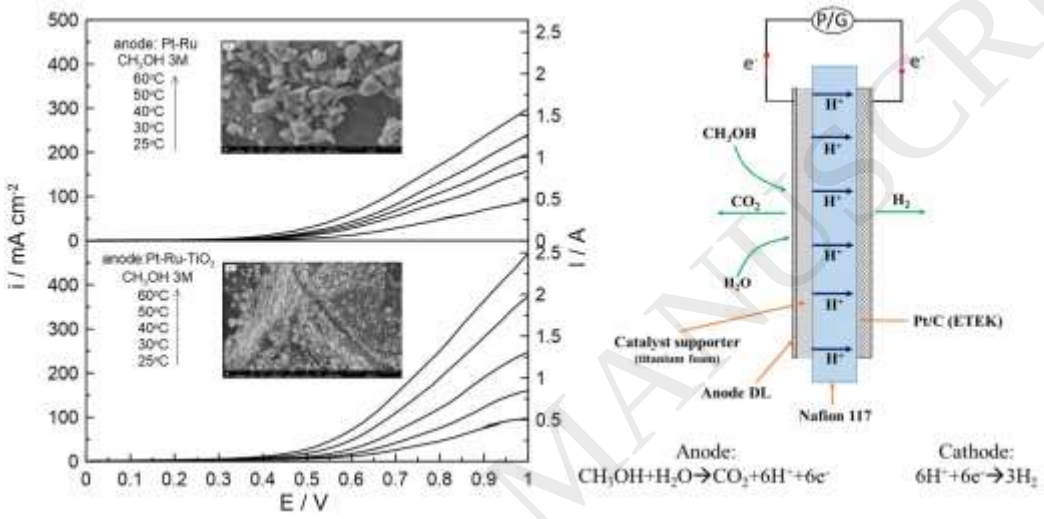
Graphical abstract



Highlights

- TiO_2 can be effectively used to modify Pt-Ru catalysts for methanol electroreforming.
- Higher current densities (up to 56%) were observed with TiO_2 modified electrodes.
- The cost of the anodes can be reduced to the half without electrocatalytic loss.
- Titanium foam can be used for metal deposition instead of carbon-based supports.

Abstract