

EPFL-TTO EPFL Innovation Park J CH-1015 Lausanne Switzerland +41 21 693 70 23 http://tto.epfl.ch/ Research Contact Prof. Xile Hu

+41 21 693 97 81 xile.hu@epfl.ch TTO Contact

Dr Natalia Giovannini +41 21 693 35 90 natalia.giovannini@epfl.ch

Licensing Opportunity

TTO - Technology Transfer Office

Methods for electrocatalysts for hydrogen evolution and oxidation reactions



Nickel-Molybdenum catalysts on Ni foam



Nickel-Molybdenum catalysts on Ni mesh (SEM images).

Ref. Nr 6.2413

Keywords

Electrodeposition; transition metal catalyst

Intellectual Property

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Publications

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Description

The present invention relates to method for the synthesis of a transition metal catalyst consisting of electrodeposition on many conductive substrate electrodes from an electrolyte solution comprising at least one transition metal precursor. The present invention further relates to a transition metal catalyst characterised in that it is stable for at least 30 minutes at a current density of at least substrate 400 A/cm2 on the electrode.

Advantages

- One-step electrodeposition
- transition metal catalyst is characterized that operate at high current density and with good stability

Applications

- production of highly active and stable nickel molybdenum catalysts
- hydrogen evolution and oxidation reactions