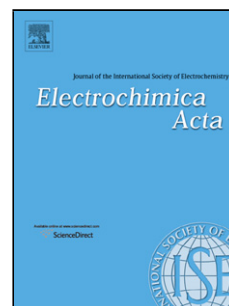


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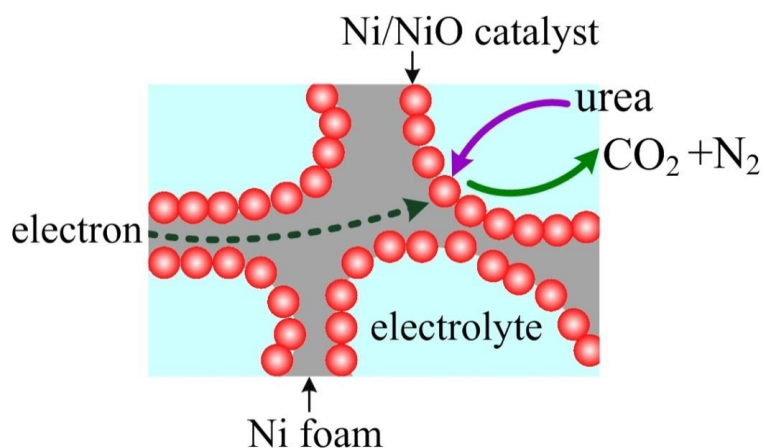
Mao-Sung Wu*, Fang-Yi Chen, Yi-Hsiang Lai, and Yi-Jhan Sie

Department of Chemical and Materials Engineering, National Kaohsiung University of Applied Sciences, Kaohsiung 807, Taiwan

*Author to whom correspondence should be addressed.

E-mail: ms_wu@url.com.tw

Graphical Abstract



Research Highlights

- NiO nanoparticles were obtained by thermal decomposition of nickel-organic framework.
- Decomposition temperature affected the chemical composition and particle size of NiO.
- Electrophoresis allowed for depositing a thin NiO layer on skeleton of 3D Ni foam.
- NiO nanoparticles on Ni foam enhanced the urea electrolysis compared with Ni foam.

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