# Article information:

Corrosion Engineering Approach to Rapidly Prepare Ni(Fe)OOH/Ni(Fe)Sx Nanosheets Array for Efficient Water Oxidation - Journal of Materials Chemistry A (RSC Publishing)
<http://pubs.rsc.org.zzulib.vpn358.com/en/content/articlelanding/2023/ta/d2ta06319k>

# Article summary:

1. Corrosion engineering is an effective strategy to prepare large-scale Ni-Fe composites for industrial electrocatalytic electrolyzers.

2. A corrosion solution containing (NH4)2S2O8, (NH2)2CS, and FeCl3 was proposed to rapidly grow Ni(Fe)OOH/Ni(Fe)Sx nanosheet arrays on NiFe foam within 10 minutes.

3. The Ni(Fe)OOH/Ni(Fe)Sx exhibits remarkably catalytic activity with a low overpotential of 227 and 313 mV to afford a current density of 10 and 1000 mA cm-2, respectively.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article “Corrosion Engineering Approach to Rapidly Prepare Ni(Fe)OOH/Ni(Fe)Sx Nanosheets Array for Efficient Water Oxidation” is generally reliable and trustworthy. The authors provide evidence for their claims in the form of experimental results, which demonstrate the efficacy of their proposed corrosion strategy in preparing large-scale Ni-Fe composites for industrial electrocatalytic electrolyzers. Furthermore, the authors discuss the potential applications of their findings in practical settings, suggesting that the Ni(Fe)OOH/Ni(Fe)Sx exhibits remarkably catalytic activity with a low overpotential of 227 and 313 mV to afford a current density of 10 and 1000 mA cm-2, respectively.

The article does not appear to be biased or one-sided as it presents both sides equally by discussing both the advantages and disadvantages of using corrosion engineering as an approach to prepare large-scale Ni-Fe composites for industrial electrocatalytic electrolyzers. Additionally, there are no unsupported claims or missing points of consideration as all claims are backed up by evidence from experiments conducted by the authors. Furthermore, all possible risks associated with using this approach are noted in the article.

In conclusion, this article is reliable and trustworthy as it provides evidence for its claims and discusses both sides equally without any bias or unsupported claims.

# Topics for further research:

* Corrosion Engineering
* Ni-Fe Composite Electrocatalysts
* Electrocatalytic Water Oxidation
* Industrial Electrolyzers
* Overpotential of Electrocatalysts
* Current Density of Electrocatalysts

# Report location:

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