

## عنوان مقاله:

Synthesis of Conductive Trypan Blue–Nickel MOF Nanosheet Array for an Asymmetric Supercapattery

## محل انتشار:

چهارمین کنگره ملی شیمی و نانوشیمی از پژوهش تا فناوری (سال: 1400)

تعداد صفحات اصل مقاله: 9

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## خلاصه مقاله:

Great efforts have been made to design and fabricate low-cost, high efficiency advanced electrode materials for energy storage devices such as batteries and high-performance supercapacitors. Choosing organic and redox active species that increase the Faradaic charge storage of electrode systems has thus become a challenge to increase energy density and conductivity. To this aim, herein, trypan (Try) blue–nickel metal–organic framework (Try–Ni–MOF) nanosheet array is fabricated via a hydrothermal method and used in an asymmetric supercapattery. The Try–Ni–MOF electrode exhibits a specific capacity of  $909.98 \text{ F g}^{-1}$  at a current density of  $1 \text{ A g}^{-1}$  and a high energy density, which is due to the increase in its number of pores and surface created facilitate electrolyte contact for electrochemical reactions

## کلمات کلیدی:

.metal–organic framework, asymmetric, energy storage, Try–Ni–MOF/NF

## لینک ثابت مقاله در پایگاه سیویلیکا:

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