

Hydrogen energy has been widely used in large-scale industrial production due to its clean, efficient and easy scale characteristics. In 2005, the Government of Iceland ...

In recent years, metal-ion (Li +, Na +, K +, etc.) batteries and supercapacitors have shown great potential for applications in the field of efficient energy storage. The rapid ...

Welcome to the comprehensive world of metal forming, where precision meets durability. This article delves into the essence of metal forming, unraveling its techniques, processes, and varied applications across industries on the ...

Dear Colleagues, It is a great honor and privilege to be involved as guest editors of a Special Issue of Materials focusing on advanced manufacturing processes of metal forming, and to invite you to contribute a ...

The well-defined porous structure of COFs facilitates ion transportation and charge storage, and also allows the incorporation of electrochemical active moieties within the pores. In this ...

Metal forming processes are characterized by the fact that the metal being processed is plastically deformed to shape it into the desired geometry. ... which is of benefit for decreasing grain ...

This research provides an insight on the performances of machine learning (ML)-based algorithms for the estimation of the energy consumption in metal forming processes and is applied to the ...

Metal-organic frameworks (MOFs), a novel type of porous crystalline materials, have attracted increasing attention in clean energy applications due to their high surface area, permanent porosity ...

Energy Intensive - Some forming processes, particularly hot forming, require significant energy, contributing to higher operational costs and environmental impact. Complex Process Control - Achieving consistent ...

Also, sustainable development of the metal forming industry requires a redesign of existing technologies to take into account the environmental aspects, e.g., minimization of ...

Web: <https://purelysolar.co.za>