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署名单位	西安交通大学	查证日期	2023年3月21日

□ 1 [Recent progress on the development of high entropy alloys \(HEAs\) for solid hydrogen storage: A review](#)

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[Yang, FS; Wang, J; \(...\); Novakovic, N](#)

被引频次



Mar 8 2022 | Mar 2022 (在线发表) | [INTERNATIONAL JOURNAL OF HYDROGEN ENERGY](#) 47 (21), pp.11236-11249

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参考文献

High entropy alloys (HEA) represent a kind of materials with unique structural and functional properties, and have attracted wide attentions in many fields including hydrogen storage. Due to the huge diversity in the composition of HEAs, novel hydrogen storage materials with superior comprehensive performance are expected to be developed following the concept, with some notable progress made i ... [显示更多](#)

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标题: Recent progress on the development of high entropy alloys (HEAs) for solid hydrogen storage: A review
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来源出版物: INTERNATIONAL JOURNAL OF HYDROGEN ENERGY 卷: 47 期: 21 页: 11236-11249
DOI: 10.1016/j.ijhydene.2022.01.141 提前访问日期: MAR 2022 出版年: MAR 8 2022

摘要: High entropy alloys (HEA) represent a kind of materials with unique structural and functional properties, and have attracted wide attentions in many fields including hydrogen storage. Due to the huge diversity in the composition of HEAs, novel hydrogen storage materials with superior comprehensive performance are expected to be developed following the concept, with some notable progress made in the past decade. In this study, the present research status in HEAs for hydrogen storage is summarized from the aspects of theoretical guide, composition and preparation, microstructure and hydrogen storage properties. Moreover, the key issues in future development and possible application scenarios are analyzed. (c) 2022 Hydrogen Energy Publications LLC. Published by Elsevier Ltd. All rights reserved.

入藏号: WOS:000784298400012

语言: English

文献类型: Review

作者关键词: High entropy alloy; Solid hydrogen storage; Hydrogen storage capacity; Hydriding; dehydriding kinetics

KeyWords Plus: THERMAL-ENERGY STORAGE; METAL-HYDRIDES; RENEWABLE ENERGY; DESORPTION-KINETICS; SYSTEM; MAGNESIUM; MICROSTRUCTURE; SORPTION; DESIGN; OPTIMIZATION

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出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science Index: Science Citation Index Expanded (SCI-EXPANDED)

Web of Science 类别: Chemistry, Physical; Electrochemistry; Energy & Fuels

研究方向: Chemistry; Electrochemistry; Energy & Fuels

IDS 号: 0P5WL

ISSN: 0360-3199

eISSN: 1879-3487