航空学报
ACTA AERONAUTICA ET ASTRONAUTICA SINICA
ISSN 1000-6893
CN 11-1929/V

航空学报 » 1994, Vol. 15 » Issue (4) :507-511 DOI:

TiFe0．86Cr0．1/NaM复合贮氢材料的合成与性质

董晋湘[1], 曹景慧[1], 李晋平[1], 张少锐[2]

1. 太原工业大学精细化工所,太原,030024;2. 太原工业大学电力分校,太原,030013

SYNTHESIS AND PROPERTIES OF A COMPLEX HYDROGEN STORAGE MATERIAL-TiFe0.86Cr0.1/NaM

Dong Jinxiang[1], Cao Jinhue[1], Li Jinping[1], Zhang Shaorui[2]

1. Research Institute of Special Chemicals Taiyuan University of Technology,Taiyuan,030024;2. Electric Power Branch Institute of Taiyuan University of Technology,Taiyuan,030013

摘要 | 参考文献 | 相关文章

Download: PDF (322KB) HTML 0KB Export: BibTeX or EndNote (RIS) Supporting Info

摘要 利用蒸汽相法制备沸石技术合成ＴｉＦｅ０．８６Ｃｒ０．１／ＮａＭ复合贮氢材料的各种条件,找到了较适宜的碱度ＳｉＯ＿２／Ａｌ＿２Ｏ＿３以及合金与沸石。研究了合成条件对贮氢容量的影响,结果表明,沸石为单一晶相合成粒度不低于７４μｍ为佳。同时,该材料亦表现出良好的抗Ｏ＿２、ＣＯ＿２中毒特性。

关键词： 钛合金 合成 制氢－储存

Abstract： The synthesis conditions for preparing a complex hydrogen storage material-TiFe0.86Cr0.1/NaM have been studied by employing the vapour phase method. The more suitable conditions of Na_2O/(Na_2+Al_2O_3+SiO_2),SiO_2/Al_2O_3and alloy/Zeolites have been found in the research.The influence of the synthesis conditions on the hydrogen-storage capacity has been examined.The results indicate that it is better that zeolite is a pure phase and the alloy size is larger than 74μm. And TiFe0.86Cr0.1/NaM possesses a good antioxygen and anticarbon monoxide property.

Keywords： titanium alloys synthesis(chemistry) hydrogen production-storage

Received 1992-07-13; published 1994-04-25

引用本文:

董晋湘;曹景慧;李晋平;张少锐. TiFe0．86Cr0．1/NaM复合贮氢材料的合成与性质[J]. 航空学报, 1994, 15(4): 507-511.

Dong Jinxiang;Cao Jinhue;Li Jinping;Zhang Shaorui. SYNTHESIS AND PROPERTIES OF A COMPLEX HYDROGEN STORAGE MATERIAL-TiFe0.86Cr0.1/NaM[J]. Acta Aeronautica et Astronautica Sinica, 1994, 15(4): 507-511.