

Accepted Manuscript

Pilot-scale produced fermented lentil protects against *t*-BHP-triggered oxidative stress by activation of Nrf2 dependent on SAPK/JNK phosphorylation

Sara Bautista-Expósito, Elena Peñas, Juana Frias, Cristina Martínez-Villaluenga

PII: S0308-8146(18)31578-4
DOI: <https://doi.org/10.1016/j.foodchem.2018.09.012>
Reference: FOCH 23499

To appear in: *Food Chemistry*

Received Date: 15 March 2018
Revised Date: 12 July 2018
Accepted Date: 2 September 2018



Please cite this article as: Bautista-Expósito, S., Peñas, E., Frias, J., Martínez-Villaluenga, C., Pilot-scale produced fermented lentil protects against *t*-BHP-triggered oxidative stress by activation of Nrf2 dependent on SAPK/JNK phosphorylation, *Food Chemistry* (2018), doi: <https://doi.org/10.1016/j.foodchem.2018.09.012>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Title

A Study on Lattice Matching Method by CoRu Layer between CoCrPtB Magnetic Layer and CrTi-(Mo, W) Alloy Underlayer

Yoshibumi Matsuda^a, Koji Sakamoto^a, Yotsuo Yahisa^a, Yuzuru Hosoe^a, H. Hosoda^b, and Y. Kitamoto^{b*}

^a HGST Japan, a Western Digital Company, Odawara, Kanagawa, 256-8510, Japan

^b Tokyo Institute of Technology, Nagatsuta-cho, Midori-ku, Yokohama, Kanagawa, 226-8502, Japan

* Corresponding author

Tel.: +81(0)45-924-5424

Fax: +81(0)45-924-5433

E-mail: kitamoto.y.aa@m.titech.ac.jp

Postal address: J2-40, Department of Materials Science and Engineering, Tokyo Institute of Technology, 4259 Nagatsuta, Midori-ku, Yokohama, 226-8502, Japan

Keywords

Lattice matching, Crystal orientation, CoCrPtB magnetic layer, Surface oxidation

Abstract

A nonmagnetic CoRu alloy was studied as a matching layer for the epitaxial growth of a CoCr₂₂Pt₁₄B₄ magnetic layer with hcp (11.0) crystal orientation on CrTi-alloy underlayers with bcc (100) crystal orientation. The CoRu matching layer realizes in-plane c-axis orientation, (11.0), of the CoCrPtB layer which has the same hcp structure as the CoRu has, and increases magnetic coercivity due to its magnetocrystalline anisotropy. Moreover, the combination of CrTi₁₀Mo₁₀ or CrTi₁₀W₁₀ underlayer with the CoRu₄₀ layer could significantly improve the (11.0) orientation of the CoCrPtB layer and increase the coercivity compared to that of CrTi₂₀ binary alloy underlayer with the CoRu₄₀ layer.

1. Introduction

Several studies have been implemented in order to increase the in-plane coercivity of magnetic films with fine crystal grain [1-3]. In these studies, CoCrPt alloy magnetic

Download English Version:

<https://daneshyari.com/en/article/10140874>

Download Persian Version:

<https://daneshyari.com/article/10140874>

[Daneshyari.com](https://daneshyari.com)