Accepted Manuscript

An influence of vacancies and elastic deformation coupling onto phase decomposition of binary systems

Dmitrii O. Kharchenko, Vasyl O. Kharchenko, Irina O. Lysenko, Irina A. Shuda

| Volume 200, Issue 20, 15 November 2013 (6019-637) 11.55.19.58 | |
|--|---|
| PHYSICA | STATISTICAL MECHANICS AND ITS APPLICATIONS |
| | Entrus K.A. DAMSON J.O. MODOLU H.E. STANATY C. TEMALO |
| | |
| Available online of ones according to an ScienceDirect | Mp:/www.alsovier.com?locate@dyse |

| PII: DOI: | S0378-4371(17)30571-X http://dx.doi.org/10.1016/j.physa.2017.05.053 |
|---------------|--|
| Reference: | PHYSA 18339 |
| To appear in: | Physica A |

Received date : 15 March 2017 Revised date : 4 May 2017

Please cite this article as: D.O. Kharchenko, V.O. Kharchenko, I.O. Lysenko, I.A. Shuda, An influence of vacancies and elastic deformation coupling onto phase decomposition of binary systems, *Physica A* (2017), http://dx.doi.org/10.1016/j.physa.2017.05.053

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.

Highlights

ACCEPTED MANUSCRIPT

Vacancy-deformation coupling leads to vacancies rearrangement and their agglomeration at phase interfaces and in soft phase due to Kirkendall effect

Vacancy-deformation coupling suppresses decomposition processes and delays dynamics of new phase formation.

Vacancy-deformation coupling results in an increase of domain size dispersion and promotes the mean domain size growth.

Download English Version:

https://daneshyari.com/en/article/5102579

Download Persian Version:

https://daneshyari.com/article/5102579

Daneshyari.com