



Full-time Contract Professor

OHBA Takuya

TEL: 0852-32-3008

Email: ohba[at]riko.shimane-u.ac.jp

(Please change [at] to @ for email.)

Background

He got Ph. D. from Hiroshima University in 1984. He has held academic position at University of Tsukuba, Teikyo University (in Utsunomiya) and Shimane University. During working at Teikyo University, he visited BNL (Brookhavan National Laboratory in USA) for having neutron experiments with US-Japan collaboration. He moved into Shimane University in 2000. He gave several invited talks at international conferences and had experiences to give lectures in China, Dubai and Romania.

Research

He has been studying crystal structural study of metals with X-ray, synchrotron radiation and neutron. He started study of martensitic alloys at University of Tsukuba. Crystal structure of martensite Au-Cd and Ti-Ni were firstly determined and transformation mechanism was proposed. Tatara project was conducted in 2008-2011 with support of Shimane University and MEXT, collecting crystallographic analytical equipment and thus Tatara nanotechnology project center was also conducted up to 2018.

Key papers

1. H. A. Pham, Takuya Ohba, Shigekazu Morito, Taisuke Hayashi: An Advanced Fitting Method for Crystallographic and Morphological Analyses of EBSD Data Applied for Low-Carbon Steel Martensite. *Materials Transactions Vol. 54 (2013) 1396-1402*
2. S. Morito, Y. Adachi and T. Ohba: Morphology and Crystallography of Sub-Blocks in Ultra-Low Carbon Lath Martensite Steel. *Mater. Trans., 50 (2009) 1919-1923.*
3. T. Ohba, S.M.Shapiro, S. Aoki and K. Otsuka: Phonon Softening in Au-49.5at%Cd Alloy. *Jpn. J. Appl. Phys. Vol.33, (1994), L1631-L1633.*
4. D. Shindo, Y. Murakami and T. Ohba: Understanding Precursor Phenomena for the R-Phase Transformation in Ti-Ni-Based Alloys. *MRS Bulletin, 27, (2002), 121-127.*
5. K. Otsuka, T. Ohba, M. Tokonami and C. M. Wayman: New Description of Long Period Stacking Order Structures of Martensite in β -phase Alloys. *Scripta Metallurgica et Materialia, Vol. 29, (1993), 1359-1364.*
6. T. Ohba, Y. Emura and K. Otsuka: Structure Determination of the ζ_2' Martensite and the Mechanism of $\beta_2 \rightarrow \zeta_2'$ Transformation in a Au-49.5at%Cd Alloy. *Materials Trans. JIM, Vol. 33, (1992), 29-37.*