

Ordering effects/segregation to defects – subgroup of SPP2006

Virtual meeting: <https://ruhr-uni-bochum.zoom.us/j/98820137821?pwd=NE5QM3NQLy9tVjdiSjFLbEVuenJ4QT09>

20 minutes presentation + 10 minutes discussion

05.10.2021

Session 1 : Ordering effects

8:45-9:00

Guillaume Laplanche, Ruhr-Universität Bochum, Germany
Welcome and presentation of the meeting

9:00-9:30

Lola Liliensten, Institut de recherche de Chimie Paris, France
investigation of the local environment in refractory MEAs: an EXAFS study

9:30-10:00

Kirill Yusenko, Bundesanstalt für Materialforschung und -prüfung (BAM), Berlin, Germany
EXAFS to Study Local Structure of High-Entropy Alloys

10:00-10:30

Reza Darvishi Kamachali, BAM, Berlin, Germany
Elastic energy of multi-component solid solutions and strain origins of phase stability in high-entropy alloys

10:30-10:45

Coffee break

10:45-11:15

Suzana Fries, Ruhr-Universität Bochum, Germany
Gibbs energies describing long and short-range ordering in multicomponent alloys:
A CALPHAD approach.

11:15-11:45

Yilun Gong, Max-Planck-Institut für Eisenforschung, Düsseldorf, Germany
Study of B2-ordering in MoTiCrAl(Ta) alloys by machine learning interatomic potentials

11:45-12:15

Yujun Zhao and Parham Gemmagami, Ruhr-Universität Bochum, Germany
Preliminary characterization of refractory TiZrNbHfTa BCC high-entropy alloy by APT and TEM

12:15-12:30

TIME FOR DISCUSSION

12:30-13:30

LUNCH BREAK

13:30

Session 2: Segregation at interfaces

13:30-14:00

Yujiao Li, Ruhr-Universität Bochum, Germany
Grain boundary segregation in a nanocrystalline CrMnFeCoNi high-entropy alloy

14:00-14:30

Surendra Kumar Makineni, Indian Institute of Science, Bangalore, India
Interplay between structure and composition of defects in high temperature alloys

14:30-15:00

Alberto Ferrari, TU Delft, Belgium
Surface segregation in High Entropy Alloys: the atomistic perspective

15:00-15:15

Coffee break

15:15-15:45

Andreas Bezold, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
Segregation to planar defects in polycrystalline high-entropy superalloys

15:45-16:15

Shabnam Taheriniya, Universität Münster, Germany
The segregation of Mn to dislocations and LAGBs in 3D printed Cantor alloy