

Curriculum vitae

Personal data

Name: Prof. Valéria Mertinger
Office: University of Miskolc, Institute of Physical Metallurgy Metalforming and Nanotechnology

Employments

research fellow, professor assistant, assistant lecturer, associate professor, full professor, University of Miskolc

Scientific degree

PHD, 1998
habilitation, 2012

Scientific activities

engineer of physicist and material science, solidification, materials science, martensitic transformation in shape memory alloys and TRIP/TWIP steels. X ray diffraction, residual stress and texture measurements

Professional experiences abroad

Universität Bochum, Institut für Werkstoffe, (D) 7 months
Technische Universität Berlin, Institut für Metallische Werkstoffe, (D) 3 months
University of Cambridge, Department of Materials Science and Metallurgy, (UK) 3 months
Westfälische Wilhelms Universität Münster, Institut für Metallforschung, Münster, (D) 3 months

Membership

Hungarian Society of Material Science, member of audit committee,

Published reports

Scientific papers: 105, references: 299 IF: 21

The most relevant publications

[https://vm.mtmt.hu/search/download.php?type=3&lang=0&flag=513&orderby=3D1a&dtile="+Mertinger+Val%C3%A9ria+%28Krist%C3%A1lyosod%C3%A1s%29++](https://vm.mtmt.hu/search/download.php?type=3&lang=0&flag=513&orderby=3D1a&dtile=)

- Benke M, Mertinger V: **In Situ Optical Microscope Study of the Thermally Induced Displacive Transformations in CuAlNi-Based Shape-Memory Alloys**, JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE 23: (7) pp. 2333-2338. *type of document*: Journal paper/Article
- Mertinger V, Benke M, Nagy E, Pataki T: **Reversible Characteristics and Cycling Effects of the $\epsilon \leftrightarrow \gamma$ Martensitic Transformations in Fe-Mn-Cr Twip/Trip Steels**, JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE 23: (7) pp. 2347-2350.
- A Filep, M Benke, V Mertinger, G Buza: **Residual stress distribution caused by laser hardening and conventional quenching in plain carbon steel**, ADVANCED MATERIALS RESEARCH 996: pp. 538-543.
- M Benke, V Mertinger, P Pekker: **Investigation of the bainitic reaction in CuAlNiMnFe shape memory alloy**, JOURNAL OF MINING AND METALLURGY SECTION B-METALLURGY 49: (1) pp. 43-47.
- Mertinger, M Benke, Sz Szabó, O Bánhidi, B Bolló, Á Kovács: **Examination of a failure detected in the convection zone of a cracking furnace**, ENGINEERING FAILURE ANALYSIS 18: (7) pp. 1675-1682.
- Benke M, Tranta F, Barkóczy P, Mertinger V, Daróczy L: **Effects of heat flux features on the differential scanning calorimetry curve of a thermoelastic martensitic transformation**, MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING 481: pp. 522-525.
- Mertinger V, Nagy E, Tranta F, Sólyom J: **Strain induced martensitic transformation in textured austenitic stainless steels**, MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING 481-482: pp. 718-722.
- Nagy E, Mertinger V, Tranta F, Sólyom J: **Deformation induced martensitic transformation in stainless steels**, MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING 378: (SI 1-2) pp. 308-313.