Bernhard Sonderegger

List of Publications by Year
in descending order

26 papers	504 citations	759233 12 h-index	839539 18 g-index
28 all docs	28 docs citations	28 times ranked	491 citing authors

#	Article	IF	Citations
1	Coherency strengthening of oblate precipitates extended in the {100} plane of fcc crystals: Modeling and experimental validation. Materialia, 2022, 21, 101328.	2.7	4
2	In situ laser-ultrasonic monitoring of Poissonâ€™s ratio and bulk sound velocities of steel plates during thermal processes. Acta Materialia, 2022, 235, 118097.	7.9	9
3	Application of an advanced mean-field dislocation creep model to P91 for calculation of creep curves and time-to-rupture diagrams. Materialia, 2020, 12, 100760.	2.7	19
4	Diffusion-defining atomic-scale spinodal decomposition within nanoprecipitates. Nature Materials, 2018, 17, 1101-1107.	27.5	43
5	Evolution of the substructure of a novel 12% Cr steel under creep conditions. Materials Characterization, 2016, 115, 23-31.	4.4	42
6	Combination of Microstructural Investigation and Simulation during the Heat Treatment of a Creep Resistant 11% Cr-Steel. Materials Science Forum, 2016, 879, 625-630.	0.3	0
7	Modelling the creep behaviour of tempered martensitic steel based on a hybrid approach. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 662, 330-341.	5.6	44
8	Characterisation and quantification of cavities in 9Cr martensitic steel for power plants. Materials Science and Technology, 2015, 31, 554-564.	1.6	24
9	Precipitate strengthening of non-spherical precipitates extended in â€˜100â€‰ or {100} direction in fcc crystals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 262-266.	5.6	35
10	Investigation of Pre-Existing Pores in Creep Loaded 9Cr Steel. , 2014, , 85-90.		1
11	3D Simulation and Process Optimization of Laser Assisted Milling of Ti6Al4V. Procedia CIRP, 2013, 8, 75-80.	1.9	32
12	Particle strengthening in fcc crystals with prolate and oblate precipitates. Scripta Materialia, 2012, 66, 52-55.	5.2	36
13	Influence of Microstructural Inhomogenities on Internal Stress and Strain Distributions during Creep. Advanced Materials Research, 2011, 409, 411-416.	0.3	0
14	Kinetics of Precipitation in a Complex Hotâ€work Tool Steel. Steel Research International, 2010, 81, 64-73.	1.8	14
15	Computational analysis of the precipitation kinetics in a complex tool steel. International Journal of Materials Research, 2008, 99, 410-415.	0.3	10
16	Compositional characterisation and thermodynamic modelling of nitride precipitates in a 12% Cr steel. International Journal of Materials Research, 2008, 99, 422-427.	0.3	7
17	Computer Simulation of the Precipitate Evolution during Industrial Heat Treatment of Complex Alloys. Materials Science Forum, 2007, 539-543, 2431-2436.	0.3	8
18	Martensite laths in creep resistant martensitic 9â€“12% Cr steels â€” Calculation and measurement of misorientations. Materials Characterization, 2007, 58, 874-882.	4.4	42

#	Article	IF	Citations
19	Modifications of stereological correction methods for precipitate parameters using transmission microscopy. Ultramicroscopy, 2006, 106, 941-950.	1.9	18
20	Precipitation Behaviour of a Complex Steel. Advanced Engineering Materials, 2006, 8, 1066-1077.	3.5	33
21	A heating stage up to 1173â€...K for X-ray diffraction studies in the whole orientation space. Journal of Applied Crystallography, 2003, 36, 80-85.	4.5	63
22	Calculation of Energies of Coherent Interfaces and Application to the Nucleation, Growth and Coarsening of Precipitates. Materials Science Forum, 0, 638-642, 2730-2735.	0.3	6
23	Modeling Particle Distances of Coherent Prolate- and Oblate-Shaped Precipitates in bcc Systems. Materials Science Forum, 0, 706-709, 1521-1526.	0.3	1
24	3D Simulation of Laser Assisted Side Milling of Ti6Al4V Alloy Using Modified Johnson-Cook Material Model. Key Engineering Materials, 0, 554-557, 2054-2061.	0.4	4
25	Application of Thermo-Calc TCFE7 to High-Alloyed Mottled Cast Iron. Materials Science Forum, 0, 879, 1431-1436.	0.3	2
26	Microstructurally Based Modeling of Creep Deformation and Damage in Martensitic Steels. , 0, , .		4