

Sven Erik Offerman

List of Publications by Year in descending order

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33
papers

1,514
citations

687363

13
h-index

501196

28
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33
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33
docs citations

33
times ranked

1124
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermal stability of retained austenite in TRIP steels studied by synchrotron X-ray diffraction during cooling. <i>Acta Materialia</i> , 2005, 53, 5439-5447.	7.9	460
2	Grain Nucleation and Growth During Phase Transformations. <i>Science</i> , 2002, 298, 1003-1005.	12.6	339
3	Characterization of individual retained austenite grains and their stability in low-alloyed TRIP steels. <i>Acta Materialia</i> , 2007, 55, 6713-6723.	7.9	226
4	The effect of aluminium and phosphorus on the stability of individual austenite grains in TRIP steels. <i>Acta Materialia</i> , 2009, 57, 533-543.	7.9	80
5	Ferrite/pearlite band formation in hot rolled medium carbon steel. <i>Materials Science and Technology</i> , 2002, 18, 297-303.	1.6	74
6	In-situ study of pearlite nucleation and growth during isothermal austenite decomposition in nearly eutectoid steel. <i>Acta Materialia</i> , 2003, 51, 3927-3938.	7.9	58
7	Austenite Nucleation and Growth Observed on the Level of Individual Grains by Three-Dimensional X-Ray Diffraction Microscopy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2010, 41, 583-591.	2.2	49
8	Solid-state phase transformations involving solute partitioning: modeling and measuring on the level of individual grains. <i>Acta Materialia</i> , 2004, 52, 4757-4766.	7.9	46
9	Barrier-free heterogeneous grain nucleation in polycrystalline materials: The austenite to ferrite phase transformation in steel. <i>Acta Materialia</i> , 2007, 55, 4489-4498.	7.9	31
10	High temperature SANS experiments on Nb(C,N) and MnS precipitates in HSLA steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2002, 33, 1883-1891.	2.2	19
11	In situ observations on the mechanical stability of austenite in TRIP-steel. <i>European Physical Journal Special Topics</i> , 2003, 104, 499-502.	0.2	15
12	3DXRD Characterization and Modeling of Solid-State Transformation Processes. <i>MRS Bulletin</i> , 2008, 33, 621-629.	3.5	14
13	Preferential Nucleation during Polymorphic Transformations. <i>Scientific Reports</i> , 2016, 6, 30860.	3.3	13
14	Effect of Ti on Evolution of Microstructure and Hardness of Martensitic Fe-C-Mn Steel during Tempering. <i>ISIJ International</i> , 2014, 54, 2890-2899.	1.4	12
15	Neutron depolarization study of the austenite/pearlite phase transformation in steel. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, s1052-s1054.	2.3	9
16	A Comparison between Ultra-high-strength and Conventional High-strength Fastener Steels: Mechanical Properties at Elevated Temperature and Microstructural Mechanisms. <i>ISIJ International</i> , 2016, 56, 1874-1883.	1.4	9
17	Effect of Silicon, Manganese and Heating Rate on the Ferrite Recrystallization Kinetics. <i>ISIJ International</i> , 2020, 60, 1312-1323.	1.4	9
18	MATERIALS SCIENCE: Microstructures in 4D. <i>Science</i> , 2004, 305, 190-191.	12.6	7

#	ARTICLE	IF	CITATIONS
19	Modelling the Evolution of Multiple Hardening Mechanisms during Tempering of Fe-C-Mn-Ti Martensite. ISIJ International, 2015, 55, 884-893.	1.4	7
20	CFD modelling of the off-gas system of Hlsarna iron making process. Part 1: model development using detailed reaction mechanism for post-combustion of CO ₂ mixture and carbon particles. Ironmaking and Steelmaking, 2022, 49, 828-844.	2.1	6
21	High-temperature magnetisation measurements on the pearlite transformation kinetics in nearly eutectoid steel. Journal of Magnetism and Magnetic Materials, 2004, 268, 40-48.	2.3	5
22	Cluster formation of pearlite colonies during the austenite/pearlite phase transformation in eutectoid steel. Physica B: Condensed Matter, 2003, 335, 99-103.	2.7	4
23	In Situ Phase Transformation Studies on a Transformation Induced Plasticity Steel Under Simulated Weld Thermal Cycles Using Synchrotron Diffraction. , 2010, , 133-148.		4
24	CFD modelling of the off-gas system Hlsarna iron making process part 2: reflux chamber geometry modification and effects on flow behaviour. Ironmaking and Steelmaking, 2022, 49, 783-794.	2.1	4
25	SANS experiments on Nb(C, N) and MnS precipitates in HSLA steel. Applied Physics A: Materials Science and Processing, 2002, 74, s978-s980.	2.3	3
26	Grain Nucleation and Growth of Individual Austenite and Ferrite Grains Studied by 3DXRD Microscopy at the ESRF. , 2010, , 41-75.		3
27	Furnace for in situ and simultaneous studies of nano-precipitates and phase transformations in steels by SANS and neutron diffraction. Review of Scientific Instruments, 2020, 91, 123903.	1.3	3
28	Zinc Vaporization and Self-reduction Behavior of Industrial Waste Residues for Recycling to the Hlsarna Furnace. Journal of Sustainable Metallurgy, 2022, 8, 658-672.	2.3	2
29	Synchrotron diffraction analysis of retained austenite in welded transformation induced plasticity (TRIP) steels. Science and Technology of Welding and Joining, 2012, 17, 146-154.	3.1	1
30	Influence of dislocations on the apparent elastic constants in single metallic crystallites: an analytical approach. Materialia, 2021, 20, 101178.	2.7	1
31	Experimental and Discrete Element Method Analysis of Galvanized Steel Scrap Particles Along and After an Inclined Chute. Steel Research International, 0, , 2200075.	1.8	1
32	Nucleation Kinetics of the β -Phase in a Binary Mg-Al Alloy. , 2013, , 259-262.		0
33	In Situ Synchrotron Diffraction Studies on the Formation, Decomposition and Stabilisation of Austenite in TRIP Steels During Simulated Weld Thermal Cycles. , 2014, , 71-88.		0