

Ernst Kozeschnik

List of Publications by Year in descending order

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179
papers

3,562
citations

136885

32
h-index

175177

52
g-index

186
all docs

186
docs citations

186
times ranked

2470
citing authors

#	ARTICLE	IF	CITATIONS
1	Mean-Field Microstructure Kinetics Modeling. , 2022, , 521-526.		10
2	Prediction of grain boundary chemistry in multicomponent Mo alloys with coupled precipitation and segregation kinetics simulations. Acta Materialia, 2022, 224, 117482.	3.8	4
3	Progress of Physics-based Mean-field Modeling and Simulation of Steel. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2022, 167, 15-22.	0.4	0
4	Coherency strengthening of oblate precipitates extended in the {100} plane of fcc crystals: Modeling and experimental validation. Materialia, 2022, 21, 101328.	1.3	4
5	Making sustainable aluminum by recycling scrap: The science of "dirty" alloys. Progress in Materials Science, 2022, 128, 100947.	16.0	134
6	Generalization of classical Hillert's grain growth and LSW theories to a wide family of kinetic evolution equations and stationary distribution functions. Acta Materialia, 2022, 235, 118085.	3.8	2
7	State Parameter-Based Yield Strength Model for Integration in Finite Element User-Material Routines. Metals, 2022, 12, 1207.	1.0	1
8	Modeling Static Recrystallization in Al-Mg Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 544-552.	1.1	14
9	Modeling of Bake Hardening Kinetics and Carbon Redistribution in Dual-Phase Steels. Steel Research International, 2021, 92, 2000307.	1.0	7
10	Simulation of Carbonitride Precipitation in the Multi-Phase Microstructure of Micro-Alloyed Transformation-Induced Plasticity Steel. Steel Research International, 2021, 92, 2000197.	1.0	0
11	Micromechanics-based damage model for liquid-assisted healing. International Journal of Damage Mechanics, 2021, 30, 123-144.	2.4	6
12	Assessment of microstructural characterization and Thermo-Kinetic simulations for producing strengthened and toughened martensitic steels. Materials Today: Proceedings, 2021, 44, 4903-4907.	0.9	1
13	Thermodynamic Modelling and Microstructural Study of Z-Phase Formation in a Ta-Alloyed Martensitic Steel. Materials, 2021, 14, 1332.	1.3	3
14	Effect of solder joint size and composition on liquid-assisted healing. Microelectronics Reliability, 2021, 119, 114066.	0.9	4
15	A semi-physical $\hat{\tau}\hat{\tau}^2$ model on bainite transformation kinetics and carbon partitioning. Acta Materialia, 2021, 207, 116701.	3.8	9
16	Quantitative analysis of void initiation in thermo-mechanical fatigue of polycrystalline copper films. Microelectronics Reliability, 2021, 127, 114387.	0.9	6
17	Simulation of Dynamic and Meta-Dynamic Recrystallization Behavior of Forged Alloy 718 Parts Using a Multi-Class Grain Size Model. Materials, 2021, 14, 111.	1.3	6
18	Analysis of Sn-Bi Solders: X-ray Micro Computed Tomography Imaging and Microstructure Characterization in Relation to Properties and Liquid Phase Healing Potential. Materials, 2021, 14, 153.	1.3	6

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19	Simulation and experimental characterization of microporosity during solidification in Sn-Bi alloys. <i>Materials and Design</i> , 2021, 212, 110258.	3.3	4
20	Thermal Desorption Spectra of H in an Fe-C-Nb Alloy Evaluated by Diffusion Simulation. <i>Steel Research International</i> , 2020, 91, 2000240.	1.0	0
21	Integrated Physical-Constitutive Computational Framework for Plastic Deformation Modeling. <i>Metals</i> , 2020, 10, 869.	1.0	4
22	Loading and Healing method to study liquid-assisted healing properties of cyclic failed bulk solder. , 2020, , .		0
23	Healing solders: A numerical investigation of damage-healing experiments. , 2020, , .		2
24	Lap shear test for solder materials: Local stress states and their effect on deformation and damage. <i>Microelectronics Reliability</i> , 2020, 109, 113655.	0.9	0
25	Characterisation of a High-Performance Al-Zn-Mg-Cu Alloy Designed for Wire Arc Additive Manufacturing. <i>Materials</i> , 2020, 13, 1610.	1.3	43
26	Strain aging characterization and physical modelling of over-aging in dual phase steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 788, 139595.	2.6	7
27	State Parameter-Based Simulation of Temperature- and Strain Rate Dependent Flow Curves of Al-Alloys. <i>Minerals, Metals and Materials Series</i> , 2020, , 267-271.	0.3	1
28	Advanced Thermo-mechanical Process for Homogenous Hierarchical Microstructures in HSLA Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 5800-5815.	1.1	4
29	Cold Roll Cladding of Carbon Steels. <i>Key Engineering Materials</i> , 2019, 809, 100-105.	0.4	0
30	Numerical study on local effects of composition and geometry in self-healing solders. , 2019, , .		3
31	An efficient method to reconstruct free energy profiles for diffusive processes in transition interface sampling and forward flux sampling simulations. <i>Journal of Chemical Physics</i> , 2019, 150, 094114.	1.2	2
32	Development of high-strength welding consumables using calculations and microstructural characterisation. <i>Welding in the World, Le Soudage Dans Le Monde</i> , 2018, 62, 451-458.	1.3	13
33	Co-Precipitation Behavior of MnS and AlN in a Low-Carbon Steel. <i>Steel Research International</i> , 2018, 89, 1700342.	1.0	15
34	Revised thermodynamic description of the Fe-Cr system based on an improved sublattice model of the δ phase. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2018, 60, 16-28.	0.7	52
35	State parameter-based constitutive modelling of stress strain curves in Al-Mg solid solutions. <i>International Journal of Plasticity</i> , 2018, 103, 67-80.	4.1	41
36	Analysis of the Temperature and Strain-Rate Dependences of Strain Hardening. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 18-21.	1.1	6

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37	Rigid-lattice Monte Carlo study of nucleation kinetics in dilute bcc Fe-Cu alloys using statistical sampling techniques. <i>Acta Materialia</i> , 2018, 159, 429-438.	3.8	6
38	Characterisation of secondary phases in Ni-base superalloy Rene 65. <i>Materials Science and Technology</i> , 2018, 34, 1558-1564.	0.8	11
39	A Model for Static Recrystallization with Simultaneous Precipitation and Solute Drag. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 2812-2818.	1.1	49
40	The Cr-Nb-Si system: Improved thermodynamic modelling and its use in simulation of Laves phase in steel. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2017, 56, 80-91.	0.7	6
41	Influence of alloying elements on the mechanical properties of high-strength weld metal. <i>Science and Technology of Welding and Joining</i> , 2017, 22, 536-543.	1.5	16
42	Carbide Precipitation in 2.25 Cr-1 Mo Bainitic Steel: Effect of Heating and Isothermal Tempering Conditions. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 2164-2178.	1.1	34
43	Phase evolution and carbon redistribution during continuous tempering of martensite studied with high resolution techniques. <i>Materials and Design</i> , 2017, 136, 214-222.	3.3	29
44	Temperature-dependent strain hardening, precipitation and deformation-induced microstructure evolution in AA 6061. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 708, 411-418.	2.6	13
45	Early Stages of Cu Precipitation in 15-5 PH Maraging Steel Revisited [~] Part I: Experimental Analysis. <i>Steel Research International</i> , 2017, 88, 1600084.	1.0	10
46	Early Stages of Cu Precipitation in 15-5 PH Maraging Steel Revisited [~] Part II: Thermokinetic Simulation. <i>Steel Research International</i> , 2017, 88, 1600085.	1.0	4
47	Dissolution of hardening phases during deformation in an A6061 Aluminium alloy. <i>Procedia Engineering</i> , 2017, 207, 37-41.	1.2	3
48	Kinetics Simulation of MnS Precipitation in Electrical Steel. <i>Steel Research International</i> , 2016, 87, 271-275.	1.0	8
49	Impact of Surface Structure Control Cooling During Continuous Casting on Hot Ductility of Microalloyed Steel. <i>Steel Research International</i> , 2016, 87, 871-879.	1.0	4
50	Modelling Yield Strength in an A6061 Aluminium Alloy. <i>Materials Science Forum</i> , 2016, 879, 1014-1018.	0.3	0
51	Coupling of Computational Thermodynamics with Kinetic Models for Predictive Simulations of Materials Properties. <i>Materials Science Forum</i> , 2016, 879, 1513-1518.	0.3	0
52	Bridging the Gap between <i>Ab Initio</i> and Large Scale Studies - A Monte Carlo Study of Cu Precipitation in Fe. <i>Materials Science Forum</i> , 2016, 879, 1564-1569.	0.3	1
53	A Statistical Methodology to Reconstruct Nucleation Pathways in the Fe-Cu System. <i>Materials Science Forum</i> , 2016, 879, 1529-1534.	0.3	0
54	Influence of NbC-Precipitation on Hot Ductility in Microalloyed Steel - TEM Study and Thermokinetic Modeling. <i>Materials Science Forum</i> , 2016, 879, 2107-2112.	0.3	2

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55	Simultaneous Precipitation and Recrystallization during Hot Deformation of Ti, Nb and V Microalloyed Steel. Materials Science Forum, 2016, 879, 2463-2467.	0.3	4
56	CALPHAD-based alloy design for advanced automotive steels – Part II: Compositional and microstructural modification for advanced carburizing steels. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2016, 54, 172-180.	0.7	10
57	A Model for the Influence Of Micro-Alloying Elements on Static Recrystallization of Austenite. , 2016, , 113-118.		2
58	A state parameter-based model for static recrystallization interacting with precipitation. Modelling and Simulation in Materials Science and Engineering, 2016, 24, 035006.	0.8	19
59	Modelling hydrogen migration and trapping in steels. Materials and Design, 2016, 106, 205-215.	3.3	22
60	Stress relaxation by power-law creep during growth of a misfitting precipitate. International Journal of Solids and Structures, 2016, 96, 74-80.	1.3	2
61	Precipitate growth in multi-component systems with stress relaxation by diffusion and creep. International Journal of Plasticity, 2016, 82, 112-126.	4.1	23
62	Long-range diffusion of H in the presence of traps in a microalloyed steel. Computational Materials Science, 2016, 113, 266-274.	1.4	2
63	A Model for the Influence of Micro-Alloying Elements on Static Recrystallization of Austenite. , 2016, , 113-118.		0
64	Thermodynamics of Pd–Mn phases and extension to the Fe–Mn–Pd system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2015, 51, 314-333.	0.7	5
65	Evolution of Precipitates and Martensite Substructure During Continuous Heat Treatment. Materials Today: Proceedings, 2015, 2, S619-S622.	0.9	6
66	Simulation of Natural Aging in Al-Mg-Si Alloys. Materials Science Forum, 2015, 828-829, 468-473.	0.3	4
67	Microstructure and Flow Stress Modelling During Plastic Deformation of an Aluminum Alloy Type A6061. Materials Today: Proceedings, 2015, 2, S107-S112.	0.9	3
68	Modelling the influence of austenitisation temperature on hydrogen trapping in Nb containing martensitic steels. Scripta Materialia, 2015, 101, 60-63.	2.6	9
69	Relaxation of a precipitate misfit stress state by creep in the matrix. International Journal of Plasticity, 2015, 64, 164-176.	4.1	16
70	Modeling precipitation thermodynamics and kinetics in type 316 austenitic stainless steels with varying composition as an initial step toward predicting phase stability during irradiation. Journal of Nuclear Materials, 2015, 462, 250-257.	1.3	16
71	Modelling the role of compositional fluctuations in nucleation kinetics. Acta Materialia, 2015, 91, 365-376.	3.8	5
72	Kinetics of interstitial segregation in Cottrell atmospheres and grain boundaries. Philosophical Magazine Letters, 2015, 95, 458-465.	0.5	19

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73	Thermo-kinetic modeling of Cu precipitation in $\hat{\pm}$ -Fe. Acta Materialia, 2015, 100, 135-146.	3.8	49
74	Modelling Microstructure Evolution in Polycrystalline Aluminium â€“ Comparison between One- and Multi-Parameter Models with Experiment. Key Engineering Materials, 2015, 651-653, 587-591.	0.4	1
75	Virtual Joining Factory â€“ Integration of Microstructure Evolution in the Manufacturing Process Chain Simulation. Key Engineering Materials, 2015, 651-653, 1325-1330.	0.4	1
76	Precipitation Behavior of Strainâ€“induced V Precipitates in Ferrite at Different Temperatures in a 0.2â€“wt% Carbon Steel. Steel Research International, 2014, 85, 679-688.	1.0	2
77	Study of molten metal droplet adhesion to organic anti-spatter coatings. Science and Technology of Welding and Joining, 2014, 19, 638-645.	1.5	3
78	Self-Diffusion in Grain Boundaries and Dislocation Pipes in Al, Fe, and Ni and Application to AlN Precipitation in Steel. Journal of Materials Engineering and Performance, 2014, 23, 1576-1579.	1.2	23
79	Early Stages of Precipitation: Experiments and Modelling. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2014, 159, 5-11.	0.4	0
80	The Effect of Si on the Precipitation Behaviour in Al-Mg-Si Alloys Studied by Thermo-kinetic Simulation and DSC Experiments. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2014, 159, 116-121.	0.4	0
81	Microstructural investigation of thermally aged nickel-based superalloy 718Plus. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 594, 253-259.	2.6	34
82	Reverse $\hat{\pm}$ â€“ $\hat{\pm}$ transformation mechanisms of martensitic Feâ€“Mn and age-hardenable Feâ€“Mnâ€“Pd alloys upon fast and slow continuous heating. Acta Materialia, 2014, 72, 99-109.	3.8	35
83	Assessment of parameters for precipitation simulation of heat treatable aluminum alloys using differential scanning calorimetry. Transactions of Nonferrous Metals Society of China, 2014, 24, 2157-2167.	1.7	18
84	Crystal structure and free energy of Ti ₂ Ni ₃ precipitates in Tiâ€“Ni alloys from first principles. Computational Materials Science, 2014, 93, 46-49.	1.4	11
85	Assessment of substitutional self-diffusion along short-circuit paths in Al, Fe and Ni. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2014, 47, 92-99.	0.7	38
86	Process-controlled suppression of natural aging in an Alâ€“Mgâ€“Si alloy. Scripta Materialia, 2014, 89, 53-56.	2.6	42
87	Yield strength prediction in Ni-base alloy 718Plus based on thermo-kinetic precipitation simulation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 608, 114-122.	2.6	78
88	Influence of Deformation on the Precipitation Behavior of Nb(CN) in Austenite and Ferrite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4210-4219.	1.1	24
89	Influence of Deformation on Phase Transformation and Precipitation of Steels for Oil Country Tubular Goods. Steel Research International, 2014, 85, 954-967.	1.0	7
90	Precipitate strengthening of non-spherical precipitates extended in $\hat{\pm}$ 100â€“ or {100} direction in fcc crystals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 262-266.	2.6	35

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91	Simulation of precipitate evolution in Fe-25 Co-15 Mo with Si addition based on computational thermodynamics. Journal of Alloys and Compounds, 2014, 587, 158-170.	2.8	4
92	Modelling the dynamic recrystallization in Mn micro-alloyed steel during thermo-mechanical treatment using cellular automata. Computational Materials Science, 2014, 94, 85-94.	1.4	32
93	A model for precipitation strengthening in multi-particle systems. Computational Materials Science, 2014, 91, 173-186.	1.4	75
94	Simulation of the effect of composition on the precipitation in 6xxx Al alloys during continuous-heating DSC. Journal of Alloys and Compounds, 2014, 612, 443-449.	2.8	37
95	The microstructure of heat-treated nickel-based superalloy 718Plus. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 610, 39-45.	2.6	26
96	Thermo-kinetic prediction of metastable and stable phase precipitation in Al-Zn-Mg series aluminium alloys during non-isothermal DSC analysis. Journal of Alloys and Compounds, 2014, 609, 129-136.	2.8	47
97	Thermodynamics of Ti-Ni shape memory alloys. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2013, 41, 128-139.	0.7	40
98	CALPHAD modeling of metastable phases in the Al-Mg-Si system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2013, 43, 94-104.	0.7	45
99	Role of vacancies in work hardening and fatigue of TiAl alloys. International Journal of Plasticity, 2013, 42, 83-100.	4.1	20
100	Computational and Experimental Analysis of Carbonitride Precipitation in Tempered Martensite. Steel Research International, 2013, 84, 20-30.	1.0	8
101	Microstructures formation and phase transformations around the interface of welds between dissimilar steels. MATEC Web of Conferences, 2013, 7, 02001.	0.1	1
102	The Bustling Nature of Vacancies in Al Alloys. , 2013, , 3181-3188.		6
103	Numerical simulation of the evolution of primary and secondary Nb(CN), Ti(CN) and AlN in Nb-microalloyed steel during continuous casting. International Journal of Materials Research, 2012, 103, 680-687.	0.1	9
104	Static Strain Aging in Fe-Mn-N Alloys Investigated by Impulse Excitation Internal Friction Analysis. Solid State Phenomena, 2012, 184, 203-208.	0.3	0
105	Simulation of Precipitation Kinetics and Precipitation Strengthening of B2-precipitates in Martensitic PH 13-8 Mo Steel. ISIJ International, 2012, 52, 610-615.	0.6	47
106	Atomistic and continuums modeling of cluster migration and coagulation in precipitation reactions. Computational Materials Science, 2012, 60, 59-65.	1.4	17
107	Microstructural Evolution and Mechanical Properties of Fusion Welds in an Iron-Copper-Based Multicomponent Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4155-4170.	1.1	10
108	Mechanism of surface modification using machine hammer peening technology. CIRP Annals - Manufacturing Technology, 2012, 61, 375-378.	1.7	66

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109	Particle strengthening in fcc crystals with prolate and oblate precipitates. Scripta Materialia, 2012, 66, 52-55.	2.6	36
110	Loss of Ductility Caused by AlN Precipitation in Hadfield Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1132-1139.	1.1	4
111	Investigation of Cu precipitation in bcc-Fe – Comparison of numerical analysis with experiment. International Journal of Materials Research, 2011, 102, 709-716.	0.1	8
112	Modeling mechanical effects on promotion and retardation of martensitic transformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 1318-1325.	2.6	4
113	AlN Precipitation During Isothermal Annealing of Ultra Low Carbon Steel. Steel Research International, 2011, 82, 905-910.	1.0	15
114	Modeling of excess vacancy annihilation at different types of sinks. Acta Materialia, 2011, 59, 3463-3472.	3.8	101
115	Diffusion processes in a migrating interface: The thick-interface model. Acta Materialia, 2011, 59, 4775-4786.	3.8	31
116	New approach to predict the long-term creep behaviour and evolution of precipitate back-stress of 9% chromium steels. Transactions of the Indian Institute of Metals, 2010, 63, 137-143.	0.7	4
117	Reverted austenite in PH 13-8 Mo maraging steels. Materials Chemistry and Physics, 2010, 122, 138-145.	2.0	109
118	The Precipitation Behavior of Superalloy ATI Allvac 718Plus. Advanced Engineering Materials, 2010, 12, 176-183.	1.6	27
119	Computer simulation of the yield strength evolution in Cu-precipitation strengthened ferritic steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 3546-3551.	2.6	62
120	Non-destructive evaluation of decarburization of spring steel using electromagnetic measurement. NDT and E International, 2010, 43, 446-450.	1.7	9
121	Kinetics of Precipitation in a Complex Hot-work Tool Steel. Steel Research International, 2010, 81, 64-73.	1.0	14
122	Computational Analysis of Precipitation during Continuous Casting of Microalloyed Steel. Steel Research International, 2010, 81, 372-380.	1.0	31
123	Concurrent Precipitation of AlN and VN in Microalloyed Steel. Steel Research International, 2010, 81, 681-685.	1.0	18
124	Simulation of Copper Precipitation in Fe-Cu Alloys. Materials Science Forum, 2010, 638-642, 2579-2584.	0.3	7
125	Modeling the Effect of Stress and Plastic Strain on Martensite Transformation. Materials Science Forum, 2010, 638-642, 2634-2639.	0.3	3
126	Numerical simulation of long-term precipitate evolution in austenitic heat-resistant steels. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2010, 34, 105-112.	0.7	44

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127	Multimodal size distributions of $\hat{\nu}$ precipitates during continuous cooling of UDIMET 720 Li. Acta Materialia, 2009, 57, 5739-5747.	3.8	150
128	Comparative analysis of heat generation in friction welding of steel bars. Acta Materialia, 2008, 56, 2843-2855.	3.8	98
129	On the Influence of Hot Straining of Austenite in Solid-State Welding of High Carbon Steel. Welding in the World, Le Soudage Dans Le Monde, 2008, 52, 100-106.	1.3	3
130	A thermodynamic model for carbon trapping in lattice defects. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2008, 32, 650-654.	0.7	29
131	Computational analysis of the precipitation kinetics in a complex tool steel. International Journal of Materials Research, 2008, 99, 410-415.	0.1	10
132	Influence of silicon on cementite precipitation in steels. Materials Science and Technology, 2008, 24, 343-347.	0.8	259
133	Numerical Analysis of the Nb(C,N) Precipitation Kinetics in Microalloyed Steels. Steel Research International, 2008, 79, 660-664.	1.0	7
134	Horst Cerjak " Emeritus Professor. International Journal of Materials Research, 2008, 99, 340-341.	0.1	0
135	Einfluss von Aluminiumnitrid auf die Hochtemperaturduktilität von stranggegossenen Brammen. Praktische Metallographie/Practical Metallography, 2008, 45, 159-172.	0.1	1
136	Mechanical stabilisation of eutectoid steel. Materials Science and Technology, 2007, 23, 610-612.	0.8	51
137	Experimental studies and thermodynamic simulation of phase transformations in high Nb containing $\hat{\nu}$ -TiAl based alloys. International Journal of Materials Research, 2007, 98, 1131-1137.	0.1	62
138	Computer Simulation of the Precipitate Evolution during Industrial Heat Treatment of Complex Alloys. Materials Science Forum, 2007, 539-543, 2431-2436.	0.3	8
139	Thermodynamic Basis of Phase Transformations. , 2007, , 7-46.		0
140	Modeling Solid-State Diffusion. , 2007, , 151-177.		3
141	Modeling Precipitation as a Sharp-Interface Phase Transformation. , 2007, , 179-217.		2
142	Modelling of Precipitation Kinetics with Simultaneous Stress Relaxation. Materials Research Society Symposia Proceedings, 2006, 979, 1.	0.1	2
143	Shape factors in modeling of precipitation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 441, 68-72.	2.6	61
144	Precipitation Behaviour of a Complex Steel. Advanced Engineering Materials, 2006, 8, 1066-1077.	1.6	33

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145	On The Influence of Nb on the Transition Temperatures of Titanium Aluminides. Materials Research Society Symposia Proceedings, 2006, 980, 3.	0.1	0
146	Experimental Studies and Thermodynamic Simulation of Phase Transformations in β -TiAl Based Alloys. Materials Research Society Symposia Proceedings, 2004, 842, 363.	0.1	3
147	Modified evolution equations for the precipitation kinetics of complex phases in multi-component systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2004, 28, 379-382.	0.7	113
148	Quantification of the Laves phase in advanced 9%12% Cr steels using a standard SEM. Materials Characterization, 2003, 51, 341-352.	1.9	143
149	Dissimilar 2%25Cr/9Cr and 2Cr/0%5CrMoV steel welds: Part 1: Characterisation of weld zone and numerical simulation. Science and Technology of Welding and Joining, 2002, 7, 63-68.	1.5	13
150	Dissimilar 2%25Cr/9Cr and 2Cr/0%5CrMoV steel welds: Part 2: Identification of precipitates. Science and Technology of Welding and Joining, 2002, 7, 69-76.	1.5	13
151	Simulating the ferrite-to-austenite transformation in stainless steel welds. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2001, 25, 217-230.	0.7	11
152	Computer simulation of the brittle-temperature-range (BTR) for hot cracking in steels. Steel Research = Archiv für Das Eisenhüttenwesen, 2000, 71, 460-465.	0.2	25
153	A discussion of phase transformations in Fe-C-Mn as affected by paraequilibrium constraints. Journal of Phase Equilibria and Diffusion, 2000, 21, 336-341.	0.3	10
154	A scheil-gulliver model with back-diffusion applied to the microsegregation of chromium in Fe-Cr-C alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2000, 31, 1682-1684.	1.1	25
155	A numerical model for evaluation of unconstrained and compositionally constrained thermodynamic equilibria. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2000, 24, 245-252.	0.7	19
156	Ortho-equilibrium and para-equilibrium phase diagrams for interstitial / substitutional iron alloys. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2000, 24, 495-502.	0.7	22
157	Multicomponent diffusion simulation based on finite elements. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 2575-2582.	1.1	12
158	A contribution to the increase in yield strength during the bake hardening process. Steel Research = Archiv für Das Eisenhüttenwesen, 1997, 68, 224-230.	0.2	22
159	Position-sensitive atom probe study of precipitates in high speed steel. Vacuum, 1995, 46, 1155-1158.	1.6	2
160	Interaction of the Precipitation Kinetics of γ' And γ'' Phases in Nickel-Base Superalloy ATI Allvac® 718Plus™. Materials Science Forum, 0, 638-642, 2712-2717.	0.3	9
161	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
162	Precipitation Kinetics of Aluminium Nitride in Austenite in Microalloyed HSLA Steels. Materials Science Forum, 0, 636-637, 605-611.	0.3	5

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163	Analysis of Clustering Characteristics during early Stages of Cu Precipitation in bcc-Fe. Solid State Phenomena, 0, 172-174, 309-314.	0.3	5
164	Carbo-Nitride Precipitation in Tempered Martensite - Computer Simulation and Experiment. Materials Science Forum, 0, 706-709, 1586-1591.	0.3	6
165	Modeling Particle Distances of Coherent Prolate- and Oblate-Shaped Precipitates in bcc Systems. Materials Science Forum, 0, 706-709, 1521-1526.	0.3	1
166	Precipitation in Al-Alloy 6016 – The Role of Excess Vacancies. Materials Science Forum, 0, 706-709, 317-322.	0.3	27
167	Coupled Grain Growth and Precipitation Modeling in Multi-Phase Systems. Materials Science Forum, 0, 753, 357-360.	0.3	10
168	Thermodynamics-Integrated Simulation of Precipitate Evolution in Al-Mg-Si-Alloys. Materials Science Forum, 0, 765, 476-480.	0.3	2
169	Relevance of Hot Ductility Tests to Crack Sensitivity during Continuous Casting of Steel. Advanced Materials Research, 0, 922, 201-206.	0.3	0
170	Determination of Substitutional-Interstitial Interaction from Chemical Potentials of Interstitials in the Steel Matrix. Advanced Materials Research, 0, 922, 645-650.	0.3	0
171	Two-Step Quenching & Partitioning of 42SiCrB Steel. Materials Science Forum, 0, 783-786, 738-743.	0.3	1
172	Simulation of Yield Strength in Alvac^{+&A} 718Plus^{+&TM}. Advanced Materials Research, 0, 922, 7-12.	0.3	5
173	The Life-Time of Structural Vacancies in the Presence of Solute Trapping. Materials Science Forum, 0, 794-796, 963-970.	0.3	14
174	Simulation of Cu Precipitation in the Fe-Cu Binary System. Advanced Materials Research, 0, 922, 728-733.	0.3	4
175	Thermo-Kinetic Simulation of the Yield Strength Evolution of AA7075 during Natural Aging. Advanced Materials Research, 0, 922, 406-411.	0.3	8
176	Agile Multiscale Modelling of the Thermo-Mechanical Processing of an Aluminium Alloy. Key Engineering Materials, 0, 651-653, 1319-1324.	0.4	5
177	Saturation of Deformation Twinning in Magnesium Alloys. Materials Science Forum, 0, 879, 2084-2087.	0.3	3
178	Flow Stress Modelling and Microstructure Development during Deformation of Metallic Materials. Materials Science Forum, 0, 892, 44-49.	0.3	2
179	Development and Improvement of 9-12%Cr Steels by a Holistic R&D Concept. Materials Science Forum, 0, , 2954-2959.	0.3	1