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	Influence of silicon on cementite precipitation in steels. Materials Science and Technology, 2008, 24, 343-347.	0.8	259
2	Multimodal size distributions of Î³â€² precipitates during continuous cooling of UDIMET 720 Li. Acta Materialia, 2009, 57, 5739-5747.	3.8	150
3	Quantification of the Laves phase in advanced 9â€“12% Cr steels using a standard SEM. Materials Characterization, 2003, 51, 341-352.	1.9	143
4	Making sustainable aluminum by recycling scrap: The science of â€œdirtyâ€• alloys. Progress in Materials Science, 2022, 128, 100947.	16.0	134
5	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
6	Reverted austenite in PH 13-8 Mo maraging steels. Materials Chemistry and Physics, 2010, 122, 138-145.	2.0	109
7	Modeling of excess vacancy annihilation at different types of sinks. Acta Materialia, 2011, 59, 3463-3472.	3.8	101
8	Comparative analysis of heat generation in friction welding of steel bars. Acta Materialia, 2008, 56, 2843-2855.	3.8	98
9	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
10	A model for precipitation strengthening in multi-particle systems. Computational Materials Science, 2014, 91, 173-186.	1.4	75
11	Mechanism of surface modification using machine hammer peening technology. CIRP Annals - Manufacturing Technology, 2012, 61, 375-378.	1.7	66
12	Experimental studies and thermodynamic simulation of phase transformations in high Nb containing Î³-TiAl based alloys. International Journal of Materials Research, 2007, 98, 1131-1137.	0.1	62
13	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
14	Shape factors in modeling of precipitation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 441, 68-72.	2.6	61
15	Revised thermodynamic description of the Fe-Cr system based on an improved sublattice model of the Ïƒ phase. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2018, 60, 16-28.	0.7	52
16	Mechanical stabilisation of eutectoid steel. Materials Science and Technology, 2007, 23, 610-612.	0.8	51
17	Thermo-kinetic modeling of Cu precipitation in Î±-Fe. Acta Materialia, 2015, 100, 135-146.	3.8	49
18	A Model for Static Recrystallization with Simultaneous Precipitation and Solute Drag. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 2812-2818.	1.1	49

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19	Simulation of Precipitation Kinetics and Precipitation Strengthening of B2-precipitates in Martensitic PH 13â€“8 Mo Steel. ISIJ International, 2012, 52, 610-615.	0.6	47
20	Thermo-kinetic prediction of metastable and stable phase precipitation in Alâ€“Znâ€“Mg series aluminium alloys during non-isothermal DSC analysis. Journal of Alloys and Compounds, 2014, 609, 129-136.	2.8	47
21	CALPHAD modeling of metastable phases in the Alâ€“Mgâ€“Si system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2013, 43, 94-104.	0.7	45
22	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
23	Characterisation of a High-Performance Alâ€“Znâ€“Mgâ€“Cu Alloy Designed for Wire Arc Additive Manufacturing. Materials, 2020, 13, 1610.	1.3	43
24	Process-controlled suppression of natural aging in an Alâ€“Mgâ€“Si alloy. Scripta Materialia, 2014, 89, 53-56.	2.6	42
25	State parameter-based constitutive modelling of stress strain curves in Al-Mg solid solutions. International Journal of Plasticity, 2018, 103, 67-80.	4.1	41
26	Thermodynamics of Tiâ€“Ni shape memory alloys. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2013, 41, 128-139.	0.7	40
27	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
28	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
29	Particle strengthening in fcc crystals with prolate and oblate precipitates. Scripta Materialia, 2012, 66, 52-55.	2.6	36
30	Reverse Î±â€²â†’Î³ 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
31	Precipitate strengthening of non-spherical precipitates extended in ã€ˆ100ã€‰ or {100} direction in fcc crystals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 262-266.	2.6	35
32	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
33	Carbide Precipitation in 2.25 Cr-1 Mo Bainitic Steel: Effect of Heating and Isothermal Tempering Conditions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 2164-2178.	1.1	34
34	Precipitation Behaviour of a Complex Steel. Advanced Engineering Materials, 2006, 8, 1066-1077.	1.6	33
35	Modelling the dynamic recrystallization in Câ€“Mn micro-alloyed steel during thermo-mechanical treatment using cellular automata. Computational Materials Science, 2014, 94, 85-94.	1.4	32
36	Computational Analysis of Precipitation during Continuous Casting of Microalloyed Steel. Steel Research International, 2010, 81, 372-380.	1.0	31

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37	Diffusion processes in a migrating interface: The thick-interface model. Acta Materialia, 2011, 59, 4775-4786.	3.8	31
38	A thermodynamic model for carbon trapping in lattice defects. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2008, 32, 650-654.	0.7	29
39	Phase evolution and carbon redistribution during continuous tempering of martensite studied with high resolution techniques. Materials and Design, 2017, 136, 214-222.	3.3	29
40	The Precipitation Behavior of Superalloy ATI Allvac 718Plus. Advanced Engineering Materials, 2010, 12, 176-183.	1.6	27
41	Precipitation in Al-Alloy 6016 â€“ The Role of Excess Vacancies. Materials Science Forum, 0, 706-709, 317-322.	0.3	27
42	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
43	Computer simulation of the brittle-temperature-range (BTR) for hot cracking in steels. Steel Research = Archiv FÃ¼r Das EisenhÃ¼ttenwesen, 2000, 71, 460-465.	0.2	25
44	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
45	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
46	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
47	Precipitate growth in multi-component systems with stress relaxation by diffusion and creep. International Journal of Plasticity, 2016, 82, 112-126.	4.1	23
48	A contribution to the increase in yield strength during the bake hardening process. Steel Research = Archiv FÃ¼r Das EisenhÃ¼ttenwesen, 1997, 68, 224-230.	0.2	22
49	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
50	Modelling hydrogen migration and trapping in steels. Materials and Design, 2016, 106, 205-215.	3.3	22
51	Role of vacancies in work hardening and fatigue of TiAl alloys. International Journal of Plasticity, 2013, 42, 83-100.	4.1	20
52	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
53	Kinetics of interstitial segregation in Cottrell atmospheres and grain boundaries. Philosophical Magazine Letters, 2015, 95, 458-465.	0.5	19
54	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

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55	Concurrent Precipitation of AlN and VN in Microalloyed Steel. Steel Research International, 2010, 81, 681-685.	1.0	18
56	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
57	Atomistic and continuums modeling of cluster migration and coagulation in precipitation reactions. Computational Materials Science, 2012, 60, 59-65.	1.4	17
58	Relaxation of a precipitate misfit stress state by creep in the matrix. International Journal of Plasticity, 2015, 64, 164-176.	4.1	16
59	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
60	Influence of alloying elements on the mechanical properties of high-strength weld metal. Science and Technology of Welding and Joining, 2017, 22, 536-543.	1.5	16
61	AlN Precipitation During Isothermal Annealing of Ultra Low Carbon Steel. Steel Research International, 2011, 82, 905-910.	1.0	15
62	Coâ€Precipitation Behavior of MnS and AlN in a Lowâ€Carbon Steel. Steel Research International, 2018, 89, 1700342.	1.0	15
63	Kinetics of Precipitation in a Complex Hotâ€work Tool Steel. Steel Research International, 2010, 81, 64-73.	1.0	14
64	The Life-Time of Structural Vacancies in the Presence of Solute Trapping. Materials Science Forum, 0, 794-796, 963-970.	0.3	14
65	Modeling Static Recrystallization in Al-Mg Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 544-552.	1.1	14
66	Dissimilar 2Â·25Cr/9Cr and 2Cr/0Â·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
67	Dissimilar 2Â·25Cr/9Cr and 2Cr/0Â·5CrMoV steel welds: Part 2: Identification of precipitates. Science and Technology of Welding and Joining, 2002, 7, 69-76.	1.5	13
68	Temperature-dependent strain hardening, precipitation and deformation-induced microstructure evolution in AA 6061. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 708, 411-418.	2.6	13
69	Development of high-strength welding consumables using calculations and microstructural characterisation. Welding in the World, Le Soudage Dans Le Monde, 2018, 62, 451-458.	1.3	13
70	Multicomponent diffusion simulation based on finite elements. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 2575-2582.	1.1	12
71	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
72	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

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73	Characterisation of secondary phases in Ni-base superalloy Rene 65. Materials Science and Technology, 2018, 34, 1558-1564.	0.8	11
74	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
75	Computational analysis of the precipitation kinetics in a complex tool steel. International Journal of Materials Research, 2008, 99, 410-415.	0.1	10
76	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
77	Coupled Grain Growth and Precipitation Modeling in Multi-Phase Systems. Materials Science Forum, 0, 753, 357-360.	0.3	10
78	CALPHAD-based alloy design for advanced automotive steels â€“ 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
79	Early Stages of Cu Precipitation in 15-5 PH Maraging Steel Revisited âˆ’ Part I: Experimental Analysis. Steel Research International, 2017, 88, 1600084.	1.0	10
80	Mean-Field Microstructure Kinetics Modeling. , 2022, , 521-526.		10
81	Non-destructive evaluation of decarburization of spring steel using electromagnetic measurement. NDT and E International, 2010, 43, 446-450.	1.7	9
82	Interaction of the Precipitation Kinetics of Î´ And Î³â€™ Phases in Nickel-Base Superalloy ATI AllvacÂ® 718Plus^{TM}. Materials Science Forum, 0, 638-642, 2712-2717.	0.3	9
83	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
84	Modelling the influence of austenitisation temperature on hydrogen trapping in Nb containing martensitic steels. Scripta Materialia, 2015, 101, 60-63.	2.6	9
85	A semi-physical Î±-Î² model on bainite transformation kinetics and carbon partitioning. Acta Materialia, 2021, 207, 116701.	3.8	9
86	Computer Simulation of the Precipitate Evolution during Industrial Heat Treatment of Complex Alloys. Materials Science Forum, 2007, 539-543, 2431-2436.	0.3	8
87	Investigation of Cu precipitation in bcc-Fe â€“ Comparison of numerical analysis with experiment. International Journal of Materials Research, 2011, 102, 709-716.	0.1	8
88	Computational and Experimental Analysis of Carboâ€Nitride Precipitation in Tempered Martensite. Steel Research International, 2013, 84, 20-30.	1.0	8
89	Thermo-Kinetic Simulation of the Yield Strength Evolution of AA7075 during Natural Aging. Advanced Materials Research, 0, 922, 406-411.	0.3	8
90	Kinetics Simulation of MnS Precipitation in Electrical Steel. Steel Research International, 2016, 87, 271-275.	1.0	8

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91	Numerical Analysis of the Nb(C,N) Precipitation Kinetics in Microalloyed Steels. Steel Research International, 2008, 79, 660-664.	1.0	7
92	Simulation of Copper Precipitation in Fe-Cu Alloys. Materials Science Forum, 2010, 638-642, 2579-2584.	0.3	7
93	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
94	Modeling of Bake Hardening Kinetics and Carbon Redistribution in Dualâ€Phase Steels. Steel Research International, 2021, 92, 2000307.	1.0	7
95	Strain aging characterization and physical modelling of over-aging in dual phase steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 788, 139595.	2.6	7
96	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
97	Carbo-Nitride Precipitation in Tempered Martensite - Computer Simulation and Experiment. Materials Science Forum, 0, 706-709, 1586-1591.	0.3	6
98	Evolution of Precipitates and Martensite Substructure During Continuous Heat Treatment. Materials Today: Proceedings, 2015, 2, S619-S622.	0.9	6
99	The Cr-Nb-Si system: Improved thermodynamic modelling and its use in simulation of Laves phase in steel. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2017, 56, 80-91.	0.7	6
100	Analysis of the Temperature and Strain-Rate Dependences of Strain Hardening. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 18-21.	1.1	6
101	Rigid-lattice Monte Carlo study of nucleation kinetics in dilute bcc Fe-Cu alloys using statistical sampling techniques. Acta Materialia, 2018, 159, 429-438.	3.8	6
102	Micromechanics-based damage model for liquid-assisted healing. International Journal of Damage Mechanics, 2021, 30, 123-144.	2.4	6
103	Quantitative analysis of void initiation in thermo-mechanical fatigue of polycrystalline copper films. Microelectronics Reliability, 2021, 127, 114387.	0.9	6
104	The Bustling Nature of Vacancies in Al Alloys. , 2013, , 3181-3188.		6
105	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
106	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
107	Precipitation Kinetics of Aluminium Nitride in Austenite in Microalloyed HSLA Steels. Materials Science Forum, 0, 636-637, 605-611.	0.3	5
108	Analysis of Clustering Characteristics during early Stages of Cu Precipitation in bcc-Fe. Solid State Phenomena, 0, 172-174, 309-314.	0.3	5

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109	Simulation of Yield Strength in Allvac^{Â®} 718Plus^{TM}. Advanced Materials Research, 0, 922, 7-12.	0.3	5
110	Thermodynamics of Pdâ€“Mn phases and extension to the Feâ€“Mnâ€“Pd system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2015, 51, 314-333.	0.7	5
111	Agile Multiscale Modelling of the Thermo-Mechanical Processing of an Aluminium Alloy. Key Engineering Materials, 0, 651-653, 1319-1324.	0.4	5
112	Modelling the role of compositional fluctuations in nucleation kinetics. Acta Materialia, 2015, 91, 365-376.	3.8	5
113	New approach to predict the long-term creep behaviour and evolution of precipitate back-stress of 9â€“12% chromium steels. Transactions of the Indian Institute of Metals, 2010, 63, 137-143.	0.7	4
114	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
115	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
116	Simulation of Cu Precipitation in the Fe-Cu Binary System. Advanced Materials Research, 0, 922, 728-733.	0.3	4
117	Simulation of precipitate evolution in Feâ€“25 Coâ€“ 15 Mo with Si addition based on computational thermodynamics. Journal of Alloys and Compounds, 2014, 587, 158-170.	2.8	4
118	Simulation of Natural Aging in Al-Mg-Si Alloys. Materials Science Forum, 2015, 828-829, 468-473.	0.3	4
119	Impact of Surface Structure Control Cooling During Continuous Casting on Hot Ductility of Microalloyed Steel. Steel Research International, 2016, 87, 871-879.	1.0	4
120	Simultaneous Precipitation and Recrystallization during Hot Deformation of Ti, Nb and V Microalloyed Steel. Materials Science Forum, 2016, 879, 2463-2467.	0.3	4
121	Early Stages of Cu Precipitation in 15-5 PH Maraging Steel Revisitedâ€‰-â€‰Part II: Thermokinetic Simulation. Steel Research International, 2017, 88, 1600085.	1.0	4
122	Advanced Thermo-mechanical Process for Homogenous Hierarchical Microstructures in HSLA Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 5800-5815.	1.1	4
123	Integrated Physical-Constitutive Computational Framework for Plastic Deformation Modeling. Metals, 2020, 10, 869.	1.0	4
124	Effect of solder joint size and composition on liquid-assisted healing. Microelectronics Reliability, 2021, 119, 114066.	0.9	4
125	Prediction of grain boundary chemistry in multicomponent Mo alloys with coupled precipitation and segregation kinetics simulations. Acta Materialia, 2022, 224, 117482.	3.8	4
126	Simulation and experimental characterization of microporosity during solidification in Sn-Bi alloys. Materials and Design, 2021, 212, 110258.	3.3	4

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127	Coherency strengthening of oblate precipitates extended in the {100} plane of fcc crystals: Modeling and experimental validation. Materialia, 2022, 21, 101328.	1.3	4
128	Experimental Studies and Thermodynamic Simulation of Phase Transformations in Î³-TiAl Based Alloys. Materials Research Society Symposia Proceedings, 2004, 842, 363.	0.1	3
129	Modeling Solid-State Diffusion. , 2007, , 151-177.		3
130	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
131	Modeling the Effect of Stress and Plastic Strain on Martensite Transformation. Materials Science Forum, 2010, 638-642, 2634-2639.	0.3	3
132	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
133	Microstructure and Flow Stress Modelling During Plastic Deformation of an Aluminum Alloy Type A6061. Materials Today: Proceedings, 2015, 2, S107-S112.	0.9	3
134	Saturation of Deformation Twinning in Magnesium Alloys. Materials Science Forum, 0, 879, 2084-2087.	0.3	3
135	Dissolution of hardening phases during deformation in an A6061 Aluminium alloy. Procedia Engineering, 2017, 207, 37-41.	1.2	3
136	Numerical study on local effects of composition and geometry in self-healing solders. , 2019, , .		3
137	Thermodynamic Modelling and Microstructural Study of Z-Phase Formation in a Ta-Alloyed Martensitic Steel. Materials, 2021, 14, 1332.	1.3	3
138	Position-sensitive atom probe study of precipitates in high speed steel. Vacuum, 1995, 46, 1155-1158.	1.6	2
139	Modelling of Precipitation Kinetics with Simultanous Stress Relaxation. Materials Research Society Symposia Proceedings, 2006, 979, 1.	0.1	2
140	Modeling Precipitation as a Sharp-Interface Phase Transformation. , 2007, , 179-217.		2
141	Thermodynamics-Integrated Simulation of Precipitate Evolution in Al-Mg-Si-Alloys. Materials Science Forum, 0, 765, 476-480.	0.3	2
142	Precipitation Behavior of Strainâ€‹scp>I</scp>nduced V Precipitates in Ferrite at Different Temperatures in a 0.2â€‰wt% Carbon Steel. Steel Research International, 2014, 85, 679-688.	1.0	2
143	Influence of NbC-Precipitation on Hot Ductility in Microalloyed Steel - TEM Study and Thermokinetic Modeling. Materials Science Forum, 2016, 879, 2107-2112.	0.3	2
144	A Model for the Influence Of Micro-Alloying Elements on Static Recrystallization of Austenite. , 2016, , 113-118.		2

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145	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
146	Long-range diffusion of H in the presence of traps in a microalloyed steel. Computational Materials Science, 2016, 113, 266-274.	1.4	2
147	Flow Stress Modelling and Microstructure Development during Deformation of Metallic Materials. Materials Science Forum, 0, 892, 44-49.	0.3	2
148	An efficient method to reconstruct free energy profiles for diffusive processes in transition interface sampling and forward flux sampling simulations. Journal of Chemical Physics, 2019, 150, 094114.	1.2	2
149	Healing solders: A numerical investigation of damage-healing experiments. , 2020, , .		2
150	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
151	Modeling Particle Distances of Coherent Prolate- and Oblate-Shaped Precipitates in bcc Systems. Materials Science Forum, 0, 706-709, 1521-1526.	0.3	1
152	Microstructures formation and phase transformations around the interface of welds between dissimilar steels. MATEC Web of Conferences, 2013, 7, 02001.	0.1	1
153	Two-Step Quenching & Partitioning of 42SiCrB Steel. Materials Science Forum, 0, 783-786, 738-743.	0.3	1
154	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
155	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
156	Bridging the Gap between <i>Ab Initio</i> and Large Scale Studies - A Monte Carlo Study of Cu Precipitation in Fe. Materials Science Forum, 2016, 879, 1564-1569.	0.3	1
157	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
158	Development and Improvement of 9-12%Cr Steels by a Holistic R&D Concept. Materials Science Forum, 0, , 2954-2959.	0.3	1
159	Einfluss von Aluminiumnitrid auf die HochtemperaturduktilitÃt von stranggegossenen Brammen. Praktische Metallographie/Practical Metallography, 2008, 45, 159-172.	0.1	1
160	State Parameter-Based Simulation of Temperature- and Strain Rate Dependent Flow Curves of Al-Alloys. Minerals, Metals and Materials Series, 2020, , 267-271.	0.3	1
161	State Parameter-Based Yield Strength Model for Integration in Finite Element User-Material Routines. Metals, 2022, 12, 1207.	1.0	1
162	On The Influence of Nb on the Transition Temperatures of Titanium Aluminides. Materials Research Society Symposia Proceedings, 2006, 980, 3.	0.1	0

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163	Thermodynamic Basis of Phase Transformations. , 2007, , 7-46.		0
164	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
165	Relevance of Hot Ductility Tests to Crack Sensitivity during Continuous Casting of Steel. Advanced Materials Research, 0, 922, 201-206.	0.3	0
166	Determination of Substitutional-Interstitial Interaction from Chemical Potentials of Interstitials in the Steel Matrix. Advanced Materials Research, 0, 922, 645-650.	0.3	0
167	Early Stages of Precipitation: Experiments and Modelling. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2014, 159, 5-11.	0.4	0
168	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
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