Ulrich Prahl

List of Publications by Year
in descending order

211 papers	4,310 citations	136740 32 h-index	138251 58 g-index
231 all docs	231 docs citations	231 times ranked	2556 citing authors

#	Article	IF	Citations
1	Derivation and Variation in Composition-Dependent Stacking Fault Energy Maps Based on Subregular Solution Model in High-Manganese Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 3076-3090.	1.1	592
2	Quantification of the effect of transformation-induced geometrically necessary dislocations on the flow-curve modelling of dual-phase steels. International Journal of Plasticity, 2013, 43, 128-152.	4.1	203
3	A crystal plasticity model for twinning- and transformation-induced plasticity. Acta Materialia, 2016, 118, 140-151.	3.8	175
4	Modelling of damage and failure in multiphase high strength DP and TRIP steels. Engineering Fracture Mechanics, 2011, 78, 469-486.	2.0	152
5	Correlation between 2D and 3D flow curve modelling of DP steels using a microstructure-based RVE approach. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 560, 129-139.	2.6	130
6	Modelling the effect of microstructural banding on the flow curve behaviour of dual-phase (DP) steels. Computational Materials Science, 2012, 52, 46-54.	1.4	124
7	Temperature dependent strain hardening and fracture behavior of TWIP steel. International Journal of Plasticity, 2018, 104, 80-103.	4.1	98
8	Characterization and modelling of failure initiation in DP steel. Computational Materials Science, 2013, 75, 35-44.	1.4	89
9	A Numerical and Experimental Investigation into Hot Stamping of Boron Alloyed Heat Treated Steels. Steel Research International, 2008, 79, 77-84.	1.0	85
10	Micromechanical modelling of damage behaviour of multiphase steels. Computational Materials Science, 2008, 43, 27-35.	1.4	82
11	Experimental and numerical failure criterion for formability prediction in sheet metal forming. Computational Materials Science, 2008, 43, 43-50.	1.4	79
12	Characterization of Dual-Phase Steel Microstructure by Combined Submicrometer EBSD and EPMA Carbon Measurements. Microscopy and Microanalysis, 2013, 19, 996-1006.	0.2	76
13	Quantification of bake hardening effect in DP600 and TRIP700 steels. Materials & Design, 2014, 57, 479-486.	5.1	76
14	Stretch-flangeability characterisation of multiphase steel using a microstructure based failure modelling. Computational Materials Science, 2009, 45, 617-623.	1.4	71
15	Transformation-Induced, Geometrically Necessary, Dislocation-Based Flow Curve Modeling of Dual-Phase Steels: Effect of Grain Size. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 3850-3869.	1.1	68
16	Characterisation of formability behaviour of multiphase steels by micromechanical modelling. International Journal of Fracture, 2009, 157, 55-69.	1.1	62
17	On the Spheroidized Carbide Dissolution and Elemental Partitioning in High Carbon Bearing Steel 100Cr6. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 595-606.	1.1	60
18	Exploiting Process-Related Advantages of Selective Laser Melting for the Production of High-Manganese Steel. Materials, 2017, 10, 56.	1.3	60

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19	Failure analysis of DP600 steel during the cross-die test. Computational Materials Science, 2012, 64, 101-105.	1.4	58
20	Micro–macro-characterisation and modelling of mechanical properties of gas metal arc welded (GMAW) DP600 steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 589, 1-14.	2.6	58
21	Study the effect of martensite banding on the failure initiation in dual-phase steel. Computational Materials Science, 2014, 87, 241-247.	1.4	57
22	Characterisation of microstructure and modelling of flow behaviour of bainite-aided dual-phase steel. Computational Materials Science, 2013, 80, 134-141.	1.4	56
23	Micromechanics-based modelling of properties and failure of multiphase steels. Computational Materials Science, 2007, 39, 17-22.	1.4	54
24	Phase-Field Modeling of Austenite Formation from a Ferrite plus Pearlite Microstructure during Annealing of Cold-Rolled Dual-Phase Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 2516-2525.	1.1	45
25	Quantification of complex-phase steel microstructure by using combined EBSD and EPMA measurements. Materials Characterization, 2018, 142, 179-186.	1.9	45
26	A study of microcrack formation in multiphase steel using representative volume element and damage mechanics. Computational Materials Science, 2011, 50, 1225-1232.	1.4	43
27	Characterization of Microstructure and Mechanical Properties of Resistance Spot Welded DP600 Steel. Metals, 2015, 5, 1704-1716.	1.0	42
28	Prediction of abnormal grain growth during high temperature treatment. Computational Materials Science, 2010, 49, 209-216.	1.4	37
29	Development and application of a microstructure-based approach to characterize and model failure initiation in DP steels using XFEM. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 660, 181-194.	2.6	37
30	Failure predictions of DP600 steel sheets using various uncoupled fracture criteria. Engineering Fracture Mechanics, 2018, 190, 367-381.	2.0	36
31	Anisotropy and strain rate effects on the failure behavior of TWIP steel: A multiscale experimental study. International Journal of Plasticity, 2019, 115, 178-199.	4.1	34
32	Microstructure Evolution of Binary and Multicomponent Manganese Steels During Selective Laser Melting: Phase-Field Modeling and Experimental Validation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 2022-2040.	1.1	33
33	Toward a virtual platform for materials processing. Jom, 2009, 61, 19-23.	0.9	32
34	Failure modeling of multiphase steels using representative volume elements based on real microstructures. Procedia Engineering, 2009, 1, 171-176.	1.2	32
35	Microstructure evolution simulation in hot rolled DP600 steel during gas metal arc welding. Computational Materials Science, 2013, 68, 107-116.	1.4	31
36	Modelling the strain-induced precipitation kinetics of vanadium carbonitride during hot working of precipitation-hardened Ferritic–Pearlitic steels. Acta Materialia, 2014, 71, 234-254.	3.8	30

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37	New attempt to wrinkling behavior analysis of tailor welded blanks during the deep drawing process. Materials & Design, 2012, 40, 407-414.	5.1	29
38	The effect of martensite banding on the mechanical properties and formability of TRIP steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 651, 160-164.	2.6	28
39	Effect of 3D Representative Volume Element (RVE) Thickness on Stress and Strain Partitioning in Crystal Plasticity Simulations of Multi-Phase Materials. Crystals, 2020, 10, 944.	1.0	26
40	The Effect of Bake-Hardening Parameters on the Mechanical Properties of Dual-Phase Steels. Steel Research International, 2016, 87, 1559-1565.	1.0	25
41	Experimental observations on thecorrelation between microstructure andfracture of multiphase steels. International Journal of Materials Research, 2006, 97, 1723-1731.	0.1	24
42	Characterisation of mechanical behavior of 18CrNiMo7-6 steel with and without nb under warm forging conditions through processing maps analysis. Journal of Materials Processing Technology, 2016, 237, 216-234.	3.1	24
43	Derivation of anisotropic flow curves of ferrite–pearlite pipeline steel via a two-level homogenisation scheme. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 566, 143-156.	2.6	23
44	Stress based failure criterion for formability characterisation of metastable steels. Computational Materials Science, 2007, 39, 43-48.	1.4	22
45	Scalability of the mechanical properties of selective laser melting produced micro-struts. Journal of Laser Applications, 2015, 27, .	0.8	21
46	Effect of precipitation on hot formability of high nitrogen steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 528, 519-525.	2.6	20
47	Investigation into the effects of weld zone and geometric discontinuity on the formability reduction of tailor welded blanks. Computational Materials Science, 2012, 59, 158-164.	1.4	20
48	ICMEg – the Integrated Computational Materials Engineering expert group – a new European coordination action. Integrating Materials and Manufacturing Innovation, 2014, 3, 20-24.	1.2	20
49	Modeling the Local Deformation and Transformation Behavior of Cast X8CrMnNi16-6-6 TRIP Steel and 10% Mg-PSZ Composite Using a Continuum Mechanics-Based Crystal Plasticity Model. Crystals, 2020, 10, 221.	1.0	20
50	Microstructural constitutive model for polycrystal viscoplasticity in cold and warm regimes based on continuum dislocation dynamics. Journal of the Mechanics and Physics of Solids, 2019, 122, 205-243.	2.3	19
51	Effect of the 3rd Dimension within the Representative Volume Element (RVE) on Damage Initiation and Propagation during Full-Phase Numerical Simulations of Single and Multi-Phase Steels. Materials, 2021, 14, 42.	1.3	19
52	Characterization and Modeling of Failure Initiation in Bainite–Aided DP Steel. Advanced Engineering Materials, 2014, 16, 1370-1380.	1.6	18
53	Investigating the local deformation and transformation behavior of sintered X3CrMnNi16-7-6 TRIP steel using a calibrated crystal plasticity-based numerical simulation model. International Journal of Materials Research, 2020, 111, 392-404.	0.1	18
54	Numerical Cooling Strategy Design for Hot Rolled Dual Phase Steel. Steel Research International, 2010, 81, 1001-1009.	1.0	17

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55	Experimental Investigations and Multiscale Modeling to Study the Effect of Sulfur Content on Formability of 16MnCr5 Alloy Steel. Steel Research International, 2019, 90, 1800369.	1.0	17
56	Strain Hardening, Damage and Fracture Behavior of Al-Added High Mn TWIP Steels. Metals, 2019, 9, 367.	1.0	16
57	Investigating the Effect of Cementite Particle Size and Distribution on Local Stress and Strain Evolution in Spheroidized Medium Carbon Steels using Crystal Plasticityâ€Based Numerical Simulations. Steel Research International, 2021, 92, 2000407.	1.0	16
58	Numerical Benchmark of Phase-Field Simulations with Elastic Strains: Precipitation in the Presence of Chemo-Mechanical Coupling. Computational Materials Science, 2018, 155, 541-553.	1.4	15
59	Microstructure and Texture Evolution during Twin-Roll Casting and Annealing of a Mgâ€"6.8Y2.5Znâ€"0.4Zr Alloy (WZ73). Crystals, 2020, 10, 513.	1.0	15
60	Influence of Non-Metallic Inclusions on Local Deformation and Damage Behavior of Modified 16MnCrS5 Steel. Crystals, 2022, 12, 281.	1.0	15
61	Towards integrative computational materials engineering of steel components. Production Engineering, 2011, 5, 373-382.	1.1	14
62	Experimental quantification of carbon gradients in martensite and its multi-scale effects in a DP steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 718, 250-259.	2.6	14
63	Microstructural adjustment of carburized steel components towards reducing the quenching-induced distortion. Journal of Materials Processing Technology, 2019, 264, 313-327.	3.1	14
64	Thermodynamics of martensite formation in Feâ€"Mnâ€"Alâ€"Ni shape memory alloys. Scripta Materialia, 2021, 192, 26-31.	2.6	14
65	Studying the Damage Evolution and the Micro-Mechanical Response of X8CrMnNi16-6-6 TRIP Steel Matrix and 10% Zirconia Particle Composite Using a Calibrated Physics and Crystal-Plasticity-Based Numerical Simulation Model. Crystals, 2021, 11, 759.	1.0	14
66	Phase-field modelling of microstructure evolution during processing of cold-rolled dual phase steels. Integrating Materials and Manufacturing Innovation, 2012, 1, 19-31.	1.2	13
67	Hot Deformation Behavior and Microstructural Evolution of a Nickel-Free Austenitic Steel with High Nitrogen Content. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 5549-5555.	1.1	13
68	Failure Initiation in Dual-Phase Steel. Key Engineering Materials, 2013, 586, 67-71.	0.4	13
69	Autonomous Interpretation of the Microstructure of Steels and Special Alloys. Materials Science Forum, 0, 949, 24-31.	0.3	13
70	On Attempting to Create a Virtual Laboratory for Application-Oriented Microstructural Optimization of Multi-Phase Materials. Applied Sciences (Switzerland), 2021, 11, 1506.	1.3	13
71	Damage parameter identification by a periodic homogenization approach. Computational Materials Science, 2002, 25, 159-165.	1.4	12
72	Thermodynamical Simulation of Carbon Profiles and Precipitation Evolution during High Temperature Case Hardening. Steel Research International, 2010, 81, 472-476.	1.0	12

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73	Development of new alloy systems and innovative processing technologies for the production of magnesium flat products with excellent property profile. Procedia Manufacturing, 2019, 27, 203-208.	1.9	12
74	Microstructure and Hot Deformation Behavior of Twin Roll Cast Mg-2Zn-1Al-0.3Ca Alloy. Materials, 2019, 12, 1020.	1.3	12
75	Influence of post-carburizing heat treatment on the core microstructural evolution and the resulting mechanical properties in case-hardened steel components. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 744, 778-789.	2.6	12
76	Modelling of Microstructure and Flow Stress Evolution during Hot Forging. Steel Research International, 2010, 81, 1102-1116.	1.0	11
77	Effect of cutting method on hydrogen embrittlement of high-Mn TWIP steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 744, 10-20.	2.6	11
78	GTN Model-Based Material Parameters of AZ31 Magnesium Sheet at Various Temperatures by Means of SEM In-Situ Testing. Crystals, 2020, 10, 856.	1.0	11
79	Deformation Behavior, Structure, and Properties of an Aging Ti-Ni Shape Memory Alloy after Compression Deformation in a Wide Temperature Range. Jom, 2021, 73, 620-629.	0.9	11
80	Deformation Behavior, Structure and Properties of an Equiatomic Tiâ€"Ni Shape Memory Alloy Compressed in a Wide Temperature Range. Transactions of the Indian Institute of Metals, 2021, 74, 2419-2426.	0.7	11
81	Micromechanical Damage Simulations of TRIP Steels. Materials Science Forum, 2003, 426-432, 1355-1360.	0.3	10
82	Optimal Control of a Cooling Line for Production of Hot Rolled Dual Phase Steel. Steel Research International, 2014, 85, 1328-1333.	1.0	10
83	Investigation of microstructure and mechanical properties of friction stir welded AA6016-T4 and DC04 alloy joints. International Journal of Advanced Manufacturing Technology, 2018, 94, 4209-4219.	1.5	10
84	The Investigation on Flow Behavior of Powder Metallurgy Ti-10V-2Fe-3Al Alloy Using the Prasad Stability Criterion. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 5314-5323.	1.1	10
85	Core microstructure-dependent bending fatigue behavior and crack growth of a case-hardened steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 762, 138040.	2.6	10
86	Fast algorithms for phase transformations in dual phase steels on a hot strip mill run-out table (ROT). Archives of Civil and Mechanical Engineering, 2012, 12, 305-311.	1.9	9
87	The Development of Incremental Sheet Forming from Flexible Forming to Fully Integrated Production of Sheet Metal Parts. Lecture Notes in Production Engineering, 2015, , 117-129.	0.3	9
88	Multiphaseâ€Field Simulation of Cementite Precipitation during Isothermal Lower Bainitic Transformation. Steel Research International, 2018, 89, 1800028.	1.0	9
89	Specific Features of Microstructural Evolution During Hot Rolling of the As-Cast Magnesium-Rich Aluminum Alloys with Added Transition Metal Elements. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 5782-5799.	1.1	9
90	Thermo-micro-mechanical simulation of metal forming processes. International Journal of Solids and Structures, 2019, 178-179, 59-80.	1.3	9

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91	Correlating magnetic properties of ferritic NO electrical steel containing 2.4Âm.%Si with hot strip microstructure. Journal of Magnetism and Magnetic Materials, 2020, 501, 166431.	1.0	9
92	Hot Deformation and Dynamic Recrystallisation Behaviour of Twin-Roll Cast Mg-6.8Y-2.5Zn-0.4Zr Magnesium Alloy. Materials, 2021, 14, 307.	1.3	9
93	Numerical Modelling of Toughness and Failure Processes in Steel Structures. Steel Research International, 2007, 78, 224-235.	1.0	8
94	Modeling of the uniaxial tensile and compression behavior of semi-solid A356 alloys. Computational Materials Science, 2009, 45, 633-637.	1.4	8
95	Modelling of grain boundary dynamics using amplitude equations. Continuum Mechanics and Thermodynamics, 2017, 29, 895-911.	1.4	8
96	Laminated TRIP/TWIP Steel Composites Produced by Roll Bonding. Metals, 2019, 9, 195.	1.0	8
97	Study on determination of flow behaviour of 6060-aluminium and AZ31-magnesium thin sheet by means of stacked compression test. IOP Conference Series: Materials Science and Engineering, 0, 480, 012023.	0.3	8
98	Effect of hot Rolling and Cooling Conditions on the Microstructure, MA Constituent Formation, and Pipeline Steels Mechanical Properties. Steel Research International, 2019, 90, 1800336.	1.0	8
99	Designing New Forging Steels by ICMPE. Lecture Notes in Production Engineering, 2015, , 85-98.	0.3	8
100	A multiscale perspective on the kinetics of solid state transformations with application to bainite formation. AIMS Materials Science, 2015, 2, 319-345.	0.7	8
101	Software Solutions for ICME. Jom, 2016, 68, 70-76.	0.9	7
102	Cutting Simulations of Two Gear Steels with Microstructure Dependent Material Laws. Procedia CIRP, 2017, 58, 549-554.	1.0	7
103	Towards a micromechanical based description for strength increase in dual phase steels during bake-hardening process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 702, 386-397.	2.6	7
104	The Influence of Induction Sintering on Microstructure and Deformation Behavior of Ti-5Al-5Mo-5V-3Cr Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 1699-1713.	1.1	7
105	Qualitative Investigation of Damage Initiation at Meso-Scale in Spheroidized C45EC Steels by Using Crystal Plasticity-Based Numerical Simulations. Journal of Composites Science, 2021, 5, 222.	1.4	7
106	FeinkornbestÃ¤digkeit von Bauteilen aus dem mikrolegierten Werkstoff 18CrNiMo7-6 in AbhÃ¤ngigkeit der Prozesskette. HTM - Journal of Heat Treatment and Materials, 2010, 65, 257-268.	0.1	7
107	Exploring the Structureâ€"Property Relationship in Spheroidized C45EC Steel Using Full Phase Crystal Plasticity Numerical Simulations. Steel Research International, 2022, 93, 2100452.	1.0	7
108	Micromechanical Effect of Martensite Attributes on Forming Limits of Dual-Phase Steels Investigated by Crystal Plasticity-Based Numerical Simulations. Crystals, 2022, 12, 155.	1.0	7

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109	Transformation of 2D RVE Local Stress and Strain Distributions to 3D Observations in Full Phase Crystal Plasticity Simulations of Dual-Phase Steels. Crystals, 2022, 12, 955.	1.0	7
110	Damage evolution in experiments and simulation in a construction steel. Computational Materials Science, 1999, 16, 206-212.	1.4	6
111	Characterization of Gas Metal Arc Welded Hot Rolled DP600 Steel. Steel Research International, 2011, 82, 1408-1416.	1.0	6
112	Industrial Needs for ICME. Jom, 2016, 68, 59-69.	0.9	6
113	Characterization of Nb-Microsegregation and Eutectic Carbide in As-Cast Nb-Microalloyed Al-Free Case Hardening Steel. Steel Research International, 2017, 88, 1700092.	1.0	6
114	Pinning effect of strain induced Nb(C,N) on case hardening steel under warm forging conditions. Journal of Materials Processing Technology, 2018, 253, 121-133.	3.1	6
115	Experimental and Numerical Investigations into the Failure Mechanisms of TRIP700 Steel Sheets. Metals, 2018, 8, 1073.	1.0	6
116	Mathematical Description of the Microstructural Modifications and Changes in the Mechanical Properties during Spheroidization of Medium€Carbon Steel. Steel Research International, 2019, 90, 1800335.	1.0	6
117	Shear and laser cutting effects on hydrogen embrittlement of a high-Mn TWIP steel. Engineering Failure Analysis, 2020, 108, 104243.	1.8	6
118	The analysis of hot deformation behavior of powder metallurgy Ti-10V-2Fe-3Al alloy using activation energy and Zener-Hollomon parameter. Procedia Manufacturing, 2020, 50, 546-551.	1.9	6
119	Improving the crashworthiness of magnesium AZ31 by tapering and triggering. Thin-Walled Structures, 2021, 162, 107565.	2.7	6
120	Direct, Mold-Less Production Systems. , 2017, , 23-111.		6
121	Integrated Process Simulation of Non-Oriented Electrical Steel. Materials, 2021, 14, 6659.	1.3	6
122	Experimental and Numerical Failure Criteria for Sheet Metal Forming. Steel Research International, 2007, 78, 762-770.	1.0	5
123	Simulation of Welding and Distortion in Ship Building. Advanced Engineering Materials, 2010, 12, 153-157.	1.6	5
124	Characterization and modelling techniques for gas metal arc welding of DP 600 sheet steels. Charakterisierung und Modellierungstechniken für Metallschutzgasschweißen von DP 600 Blech-Stählen. Materialwissenschaft Und Werkstofftechnik, 2010, 41, 972-983.	0.5	5
125	Further Development of Process Maps for TRIP Matrix Composites during Powder Forging. Materials Science Forum, 2019, 949, 15-23.	0.3	5
126	The Influence of Segregations after Forming on the Heat Treatment Result of Bevel Gears. Steel Research International, 2019, 90, 1800427.	1.0	5

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127	The Kinetics of Dynamic Recrystallization of Fe–16Cr–xMn–4Ni–0.05C–0.17N Steel. Steel Research International, 2019, 90, 1800309.	1.0	5
128	Hot Processing of Powder Metallurgy and Wrought Ti-6Al-4V Alloy with Large Total Deformation: Physical Modeling and Verification by Rolling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 5790-5805.	1.1	5
129	Analyzing the cementite particle size and distribution in heterogeneous microstructure of C45EC steel using crystal plasticity based DAMASK code. , 2021, , .		5
130	A Comparative Study on the Hot Deformation Behavior of As-Cast and Twin-Roll Cast Mg-6.8Y-2.5Zn-0.4Zr Alloy. Materials, 2021, 14, 3628.	1.3	5
131	Investigation of the Deformation Behaviour and Resulting Ply Thicknesses of Multilayered Fibre–Metal Laminates. Journal of Composites Science, 2021, 5, 176.	1.4	5
132	Microstructural evolution of the bonding zone in TRIP-TWIP laminate produced by accumulative roll bonding. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 840, 142866.	2.6	5
133	Ductile Damage Prediction on the Basis of Microstructural Observations. Key Engineering Materials, 2003, 251-252, 351-356.	0.4	4
134	Phase Transformation Modelling and Parameter Identification from Dilatometric Investigations. Steel Research International, 2008, 79, 793-799.	1.0	4
135	Experimental characterisation of a semi-solid A356 alloy during solidification and remelting. International Journal of Cast Metals Research, 2009, 22, 248-251.	0.5	4
136	Impact of the Microstructure on the U–O Forming Simulations of a Ferrite–Pearlite Pipeline Tube. Steel Research International, 2014, 85, 1083-1098.	1.0	4
137	Material Models and their Capability for Process and Material Properties Design in Different Forming Processes. Materials Science Forum, 2016, 854, 174-182.	0.3	4
138	Magnesium Twin-Roll Casting Technology for Flat and Long Products - State of the Art and Future. Materials Science Forum, 2018, 941, 1431-1436.	0.3	4
139	Experimental and numerical investigation of dual phase steels formability during laser-assisted hole-flanging. AIP Conference Proceedings, 2018, , .	0.3	4
140	Microstructure-based approach to predict the machinability of the ferritic-pearlitic steel C60 by cutting operations. Procedia CIRP, 2019, 82, 107-112.	1.0	4
141	Hot Deformation Behaviour and Processing Maps of an as-Cast Mg-6.8Y-2.5Zn-0.4Zr Alloy. Materials Science Forum, 2019, 949, 57-65.	0.3	4
142	Effect of Spheroidization Annealing on Pearlite Banding. Materials Science Forum, 0, 949, 40-47.	0.3	4
143	Inter–Pass Softening Behavior of Fe–16Cr– x Mn–4Ni–0.05C–0.17N Steel. Advanced Engineering Materials, 2019, 21, 1800692.	1.6	4
144	An Attempt to Integrate Software Tools at Microscale and Above Towards an ICME Approach for Heat Treatment of a DP Steel Gear with Reduced Distortion. Minerals, Metals and Materials Series, 2017, , 3-13.	0.3	4

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145	Low-loss FeSi sheet for energy-efficient electrical drives. AIMS Materials Science, 2018, 5, 1184-1198.	0.7	4
146	Copper-Based Alloys with Optimized Hardness and High Conductivity: Research on Precipitation Hardening of Low-Alloyed Binary CuSc Alloys. Metals, 2022, 12, 902.	1.0	4
147	Microstructure based simulations for prediction of flow curves and selection of process parameters for inter-critical annealing in DP steel. IOP Conference Series: Materials Science and Engineering, 2017, 192, 012010.	0.3	3
148	Modeling Bainite Transformation and Retained Austenite in Hot Rolled TRIP Steel by Instantaneous Carbon Enrichment. Steel Research International, 2017, 88, 1700122.	1.0	3
149	Dynamic recrystallization and texture evolution of Mg-6.8Y-2.5Zn-0.3Zr alloy during hot rolling. Procedia Manufacturing, 2020, 50, 809-816.	1.9	3
150	Forming Complex Graded and Homogeneous Components by Joining Simple Presintered Parts of TRIP-Matrix Composite through Powder Forging. Metals, 2020, 10, 543.	1.0	3
151	Analysis of defects in a twin roll cast <scp>Mgâ€Yâ€Zn</scp> magnesium alloy. Engineering Reports, 2022, 4, e12394.	0.9	3
152	ICME-Based Process and Alloy Design for Vacuum Carburized Steel Components with High Potential of Reduced Distortion. Minerals, Metals and Materials Series, 2017, , 133-144.	0.3	3
153	Simulation der Ausscheidungsentwicklung entlang der Prozesskette fÃ¼r das Hochtemperatur-Aufkohlen*. HTM - Journal of Heat Treatment and Materials, 2011, 66, 217-229.	0.1	3
154	Twin-roll casting of magnesium wire: an innovative continuous production route. , 2019, , .		3
155	A New Approach for Sintering Simulation of Irregularly Shaped Powder Particlesâ€"Part I: Model Development and Case Studies. Advanced Engineering Materials, 2022, 24, .	1.6	3
156	Quantification of Phase Transformation Kinetics under Thermomechanical Conditions Using Dilatometry Data. Advanced Materials Research, 0, 622-623, 581-584.	0.3	2
157	Flow Curve and Failure Modeling for Highâ€Mn Steels on a Microstructural Scale. Steel Research International, 2012, 83, 340-345.	1.0	2
158	Multi-technology Platforms (MTPs). , 2017, , 369-513.		2
159	Scenario for Data Exchange at the Microstructure Scale. Integrating Materials and Manufacturing Innovation, 2017, 6, 127-133.	1.2	2
160	Simulation of Thermal Phenomena in Reverse Strip-Rolling Process. Materials Science Forum, 2018, 941, 1424-1430.	0.3	2
161	Improving the formability of magnesium by cushion-ram-pulsation. MATEC Web of Conferences, 2018, 190, 12003.	0.1	2
162	The Influence of Hotâ€Rolling Conditions on the Content and Morphology of Retained Austenite in Ultraâ€High Strength Bainitic Steel and Its Mechanical Properties. Steel Research International, 2019, 90, 1800386.	1.0	2

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163	Deformation Behavior of Particle Reinforced TRIP Steel/MgPSZ Composite at Hot Working Temperatures. Steel Research International, 2019, 90, 1800334.	1.0	2
164	Improving Mechanical Properties of Twin-Roll Cast AZ31 by Wire Rolling. Materials Science Forum, 0, 1016, 957-963.	0.3	2
165	Entwicklung eines Al-reduzierten Einsatzstahls fÃ¼r die Hochtemperatur-Aufkohlungâ—. HTM - Journal of Heat Treatment and Materials, 2012, 67, 202-210.	0.1	2
166	Development of an Aluminium-Reduced Niobium-Microalloyed Case Hardening Steel for Heavy Gear Manufacturing. HTM - Journal of Heat Treatment and Materials, 2019, 74, 36-49.	0.1	2
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