

# Ulrich Prahl

## List of Publications by Year in descending order

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211  
papers

4,310  
citations

136950

32  
h-index

138484

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. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2009, 40, 3076-3090.	2.2	592
2	Quantification of the effect of transformation-induced geometrically necessary dislocations on the flow-curve modelling of dual-phase steels. <i>International Journal of Plasticity</i> , 2013, 43, 128-152.	8.8	203
3	A crystal plasticity model for twinning- and transformation-induced plasticity. <i>Acta Materialia</i> , 2016, 118, 140-151.	7.9	175
4	Modelling of damage and failure in multiphase high strength DP and TRIP steels. <i>Engineering Fracture Mechanics</i> , 2011, 78, 469-486.	4.3	152
5	Correlation between 2D and 3D flow curve modelling of DP steels using a microstructure-based RVE approach. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 560, 129-139.	5.6	130
6	Modelling the effect of microstructural banding on the flow curve behaviour of dual-phase (DP) steels. <i>Computational Materials Science</i> , 2012, 52, 46-54.	3.0	124
7	Temperature dependent strain hardening and fracture behavior of TWIP steel. <i>International Journal of Plasticity</i> , 2018, 104, 80-103.	8.8	98
8	Characterization and modelling of failure initiation in DP steel. <i>Computational Materials Science</i> , 2013, 75, 35-44.	3.0	89
9	A Numerical and Experimental Investigation into Hot Stamping of Boron Alloyed Heat Treated Steels. <i>Steel Research International</i> , 2008, 79, 77-84.	1.8	85
10	Micromechanical modelling of damage behaviour of multiphase steels. <i>Computational Materials Science</i> , 2008, 43, 27-35.	3.0	82
11	Experimental and numerical failure criterion for formability prediction in sheet metal forming. <i>Computational Materials Science</i> , 2008, 43, 43-50.	3.0	79
12	Characterization of Dual-Phase Steel Microstructure by Combined Submicrometer EBSD and EPMA Carbon Measurements. <i>Microscopy and Microanalysis</i> , 2013, 19, 996-1006.	0.4	76
13	Quantification of bake hardening effect in DP600 and TRIP700 steels. <i>Materials &amp; Design</i> , 2014, 57, 479-486.	5.1	76
14	Stretch-flangeability characterisation of multiphase steel using a microstructure based failure modelling. <i>Computational Materials Science</i> , 2009, 45, 617-623.	3.0	71
15	Transformation-Induced, Geometrically Necessary, Dislocation-Based Flow Curve Modeling of Dual-Phase Steels: Effect of Grain Size. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 3850-3869.	2.2	68
16	Characterisation of formability behaviour of multiphase steels by micromechanical modelling. <i>International Journal of Fracture</i> , 2009, 157, 55-69.	2.2	62
17	On the Spheroidized Carbide Dissolution and Elemental Partitioning in High Carbon Bearing Steel 100Cr6. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 595-606.	2.2	60
18	Exploiting Process-Related Advantages of Selective Laser Melting for the Production of High-Manganese Steel. <i>Materials</i> , 2017, 10, 56.	2.9	60

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19	Failure analysis of DP600 steel during the cross-die test. Computational Materials Science, 2012, 64, 101-105.	3.0	58
20	Micro- and 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.	5.6	58
21	Study the effect of martensite banding on the failure initiation in dual-phase steel. Computational Materials Science, 2014, 87, 241-247.	3.0	57
22	Characterisation of microstructure and modelling of flow behaviour of bainite-aided dual-phase steel. Computational Materials Science, 2013, 80, 134-141.	3.0	56
23	Micromechanics-based modelling of properties and failure of multiphase steels. Computational Materials Science, 2007, 39, 17-22.	3.0	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.	2.2	45
25	Quantification of complex-phase steel microstructure by using combined EBSD and EPMA measurements. Materials Characterization, 2018, 142, 179-186.	4.4	45
26	A study of microcrack formation in multiphase steel using representative volume element and damage mechanics. Computational Materials Science, 2011, 50, 1225-1232.	3.0	43
27	Characterization of Microstructure and Mechanical Properties of Resistance Spot Welded DP600 Steel. Metals, 2015, 5, 1704-1716.	2.3	42
28	Prediction of abnormal grain growth during high temperature treatment. Computational Materials Science, 2010, 49, 209-216.	3.0	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.	5.6	37
30	Failure predictions of DP600 steel sheets using various uncoupled fracture criteria. Engineering Fracture Mechanics, 2018, 190, 367-381.	4.3	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.	8.8	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.	2.2	33
33	Toward a virtual platform for materials processing. Jom, 2009, 61, 19-23.	1.9	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.	3.0	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.	7.9	30

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37	New attempt to wrinkling behavior analysis of tailor welded blanks during the deep drawing process. <i>Materials &amp; Design</i> , 2012, 40, 407-414.	5.1	29
38	The effect of martensite banding on the mechanical properties and formability of TRIP steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 651, 160-164.	5.6	28
39	Effect of 3D Representative Volume Element (RVE) Thickness on Stress and Strain Partitioning in Crystal Plasticity Simulations of Multi-Phase Materials. <i>Crystals</i> , 2020, 10, 944.	2.2	26
40	The Effect of Bake-Hardening Parameters on the Mechanical Properties of Dual-Phase Steels. <i>Steel Research International</i> , 2016, 87, 1559-1565.	1.8	25
41	Experimental observations on the correlation between microstructure and fracture of multiphase steels. <i>International Journal of Materials Research</i> , 2006, 97, 1723-1731.	0.3	24
42	Characterisation of mechanical behavior of 18CrNiMo7-6 steel with and without Nb under warm forging conditions through processing maps analysis. <i>Journal of Materials Processing Technology</i> , 2016, 237, 216-234.	6.3	24
43	Derivation of anisotropic flow curves of ferrite-pearlite pipeline steel via a two-level homogenisation scheme. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 566, 143-156.	5.6	23
44	Stress based failure criterion for formability characterisation of metastable steels. <i>Computational Materials Science</i> , 2007, 39, 43-48.	3.0	22
45	Scalability of the mechanical properties of selective laser melting produced micro-struts. <i>Journal of Laser Applications</i> , 2015, 27, .	1.7	21
46	Effect of precipitation on hot formability of high nitrogen steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 528, 519-525.	5.6	20
47	Investigation into the effects of weld zone and geometric discontinuity on the formability reduction of tailor welded blanks. <i>Computational Materials Science</i> , 2012, 59, 158-164.	3.0	20
48	ICMEg – the Integrated Computational Materials Engineering expert group – a new European coordination action. <i>Integrating Materials and Manufacturing Innovation</i> , 2014, 3, 20-24.	2.6	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. <i>Crystals</i> , 2020, 10, 221.	2.2	20
50	Microstructural constitutive model for polycrystal viscoplasticity in cold and warm regimes based on continuum dislocation dynamics. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 122, 205-243.	4.8	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. <i>Materials</i> , 2021, 14, 42.	2.9	19
52	Characterization and Modeling of Failure Initiation in Bainite-Aided DP Steel. <i>Advanced Engineering Materials</i> , 2014, 16, 1370-1380.	3.5	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. <i>International Journal of Materials Research</i> , 2020, 111, 392-404.	0.3	18
54	Numerical Cooling Strategy Design for Hot Rolled Dual Phase Steel. <i>Steel Research International</i> , 2010, 81, 1001-1009.	1.8	17

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55	Experimental Investigations and Multiscale Modeling to Study the Effect of Sulfur Content on Formability of 16MnCr5 Alloy Steel. <i>Steel Research International</i> , 2019, 90, 1800369.	1.8	17
56	Strain Hardening, Damage and Fracture Behavior of Al-Added High Mn TWIP Steels. <i>Metals</i> , 2019, 9, 367.	2.3	16
57	Investigating the Effect of Cementite Particle Size and Distribution on Local Stress and Strain Evolution in Spheroidized Medium Carbon Steels using Crystal Plasticity-Based Numerical Simulations. <i>Steel Research International</i> , 2021, 92, 2000407.	1.8	16
58	Numerical Benchmark of Phase-Field Simulations with Elastic Strains: Precipitation in the Presence of Chemo-Mechanical Coupling. <i>Computational Materials Science</i> , 2018, 155, 541-553.	3.0	15
59	Microstructure and Texture Evolution during Twin-Roll Casting and Annealing of a Mg-6.8Y-2.5Zn-0.4Zr Alloy (WZ73). <i>Crystals</i> , 2020, 10, 513.	2.2	15
60	Influence of Non-Metallic Inclusions on Local Deformation and Damage Behavior of Modified 16MnCr5 Steel. <i>Crystals</i> , 2022, 12, 281.	2.2	15
61	Towards integrative computational materials engineering of steel components. <i>Production Engineering</i> , 2011, 5, 373-382.	2.3	14
62	Experimental quantification of carbon gradients in martensite and its multi-scale effects in a DP steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 718, 250-259.	5.6	14
63	Microstructural adjustment of carburized steel components towards reducing the quenching-induced distortion. <i>Journal of Materials Processing Technology</i> , 2019, 264, 313-327.	6.3	14
64	Thermodynamics of martensite formation in Fe-Mn-Al-Ni shape memory alloys. <i>Scripta Materialia</i> , 2021, 192, 26-31.	5.2	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. <i>Crystals</i> , 2021, 11, 759.	2.2	14
66	Phase-field modelling of microstructure evolution during processing of cold-rolled dual phase steels. <i>Integrating Materials and Manufacturing Innovation</i> , 2012, 1, 19-31.	2.6	13
67	Hot Deformation Behavior and Microstructural Evolution of a Nickel-Free Austenitic Steel with High Nitrogen Content. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013, 44, 5549-5555.	2.2	13
68	Failure Initiation in Dual-Phase Steel. <i>Key Engineering Materials</i> , 2013, 586, 67-71.	0.4	13
69	Autonomous Interpretation of the Microstructure of Steels and Special Alloys. <i>Materials Science Forum</i> , 0, 949, 24-31.	0.3	13
70	On Attempting to Create a Virtual Laboratory for Application-Oriented Microstructural Optimization of Multi-Phase Materials. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 1506.	2.5	13
71	Damage parameter identification by a periodic homogenization approach. <i>Computational Materials Science</i> , 2002, 25, 159-165.	3.0	12
72	Thermodynamical Simulation of Carbon Profiles and Precipitation Evolution during High Temperature Case Hardening. <i>Steel Research International</i> , 2010, 81, 472-476.	1.8	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. <i>Procedia Manufacturing</i> , 2019, 27, 203-208.	1.9	12
74	Microstructure and Hot Deformation Behavior of Twin Roll Cast Mg-2Zn-1Al-0.3Ca Alloy. <i>Materials</i> , 2019, 12, 1020.	2.9	12
75	Influence of post-carburizing heat treatment on the core microstructural evolution and the resulting mechanical properties in case-hardened steel components. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 744, 778-789.	5.6	12
76	Modelling of Microstructure and Flow Stress Evolution during Hot Forging. <i>Steel Research International</i> , 2010, 81, 1102-1116.	1.8	11
77	Effect of cutting method on hydrogen embrittlement of high-Mn TWIP steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 744, 10-20.	5.6	11
78	GTN Model-Based Material Parameters of AZ31 Magnesium Sheet at Various Temperatures by Means of SEM In-Situ Testing. <i>Crystals</i> , 2020, 10, 856.	2.2	11
79	Deformation Behavior, Structure, and Properties of an Aging Ti-Ni Shape Memory Alloy after Compression Deformation in a Wide Temperature Range. <i>Jom</i> , 2021, 73, 620-629.	1.9	11
80	Deformation Behavior, Structure and Properties of an Equiatomic Ti-Ni Shape Memory Alloy Compressed in a Wide Temperature Range. <i>Transactions of the Indian Institute of Metals</i> , 2021, 74, 2419-2426.	1.5	11
81	Micromechanical Damage Simulations of TRIP Steels. <i>Materials Science Forum</i> , 2003, 426-432, 1355-1360.	0.3	10
82	Optimal Control of a Cooling Line for Production of Hot Rolled Dual Phase Steel. <i>Steel Research International</i> , 2014, 85, 1328-1333.	1.8	10
83	Investigation of microstructure and mechanical properties of friction stir welded AA6016-T4 and DC04 alloy joints. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 94, 4209-4219.	3.0	10
84	The Investigation on Flow Behavior of Powder Metallurgy Ti-10V-2Fe-3Al Alloy Using the Prasad Stability Criterion. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 5314-5323.	2.2	10
85	Core microstructure-dependent bending fatigue behavior and crack growth of a case-hardened steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 762, 138040.	5.6	10
86	Fast algorithms for phase transformations in dual phase steels on a hot strip mill run-out table (ROT). <i>Archives of Civil and Mechanical Engineering</i> , 2012, 12, 305-311.	3.8	9
87	The Development of Incremental Sheet Forming from Flexible Forming to Fully Integrated Production of Sheet Metal Parts. <i>Lecture Notes in Production Engineering</i> , 2015, , 117-129.	0.4	9
88	Multiphase-Field Simulation of Cementite Precipitation during Isothermal Lower Bainitic Transformation. <i>Steel Research International</i> , 2018, 89, 1800028.	1.8	9
89	Specific Features of Microstructural Evolution During Hot Rolling of the As-Cast Magnesium-Rich Aluminum Alloys with Added Transition Metal Elements. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 5782-5799.	2.2	9
90	Thermo-micro-mechanical simulation of metal forming processes. <i>International Journal of Solids and Structures</i> , 2019, 178-179, 59-80.	2.7	9

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91	Correlating magnetic properties of ferritic NO electrical steel containing 2.4Åm.%Si with hot strip microstructure. Journal of Magnetism and Magnetic Materials, 2020, 501, 166431.	2.3	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.	2.9	9
93	Numerical Modelling of Toughness and Failure Processes in Steel Structures. Steel Research International, 2007, 78, 224-235.	1.8	8
94	Modeling of the uniaxial tensile and compression behavior of semi-solid A356 alloys. Computational Materials Science, 2009, 45, 633-637.	3.0	8
95	Modelling of grain boundary dynamics using amplitude equations. Continuum Mechanics and Thermodynamics, 2017, 29, 895-911.	2.2	8
96	Laminated TRIP/TWIP Steel Composites Produced by Roll Bonding. Metals, 2019, 9, 195.	2.3	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.	0.6	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.	1.8	8
99	Designing New Forging Steels by ICMPE. Lecture Notes in Production Engineering, 2015, , 85-98.	0.4	8
100	A multiscale perspective on the kinetics of solid state transformations with application to bainite formation. AIMS Materials Science, 2015, 2, 319-345.	1.4	8
101	Software Solutions for ICME. Jom, 2016, 68, 70-76.	1.9	7
102	Cutting Simulations of Two Gear Steels with Microstructure Dependent Material Laws. Procedia CIRP, 2017, 58, 549-554.	1.9	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.	5.6	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.	2.2	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.	3.0	7
106	FeinkornbestÄndigkeit von Bauteilen aus dem mikrolegierten Werkstoff 18CrNiMo7-6 in AbhÄngigkeit der Prozesskette. HTM - Journal of Heat Treatment and Materials, 2010, 65, 257-268.	0.2	7
107	Exploring the StructureÄ“Property Relationship in Spheroidized C45EC Steel Using Full Phase Crystal Plasticity Numerical Simulations. Steel Research International, 2022, 93, 2100452.	1.8	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.	2.2	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.	2.2	7
110	Damage evolution in experiments and simulation in a construction steel. Computational Materials Science, 1999, 16, 206-212.	3.0	6
111	Characterization of Gas Metal Arc Welded Hot Rolled DP600 Steel. Steel Research International, 2011, 82, 1408-1416.	1.8	6
112	Industrial Needs for ICME. Jom, 2016, 68, 59-69.	1.9	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.	1.8	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.	6.3	6
115	Experimental and Numerical Investigations into the Failure Mechanisms of TRIP700 Steel Sheets. Metals, 2018, 8, 1073.	2.3	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.	1.8	6
117	Shear and laser cutting effects on hydrogen embrittlement of a high-Mn TWIP steel. Engineering Failure Analysis, 2020, 108, 104243.	4.0	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.	5.3	6
120	Direct, Mold-Less Production Systems. , 2017, , 23-111.		6
121	Integrated Process Simulation of Non-Oriented Electrical Steel. Materials, 2021, 14, 6659.	2.9	6
122	Experimental and Numerical Failure Criteria for Sheet Metal Forming. Steel Research International, 2007, 78, 762-770.	1.8	5
123	Simulation of Welding and Distortion in Ship Building. Advanced Engineering Materials, 2010, 12, 153-157.	3.5	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.	0.9	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.	1.8	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.	1.8	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.	2.2	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.	2.9	5
131	Investigation of the Deformation Behaviour and Resulting Ply Thicknesses of Multilayered Fibre-Metal Laminates. Journal of Composites Science, 2021, 5, 176.	3.0	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.	5.6	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.	1.8	4
135	Experimental characterisation of a semi-solid A356 alloy during solidification and remelting. International Journal of Cast Metals Research, 2009, 22, 248-251.	1.0	4
136	Impact of the Microstructure on the UO Forming Simulations of a Ferrite-Pearlite Pipeline Tube. Steel Research International, 2014, 85, 1083-1098.	1.8	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, , .	0.4	4
140	Microstructure-based approach to predict the machinability of the ferritic-pearlitic steel C60 by cutting operations. Procedia CIRP, 2019, 82, 107-112.	1.9	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	Interpass Softening Behavior of Fe-16Cr-xMn-4Ni-0.05C-0.17N Steel. Advanced Engineering Materials, 2019, 21, 1800692.	3.5	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.	0.4	4

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145	Low-loss FeSi sheet for energy-efficient electrical drives. AIMS Materials Science, 2018, 5, 1184-1198.	1.4	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.	2.3	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.	0.6	3
148	Modeling Bainite Transformation and Retained Austenite in Hot Rolled TRIP Steel by Instantaneous Carbon Enrichment. Steel Research International, 2017, 88, 1700122.	1.8	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.	2.3	3
151	Analysis of defects in a twin roll cast $\langle \text{Mg-6.8Y-2.5Zn} \rangle$ magnesium alloy. Engineering Reports, 2022, 4, e12394.	1.7	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.	0.4	3
153	Simulation der Ausscheidungsentwicklung entlang der Prozesskette für das Hochtemperatur-Aufkohlen*. HTM - Journal of Heat Treatment and Materials, 2011, 66, 217-229.	0.2	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 Particles – Part I: Model Development and Case Studies. Advanced Engineering Materials, 2022, 24, .	3.5	3
156	Quantification of Phase Transformation Kinetics under Thermomechanical Conditions Using Dilatometry Data. Advanced Materials Research, 0, 622-623, 581-584.	0.3	2
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