Wolfram Volk

List of Publications by Year
in descending order

182 papers	2,161 citations	331538 21 h-index	345118 36 g-index
187 all docs	187 docs citations	187 times ranked	1303 citing authors

#	Article	IF	Citations
1	On theoretical and numerical methods in the theory of porous media based on polar and non-polar elasto-plastic solid materials. International Journal of Solids and Structures, 1998, 35, 4597-4617.	1.3	111
2	New algorithm for a robust user-independent evaluation of beginning instability for the experimental FLC determination. International Journal of Material Forming, 2011, 4, 339-346.	0.9	111
3	Influence of shear cutting parameters on the electromagnetic properties of non-oriented electrical steel sheets. Journal of Magnetism and Magnetic Materials, 2017, 421, 250-259.	1.0	85
4	Effect of processing route on texture and cold formability of AZ31 Mg alloy sheets processed by ECAP. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 669, 159-170.	2.6	84
5	From discrete element simulations to a continuum model. Computer Methods in Applied Mechanics and Engineering, 2001, 191, 21-28.	3.4	61
6	Improvement in cold formability of AZ31 magnesium alloy sheets processed by equal channel angular pressing. Journal of Materials Processing Technology, 2015, 217, 286-293.	3.1	60
7	Models and modelling for process limits in metal forming. CIRP Annals - Manufacturing Technology, 2019, 68, 775-798.	1.7	57
8	Enhanced mechanical behavior and reduced mechanical anisotropy of AZ31 Mg alloy sheet processed by ECAP. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 650, 523-529.	2.6	56
9	Impact of Punching Parameter Variations on Magnetic Properties of Nongrain-Oriented Electrical Steel. IEEE Transactions on Industry Applications, 2018, 54, 5869-5878.	3.3	44
10	An artificial neural network approach for tool path generation in incremental sheet metal free-forming. Journal of Intelligent Manufacturing, 2019, 30, 757-770.	4.4	40
11	Failure prediction for nonlinear strain paths in sheet metal forming. CIRP Annals - Manufacturing Technology, 2012, 61, 259-262.	1.7	38
12	3D Printing of Inorganic Sand Moulds for Casting Applications. Advanced Materials Research, 0, 1018, 441-449.	0.3	36
13	Implementation and evaluation of optical flow methods for two-dimensional deformation measurement in comparison to digital image correlation. Optics and Lasers in Engineering, 2018, 107, 127-141.	2.0	36
14	Shear cutting of press hardened steel: influence of punch chamfer on process forces, tool stresses and sheared edge qualities. Production Engineering, 2012, 6, 413-420.	1.1	34
15	In-situ measurement of phase transformation kinetics in austempered ductile iron. Materials Characterization, 2013, 85, 124-133.	1.9	34
16	Strain-induced selective grain growth in AZ31 Mg alloy sheet deformed by equal channel angular pressing. Materials Characterization, 2016, 113, 98-107.	1.9	33
17	Experimental Investigations on the Influence of the Thermal Conditions During Composite Casting on the Microstructure of Cuâ€“Al Bilayer Compounds. International Journal of Metalcasting, 2018, 12, 79-88.	1.5	28
18	Regenerated Bragg Grating Sensor Array for Temperature Measurements During an Aluminum Casting Process. IEEE Sensors Journal, 2018, 18, 5352-5360.	2.4	28

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19	Modelling the microstructure and computing effective elastic properties of sand core materials. International Journal of Solids and Structures, 2018, 143, 1-17.	1.3	27
20	Burr-free cutting edges by notch-shear cutting. Journal of Materials Processing Technology, 2017, 249, 229-245.	3.1	25
21	Prediction of formability for non-linear deformation history using generalized forming limit concept (GFLC). AIP Conference Proceedings, 2013, , .	0.3	24
22	Development of a continuous composite casting process for the production of bilayer aluminium strips. Journal of Materials Processing Technology, 2014, 214, 1445-1455.	3.1	24
23	Determining the Influence of Shear Cutting Parameters on the Edge Cracking Susceptibility of High-strength-steels Using the Edge-fracture-tensile-test. Procedia CIRP, 2016, 41, 1078-1083.	1.0	22
24	Interaction of heat generation and material behaviour in sheet metal blanking. CIRP Annals - Manufacturing Technology, 2015, 64, 249-252.	1.7	20
25	Composite Casting and Characterization of Cuâ€“Al Bilayer Compounds. International Journal of Metalcasting, 2020, 14, 155-166.	1.5	20
26	In-Situ High Temperature and Large Strain Monitoring During a Copper Casting Process Based on Regenerated Fiber Bragg Grating Sensors. Journal of Lightwave Technology, 2021, 39, 6660-6669.	2.7	20
27	On the correlation between thermoelectricity and adhesive tool wear during blanking of aluminum sheets. International Journal of Machine Tools and Manufacture, 2017, 118-119, 91-97.	6.2	18
28	Neutron grating interferometry investigation of punching-related local magnetic property deteriorations in electrical steels. Journal of Magnetism and Magnetic Materials, 2019, 474, 643-653.	1.0	18
29	Material Design for Low-Loss Non-Oriented Electrical Steel for Energy Efficient Drives. Materials, 2021, 14, 6588.	1.3	18
30	Strain Measurement in Aluminium Alloy during the Solidification Process Using Embedded Fibre Bragg Gratings. Sensors, 2016, 16, 1853.	2.1	17
31	Fabrication and processing of metallurgically bonded copper bimetal sheets. Journal of Materials Processing Technology, 2019, 263, 33-41.	3.1	17
32	Digital sand core physics: Predicting physical properties of sand cores by simulations on digital microstructures. International Journal of Solids and Structures, 2020, 188-189, 155-168.	1.3	16
33	The influence of freeform bending process parameters on residual stresses for steel tubes. Advances in Industrial and Manufacturing Engineering, 2021, 2, 100047.	1.2	16
34	Reduction of Burr Formation for Conventional Shear Cutting of Boron-alloyed Sheets through Focused Heat Treatment. Procedia CIRP, 2017, 63, 493-498.	1.0	15
35	Fiber Bragg Sensors Embedded in Cast Aluminum Parts: Axial Strain and Temperature Response. Sensors, 2021, 21, 1680.	2.1	15
36	Automated driving for individualized sheet metal part productionâ€”A neural network approach. Robotics and Computer-Integrated Manufacturing, 2015, 35, 144-150.	6.1	14

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37	Experimental Investigation of the Influence of Punch Velocity on the Springback Behavior and the Flat Length in Free Bending. Procedia CIRP, 2016, 41, 1066-1071.	1.0	14
38	Analysis of shear cutting of dual phase steel by application of an advanced damage model. Procedia Structural Integrity, 2016, 2, 1700-1707.	0.3	14
39	In Situ Study of the Influence of Nickel on the Phase Transformation Kinetics in Austempered Ductile Iron. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 661-671.	1.1	14
40	On the influence of Seebeck coefficients on adhesive tool wear during sheet metal processing. CIRP Annals - Manufacturing Technology, 2017, 66, 293-296.	1.7	14
41	Impact of the interaction of material production and mechanical processing on the magnetic properties of non-oriented electrical steel. AIP Advances, 2018, 8, .	0.6	14
42	Compensation for Geometrical Deviations in Additive Manufacturing. Technologies, 2019, 7, 83.	3.0	14
43	High order thin-walled solid finite elements applied to elastic spring-back computations. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 5377-5389.	3.4	13
44	On the Influence of Different Parameters on the Characteristic Cutting Surface when Shear Cutting Aluminum. Procedia CIRP, 2017, 63, 230-235.	1.0	13
45	Geometrical compensation of deterministic deviations for part finishing in bulk forming. Journal of Materials Processing Technology, 2018, 261, 140-148.	3.1	13
46	Temperature-based determination of the onset of yielding using a new clip-on device for tensile tests. Procedia Manufacturing, 2019, 29, 490-497.	1.9	13
47	Mechanical characterization of as-cast AA7075/6060 and CuSn6/Cu99.5 compounds using an experimental and numerical push-out test. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 751, 214-225.	2.6	13
48	Measurement of strain, strain rate and crack evolution in shear cutting. Journal of Materials Processing Technology, 2021, 288, 116872.	3.1	13
49	Characterisation of the decoring behaviour of inorganically bound cast-in sand cores for light metal casting. Journal of Materials Processing Technology, 2021, 296, 117201.	3.1	13
50	Simulation Assisted Analysis of Material Flow in Roller Clinched Joints. Advanced Materials Research, 2014, 966-967, 628-640.	0.3	12
51	Joining Aluminium Alloy and Mild Steel Sheets by Roller Clinching. Applied Mechanics and Materials, 0, 794, 295-303.	0.2	12
52	Experimental investigation of the lateral forces during shear cutting with an open cutting line. Journal of Materials Processing Technology, 2016, 238, 49-54.	3.1	12
53	Thermal Analysis and Production of As-Cast Al 7075/6060 Bilayer Billets. International Journal of Metalcasting, 2019, 13, 817-829.	1.5	12
54	Transition from purely elastic to viscoelastic behavior of silica optical fibers at high temperatures characterized using regenerated Bragg gratings. Optics Express, 2020, 28, 7323.	1.7	12

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55	Edge crack test methods for AHSS steel grades: A review and comparisons. Journal of Materials Processing Technology, 2022, 302, 117488.	3.1	12
56	Magnetic Material Deterioration of Non-Oriented Electrical Steels as a Result of Plastic Deformation Considering Residual Stress Distribution. IEEE Transactions on Magnetics, 2018, 54, 1-5.	1.2	11
57	Adaptive wear model for shear-cutting simulation with open cutting line. Wear, 2017, 386-387, 17-28.	1.5	10
58	Experimental prediction of sheet metal formability of AW-5754 for non-linear strain paths by using a cruciform specimen and a blank holder with adjustable draw beads on a sheet metal testing machine. International Journal of Material Forming, 2017, 10, 597-605.	0.9	10
59	FEA-based development of a new tool for systematic experimental validation of nonlinear strain paths and design of test specimens. AIP Conference Proceedings, 2017, , .	0.3	10
60	Extent of embossing-related residual stress on the magnetic properties evaluated using neutron grating interferometry and single sheet test. Production Engineering, 2019, 13, 211-217.	1.1	10
61	Production of aluminum AA7075/6060 compounds by die casting and hot extrusion. Journal of Materials Processing Technology, 2020, 280, 116594.	3.1	10
62	Vertical continuous compound casting of copper aluminum bilayer rods. Journal of Materials Processing Technology, 2021, 288, 116854.	3.1	10
63	Model adaptivity for industrial application of sheet metal forming simulation. Finite Elements in Analysis and Design, 2010, 46, 585-600.	1.7	9
64	Simulation-Based Prediction of the Fracture Elongation as a Failure Criterion for Thin-Walled High-Pressure Die Casting Components. International Journal of Metalcasting, 2014, 8, 47-54.	1.5	9
65	Optical Measurement Techniques Determine Youngâ€™s Modulus of Sand Core Materials. International Journal of Metalcasting, 2016, 10, 524-530.	1.5	9
66	Evaluation of non-linear strain paths using Generalized Forming Limit Concept and a modification of the Time Dependent Evaluation Method. International Journal of Material Forming, 2017, 10, 345-351.	0.9	9
67	Investigation and Compensation of Biaxial Pre-strain During the Standard Nakajima- and Marciniak-test Using Generalized Forming Limit Concept. Procedia Engineering, 2017, 207, 568-573.	1.2	9
68	On the opportunities of problem- and process-adapted shear cutting simulations for effective process design. Procedia Engineering, 2017, 207, 1570-1575.	1.2	9
69	Fracture Statistics for Inorganically-Bound Core Materials. Materials, 2018, 11, 2306.	1.3	9
70	Knowledge-based incremental sheet metal free-forming using probabilistic density functions and voronoi partitioning. Procedia Manufacturing, 2019, 29, 4-11.	1.9	9
71	In-situ strain measurements in the plastic deformation regime inside casted parts using fibre-optical strain sensors. Production Engineering, 2019, 13, 351-360.	1.1	9
72	Casting methods for the production of rotationally symmetric copper bimetals. Materials Science and Technology, 2020, 36, 906-916.	0.8	9

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73	Shear cutting induced residual stresses in involute gears and resulting tooth root bending strength of a fineblanked gear. Archive of Applied Mechanics, 2021, 91, 3679-3692.	1.2	9
74	A Plane Stress Failure Criterion for Inorganically-Bound Core Materials. Materials, 2021, 14, 247.	1.3	9
75	Influence of Process Parameters on Grain Size and Texture Evolution of Fe-3.2 wt.-% Si Non-Oriented Electrical Steels. Materials, 2021, 14, 6822.	1.3	9
76	Notch Shear Cutting of Press Hardened Steels. Key Engineering Materials, 2015, 639, 477-484.	0.4	8
77	Strain rate sensitivity of DC06 for high strains under biaxial stress in hydraulic bulge test and under uniaxial stress in tensile test. International Journal of Material Forming, 2017, 10, 453-461.	0.9	8
78	Residual stresses in parts manufactured by near-net-shape-blanking. Production Engineering, 2019, 13, 181-188.	1.1	8
79	Interface Formation and Characterization of Brass/Aluminum Compounds Fabricated Through Die Casting and Semi-Continuous Casting. International Journal of Metalcasting, 2020, 14, 564-579.	1.5	8
80	Acoustical and Optical Determination of Mechanical Properties of Inorganically-Bound Foundry Core Materials. Materials, 2020, 13, 2531.	1.3	8
81	A System Identification and Implementation of a Soft Sensor for Freeform Bending. Materials, 2021, 14, 4549.	1.3	8
82	Grain Size Influence on the Magnetic Property Deterioration of Blanked Non-Oriented Electrical Steels. Materials, 2021, 14, 7055.	1.3	8
83	Characterization of the Thermoelectric Behavior of Plastically Deformed Steels by Means of Relative Seebeck Coefficient. Materials Science Forum, 0, 755, 1-7.	0.3	7
84	Improvement of Ductility at Room Temperature of Mg-3Al-1Zn Alloy Sheets Processed by Equal Channel Angular Pressing. Procedia Engineering, 2014, 81, 1517-1522.	1.2	7
85	Influence of Kinematics During Roller Clinching on Joint Properties. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2015, 137, .	1.3	7
86	Tool-integrated spring back measuring system for automotive press shops. Production Engineering, 2017, 11, 307-313.	1.1	7
87	Process-integrated Compensation of Geometrical Deviations for Bulk Forming. Procedia Engineering, 2017, 207, 466-471.	1.2	7
88	Influence of tool elasticity on process forces and joint properties during clinching with rotational tool movement. Journal of Physics: Conference Series, 2017, 896, 012116.	0.3	7
89	Numerical Analysis of the Scalability of Roller Clinching Processes. Key Engineering Materials, 0, 767, 377-385.	0.4	7
90	Tensile properties of aluminium 4047A built in droplet-based metal printing. Rapid Prototyping Journal, 2019, 25, 427-432.	1.6	7

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91	Phase Transition Kinetics in Austempered Ductile Iron (ADI) with Regard to Mo Content. Materials, 2020, 13, 5266.	1.3	7
92	Impact of residual stress evoked by pyramidal embossing on the magnetic material properties of non-oriented electrical steel. Archive of Applied Mechanics, 2021, 91, 3513-3526.	1.2	7
93	In-situ measurement of higher-order strain derivatives for advanced analysis of forming processes using spatio-temporal optical flow. CIRP Annals - Manufacturing Technology, 2021, 70, 251-254.	1.7	7
94	In Situ Strain Measurements during Casting Using Neutron Diffraction. Materials Science Forum, 2013, 768-769, 484-491.	0.3	6
95	Methods to Decrease Cut Edge Sensitivity of High Strength Steels. Key Engineering Materials, 2014, 611-612, 1294-1307.	0.4	6
96	Decrease of Springback by Geometrical Modification of the Sheet Metal Part. Advanced Materials Research, 0, 1018, 277-284.	0.3	6
97	Edge-Fracture-Tensile-Test. , 2015, , 193-198.		6
98	Support for Ingate Design by Analysing the Geometry of High Pressure Die Cast Geometries Using Dijkstraâ€™s Shortest Path Algorithm. Advanced Materials Research, 0, 1140, 400-407.	0.3	6
99	Variation of components by automated driving. International Journal of Material Forming, 2016, 9, 9-19.	0.9	6
100	Notch Shear Cutting of Aluminum Alloys. Procedia Engineering, 2017, 183, 53-58.	1.2	6
101	Open hole tensile tests for the determination of the edge-crack sensitivity of sheared holes dependent on specimen geometry, cutting parameters, and the notch factor. Procedia Manufacturing, 2019, 29, 412-419.	1.9	6
102	Numerical and Experimental Study on ECAP-Processing Parameters for Efficient Grain Refinement of AA5083 Sheet Metal. Key Engineering Materials, 0, 794, 315-323.	0.4	6
103	Data-Driven Compensation for Bulk Formed Parts Based on Material Point Tracking. Key Engineering Materials, 0, 794, 277-284.	0.4	6
104	Introduction to residual stresses in production technology. Production Engineering, 2019, 13, 119-121.	1.1	6
105	Calibration of cast-in fibre Bragg gratings for internal strain measurements in cast aluminium by using neutron diffraction. Measurement: Journal of the International Measurement Confederation, 2020, 163, 107939.	2.5	6
106	Combining Structural Optimization and Process Assurance in Implicit Modelling for Casting Parts. Materials, 2021, 14, 3715.	1.3	6
107	Integrated Process Simulation of Non-Oriented Electrical Steel. Materials, 2021, 14, 6659.	1.3	6
108	Evaluation of Experimental Forming Limit Curves and Investigation of Strain Rate Sensitivity for the Start of Local Necking. AIP Conference Proceedings, 2011, , .	0.3	5

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109	Automated Driving by Standardizing and Scaling the Manufacturing Strategy. Procedia CIRP, 2012, 3, 138-143.	1.0	5
110	Experimental analysis of Roman coin minting. Journal of Archaeological Science: Reports, 2019, 25, 498-506.	0.2	5
111	Manufacturing efficient electrical motors with a predictive maintenance approach. CIRP Annals - Manufacturing Technology, 2019, 68, 253-256.	1.7	5
112	Influence of non-proportional load paths and change in loading direction on the failure mode of sheet metals. CIRP Annals - Manufacturing Technology, 2020, 69, 273-276.	1.7	5
113	Evaluation of Strain Transition Properties between Cast-In Fibre Bragg Gratings and Cast Aluminium during Uniaxial Straining. Sensors, 2020, 20, 6276.	2.1	5
114	A Combined Numerical and Experimental Investigation on Deterministic Deviations in Hot Forging Processes. Procedia Manufacturing, 2020, 47, 295-300.	1.9	5
115	Characterization Methods along the Process Chain of Electrical Steel Sheetâ€"From Best Practices to Advanced Characterization. Materials, 2022, 15, 32.	1.3	5
116	In-situ analysis of the thermoelastic effect and its relation to the onset of yielding of low carbon steel. Materials and Design, 2022, 219, 110753.	3.3	5
117	Predicting Edge Cracks on Shear-Cut High-Strength Steels by Modified Uniaxial Tensile Tests. Key Engineering Materials, 0, 703, 49-55.	0.4	4
118	Tool setup to investigate scalability of roller clinching processes. Procedia Manufacturing, 2018, 15, 1338-1345.	1.9	4
119	MaterialModelerâ€"From experimental raw data to a material model. SoftwareX, 2019, 10, 100249.	1.2	4
120	Evaluation of Prediction Accuracy for Anisotropic Yield Functions Using Cruciform Hole Expansion Test. Journal of Manufacturing and Materials Processing, 2020, 4, 43.	1.0	4
121	The Frictional Force between Slug and Die in Shear Cutting after Material Separation. Key Engineering Materials, 0, 883, 285-293.	0.4	4
122	Influence of cutting parameters on mechanisms causing slug pulling. Production Engineering, 2021, 15, 833.	1.1	4
123	Temperature, thermoelectric current and adhesion formation during deep drawing. Wear, 2021, 477, 203839.	1.5	4
124	Forming-induced residual stresses: experiment, modeling, simulation. Archive of Applied Mechanics, 2021, 91, 3463-3464.	1.2	4
125	Rundpunkt-Clinchen mit rotierenden Werkzeugen. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2012, 107, 537-540.	0.2	4
126	Low-loss FeSi sheet for energy-efficient electrical drives. AIMS Materials Science, 2018, 5, 1184-1198.	0.7	4

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127	Characterization of the Thermoelectric Behavior of Plastically Deformed Steels. Journal of Electronic Materials, 2013, 42, 2371-2375.	1.0	3
128	Anisotropic plasticity model coupled with strain dependent plastic strain and stress ratios. CIRP Annals - Manufacturing Technology, 2013, 62, 283-286.	1.7	3
129	Studies on the Effect of Tool Wear on the Production Process in Two Stage Shear Cutting. Key Engineering Materials, 2015, 651-653, 1261-1270.	0.4	3
130	Manufacturing processes of multi-component gearwheels. Forschung Im Ingenieurwesen/Engineering Research, 2017, 81, 265-269.	1.0	3
131	Thermal process simulation of droplet based metal printing with aluminium. Production Engineering, 2018, 12, 457-464.	1.1	3
132	The influence of process parameters on the temperature development in the forming zone. MATEC Web of Conferences, 2018, 190, 14004.	0.1	3
133	Innovative measurement technique to determine equibiaxial flow curves of sheet metals using a modified Nakajima test. CIRP Annals - Manufacturing Technology, 2018, 67, 265-268.	1.7	3
134	Effect of One- and Two-Stage Shear Cutting on the Fatigue Strength of Truck Frame Parts. Journal of Manufacturing and Materials Processing, 2020, 4, 52.	1.0	3
135	Experimental and numerical investigations into the deformation and fracture behavior of intermetallics and base materials in as-cast Al-Cu compounds. Materials Today Communications, 2020, 25, 101278.	0.9	3
136	A Modular Car Body for Sustainable, Cost-Effective, and Versatile Vehicle Development. Technologies, 2021, 9, 13.	3.0	3
137	Homogenization of the interfacial bonding of compound-cast AA7075/6060 bilayer billets by co-extrusion. International Journal of Material Forming, 2021, 14, 1109-1119.	0.9	3
138	Analysis of salts for use as support structure in metal material jetting. Production Engineering, 2021, 15, 855-862.	1.1	3
139	Comparative Evaluation of Marking Methods on Cast Parts of Alâ€“Si Alloy with Image Processing. International Journal of Metalcasting, 0, , 1.	1.5	3
140	Evaluation and optimisation of a slurry-based layer casting process in additive manufacturing using multiphase simulations and spatial reconstruction. Production Engineering, 2022, 16, 43-54.	1.1	3
141	Mohrâ€“Coulomb characterisation of inorganically-bound core materials. Journal of Materials Processing Technology, 2021, 296, 117214.	3.1	3
142	A Method for Characterising the Influence of Casting Parameters on the Metallurgical Bonding of Copper and Steel Bimetals. Materials, 2021, 14, 6223.	1.3	3
143	Carbon nanotubesâ€“reinforced copper matrix composites produced by melt stirring. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems, 2013, 227, 63-66.	0.1	2
144	New Diagnostic Techniques for an Automated Hemming Validation of Hang-On Parts. Key Engineering Materials, 0, 639, 509-516.	0.4	2

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145	Efficient Parameterized Characterization of Manufacturing Strategies for Automated Copied Driving. Procedia CIRP, 2016, 41, 1090-1095.	1.0	2
146	Multi-component lightweight gearwheels with deep-drawn wheel body for automotive applications. Journal of Physics: Conference Series, 2017, 896, 012083.	0.3	2
147	Formability consideration during bead optimisation to stiffen deep drawn parts. Production Engineering, 2018, 12, 691-702.	1.1	2
148	Warm and cold blanking of manganese-boron steel 22MnB5 with different tool geometries. Procedia Manufacturing, 2019, 29, 345-352.	1.9	2
149	Low-risk bypassing of machine failure scenarios in automotive industry press shops by releasing overall capacity of the production networks. Journal of Manufacturing Systems, 2019, 52, 121-130.	7.6	2
150	Thermoelectrically Based Approaches to Reduce Adhesive Wear During Blanking. Jom, 2020, 72, 2525-2535.	0.9	2
151	Development of a numerical compensation framework for geometrical deviations in bulk metal forming exploiting a surrogate model and computed compatible stresses. International Journal of Material Forming, 2021, 14, 901-916.	0.9	2
152	Facing the Issues of Sheet Metal Equalâ€Channel Angular Pressing: A Modified Approach Using Stacks to Produce Ultrafineâ€Grained High Ductility AA5083 Sheets. Advanced Engineering Materials, 2021, 23, 2100244.	1.6	2
153	Springback and compensation in sheet metal forming reconsidered as an ill-posed problem. IOP Conference Series: Materials Science and Engineering, 2021, 1157, 012044.	0.3	2
154	Optimierung einer Probenform fÃ¼r den Kreuzzugversuch zur Bestimmung der GrenzformÃnderung. Materialpruefung/Materials Testing, 2015, 57, 205-213.	0.8	2
155	Feasibility of Acoustic Print Head Monitoring for Binder Jetting Processes with Artificial Neural Networks. Applied Sciences (Switzerland), 2021, 11, 10672.	1.3	2
156	Effect of Equal-Channel Angular Pressing and Targeted Heat Treatment on Aluminum AA7075 Sheet Metal. Minerals, Metals and Materials Series, 2022, , 25-36.	0.3	2
157	A knowledge-based automated driving approach for flexible production of individualized sheet metal parts. Knowledge-Based Systems, 2022, 244, 108558.	4.0	2
158	The Influence of Temperature on Zinc Abrasion in Deep Drawing Processes. Key Engineering Materials, 2014, 611-612, 1039-1046.	0.4	1
159	Optimization of the Modified Yoshida Buckling Test to Investigate the Influence of Curvature. Advanced Materials Research, 2016, 1140, 67-74.	0.3	1
160	Numerical investigation on the robustness of the roller clinching process. AIP Conference Proceedings, 2019, , .	0.3	1
161	The influence of process parameters and sheet material on the temperature development in the forming zone. Manufacturing Review, 2019, 6, 9.	0.9	1
162	Stress-Based Compensation of Geometrical Deviations in Metal Forming. , 2019, , 647-656.		1

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163	Method for highly spatially resolved determination of residual stress by using nanoindentation. Production Engineering, 2019, 13, 133-138.	1.1	1
164	A Novel Method for Measuring Elastic Modulus of Foundry Silicate Binders. International Journal of Metalcasting, 2020, 14, 423-431.	1.5	1
165	Full-Field Strain Measurement in Multi-stage Shear Cutting: High-Speed Camera Setup and Variational Motion Estimation. Minerals, Metals and Materials Series, 2021, , 1605-1615.	0.3	1
166	Analysis of Cylindrically and Spherically Embossed Flux Barriers in Non-oriented Electrical Steel. Minerals, Metals and Materials Series, 2021, , 2303-2318.	0.3	1
167	Detection of Core Fracture in Inorganically Bound Cast-in Sand Cores by Acoustic Microphony. , 2019, , 34-43.		1
168	Failure behaviour of various pre-formed steel sheets with respect to the mechanical grain boundary properties. International Journal of Material Forming, 2022, 15, .	0.9	1
169	Dynamic Strength Behaviour of Punch Connections in Shear Cutting Processes. Key Engineering Materials, 2013, 549, 262-269.	0.4	0
170	Designing a High-Speed Press with a Six-Bar Linkage Mechanism. Applied Mechanics and Materials, 0, 794, 411-418.	0.2	0
171	On the Development of Mg Sheets with Improved Formability by Applying Additional Shear Strain during Processing. Materials Science Forum, 0, 828-829, 395-400.	0.3	0
172	Determination of the bead geometry considering formability and stiffness effect using generalized forming limit concept (GFLC). Journal of Physics: Conference Series, 2016, 734, 032077.	0.3	0
173	Influence of process-related oxide formation during shaping of aluminum fiber mats in the mushy state. Production Engineering, 2016, 10, 227-240.	1.1	0
174	Validation of the stoning method by numerical and experimental investigation of outer panels with and without surface deflections. Journal of Physics: Conference Series, 2018, 1063, 012143.	0.3	0
175	Improvement of surface quality of 1.6220 cast steel by calibrating process and effects on material behavior. Production Engineering, 2018, 12, 797-806.	1.1	0
176	A holistic approach to lightweight design of multi-component gearwheels. IOP Conference Series: Materials Science and Engineering, 2018, 418, 012121.	0.3	0
177	Phase transition and microstructure investigation of perferritic isothermed ductile iron (IDI). International Journal of Cast Metals Research, 2020, 33, 233-241.	0.5	0
178	Co-Extrusion of Compound-Cast AA7075/6060 Bilayer Billets at Various Temperatures. Minerals, Metals and Materials Series, 2021, , 993-1001.	0.3	0
179	Influence of Shear Cutting Process Parameters on the Residual Stress State and the Fatigue Strength of Gears. Minerals, Metals and Materials Series, 2021, , 2331-2344.	0.3	0
180	Influence of Salt Support Structures on Material Jetted Aluminum Parts. Materials, 2021, 14, 4072.	1.3	0

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181	A Thermoelectrically Based Approach to Reduce Adhesive Wear During Blanking. Minerals, Metals and Materials Series, 2020, , 1993-2007.	0.3	0
182	Localization of cavities in cast components via impulse excitation and a finite element analysis. Production Engineering, 0, , .	1.1	0