## A Erman Tekkaya

List of Publications by Year in descending order

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481 papers

11,905 citations

46 h-index

50244

43868 91 g-index

506 all docs

506 docs citations

506 times ranked 4729 citing authors

#	Article	IF	CITATIONS
1	A review on hot stamping. Journal of Materials Processing Technology, 2010, 210, 2103-2118.	3.1	1,400
2	Electromagnetic forming—A review. Journal of Materials Processing Technology, 2011, 211, 787-829.	3.1	745
3	Joining by plastic deformation. CIRP Annals - Manufacturing Technology, 2013, 62, 673-694.	1.7	376
4	Hybrid processes in manufacturing. CIRP Annals - Manufacturing Technology, 2014, 63, 561-583.	1.7	316
5	Bulk forming of sheet metal. CIRP Annals - Manufacturing Technology, 2012, 61, 725-745.	1.7	307
6	Testing and modelling of material behaviour and formability in sheet metal forming. CIRP Annals - Manufacturing Technology, 2014, 63, 727-749.	1.7	185
7	Formability limits by fracture in sheet metal forming. Journal of Materials Processing Technology, 2014, 214, 1557-1565.	3.1	180
8	Modeling of ductile fracture from shear to balanced biaxial tension for sheet metals. International Journal of Solids and Structures, 2017, 112, 169-184.	1.3	179
9	Formability of Metallic Materials. Engineering Materials, 2000, , .	0.3	168
10	Hot profile extrusion of AA-6060 aluminum chips. Journal of Materials Processing Technology, 2009, 209, 3343-3350.	3.1	163
11	A comparison of orthogonal cutting data from experiments with three different finite element models. International Journal of Machine Tools and Manufacture, 2004, 44, 933-944.	6.2	160
12	State-of-the-art of simulation of sheet metal forming. Journal of Materials Processing Technology, 2000, 103, 14-22.	3.1	144
13	Incremental Bulk Metal Forming. CIRP Annals - Manufacturing Technology, 2007, 56, 635-656.	1.7	136
14	Metal forming beyond shaping: Predicting and setting product properties. CIRP Annals - Manufacturing Technology, 2015, 64, 629-653.	1.7	134
15	Closed-loop control of product properties in metal forming. CIRP Annals - Manufacturing Technology, 2016, 65, 573-596.	1.7	130
16	The Increased Forming Limits of Incremental Sheet Forming Processes. Key Engineering Materials, 0, 344, 621-628.	0.4	129
17	Biomechanical effects of rapid maxillary expansion on the craniofacial skeleton, studied by the finite element method. European Journal of Orthodontics, 1998, 20, 347-356.	1.1	128
18	Single point incremental forming of PVC. Journal of Materials Processing Technology, 2009, 209, 462-469.	3.1	126

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19	Single point incremental forming of polymers. CIRP Annals - Manufacturing Technology, 2009, 58, 229-232.	1.7	122
20	Velocity effects in metal forming and machining processes. CIRP Annals - Manufacturing Technology, 2011, 60, 627-650.	1.7	116
21	Characterization of fracture loci in metal forming. International Journal of Mechanical Sciences, 2014, 83, 112-123.	3.6	112
22	Flexibility in metal forming. CIRP Annals - Manufacturing Technology, 2018, 67, 743-765.	1.7	104
23	The Development of Ring Rolling Technology. Steel Research International, 2005, 76, 111-120.	1.0	102
24	Remote and Virtual Labs for Engineering Education 4.0. Procedia Manufacturing, 2018, 26, 1349-1360.	1.9	98
25	The new TSS bending process: 3D bending of profiles with arbitrary cross-sections. CIRP Annals - Manufacturing Technology, 2010, 59, 315-318.	1.7	96
26	An experimental and numerical investigation of different shear test configurations for sheet metal characterization. International Journal of Solids and Structures, 2014, 51, 1066-1074.	1.3	92
27	Environmental assessment of solid state recycling routes for aluminium alloys: Can solid state processes significantly reduce the environmental impact of aluminium recycling?. CIRP Annals - Manufacturing Technology, 2015, 64, 37-40.	1.7	90
28	Improving mechanical properties of chip-based aluminum extrudates by integrated extrusion and equal channel angular pressing (iECAP). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 539, 194-204.	2.6	89
29	Effect of die design on the welding quality during solid state recycling of AA6060 chips by hot extrusion. Materials Science & Description A: Structural Materials: Properties, Microstructure and Processing, 2013, 574, 163-175.	2.6	88
30	Experimental investigation of embedding high strength reinforcements in extrusion profiles. CIRP Annals - Manufacturing Technology, 2008, 57, 313-316.	1.7	76
31	Forming of Lightweight Metal Components: Need for New Technologies. Procedia Engineering, 2014, 81, 28-37.	1.2	73
32	A combined experimental–numerical investigation of ductile fracture in bending of a class of ferritic–martensitic steel. International Journal of Solids and Structures, 2012, 49, 1608-1626.	1.3	70
33	A new method for determining dynamic grain structure evolution during hot aluminum extrusion. Journal of Materials Processing Technology, 2012, 212, 323-330.	3.1	69
34	Lightweight in Automotive Components by Forming Technology. Automotive Innovation, 2020, 3, 195-209.	3.1	69
35	Characterization of anisotropy of sheet metals employing inhomogeneous strain fields for Yld2000-2D yield function. International Journal of Solids and Structures, 2012, 49, 3517-3527.	1.3	65
36	Damage in metal forming. CIRP Annals - Manufacturing Technology, 2020, 69, 600-623.	1.7	64

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37	A grooved in-plane torsion test for the investigation of shear fracture in sheet materials. International Journal of Solids and Structures, 2015, 66, 121-132.	1.3	63
38	Influence of groove characteristics on strength of form-fit joints. Journal of Materials Processing Technology, 2011, 211, 925-935.	3.1	61
39	A semi-empirical approach for residual stresses in electric discharge machining (EDM). International Journal of Machine Tools and Manufacture, 2006, 46, 858-868.	6.2	60
40	Damage Mechanisms and Mechanical Properties of High-Strength Multiphase Steels. Materials, 2018, 11, 761.	1.3	60
41	A cyclic twin bridge shear test for the identification of kinematic hardening parameters. International Journal of Mechanical Sciences, 2012, 59, 31-43.	3.6	59
42	Accuracy, reliability and validity of finite element analysis in metal forming: a user's perspective. Engineering Computations, 2009, 26, 1026-1055.	0.7	57
43	A New Shear Test for Sheet Metal Characterization. Steel Research International, 2011, 82, 323-328.	1.0	56
44	Cold extrusion of hot extruded aluminum chips. Journal of Materials Processing Technology, 2015, 217, 356-367.	3.1	56
45	An Improved Relationship between Vickers Hardness and Yield Stress for Cold Formed Materials and its Experimental Verification. CIRP Annals - Manufacturing Technology, 2000, 49, 205-208.	1.7	53
46	RESIDUAL STRESS STATE AND HARDNESS DEPTH IN ELECTRIC DISCHARGE MACHINING: DE-IONIZED WATER AS DIELECTRIC LIQUID. Machining Science and Technology, 2005, 9, 39-61.	1.4	52
47	The Development of Ring Rolling Technology - Part 2: Investigation of Process Behaviour and Production Equipment. Steel Research International, 2005, 76, 491-507.	1.0	47
48	Direct recycling of 1050 aluminum alloy scrap material mixed with 6060 aluminum alloy chips by hot extrusion. International Journal of Material Forming, 2010, 3, 853-856.	0.9	47
49	Numerical investigation of non-homogeneous plastic deformation in quenching process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 319-321, 164-169.	2.6	46
50	Advancements in the manufacturing of dies for hot aluminum extrusion with conformal cooling channels. International Journal of Advanced Manufacturing Technology, 2016, 83, 1209-1220.	1.5	46
51	High quality extrudates from aluminum chips by new billet compaction and deformation routes. CIRP Annals - Manufacturing Technology, 2012, 61, 239-242.	1.7	45
52	The Technical and Commercial Potential of an Incremental Ring Rolling Process. CIRP Annals - Manufacturing Technology, 2005, 54, 233-236.	1.7	44
53	Fundamentals of the incremental tube forming process. CIRP Annals - Manufacturing Technology, 2014, 63, 253-256.	1.7	44
54	Prediction of roughness after ball burnishing of thermally coated surfaces. Journal of Materials Processing Technology, 2015, 217, 193-201.	3.1	44

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55	Investigation of evolving yield surfaces of dual-phase steels. Journal of Materials Processing Technology, 2021, 287, 116314.	3.1	44
56	Forming-induced damage and its effects on product properties. CIRP Annals - Manufacturing Technology, 2017, 66, 281-284.	1.7	43
57	Influence of the flyer kinetics on magnetic pulse welding of tubes. Journal of Materials Processing Technology, 2018, 262, 189-203.	3.1	43
58	Microstructure analysis of aluminum extrusion: Prediction of microstructure on AA6060 alloy. Journal of Materials Processing Technology, 2008, 201, 156-162.	3.1	42
59	Controlling heat balance in hot aluminum extrusion by additive manufactured extrusion dies with conformal cooling channels. International Journal of Precision Engineering and Manufacturing, 2013, 14, 1487-1493.	1.1	42
60	Thermo-mechanical coupled simulation of hot stamping components for process design. Production Engineering, 2007, 1, 85-89.	1.1	41
61	Analytical methodology for the process design of electromagnetic crimping. Journal of Materials Processing Technology, 2015, 222, 163-180.	3.1	41
62	Analytical approach for magnetic pulse welding of sheet connections. Journal of Materials Processing Technology, 2016, 230, 131-142.	3.1	39
63	Determining Stress-Strain Curves of Sheet Metal in the Plane Torsion Test. CIRP Annals - Manufacturing Technology, 1982, 31, 171-174.	1.7	38
64	Microstructure analysis of aluminum extrusion: grain size distribution in AA6060, AA6082 and AA7075 alloys. Journal of Mechanical Science and Technology, 2007, 21, 1445-1451.	0.7	38
65	Hot Extrusion Dies with Conformal Cooling Channels Produced by Additive Manufacturing. Materials Today: Proceedings, 2015, 2, 4838-4846.	0.9	38
66	Application of Continuum Damage Mechanics in discontinuous crack formation: Forward extrusion chevron predictions. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2008, 88, 436-453.	0.9	37
67	Numerical simulation of various cross sectional workpieces using conventional deep drawing and hydroforming technologies. International Journal of Machine Tools and Manufacture, 2008, 48, 532-542.	6.2	36
68	Textured surfaces for deep drawing tools by rolling. International Journal of Machine Tools and Manufacture, 2010, 50, 969-976.	6.2	36
69	Setting Mechanical Properties of High Strength Steels for Rapid Hot Forming Processes. Materials, 2016, 9, 229.	1.3	36
70	Determining cyclic flow curves using the in-plane torsion test. CIRP Annals - Manufacturing Technology, 2015, 64, 261-264.	1.7	34
71	Granular media-based tube press hardening. Journal of Materials Processing Technology, 2016, 228, 145-159.	3.1	34
72	Manufacturing of functional elements by sheet-bulk metal forming processes. Production Engineering, 2016, 10, 63-80.	1.1	33

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73	Global and High-Resolution Damage Quantification in Dual-Phase Steel Bending Samples with Varying Stress States. Metals, 2019, 9, 319.	1.0	33
74	Innovative Machine Concepts for 3D Bending of Tubes and Profiles. Key Engineering Materials, 0, 473, 37-42.	0.4	32
75	Modeling and finite element simulation of loading-path-dependent hardening in sheet metals during forming. International Journal of Plasticity, 2014, 63, 64-93.	4.1	32
76	Residual Stresses in Cold-Formed Workpieces. CIRP Annals - Manufacturing Technology, 1985, 34, 225-230.	1.7	30
77	Recycling of Aluminum Chips by Hot Extrusion with Subsequent Cold Extrusion. Procedia Engineering, 2014, 81, 652-657.	1.2	30
78	Uniform Pressure Electromagnetic Actuator – An Innovative Tool for Magnetic Pulse Welding. Procedia CIRP, 2014, 18, 156-161.	1.0	30
79	Analytical contact pressure model for predicting roughness of ball burnished surfaces. Journal of Materials Processing Technology, 2016, 232, 63-77.	3.1	30
80	Finite element simulation of quench hardening. Steel Research = Archiv Für Das Eisenhüttenwesen, 1996, 67, 298-306.	0.2	29
81	Production of low-volume aviation components using disposable electromagnetic actuators. Journal of Materials Processing Technology, 2011, 211, 886-895.	3.1	29
82	Plastic flow and failure in single point incremental forming of PVC sheets. EXPRESS Polymer Letters, 2014, 8, 301-311.	1.1	29
83	Thermally sprayed finestructured WC-12Co coatings finished by ball burnishing and grinding as an innovative approach to protect forming tools against wear. Surface and Coatings Technology, 2015, 268, 134-141.	2.2	29
84	Experimental and numerical analysis of tribological effective surfaces for forming tools in Sheet-Bulk Metal Forming. Production Engineering, 2016, 10, 37-50.	1.1	29
85	Material characterization for plane and curved sheets using the in-plane torsion test – An overview. Journal of Materials Processing Technology, 2018, 257, 278-287.	3.1	29
86	Methods for measuring large shear strains in in-plane torsion tests. Journal of Materials Processing Technology, 2021, 287, 116516.	3.1	29
87	Engineering education amid a global pandemic. Advances in Industrial and Manufacturing Engineering, 2021, 3, 100058.	1.2	29
88	Finishing of Thermally Sprayed Tool Coatings for Sheet Metal Forming Operations by Roller Burnishing. International Journal of Material Forming, 2010, 3, 147-150.	0.9	28
89	Friction model selection in FEM simulations of aluminium extrusion. International Journal of Surface Science and Engineering, 2010, 4, 27.	0.4	28
90	Evaluation of Void Nucleation and Development during Plastic Deformation of Dual-Phase Steel DP600. Steel Research International, 2016, 87, 1583-1591.	1.0	28

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91	Accurate springback prediction in deep drawing using pre-strain based multiple cyclic stress–strain curves in finite element simulation. International Journal of Mechanical Sciences, 2016, 110, 229-241.	3.6	27
92	Springback prediction and reduction in deep drawing under influence of unloading modulus degradation. International Journal of Material Forming, 2016, 9, 619-633.	0.9	27
93	Grain size evolution simulation in aluminium alloys AA 6082 and AA 7020 during hot forward extrusion process. Materials Science and Technology, 2013, 29, 100-110.	0.8	26
94	Vaporizing foil actuator welding as a competing technology to magnetic pulse welding. Journal of Materials Processing Technology, 2016, 230, 8-20.	3.1	26
95	Developing Tele-Operated Laboratories for Manufacturing Engineering Education. Platform for E-Learning and Telemetric Experimentation (PeTEX). International Journal of Online and Biomedical Engineering, 2010, 6, 60.	0.9	26
96	Manufacturing of lightweight frame structures by innovative joining by forming processes. International Journal of Material Forming, 2009, 2, 307-310.	0.9	25
97	Thermo-mechanical processing of aluminum profiles by integrated electromagnetic compression subsequent to hot extrusion. Journal of Materials Processing Technology, 2011, 211, 936-943.	3.1	25
98	Wear behavior of tribologically optimized tool surfaces for incremental forming processes. Tribology International, 2016, 104, 64-72.	3.0	25
99	Forming properties of additively manufactured monolithic Hastelloy X sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 753, 300-316.	2.6	25
100	Joining dissimilar thin-walled tubes by Magnetic Pulse Welding. Journal of Materials Processing Technology, 2020, 279, 116562.	3.1	25
101	Ermittlung von Eigenspannungen in der Kaltmassivumformung. Berichte Aus Dem Institut Für Umfortechnik UniversitäStuttgart, 1986, , .	0.1	25
102	Improved relationship between Vickers hardness and yield stress for cold formed materials. Steel Research = Archiv $F\tilde{A}\frac{1}{4}$ r Das Eisenh $\tilde{A}\frac{1}{4}$ ttenwesen, 2001, 72, 304-310.	0.2	24
103	Three-Dimensional Bending of Profiles with Stress Superposition. International Journal of Material Forming, 2008, 1, 133-136.	0.9	24
104	A simple finite strain non-linear visco-plastic model for thermoplastics and its application to the simulation of incremental cold forming of polyvinylchloride (PVC). International Journal of Mechanical Sciences, 2013, 66, 192-201.	3.6	24
105	Identification of fully coupled anisotropic plasticity and damage constitutive equations using a hybrid experimental–numerical methodology with various triaxialities. International Journal of Damage Mechanics, 2015, 24, 683-710.	2.4	24
106	Fracture toughness and failure limits in sheet metal forming. Journal of Materials Processing Technology, 2016, 234, 249-258.	3.1	24
107	Enhanced granular medium-based tube and hollow profile press hardening. CIRP Annals - Manufacturing Technology, 2016, 65, 273-276.	1.7	24
108	Flow curves up to high strains considering load reversal and damage. International Journal of Material Forming, 2019, 12, 955-972.	0.9	24

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109	Torsion testing $\hat{a} \in \text{``plastic}$ deformation to high strains and strain rates. Materials Science and Technology, 1985, 1, 972-977.	0.8	23
110	Tele-Operated Laboratories for Online Production Engineering Education - Platform for E-Learning and Telemetric Experimentation (PeTEX). International Journal of Online and Biomedical Engineering, 2011, 7, 37.	0.9	23
111	Mechanics of sheet-bulk indentation. Journal of Materials Processing Technology, 2014, 214, 2387-2394.	3.1	23
112	Development of a tele-operative testing cell as a remote lab for material characterization. , 2014, , .		23
113	Measurement and analysis technologies for magnetic pulse welding: established methods and new strategies. Advances in Manufacturing, 2016, 4, 322-339.	3.2	23
114	Experimental and numerical investigation of increased formability in combined quasi-static and high-speed forming processes. Journal of Materials Processing Technology, 2016, 237, 254-269.	3.1	23
115	Simultaneous deep drawing and cold forging of multi-material components: Draw-forging. CIRP Annals - Manufacturing Technology, 2019, 68, 269-272.	1.7	23
116	Characterization of damage in forward rod extruded parts. International Journal of Material Forming, 2020, 13, 1003-1014.	0.9	23
117	New Aspects of Joining by Compression and Expansion of Tubular Workpieces. International Journal of Material Forming, 2008, 1, 1295-1298.	0.9	22
118	Innovation by forming technology: motivation for research. International Journal of Material Forming, 2009, 2, 29-38.	0.9	22
119	Large strain flow curve identification for sheet metals under complex stress states. Mechanics of Materials, 2021, 161, 103997.	1.7	22
120	Surface reconstruction for incremental forming. Production Engineering, 2007, 1, 71-78.	1.1	21
121	Determination of the flow curve at high strain rates using electromagnetic punch stretching. Journal of Materials Processing Technology, 2012, 212, 1314-1323.	3.1	21
122	Fundamentals for controlling thickness and surface quality during dieless necking-in of tubes by spinning. CIRP Annals - Manufacturing Technology, 2013, 62, 299-302.	1.7	21
123	Joining zone design for electromagnetically crimped connections. Journal of Materials Processing Technology, 2015, 225, 240-261.	3.1	21
124	Tooling concepts to speed up incremental sheet forming. Production Engineering, 2010, 4, 57-64.	1.1	20
125	Platform for e-Learning and Telemetric Experimentation (PeTEX). Tele-operated laboratories for production engineering education. , $2011, \ldots$		20
126	Experimental and Numerical Analysis of Material Flow in Porthole Die Extrusion. Key Engineering Materials, 0, 491, 97-104.	0.4	20

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127	Thermal loads of working coils in electromagnetic sheet metal forming. Journal of Materials Processing Technology, 2014, 214, 2553-2565.	3.1	20
128	Influence of manufacturing processes on material characterization with the grooved in-plane torsion test. International Journal of Mechanical Sciences, 2018, 146-147, 544-555.	3.6	20
129	Predicting weld-quality in direct hot extrusion of aluminium chips. Journal of Materials Processing Technology, 2019, 274, 116294.	3.1	20
130	Damage-induced performance variations of cold forged parts. Journal of Materials Processing Technology, 2020, 279, 116556.	3.1	20
131	Stresses induced by different loadings around weak abutments. Journal of Prosthetic Dentistry, 1992, 68, 879-884.	1.1	19
132	Simulation of tube wrinkling in electromagnetic compression. Production Engineering, 2010, 4, 421-426.	1.1	19
133	Improved Tool Surfaces for Incremental Bulk Forming Processes of Sheet Metals. Key Engineering Materials, 2012, 504-506, 975-980.	0.4	19
134	Dynamic forming limits and numerical optimization of combined quasi-static and impulse metal forming. Computational Materials Science, 2012, 54, 293-302.	1.4	19
135	Friction analysis of thermally sprayed coatings finished by ball burnishing and grinding. Production Engineering, 2013, 7, 601-610.	1.1	19
136	Novel Five-Axis Forming Press for the Incremental Sheet-Bulk Metal Forming. Key Engineering Materials, 0, 554-557, 1478-1483.	0.4	19
137	Magnetic Pulse Welding by Electromagnetic Compression: Determination of the Impact Velocity. Advanced Materials Research, 0, 966-967, 489-499.	0.3	19
138	Joining of lightweight frame structures by die-less hydroforming. International Journal of Material Forming, 2010, 3, 1031-1034.	0.9	18
139	60 Excellent Inventions in Metal Forming. , 2015, , .		18
140	Analysis of the Influence of Fibers on the Formability of Metal Blanks in Manufacturing Processes for Fiber Metal Laminates. Journal of Manufacturing and Materials Processing, 2019, 3, 2.	1.0	18
141	PeTEX@Work: Designing CSCL@Work for Online Engineering Education., 2013,, 269-292.		18
142	Yield locus evolution and constitutive parameter identification using plane strain tension and tensile tests. Journal of Materials Processing Technology, 2011, 211, 1957-1964.	3.1	17
143	Analytical Prediction of Roughness after Ball Burnishing of Thermally Coated Surfaces. Procedia Engineering, 2014, 81, 1921-1926.	1.2	17
144	Investigations on the Manufacturability of Thin Press Hardened Steel Components. Procedia CIRP, 2014, 18, 74-79.	1.0	17

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145	Adiabatic blanking of advanced high-strength steels. CIRP Annals - Manufacturing Technology, 2020, 69, 269-272.	1.7	17
146	Service life estimation of extrusion dies by numerical simulation of fatigue-crack-growth. International Journal of Mechanical Sciences, 1996, 38, 527-538.	3.6	16
147	Extrusion Benchmark 2009 Experimental Analysis of Deflection in Extrusion Dies. Key Engineering Materials, 0, 424, 19-26.	0.4	16
148	The Effect of Extrusion Ratio and Material Flow on the Mechanical Properties of Aluminum Profiles Solid State Recycled from 6060 Aluminum Alloy Chips. AIP Conference Proceedings, 2011, , .	0.3	16
149	High wear resistant deep drawing tools made of coated polymers. CIRP Annals - Manufacturing Technology, 2011, 60, 311-314.	1.7	16
150	Extending the Flexibility in the Composite Extrusion Process. Procedia CIRP, 2014, 18, 33-38.	1.0	16
151	Application of the bending theory on square-hollow sections made from high-strength steel with a changing angle of the bending plane. Journal of Materials Processing Technology, 2014, 214, 2505-2513.	3.1	16
152	Comparison of various preforms for hot forging of bearing rings. Journal of Materials Processing Technology, 2005, 169, 72-82.	3.1	15
153	Finite deformation plasticity coupled with isotropic damage: Formulation in principal axes and applications. Finite Elements in Analysis and Design, 2010, 46, 668-683.	1.7	15
154	A damage coupled orthotropic finite plasticity model for sheet metal forming: CDM approach. Computational Materials Science, 2010, 48, 150-165.	1.4	15
155	The non-hydrostatic response of polymer melts as a pressure medium in sheet metal forming. Production Engineering, 2012, 6, 385-394.	1.1	15
156	Innovative Tools to Improve Incremental Bulk Forming Processes. Key Engineering Materials, 0, 554-557, 1490-1497.	0.4	15
157	Formability prediction of AL7020 with experimental and numerical failure criteria. Journal of Materials Processing Technology, 2015, 218, 80-88.	3.1	15
158	Incipient and repeatable plastic flow in incremental sheet-bulk forming of gears. International Journal of Advanced Manufacturing Technology, 2016, 86, 3091-3100.	1.5	15
159	Development of forming and product properties of copper wire in a linear coil winding process. , 2017,		15
160	Interaction of Process Parameters, Forming Mechanisms, and Residual Stresses in Single Point Incremental Forming. Metals, 2020, 10, 656.	1.0	15
161	Distortion and Dilution Behavior for Laser Metal Deposition onto Thin Sheet Metals. International Journal of Precision Engineering and Manufacturing - Green Technology, 2020, 7, 625-634.	2.7	15
162	Analysis of the Hydraulic Bulge Test with FEA Concerning the Accuracy of the Determined Flow Curves. Key Engineering Materials, 0, 410-411, 439-447.	0.4	14

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163	Combination of curved profile extrusion and composite extrusion for increased lightweight properties. Production Engineering, 2009, 3, 63-68.	1.1	14
164	3D Numerical Analysis of 2D Profile Bending with the Torque Superposed Spatial Bending Method. Strojniski Vestnik/Journal of Mechanical Engineering, 2013, 59, 139-147.	0.6	14
165	Closed loop springback control in progressive die bending by induction heating. International Journal of Precision Engineering and Manufacturing, 2015, 16, 2441-2449.	1.1	14
166	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
167	Mechanics of the reciprocal effects of bending and torsion during 3D bending of profiles. Journal of Materials Processing Technology, 2018, 262, 650-659.	3.1	14
168	Particle Ejection by Jetting and Related Effects in Impact Welding Processes. Metals, 2020, 10, 1108.	1.0	14
169	Shape optimization with the biological growth method: a parameter study. Engineering Computations, 1996, 13, 4-18.	0.7	13
170	Development of ultra high performance concrete dies for sheet metal hydroforming. Production Engineering, 2008, 2, 201-208.	1.1	13
171	Modeling of dynamic microstructure evolution of EN AW-6082 alloy during hot forward extrusion. Computational Materials Science, 2011, 50, 1520-1525.	1.4	13
172	Analytic Prediction of the Process Parameters for Form-Fit Joining by Die-Less Hydroforming. Key Engineering Materials, 2012, 504-506, 393-398.	0.4	13
173	Manufacturing of Steel-Reinforced Aluminum Products by Combining Hot Extrusion and Closed-Die Forging. Key Engineering Materials, 0, 504-506, 481-486.	0.4	13
174	Modeling Approach for the Determination of Material Flow and Welding Conditions in Porthole Die Extrusion with Gas Pocket Formation. Key Engineering Materials, 0, 554-557, 787-793.	0.4	13
175	Improvement strategies for the formfilling in incremental gear forming processes. Production Engineering, 2017, 11, 623-631.	1.1	13
176	The reciprocal effects of bending and torsion on springback during 3D bending of profiles. Procedia Engineering, 2017, 207, 2322-2327.	1.2	13
177	Influence of tool path strategies on the residual stress development in single point incremental forming. Procedia Manufacturing, 2019, 29, 53-58.	1.9	13
178	Thermal Effects in Dissimilar Magnetic Pulse Welding. Metals, 2019, 9, 348.	1.0	13
179	Interface Formation during Collision Welding of Aluminum. Metals, 2020, 10, 1202.	1.0	13
180	New incremental methods for springback compensation by stress superposition. Production Engineering, 2009, 3, 137-144.	1.1	12

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181	New incremental methods for springback compensation by stress superposition. International Journal of Material Forming, 2009, 2, 817-820.	0.9	12
182	Extrusion Benchmark 2013 - Experimental Analysis of Mandrel Deflection, Local Temperature and Pressure in Extrusion Dies. Key Engineering Materials, 0, 585, 13-22.	0.4	12
183	Fracture Loci in Sheet Metal Forming: A Review. Acta Metallurgica Sinica (English Letters), 2015, 28, 1415-1425.	1.5	12
184	Investigations of ductile damage during the process chains of toothed functional components manufactured by sheet-bulk metal forming. Production Engineering, 2016, 10, 5-15.	1.1	12
185	Analytical prediction of Joule heat losses in electromagnetic forming coils. Journal of Materials Processing Technology, 2017, 246, 102-115.	3.1	12
186	On mesh dependencies in finite-element-based damage prediction: application to sheet metal bending. Production Engineering, 2020, 14, 123-134.	1.1	12
187	Strategies for springback compensation regarding process robustness. Production Engineering, 2011, 5, 49-57.	1.1	11
188	Manufacturing of Steel-Reinforced Aluminum Parts by Co-Extrusion and Subsequent Forging. Key Engineering Materials, 0, 585, 149-156.	0.4	11
189	Bridge Design Influences on the Pressure Conditions in the Welding Chamber for Porthole Die Extrusion. Key Engineering Materials, 2014, 622-623, 87-94.	0.4	11
190	Closed-loop control concept for kinematic 3D-profile bending. AIP Conference Proceedings, 2016, , .	0.3	11
191	Failure assessment in sheet metal forming using a phenomenological damage model and fracture criterion: experiments, parameter identification and validation. Procedia Engineering, 2017, 207, 2066-2071.	1.2	11
192	Thermally activated lightweight actuator based on hot extruded shape memory metal matrix composites (SMA-MMC). Procedia Engineering, 2017, 207, 1511-1516.	1.2	11
193	Stress State Control by a Novel Bending Process and its Effect on Damage and Product Performance. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .	1.3	11
194	Analytical and experimental bond strength investigation of cold forged composite shafts. Journal of Materials Processing Technology, 2019, 264, 190-199.	3.1	11
195	Analytical prediction of wall thickness reduction and forming forces during the radial indentation process in Incremental Profile Forming. Journal of Materials Processing Technology, 2019, 267, 68-79.	3.1	11
196	Special Issue on Automotive Lightweight. Automotive Innovation, 2020, 3, 193-194.	3.1	11
197	Process-oriented Flow Curve Determination at Mechanical Joining. Procedia Manufacturing, 2020, 47, 368-374.	1.9	11
198	Measurement of Collision Conditions in Magnetic Pulse Welding Processes. Journal of Physical Science and Application, 2017, 7, .	0.1	11

#	Article	IF	CITATIONS
199	ADAPT â€" A Diversely Applicable Parameter Identification Tool: Overview and full-field application examples. International Journal of Mechanical Sciences, 2022, 213, 106840.	3.6	11
200	Modeling Flexforming (Fluid Cell Forming) Process with Finite Element Method. Key Engineering Materials, 2007, 344, 469-476.	0.4	10
201	Free forming of locally heated specimens. International Journal of Machine Tools and Manufacture, 2007, 47, 1197-1205.	6.2	10
202	Generalized transient temperature behavior in induction heated workpieces. Journal of Materials Processing Technology, 2009, 209, 5932-5939.	3.1	10
203	Inverse method for identification of initial yield locus of sheet metals utilizing inhomogeneous deformation fields. International Journal of Material Forming, 2011, 4, 121-128.	0.9	10
204	An Experimental and Numerical Assessment of Sheet-Bulk Formability of Mild Steel DC04. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2011, 133, .	1.3	10
205	Machines and Tools for Sheet-Bulk Metal Forming. Key Engineering Materials, 2011, 473, 91-98.	0.4	10
206	An Experimental and Numerical Investigation on Polymer Melt Injected Sheet Metal Forming. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2012, 134, .	1.3	10
207	Innovative Machine Design for Incremental Profile Forming. Key Engineering Materials, 2014, 622-623, 413-419.	0.4	10
208	In-situ measurement of loading stresses with X-ray diffraction for yield locus determination. International Journal of Automotive Technology, 2014, 15, 303-316.	0.7	10
209	The challenge of specimen handling in remote laboratories for Engineering Education. , 2015, , .		10
210	Reducing the stair step effect of layer manufactured surfaces by ball burnishing. AIP Conference Proceedings, 2016, , .	0.3	10
211	Adaptive wear model for shear-cutting simulation with open cutting line. Wear, 2017, 386-387, 17-28.	1.5	10
212	Parameter Identification for Magnetic Pulse Welding Applications. Key Engineering Materials, 0, 767, 431-438.	0.4	10
213	Stress State Analysis of Radial Stress Superposed Bending. International Journal of Precision Engineering and Manufacturing, 2019, 20, 53-66.	1.1	10
214	Strain path dependency in incremental sheet-bulk metal forming. International Journal of Material Forming, 2021, 14, 547-561.	0.9	10
215	Adjusting residual stresses by flexible stress superposition in incremental sheet metal forming. Archive of Applied Mechanics, 2021, 91, 3489-3499.	1.2	10
216	Effect of Process Parameters on Wavy Interfacial Morphology During Magnetic Pulse Welding. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2021, 143, .	1.3	10

#	Article	IF	CITATIONS
217	Complete Numerical Solution of the Axisymmetrical Deep-Drawing Problem. Journal of Engineering Materials and Technology, Transactions of the ASME, 1981, 103, 326-332.	0.8	9
218	Joining by Compression and Expansion of (None-) Reinforced Profiles. Advanced Materials Research, 0, 43, 57-68.	0.3	9
219	Numerical Optimization of Bearing Length in Composite Extrusion Processes. Key Engineering Materials, 0, 367, 47-54.	0.4	9
220	Embedding of Alumina Reinforcing Elements in the Composite Extrusion Process. Advanced Materials Research, 2008, 43, 9-16.	0.3	9
221	Accurate deep drawing simulation by combining analytical approaches. International Journal of Mechanical Sciences, 2011, 53, 374-386.	3.6	9
222	Co-extrusion of Discontinuously, Non-centric Steel-reinforced Aluminum. , 2011, , .		9
223	A Viscoplastic Material Model Based on Overstress for the Simulation of Incremental Sheet Forming of Thermoplastics. AIP Conference Proceedings, 2011, , .	0.3	9
224	New Concepts for Cooling of Extrusion Dies Manufactured by Rapid Tooling. Key Engineering Materials, 0, 491, 223-232.	0.4	9
225	An Experimental Study on the Groove Design for Joints Produced by Hydraulic Expansion Considering Axial or Torque Load. Materials and Manufacturing Processes, 2012, 27, 545-555.	2.7	9
226	Achieving High Strains in Sheet Metal Characterization Using the In-Plane Torsion Test. Key Engineering Materials, 0, 554-557, 77-85.	0.4	9
227	Composite Extrusion of Thin Aluminum Profiles with High Reinforcing Volume. Key Engineering Materials, 0, 554-557, 801-808.	0.4	9
228	Teaching and learning globally connected using live online classes for preparing international engineering students for transnational collaboration and for studying in Germany. , 2015, , .		9
229	Industrial Benchmark 2015: Process Monitoring and Analysis of Hollow EN AW-6063 Extruded Profile. Materials Today: Proceedings, 2015, 2, 4714-4725.	0.9	9
230	Failure by fracture in sheet–bulk metal forming. Journal of Strain Analysis for Engineering Design, 2016, 51, 387-394.	1.0	9
231	Analysis of residual stress state in sheet metal parts processed by single point incremental forming. AIP Conference Proceedings, 2018, , .	0.3	9
232	Forming mechanisms-related residual stress development in single point incremental forming. Production Engineering, 2019, 13, 149-156.	1.1	9
233	Extrusion Benchmark 2011: Evaluation of Different Design Strategies on Process Conditions, Die Deflection and Seam Weld Quality in Hollow Profiles. Key Engineering Materials, 0, 491, 1-10.	0.4	9
234	Life Estimation of Extrusion Dies. CIRP Annals - Manufacturing Technology, 1995, 44, 231-234.	1.7	8

#	Article	IF	CITATIONS
235	Dyna-Die: Towards Full Kinematic Incremental Forming. International Journal of Material Forming, 2008, 1, 1163-1166.	0.9	8
236	Wirkmedienbasierte Herstellung hybrider Metallâ€Kunststoffâ€Verbundbauteile mit Kunststoffschmelzen als Druckmedium. Materialwissenschaft Und Werkstofftechnik, 2008, 39, 627-632.	0.5	8
237	Extrusion Benchmark 2007 – Benchmark Experiments: Study on Material Flow Extrusion of a Flat Die. Key Engineering Materials, 0, 367, 1-8.	0.4	8
238	Recent Developments in the Manufacture of Complex Components by Influencing the Material Flow during Extrusion. Key Engineering Materials, 2008, 367, 55-62.	0.4	8
239	Integrated simulation of the process chain composite extrusion–milling–welding for lightweight frame structures. Production Engineering, 2009, 3, 441-451.	1.1	8
240	Accurate Welding Line Prediction in Extrusion Processes. Key Engineering Materials, 0, 424, 87-95.	0.4	8
241	Effects of Weld Line in Deep Drawing of Tailor Welded Blanks of High Strength Steels. Key Engineering Materials, 2014, 611-612, 955-962.	0.4	8
242	Enhancement of Lemaitre Model to Predict Cracks at Low and Negative Triaxialities in Sheet Metal Forming. Key Engineering Materials, 0, 639, 427-434.	0.4	8
243	Remote labs in ELLI: Lab experience for every student with two different approaches., 2016,,.		8
244	Investigations of ductile damage in DP600 and DC04 deep drawing steel sheets during punching. Procedia Structural Integrity, 2016, 2, 673-680.	0.3	8
245	Mechanisms for controlling springback and strength in heat-assisted sheet forming. CIRP Annals - Manufacturing Technology, 2018, 67, 273-276.	1.7	8
246	Local forming of gears by indentation of sheets. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2018, 232, 838-847.	1.5	8
247	Modelling of the blanking process of high-carbon steel using Lemaitre damage model. Comptes Rendus - Mecanique, 2018, 346, 770-778.	2.1	8
248	Simulation approach for three-point plastic bending of additively manufactured Hastelloy X sheets. Procedia Manufacturing, 2019, 34, 475-481.	1.9	8
249	Prediction and analysis of damage evolution during caliber rolling and subsequent cold forward extrusion. Production Engineering, 2020, 14, 33-41.	1.1	8
250	Potential and status of damage controlled forming processes. Production Engineering, 2020, 14, 1-4.	1.1	8
251	Decoupled Simulation Method For Incremental Sheet Metal Forming. AIP Conference Proceedings, 2007, , .	0.3	7
252	Manufacture of 3D Curved Profiles for Structure Components. Advanced Materials Research, 0, 43, 1-8.	0.3	7

#	Article	IF	Citations
253	Numerical Approach for the Evaluation of Seam Welding Criteria in Extrusion Processes. Key Engineering Materials, 2012, 504-506, 517-522.	0.4	7
254	Extrusion of Profiles with Variable Wall Thickness. Procedia CIRP, 2014, 18, 15-20.	1.0	7
255	Development of a cupping test in remote laboratories for engineering education. , 2016, , .		7
256	Formability analysis of thin press hardening steel sheets under isothermal and non-isothermal conditions. International Journal of Material Forming, 2017, 10, 405-419.	0.9	7
257	Experimental analysis of anisotropic damage in dual-phase steel by resonance measurement. International Journal of Damage Mechanics, 2017, 26, 1147-1169.	2.4	7
258	Additive manufacture of tools and dies for metal forming. , 2017, , 439-464.		7
259	High temperature and dynamic testing of AHSS for an analytical description of the adiabatic cutting process. IOP Conference Series: Materials Science and Engineering, 2017, 181, 012026.	0.3	7
260	Optimization of the Linear Coil Winding Process by Combining New Actuator Principles on the Basis of Wire Forming Analysis. , $2018$ , , .		7
261	Manufacturing of hybrid gears by incremental sheet-bulk metal forming. Procedia Manufacturing, 2019, 27, 152-157.	1.9	7
262	Magnetic Field Measurements during Magnetic Pulse Welding Using CMR-B-Scalar Sensors. Sensors, 2020, 20, 5925.	2.1	7
263	Novel Approach and Interpretation for the Determination of Electromagnetic Forming Limits. Materials, 2020, 13, 4175.	1.3	7
264	Targeted residual stress generation in single and two point incremental sheet forming (ISF). Archive of Applied Mechanics, 2021, 91, 3465-3487.	1.2	7
265	Internationalization and Digitalization in Engineering Education. , 0, , .		7
266	$Pr\tilde{A}\frac{1}{4}$ fung des plastischen Verhaltens metallischer Werkstoffe in Torsionsversuchen. Materialwissenschaft Und Werkstofftechnik, 1983, 14, 181-189.	0.5	6
267	Multifunctional Lightweight Structures from Tailored Cladded Blanks. Key Engineering Materials, 0, 410-411, 37-42.	0.4	6
268	Experimental investigation of tool path strategies for incremental necking-in. International Journal of Material Forming, 2010, 3, 967-970.	0.9	6
269	Lightweight Construction by Means of Profiles. Key Engineering Materials, 2012, 504-506, 369-374.	0.4	6
270	The evaluation of remote laboratories: Development and application of a holistic model for the evaluation of online remote laboratories in manufacturing technology education. , 2016, , .		6

#	Article	IF	Citations
271	Energy saving by manufacturing technology. Procedia Manufacturing, 2018, 21, 392-396.	1.9	6
272	Light enough or go lighter?. Materials and Design, 2019, 163, 107545.	3.3	6
273	Micro-magnetic damage characterization of bent and cold forged parts. Production Engineering, 2020, 14, 77-85.	1.1	6
274	Force reduction by electrical assistance in incremental sheet-bulk metal forming of gears. Journal of Materials Processing Technology, 2021, 296, 117194.	3.1	6
275	Torsion testing $\hat{a} \in \hat{b}$ plastic deformation to high strains and strain rates. Materials Science and Technology, 1985, 1, 972-977.	0.8	6
276	Influence of Mandrel's Surface and Material on the Mechanical Properties of Joints Produced by Electromagnetic Compression., 2009, 80, 366.		6
277	Hybrid additive manufacturing of metal laminated forming tools. CIRP Annals - Manufacturing Technology, 2022, 71, 225-228.	1.7	6
278	Large strain flow curve identification for sheet metal. Journal of Materials Processing Technology, 2022, 308, 117725.	3.1	6
279	Potential of Melted Polymer as Pressure Medium in Sheet Metal Forming. Key Engineering Materials, 2009, 410-411, 493-501.	0.4	5
280	Experimental and numerical investigation of the process chain from composite extrusion to friction stir welding regarding the residual stresses in composite extruded profiles. Production Engineering, 2009, 3, 353-360.	1.1	5
281	Comparison of different FEM code approaches in the simulation of the die deflection during aluminium extrusion. International Journal of Material Forming, 2010, 3, 375-378.	0.9	5
282	Process Design for the Manufacturing of Magnetic Pulse Welded Joints. Key Engineering Materials, 2011, 473, 243-250.	0.4	5
283	Newest Developments on the Manufacture of Helical Profiles by Hot Extrusion. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2011, 133, .	1.3	5
284	Prediction of surface roughness due to spinning in the incremental tube forming process. Production Engineering, 2013, 7, 153-166.	1.1	5
285	Inverse Identification of CDM Model Parameters for DP1000 Steel Sheets Using a Hybrid Experimental-Numerical Methodology Spanning Various Stress Triaxiality Ratios. Key Engineering Materials, 0, 554-557, 2103-2110.	0.4	5
286	Numerical Investigation of the Incremental Tube Forming Process. Key Engineering Materials, 0, 554-557, 664-670.	0.4	5
287	Simulation of Composite Hot Extrusion with High Reinforcing Volumes. Procedia Engineering, 2014, 81, 1265-1270.	1.2	5
288	Composite Hot Extrusion of Functional Elements. Advanced Materials Research, 0, 1018, 223-228.	0.3	5

#	Article	IF	Citations
289	Bending of Tailored Blanks Using Elastic Tools. Advanced Materials Research, 0, 1018, 301-308.	0.3	5
290	The Impact of Torsion on the Bending Curve during 3D Bending of Thin-Walled Tubes - A Case Study on Forming Helices. Key Engineering Materials, 2015, 651-653, 1595-1601.	0.4	5
291	A new test for determining fracture toughness in plane stress in mode II. Journal of Strain Analysis for Engineering Design, 2015, 50, 221-231.	1.0	5
292	Local sheet thickening by in-plane swaging. International Journal of Mechanical Sciences, 2016, 119, 59-67.	3.6	5
293	Damage characterization of high-strength multiphase steels. IOP Conference Series: Materials Science and Engineering, 2016, 159, 012013.	0.3	5
294	Material characterization for plane and curved sheets using the in-plane torsion test – an overview. Procedia Engineering, 2017, 207, 1934-1939.	1.2	5
295	Joining by Die-Less Hydroforming of Profiles with Oval Cross Section. Key Engineering Materials, 2018, 767, 405-412.	0.4	5
296	Bending moment in incremental tube forming. International Journal of Material Forming, 2019, 12, 113-122.	0.9	5
297	Characterization of plasticity and fracture of an QP1180 steel sheet. Procedia Manufacturing, 2020, 50, 529-534.	1.9	5
298	Prediction of Ductile Damage in the Process Chain of Caliber Rolling and Forward Rod Extrusion. Procedia Manufacturing, 2020, 47, 649-655.	1.9	5
299	Coin minting by additive manufacturing and forming. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2021, 235, 819-828.	1.5	5
300	Targeted Weld Seam Formation and Energy Reduction at Magnetic Pulse Welding (MPW). Biuletyn Instytutu Spawalnictwa, 2017, 2017, 91-102.	0.0	5
301	Aufnahme der Fließkurven dünner Bleche im ebenen Torsionsversuch. Archiv Für Das Eisenhüttenwesen, 1982, 53, 421-426.	0.1	4
302	Determination of the Material Characteristics by Means of a High Speed Tensile Test - Experiments and Simulations. International Journal of Material Forming, 2008, 1, 1331-1334.	0.9	4
303	Optimization of the Die Topology in Extrusion Processes. Advanced Materials Research, 0, 43, 81-88.	0.3	4
304	An Assessment of the Grain Structure Evolution during Hot Forward Extrusion of Aluminum Alloy 7020. Key Engineering Materials, 0, 424, 35-41.	0.4	4
305	Increasing the Production Accuracy of Profile Bending with Methods of Computational Intelligence. Evolutionary Computation, 2009, 17, 561-576.	2.3	4
306	Simulation of the Quench Sensitivity of the Aluminum Alloy 6082. Key Engineering Materials, 0, 424, 51-56.	0.4	4

#	Article	IF	CITATIONS
307	Influence of cooling rate on distortion and microstructure in extrusion of Al-Mg-Si alloys. International Journal of Material Forming, 2009, 2, 81-84.	0.9	4
308	Impulse forming. Journal of Materials Processing Technology, 2011, 211, 785-786.	3.1	4
309	FlexDie: A Flexible Tooling-Concept for Incremental Sheet Forming. Key Engineering Materials, 0, 504-506, 883-888.	0.4	4
310	Verschleißanalyse gewalzter und geschliffener Eisenbasislegierungsschichten mit und ohne HartstoffverstÃ#kung. Materialwissenschaft Und Werkstofftechnik, 2012, 43, 485-494.	0.5	4
311	Simulation of Electromagnetic Forming of a Cross-Shaped Cup by Means of a Viscoplasticity Model Coupled with Damage at Finite Strains. Key Engineering Materials, 0, 554-557, 2363-2368.	0.4	4
312	Measurement of working coil temperature in electromagnetic forming processes by means of optical frequency domain reflectometry. Case Studies in Nondestructive Testing and Evaluation, 2015, 3, 15-20.	1.7	4
313	Scientific Benchmark 2015: Effect of Choking and Bearing Length on Metal Flow Balancing in Extrusion Dies. Materials Today: Proceedings, 2015, 2, 4704-4713.	0.9	4
314	Development of a tele-operative control for the incremental tube forming process and its integration into a learning environment, , $2016$ , , .		4
315	Deformation characteristics of thermoplastics in single point incremental forming. AIP Conference Proceedings, 2017, , .	0.3	4
316	Influence of Different Yield Loci on Failure Prediction with Damage Models. Journal of Physics: Conference Series, 2017, 896, 012081.	0.3	4
317	Stress state dependency of unloading behavior in high strength steels. Procedia Engineering, 2017, 207, 179-184.	1.2	4
318	Effect of workpiece deformation on Joule heat losses in electromagnetic forming coils. Procedia Engineering, 2017, 207, 341-346.	1.2	4
319	Influence of cutting tool stiffness on edge formability. IOP Conference Series: Materials Science and Engineering, 2018, 418, 012061.	0.3	4
320	Experimental and numerical investigations of wire bending by linear winding of rectangular tooth coils. AIP Conference Proceedings, $2018, \ldots$	0.3	4
321	Influence of SMA-induced stress on shape memory alloy metal matrix composites manufactured by continuous composite extrusion. Smart Materials and Structures, 2019, 28, 084006.	1.8	4
322	Experimental study on the magnetic pulse welding process of large aluminum tubes on steel rods. IOP Conference Series: Materials Science and Engineering, 2019, 480, 012033.	0.3	4
323	Hybrid Additive Manufacturing of Collector Coins. Journal of Manufacturing and Materials Processing, 2020, 4, 115.	1.0	4
324	Reduction of Warping in Kinematic L-Profile Bending Using Local Heating. Metals, 2021, 11, 1146.	1.0	4

#	Article	IF	CITATIONS
325	Speeding up Additive Manufacturing by Means of Forming for Sheet Components with Core Structures. International Journal of Precision Engineering and Manufacturing - Green Technology, 2022, 9, 1021-1034.	2.7	4
326	Einfluss der WÄrmebehandlung und des Werkstoffs auf den Verzug von querflieÄŸgepressten Tripoden. HTM - Journal of Heat Treatment and Materials, 2012, 67, 357-365.	0.1	4
327	Production and Subsequent Forming of Chip-Based Aluminium Sheets Without Remelting. International Journal of Precision Engineering and Manufacturing - Green Technology, 2022, 9, 1035-1048.	2.7	4
328	Development of a Tele-Operative Testing Cell as a Remote Lab for Material Characterization. , $2016$ , , $265-277$ .		4
329	Analytical model of the in-plane torsion test. Acta Mechanica, 2022, 233, 641-663.	1.1	4
330	Prototype Manufacturing of Extruded Aluminum Aircraft Stringer Profiles with Continuous Reinforcement. Advanced Materials Research, 0, 43, 167-174.	0.3	3
331	Springback Compensation by Superposition of Stress in Air Bending. Key Engineering Materials, 0, 410-411, 621-628.	0.4	3
332	A drop-weight high-speed tensile testing instrument. Production Engineering, 2009, 3, 175-180.	1.1	3
333	Towards the flexible and near-net-shape production of three-dimensionally curved extrusion profiles. Production Engineering, 2010, 4, 561-569.	1.1	3
334	Thermally Sprayed Coatings as Effective Tool Surfaces in Sheet Metal Forming Applications. Journal of Thermal Spray Technology, 2011, 20, 939-947.	1.6	3
335	Investigation And Prediction of Grain Texture Evolution in AA6082. AIP Conference Proceedings, 2011, ,	0.3	3
336	Effect of Porthole Design and Welding Chamber Dimensions on Material Flow and Weld Deformability of Extruded Aluminium Profiles. Key Engineering Materials, 2012, 504-506, 523-528.	0.4	3
337	Finite Element Based Determination and Optimization of Seam Weld Positions in Porthole Die Extrusion of Double Hollow Profile with Asymmetric Cross Section. Key Engineering Materials, 2013, 585, 95-102.	0.4	3
338	Groove Filling Characteristics and Strength of Form-Fit Joints Produced by Die-Less Hydroforming. Key Engineering Materials, 0, 554-557, 671-680.	0.4	3
339	Forming Limit Extension of High-Strength Steels in Bending Processes. Key Engineering Materials, 2014, 611-612, 1110-1115.	0.4	3
340	Increased Productivity in Hot Aluminum Extrusion by Using Extrusion Dies with Inner Cooling Channels Manufactured by Rapid Tooling. Key Engineering Materials, 2014, 611-612, 981-988.	0.4	3
341	What students use: Results of a survey on media use among engineering students. , 2014, , .		3
342	Analytical Model to Determine the Strength of Form-Fit Connection Joined by Die-Less Hydroforming. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2015, 137, .	1.3	3

#	Article	IF	Citations
343	Influencing the Forming Limits in Air Bending Using Incremental Stress Superposition. Key Engineering Materials, 2015, 651-653, 1602-1607.	0.4	3
344	Wall Thickness Distribution during a Combined Tube Spinning and Bending Process. Key Engineering Materials, 2015, 651-653, 1614-1619.	0.4	3
345	Increasing the formability of ferritic stainless steel tube by granular medium-based hot forming. Journal of Physics: Conference Series, 2017, 896, 012009.	0.3	3
346	Microstructural characterization and simulation of damage for geared sheet components. Journal of Physics: Conference Series, 2017, 896, 012076.	0.3	3
347	Stress State Control by a Novel Bending Process and its Effect on Damage Evolution. , 2018, , .		3
348	Evaluation of micro-damage by acoustic methods. Procedia Manufacturing, 2018, 15, 527-534.	1.9	3
349	Effect of multiple forming tools on geometrical and mechanical properties in incremental sheet forming. AIP Conference Proceedings, 2018, , .	0.3	3
350	Design of process parameters for the incremental tube forming (ITF) by FEM to control product properties. AIP Conference Proceedings, 2018, , .	0.3	3
351	Effect of the wall thickness on the forming behavior and welding result during magnetic pulse welding. Materialwissenschaft Und Werkstofftechnik, 2019, 50, 883-892.	0.5	3
352	Magnetic pulse welding of tubular parts. AIP Conference Proceedings, 2019, , .	0.3	3
353	Properties of Components with Incrementally Formed Gears. Metals, 2019, 9, 515.	1.0	3
354	Thermomechanical behavior of shape memory alloy metal matrix composite actuator manufactured by composite extrusion. Smart Materials and Structures, 2019, 28, 055022.	1.8	3
355	Influence of the preheating strategy on the deep drawing of extruded magnesium alloy ME20 sheets. IOP Conference Series: Materials Science and Engineering, 2019, 651, 012067.	0.3	3
356	A quick model for demonstrating high speed forming capabilities. Mechanics Research Communications, 2020, 108, 103579.	1.0	3
357	Experimental and Numerical Analysis of the Influence of Burst Pressure Distribution on Rapid Free Sheet Forming by Vaporizing Foil Actuators. Metals, 2020, 10, 845.	1.0	3
358	Application of an Advanced Friction Model in Hot Stamping Simulations: A Numerical and Experimental Investigation of an A-Pillar Reinforcement Panel from Volvo Cars. IOP Conference Series: Materials Science and Engineering, 2021, 1157, 012020.	0.3	3
359	Large strain flow curves of sheet metals by sheet extrusion. CIRP Annals - Manufacturing Technology, 2021, 70, 247-250.	1.7	3
360	Consequences of large strain anisotropic work-hardening in cold forging. International Journal of Material Forming, 2021, 14, 1463-1481.	0.9	3

#	Article	IF	CITATIONS
361	Bending (Tubes, Profiles)., 2014,, 92-101.		3
362	The Challenge of Specimen Handling in Remote Laboratories for Engineering Education. , 2016, , 449-464.		3
363	More Than "Did You Read the Script?― Lecture Notes in Networks and Systems, 2018, , 160-169.	0.5	3
364	Influence of mechanical characterization on the prediction of necking issues during sheet flow forming process. Journal of Materials Processing Technology, 2022, , 117620.	3.1	3
365	Comparison of Conventional Deep Drawing, Hydromechanical Deep-Drawing and High Pressure Sheet Metal Forming by Numerical Experiments. AIP Conference Proceedings, 2005, , .	0.3	2
366	MANUFACTURING AND FORMING OF PARTIALLY CLADDED DOUBLE BLANKS. Journal of Advanced Manufacturing Systems, 2008, 07, 33-36.	0.4	2
367	Experimental Investigation of Residual Stresses after Heat Treatment and Grinding Processes in the Production of Ball Bearing Rings. Materials Science Forum, 2008, 571-572, 27-32.	0.3	2
368	Numerical Material Flow Optimization of a Multi-Hole Extrusion Process. Advanced Materials Research, 0, 83-86, 826-833.	0.3	2
369	On the Study of Constitutive Parameter Identification of Advanced Yield Criteria. Key Engineering Materials, 2011, 473, 452-459.	0.4	2
370	Advanced extrusion processes. Materials Research Innovations, 2011, 15, s487-s490.	1.0	2
371	Processing of New Solar Absorbers in Steel Design Based on Partially Cold Roll Bonded Hybrid Semi-Finished Parts. Key Engineering Materials, 2012, 504-506, 137-142.	0.4	2
372	miniLABs – Focused Lab Sessions in Manufacturing Technology Related to Forming Processes. International Journal of Engineering Pedagogy, 2013, 3, 52.	0.7	2
373	Analytical Methodology for the Process and Joint Design of Form-Fit Joining by Die-Less Hydroforming. , 2014, , .		2
374	Experimental and Numerical Analysis of Dry Shearing of Aluminum 6082. Advanced Materials Research, 2014, 1018, 261-268.	0.3	2
375	Electrically Driven Plasma via Vaporization of Metallic Conductors: A Novel Tool for Joining Tubular Workpieces. Procedia CIRP, 2014, 18, 62-67.	1.0	2
376	The globally competent engineer: What different stakeholders say about educating engineers for a globalized world., 2014,,.		2
377	Basic Investigations in Incremental Profile Forming. , 2015, , .		2
378	Transnational Connected Learning and Experimentation - Using live online classes and remote labs for preparing international engineering students for an international working world. International Journal of Engineering Pedagogy, 2016, 6, 18.	0.7	2

#	Article	IF	CITATIONS
379	Experimental and analytical investigation of the force requirements in shear cutting of metal-polymer-metal composites. International Journal of Material Forming, 2018, 11, 213-224.	0.9	2
380	Ball Burnishing Under High Velocities Using a New Rolling Tool Concept. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2018, 140, .	1.3	2
381	Investigation of martensite-transformation and forming properties of additively reinforced 22MnB5 sheet metals. AIP Conference Proceedings, 2019, , .	0.3	2
382	Effect of plastic strain and ductile damage on elastic modulus of multiphase steel and its impact on springback prediction. AIP Conference Proceedings, 2019, , .	0.3	2
383	Developments in composite extrusion of complex profiles for automotive applications. Materials Today: Proceedings, 2019, 10, 217-225.	0.9	2
384	Analytical process design for interference-fit joining of rectangular profiles. Journal of Materials Processing Technology, 2020, 276, 116391.	3.1	2
385	Analysis of incremental die bending of wires and tubes. Production Engineering, 2020, 14, 265-274.	1.1	2
386	Estimation and Prevention of Strain Localization in Shear Tests. Minerals, Metals and Materials Series, 2021, , 691-707.	0.3	2
387	Analysis of Proximity Consequences of Coil Windings in Electromagnetic Forming. Journal of Manufacturing and Materials Processing, 2021, 5, 45.	1.0	2
388	Characterization of Flow Curves for Ultra-Thin Steel Sheets With the In-Plane Torsion Test. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2022, 144, .	1.3	2
389	Introduction of a New Method for Continuous Aluminum Hot Extrusion. Minerals, Metals and Materials Series, 2021, , 1021-1032.	0.3	2
390	Development of a Remote Compression Test Lab for Engineering Education. Lecture Notes in Networks and Systems, 2020, , 496-505.	0.5	2
391	Development of a Cupping Test in Remote Laboratories for Engineering Education., 2016,, 465-476.		2
392	Proze $ ilde{A}$ Ysimulation und- optimierung. , $1993$ , , $306\text{-}435$ .		2
393	TwinTool. , 2015, , 161-166.		2
394	Einfluss einer Kaltmassivumformung und WĤme-behandlung auf die Maß-und Formäderungen. HTM - Journal of Heat Treatment and Materials, 2014, 69, 295-305.	0.1	2
395	Preparation and Etching Methods for a Light-Optical Microscopy Analysis of Extrusion Seams and Microstructural Contrasting for Aluminum Alloys EN AW-6063 and EN AW-6082. Praktische Metallographie/Practical Metallography, 2012, 49, 612-622.	0.1	2
396	Newest Developments on the Manufacture of Helical Profiles by Hot Extrusion. , 2011, , .		2

#	Article	IF	CITATIONS
397	Characterization of Flow Induced Anisotropy in Sheet Metal at Large Strain. Experimental Mechanics, 2022, 62, 441-458.	1.1	2
398	Increasing the Lightweight Potential of Composite Cold Forging by Utilizing Magnesium and Granular Cores. Metals, 2021, $11$ , 32.	1.0	2
399	A control strategy for incremental profile forming. Journal of Manufacturing Processes, 2022, 79, 142-153.	2.8	2
400	Non-conventional extrusion of less-common materials. Journal of Materials Processing Technology, 1995, 49, 345-354.	3.1	1
401	Optimal initialization of manipulation dynamics by vorticity model of robot hand preshaping. Part I: Vorticity model. Journal of Field Robotics, 2000, 17, 199-212.	0.7	1
402	Investigation of Forming Strategies to Set up Mechanical Properties of Parts Made by Incremental Sheet Bulk Rolling., 2011,,.		1
403	Characterization of Initial Anisotropy of Sheet Metals Employing Inhomogeneous Strain Fields. , 2011, , .		1
404	miniLABs drop in and become fascinated by engineering experiments. , 2013, , .		1
405	A numerical study on intended and unintended failure mechanisms in blanking of sandwich plates. , 2013, , .		1
406	In-situ stress analysis with X-Ray diffraction for yield locus characterization of sheet metals., 2013,,.		1
407	Incremental analysis of springback and kinematic hardening by the variation of tension during deep drawing. , 2013, , .		1
408	Extrusion of Multi-Material Components. , 2014, , .		1
409	Analysis of the Potential of Incremental Stress Superposition on Air Bending. Key Engineering Materials, 0, 622-623, 1173-1180.	0.4	1
410	Investigations for the Embedding of Functional Elements in the Composite Extrusion Process. Materials Today: Proceedings, 2015, 2, 4763-4770.	0.9	1
411	Optimization of Porthole Die for Non-symmetric Composite Profiles. Materials Today: Proceedings, 2015, 2, 4778-4785.	0.9	1
412	Multiple forming tools in incremental forming $\hat{a} \in \text{``Influence'}$ Influence of the forming strategies on sheet contour. AIP Conference Proceedings, 2016, , .	0.3	1
413	Integration of new concepts and features into forming technology lectures. , 2016, , .		1
414	Numerical investigation of blanking for metal polymer sandwich sheets. MATEC Web of Conferences, 2016, 80, 16002.	0.1	1

#	Article	IF	CITATIONS
415	Finite element analysis of combined forming processes by means of rate dependent ductile damage modelling. International Journal of Material Forming, 2017, 10, 73-84.	0.9	1
416	Development of a FEM-lab for the virtual experimentation in forming processes. , 2017, , .		1
417	On the reduction of the gloss property of organic coated sheet metal after forming. Production Engineering, 2018, 12, 1-8.	1.1	1
418	Influence of the Manufacturing Process on Hot Extruded Shape Memory Alloy Metal Matrix Composites. , $2018, \ldots$		1
419	Improved failure prediction in forming simulations through pre-strain mapping. AIP Conference Proceedings, 2018, , .	0.3	1
420	Experimental and numerical investigations of joining by electromagnetic forming for aeronautical applications. AIP Conference Proceedings, 2019, , .	0.3	1
421	Manufacturing of reinforced profiles by means of combined continuous and discontinuous composite extrusion. Materials Today: Proceedings, 2019, 10, 201-208.	0.9	1
422	Load Optimisation for Air Bending in the Context of Damage Reduction. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900179.	0.2	1
423	Joining by die-less hydroforming with outer pressurization. Journal of Advanced Joining Processes, 2020, 1, 100014.	1.5	1
424	Cyclic Loading Tests Based on the In-Plane Torsion Test for Sheet Metal. Minerals, Metals and Materials Series, 2021, , 635-645.	0.3	1
425	Welding of Aluminium in Chip Extrusion. Minerals, Metals and Materials Series, 2021, , 139-147.	0.3	1
426	Control-Oriented Characterization of Product Properties during Hot Hole-Flanging of X46Cr13 Sheet Material in a Progressive-Die. Metals, 2021, 11, 349.	1.0	1
427	Part-optimized forming by spatially distributed vaporizing foil actuators. International Journal of Material Forming, 2021, 14, 1391-1401.	0.9	1
428	Material Flow Analysis for the Incremental Sheet-Bulk Gearing by Rotating Tools. , 2017, , .		1
429	Enabling Innovation in Engineering Education by Providing Flexible Funds for Teaching Staff. , 2014, , 269-278.		1
430	Simulation of Drawing-Processes by the Finite Element Method. , 1987, , 841-848.		1
431	Integration of new Concepts and Features into Forming Technology Lectures. , 2016, , 529-545.		1
432	Using Transnational Online Learning Experiences for Building International Student Working Groups and Developing Intercultural Competences. , 0, , .		1

#	Article	IF	CITATIONS
433	Warping and springback reduction in bending of U-profiles through partial heating over the cross-section. IOP Conference Series: Materials Science and Engineering, 2022, 1238, 012015.	0.3	1
434	Optimal initialization of manipulation dynamics by vorticity model of robot hand preshaping. Part II: Analyses of grasp initialization and its vorticity based optimization. Journal of Field Robotics, 2000, 17, 213-231.	0.7	O
435	Comparison of the Deep Drawability of Aluminum and Steel using Numerical Simulation Experiments. AIP Conference Proceedings, 2005, , .	0.3	0
436	Effects of Local Heating on Material Flow in Free Forming Process. , 2006, , 213.		0
437	INNOVATIVE FORMING TECHNOLOGY AS A KEY FOR THE EFFECTIVE MANUFACTURING OF LIGHTWEIGHT STRUCTURES. Journal of Advanced Manufacturing Systems, 2008, 07, 37-40.	0.4	O
438	Innovative sheet metal-forming processes. International Journal of Mechatronics and Manufacturing Systems, 2008, 1, 157.	0.1	0
439	Hydroforming of Large-Area Multi-Cell Sheet Metal Structures. Key Engineering Materials, 0, 410-411, 53-60.	0.4	0
440	Inverse parameter identification of sheet metals utilizing the distribution of field variables. International Journal of Material Forming, 2009, 2, 455-458.	0.9	0
441	High Speed Forming of Metals. Steel Research International, 2010, 80, 315-316.	1.0	0
442	Erratum to "A damage coupled orthotropic finite plasticity model for sheet metal forming: CDM approach―[Comput. Mater. Sci. 48 (2010) 150–165]. Computational Materials Science, 2010, 48, 875-876.	1.4	0
443	Lithe and Lissom - From the Hands of Robots. German Research, 2011, 33, 26-31.	0.1	0
444	Tool Design Induced Anisotropic Flow Behavior of Hot Extruded Aluminum Profiles. Key Engineering Materials, 0, 585, 131-138.	0.4	0
445	Application of a viscoplastic material model on a combined quasi-static-electromagnetic forming process. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 171-172.	0.2	O
446	Dry Shearing of Micro-Alloyed Steels. Key Engineering Materials, 2014, 622-623, 1058-1065.	0.4	0
447	Residual Stresses in Continuously Reinforced Composite Profiles with Symmetric Cross Sections. Procedia CIRP, 2014, 18, 126-131.	1.0	O
448	Process Window for the Embedding of Eccentric Steel-Reinforcing Elements in the Discontinuous Composite Extrusion Process. Applied Mechanics and Materials, 0, 794, 182-189.	0.2	0
449	Composite Extrusion of Aluminum with Discontinuous Eccentric Reinforcements. Materials Today: Proceedings, 2015, 2, 4758-4762.	0.9	O
450	Approaches for the Simulation of Composite Extrusion – Possibilities and Limits. Materials Today: Proceedings, 2015, 2, 4771-4777.	0.9	0

#	Article	IF	Citations
451	New process for flexible manufacturing of bent parts with variable arbitrary cross section. AIP Conference Proceedings, 2016, , .	0.3	O
452	Simulation of sheet-bulk metal forming processes with simufact forming using user-subroutines. AlP Conference Proceedings, 2016, , .	0.3	0
453	Live demo of two experiments using a remote lab for forming technology. , 2016, , .		0
454	An analytical model to predict the shock pressure amplitude in vaporizing foils. Journal of Materials Processing Technology, 2016, 231, 374-381.	3.1	0
455	Ball Burnishing Under High Velocities Using a New Rolling Tool Concept. , 2017, , .		0
456	Demonstration of deep drawing experiments in a remote lab environment., 2017,,.		0
457	Combination technology of deep drawing and back-moulding for plastic/metal hybrid components. Journal of Polymer Engineering, 2018, 38, 583-589.	0.6	0
458	Investigation of the effects of process and geometrical parameters on formability in tube hydroforming using a modular hydroforming tool. AIP Conference Proceedings, 2018, , .	0.3	0
459	Development of a procedure for forming assisted thermal joining of tubes. AIP Conference Proceedings, 2018, , .	0.3	0
460	Effect of the unbending process on mechanical properties before and after flattening of extruded open tubes of magnesium alloy ME20. AIP Conference Proceedings, 2019, , .	0.3	0
461	Novel roll stand for flexible profile bending. IOP Conference Series: Materials Science and Engineering, 2019, 651, 012076.	0.3	0
462	Influence of anisotropic damage evolution on cold forging. Production Engineering, 2020, 14, 115-121.	1.1	0
463	Strain hardening under large deformation for AA5182. IOP Conference Series: Materials Science and Engineering, 2020, 967, 012030.	0.3	0
464	Experimental Analysis on Granular Media-Based Tube Forming with Active Axial Feed. Minerals, Metals and Materials Series, 2021, , 2661-2670.	0.3	0
465	Metal Forming. Springer Handbooks, 2021, , 357-408.	0.3	0
466	Hot Extrusion of Aluminum Chips. , 2012, , 1559-1573.		0
467	Recycling of Aluminum Chips by Hot Extrusion. Lecture Notes in Production Engineering, 2014, , 197-201.	0.3	0
468	In-Situ Measurement of Loading Stresses by Means of X-ray Diffraction with Multi-State Sheet Specimen., 2015,, 397-402.		0

#	Article	IF	Citations
469	Sheet Material Characterization with the In-Plane Torsion Test: Cyclic Loading, Grooved Specimen and Twin Bridge Specimen., 2015,, 17-21.		0
470	Concepts of the International Manufacturing Remote Lab (MINTReLab) – Combination of a MOOC and a Remote Lab for a Manufacturing Technology Online Course. , 2016, , 547-558.		0
471	Development of a Tele-Operative Control for the Incremental Tube Forming Process and Its Integration into a Learning Environment., 2016,, 513-528.		O
472	Analysis of Dislocation Structures in Ferritic and Dual Phase Steels Regarding Continuous and Discontinuous Loading Paths. Minerals, Metals and Materials Series, 2017, , 203-210.	0.3	0
473	Bending (Tubes, Profiles)., 2018,, 1-10.		0
474	Bending (Tubes, Profiles)., 2019,, 131-140.		0
475	Remote Lab to Illustrate the Influence of Process Parameters on Product Properties in Additive Manufacturing. Advances in Intelligent Systems and Computing, 2021, , 456-464.	0.5	0
476	Introduction of Composite Hot Extrusion with Tubular Reinforcements for Subsequent Cold Forging. Lecture Notes in Production Engineering, 2021, , 193-201.	0.3	0
477	Analysis of Path-Dependent Damage and Microstructure Evolution for Numerical Analysis of Sheet-Bulk Metal Forming Processes. Lecture Notes in Production Engineering, 2021, , 378-411.	0.3	O
478	Incremental Sheet-Bulk Metal Forming by Application of Thermal-Controlled Grading Mechanisms. Lecture Notes in Production Engineering, 2021, , 493-514.	0.3	0
479	Extending the potentials of draw-forging. International Journal of Material Forming, 2022, 15, 1.	0.9	0
480	Superposing tensile stresses into single point incremental forming to affect martensitic transformation of SS304. IOP Conference Series: Materials Science and Engineering, 2022, 1238, 012085.	0.3	0
481	Development of a Hot Cutting Process for Functional Parts by Stress State-Dependent Damage Modeling. Minerals, Metals and Materials Series, 2022, , 511-521.	0.3	0