Marion Merklein

List of Publications by Year
in descending order

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348 papers	6,447 citations	126907 33 h-index	95266 68 g-index
352 all docs	352 docs citations	352 times ranked	3084 citing authors

#	Article	IF	Citations
1	Laser based additive manufacturing in industry and academia. CIRP Annals - Manufacturing Technology, 2017, 66, 561-583.	3.6	431
2	A review on tailored blanksâ€"Production, applications and evaluation. Journal of Materials Processing Technology, 2014, 214, 151-164.	6.3	354
3	Investigation of the thermo-mechanical properties of hot stamping steels. Journal of Materials Processing Technology, 2006, 177, 452-455.	6.3	326
4	Bulk forming of sheet metal. CIRP Annals - Manufacturing Technology, 2012, 61, 725-745.	3.6	307
5	Hot stamping of boron steel sheets with tailored properties: A review. Journal of Materials Processing Technology, 2016, 228, 11-24.	6.3	259
6	Hot stamping of ultra-high strength steel parts. CIRP Annals - Manufacturing Technology, 2017, 66, 755-777.	3.6	256
7	Environmentally benign tribo-systems for metal forming. CIRP Annals - Manufacturing Technology, 2010, 59, 760-780.	3.6	253
8	Testing and modelling of material behaviour and formability in sheet metal forming. CIRP Annals - Manufacturing Technology, 2014, 63, 727-749.	3.6	185
9	Characterisation of the Flow Properties of the Quenchenable Ultra High Strength Steel 22MnB5. CIRP Annals - Manufacturing Technology, 2006, 55, 229-232.	3.6	165
10	Investigation on induction heating for hot stamping of boron alloyed steels. CIRP Annals - Manufacturing Technology, 2009, 58, 275-278.	3.6	141
11	Metal forming beyond shaping: Predicting and setting product properties. CIRP Annals - Manufacturing Technology, 2015, 64, 629-653.	3.6	134
12	Hybrid Additive Manufacturing Technologies â€“ An Analysis Regarding Potentials and Applications. Physics Procedia, 2016, 83, 549-559.	1.2	114
13	Investigations on the thermal behavior of ultra high strength boron manganese steels within hot stamping. International Journal of Material Forming, 2009, 2, 259-262.	2.0	85
14	Manufacturing of advanced smart tooling for metal forming. CIRP Annals - Manufacturing Technology, 2019, 68, 605-628.	3.6	78
15	Determination of Material and Process Characteristics for Hot Stamping Processes of Quenchenable Ultra High Strength Steels with Respect to a FE-based Process Design. SAE International Journal of Materials and Manufacturing, 0, 1, 411-426.	0.3	75
16	Time dependent determination of forming limit diagrams. CIRP Annals - Manufacturing Technology, 2010, 59, 295-298.	3.6	69
17	Determination of tribological conditions within hot stamping. Production Engineering, 2008, 2, 269-276.	2.3	67
18	Fundamental investigations on the material flow at combined sheet and bulk metal forming processes. CIRP Annals - Manufacturing Technology, 2011, 60, 283-286.	3.6	66

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19	Aluminum tailored heat treated blanks. Production Engineering, 2009, 3, 401-410.	2.3	64
20	Bendability of advanced high strength steelsâ€"A new evaluation procedure. CIRP Annals - Manufacturing Technology, 2013, 62, 247-250.	3.6	61
21	A Round Robin study for Selective Laser Sintering of polyamide 12: Microstructural origin of the mechanical properties. Optics and Laser Technology, 2017, 89, 31-40.	4.6	58
22	Development of a mechanical joining process for automotive body-in-white production. International Journal of Material Forming, 2010, 3, 1059-1062.	2.0	55
23	Development of a biaxial tensile machine for characterization of sheet metals. Journal of Materials Processing Technology, 2013, 213, 939-946.	6.3	55
24	On the hot deformation behavior of Ti-6Al-4V made by additive manufacturing. Journal of Materials Processing Technology, 2021, 288, 116840.	6.3	54
25	A method for the layer compression test considering the anisotropic material behavior. International Journal of Material Forming, 2009, 2, 483-486.	2.0	49
26	Mechanical properties of an innovative shear-clinching technology for ultra-high-strength steel and aluminium in lightweight car body structures. Welding in the World, Le Soudage Dans Le Monde, 2016, 60, 613-620.	2.5	46
27	Interlaboratory comparison for heat transfer coefficient identification in hot stamping of high strength steels. International Journal of Material Forming, 2010, 3, 817-820.	2.0	44
28	Time Dependent FLC Determination Comparison of Different Algorithms to Detect the Onset of Unstable Necking before Fracture. Key Engineering Materials, 0, 549, 397-404.	0.4	43
29	Review on mechanical joining by plastic deformation. Journal of Advanced Joining Processes, 2022, 5, 100113.	2.7	43
30	Basic Investigations on the Hot Stamping Steel 22MnB5. Advanced Materials Research, 2005, 6-8, 795-804.	0.3	41
31	Alloy design and adaptation for additive manufacture. Journal of Materials Processing Technology, 2022, 299, 117358.	6.3	41
32	Finite Element Simulation of Deep Drawing of Tailored Heat Treated Blanks. CIRP Annals - Manufacturing Technology, 2004, 53, 223-226.	3.6	40
33	Manufacturing of complex functional components with variants by using a new metal forming process â€“ sheet-bulk metal forming. International Journal of Material Forming, 2010, 3, 347-350.	2.0	39
34	Experimental and numerical investigation of a strain rate controlled hydraulic bulge test of sheet metal. Journal of Materials Processing Technology, 2016, 235, 121-133.	6.3	38
35	An inverse approach to the numerical design of the process sequence of tailored heat treated blanks. Production Engineering, 2008, 2, 15-20.	2.3	37
36	A Round Robin study for selective laser sintering of polymers: Back tracing of the pore morphology to the process parameters. Journal of Materials Processing Technology, 2018, 252, 537-545.	6.3	36

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37	Orbital forming of tailored blanks from sheet metal. CIRP Annals - Manufacturing Technology, 2012, 61, 263-266.	3.6	35
38	Manufacturing of functional elements by sheet-bulk metal forming processes. Production Engineering, 2016, 10, 63-80.	2.3	33
39	Modelling kinetics of phase transformation for the indirect hot stamping process to focus on car body parts with tailored properties. Journal of Materials Processing Technology, 2016, 228, 59-67.	6.3	32
40	Improved Sheet Bulk Metal Forming Processes by Local Adjustment of Tribological Properties. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2011, 133, .	2.2	30
41	Fluid elements in machine tools. CIRP Annals - Manufacturing Technology, 2017, 66, 611-634.	3.6	30
42	Experimental and numerical analysis of tribological effective surfaces for forming tools in Sheet-Bulk Metal Forming. Production Engineering, 2016, 10, 37-50.	2.3	29
43	Tailoring Material Properties of Aluminum by Local Laser Heat Treatment. Physics Procedia, 2012, 39, 232-239.	1.2	28
44	Developing LBM Process Parameters for Ti-6Al-4V Thin Wall Structures and Determining the Corresponding Mechanical Characteristics. Physics Procedia, 2014, 56, 90-98.	1.2	28
45	Formability of Accumulative Roll Bonded Aluminum AA1050 and AA6016 Investigated Using Bulge Tests. Advanced Engineering Materials, 2008, 10, 1101-1109.	3.5	27
46	Investigation of Heat Treatment Strategies for Additively-Manufactured Tools of X37CrMoV5-1. Metals, 2018, 8, 854.	2.3	27
47	Improving formability due to an enhancement of sealing limits caused by using a smart fluid as active fluid medium for hydroforming. Production Engineering, 2014, 8, 7-15.	2.3	26
48	Tribological measures for controlling material flow in sheet-bulk metal forming. Production Engineering, 2016, 10, 459-470.	2.3	26
49	Experimental investigations of processing the high carbon cold-work tool steel 1.2358 by laser metal deposition for the additive manufacturing of cold forging tools. Journal of Laser Applications, 2017, 29, .	1.7	26
50	Application of Tailor Heat Treated Blanks technology in a joining by forming process. Journal of Materials Processing Technology, 2019, 264, 259-272.	6.3	26
51	Material Flow in Sheet-Bulk Metal Forming. Key Engineering Materials, 2012, 504-506, 1035-1040.	0.4	25
52	Investigation on basic friction and wear mechanisms within hot stamping considering the influence of tool steel and hardness. Wear, 2019, 426-427, 378-389.	3.1	25
53	Hot stamping: manufacturing functional optimized components. Production Engineering, 2013, 7, 141-151.	2.3	24
54	Improvement of a rivet geometry for the self-piercing riveting of high-strength steel and multi-material joints. Production Engineering, 2020, 14, 417-423.	2.3	24

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55	An innovative process combination of additive manufacturing and sheet bulk metal forming for manufacturing a functional hybrid part. Journal of Materials Processing Technology, 2021, 291, 117032.	6.3	24
56	High-feed milling of tailored surfaces for sheet-bulk metal forming tools. Production Engineering, 2015, 9, 215-223.	2.3	21
57	Potential of shear-clinching technology for joining of three sheets. Journal of Advanced Joining Processes, 2021, 3, 100043.	2.7	21
58	Contact pressure-dependent friction characterization by using a single sheet metal compression test. Wear, 2021, 476, 203679.	3.1	20
59	Determination of friction coefficients in deep drawing by modification of Siebelâ€™s formula for calculation of ideal drawing force. Production Engineering, 2014, 8, 577-584.	2.3	19
60	Influence of tool surface on tribological conditions in conventional and dry sheet metal forming. International Journal of Precision Engineering and Manufacturing - Green Technology, 2015, 2, 131-137.	4.9	19
61	Analysis of the bending effects and the biaxial pre-straining in sheet metal stretch forming processes for the determination of the forming limits. International Journal of Mechanical Sciences, 2018, 138-139, 295-309.	6.7	19
62	Investigation of tribological behaviour of a-C:H coatings for dry deep drawing of aluminium alloys. Tribology International, 2018, 118, 484-490.	5.9	19
63	In Situ Formation of a Metastable Î²-Ti Alloy by Laser Powder Bed Fusion (L-PBF) of Vanadium and Iron Modified Ti-6Al-4V. Metals, 2018, 8, 1067.	2.3	18
64	Mechanical joining without auxiliary element by cold formed pins for multi-material-systems. AIP Conference Proceedings, 2019, , .	0.4	18
65	Customized exposure strategies for manufacturing hybrid parts by combining laser beam melting and sheet metal forming. Journal of Laser Applications, 2019, 31, .	1.7	18
66	Sheet Metal Forming - A New Kind of Forge for the Future. Key Engineering Materials, 0, 344, 9-20.	0.4	17
67	Characterization of Hybrid Components Consisting of SEBM Additive Structures and Sheet Metal of Alloy Ti-6Al-4V. Key Engineering Materials, 0, 611-612, 609-614.	0.4	17
68	Additive Manufacturing of Functional Elements on Sheet Metal. Physics Procedia, 2016, 83, 797-807.	1.2	17
69	A new approach for the determination of the linear elastic modulus from uniaxial tensile tests of sheet metals. Journal of Materials Processing Technology, 2017, 241, 64-72.	6.3	17
70	Control of the material flow in sheet-bulk metal forming using modifications of the tool surface. International Journal of Material Forming, 2019, 12, 17-26.	2.0	17
71	Measuring procedures for surface evaluation of additively manufactured powder bed-based polymer and metal parts. Measurement Science and Technology, 2020, 31, 095202.	2.6	17
72	Numerical and experimental investigation of dry deep drawing of aluminum alloys with conventional and coated tool surfaces. Procedia Engineering, 2017, 207, 2245-2250.	1.2	16

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73	Tailored Heat Treated Accumulative Roll Bonded Aluminum Blanks: Microstructure and Mechanical Behavior. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 3097-3107.	2.2	15
74	Investigations and Approaches on Material Flow of Non-uniform Arranged Cavities in Sheet Bulk Metal Forming Processes. Procedia Engineering, 2014, 81, 401-406.	1.2	15
75	Electrodeposition, microstructural characterization and anticorrosive properties of Zn-Mn alloy coatings from acidic chloride electrolyte containing 4-hydroxybenzaldehyde and ammonium thiocyanate. Surface and Coatings Technology, 2016, 298, 73-82.	4.8	15
76	Fiber Orientation Mechanism of ContinuousÂFiber Reinforced Thermoplastics Hybrid Parts Joined with Metallic Pins. Applied Composite Materials, 2021, 28, 951-972.	2.5	15
77	A New Process Chain for Joining Sheet Metal to Fibre Composite Sheets. Key Engineering Materials, 2014, 611-612, 1468-1475.	0.4	14
78	Process Design of Aluminum Tailor Heat Treated Blanks. Materials, 2015, 8, 8524-8538.	2.9	14
79	A New Approach to the Evaluation of Forming Limits in Sheet Metal Forming. Key Engineering Materials, 2015, 639, 333-338.	0.4	14
80	Plastic flow and its control in sheetâ€“bulk metal forming of thin-walled functional components. CIRP Annals - Manufacturing Technology, 2015, 64, 245-248.	3.6	14
81	Experimental analysis of the forming behavior of ash wood veneer with nonwoven backings. European Journal of Wood and Wood Products, 2020, 78, 321-331.	2.9	14
82	Forming of metal-based composite parts. CIRP Annals - Manufacturing Technology, 2021, 70, 567-588.	3.6	14
83	Enhancement of formability of aluminum alloys in multi-stage forming operations by a local intermediate heat treatment. Production Engineering, 2012, 6, 541-549.	2.3	13
84	Bending of unidirectional non-crimp-fabrics: experimental characterization, constitutive modeling and application in finite element simulation. Production Engineering, 2015, 9, 1-10.	2.3	13
85	Introduction to sheet-bulk metal forming. Production Engineering, 2016, 10, 1-3.	2.3	13
86	Influence of short-term heat treatment on the microstructure and mechanical properties of EN AW-6060 T4 extrusion profiles: Part A. Production Engineering, 2016, 10, 383-389.	2.3	13
87	Friction reduction in EHL contacts by surface microtexturing â€“ tribological performance, manufacturing and tailored design. Industrial Lubrication and Tribology, 2019, 71, 986-990.	1.3	13
88	Cyber-Physical Systems in the Context of Industry 4.0: A Review, Categorization and Outlook. Information Systems Frontiers, 0, , 1.	6.4	13
89	FE-Simulation of the Heat Transfer by Defined Cooling Conditions during the Hot Stamping Process. Key Engineering Materials, 2011, 473, 699-706.	0.4	12
90	Experimental Study of a Full Forward Extrusion Process from Metal Strip. Key Engineering Materials, 0, 504-506, 587-592.	0.4	12

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91	Analysis of Effectiveness of Locally Adapted Tribological Conditions for Improving Product Quality in Sheet-Bulk Metal Forming. Applied Mechanics and Materials, 0, 794, 81-88.	0.2	12
92	Development of a Testing Method for the Identification of Friction Coefficients for Numerical Modeling of the Shear-Clinching Process. Key Engineering Materials, 2015, 639, 469-476.	0.4	12
93	Investigations of ductile damage during the process chains of toothed functional components manufactured by sheet-bulk metal forming. Production Engineering, 2016, 10, 5-15.	2.3	12
94	Effect of temperature and punch speed on forming limit strains of AA5182 alloy in warm forming and improvement in failure prediction in finite element analysis. Journal of Strain Analysis for Engineering Design, 2017, 52, 258-273.	1.8	12
95	Influence of a bending operation on the bonding strength for hybrid parts made of Ti-6Al-4V. Procedia CIRP, 2018, 74, 290-294.	1.9	12
96	4.0 in metal forming â€“ questions and challenges. Procedia CIRP, 2019, 79, 649-654.	1.9	12
97	Determination of Forming Limits in Sheet Metal Forming Using Deep Learning. Materials, 2019, 12, 1051.	2.9	12
98	Microstructural evolution and geometrical properties of TiB2 metal matrix composite protrusions on hot work tool steel surfaces manufactured by laser implantation. International Journal of Advanced Manufacturing Technology, 2020, 106, 481-501.	3.0	12
99	Influence of the properties of the joining partners on the load-bearing capacity of shear-clinched joints. Journal of Materials Processing Technology, 2020, 283, 116696.	6.3	12
100	Variation of deep drawing steel gradesâ€™ properties in dependency of the stress state and its impact on FEA. International Journal of Material Forming, 2011, 4, 183-192.	2.0	11
101	Characterisation of kinematic hardening and yield surface evolution from uniaxial to biaxial tension with continuous strain path change. CIRP Annals - Manufacturing Technology, 2014, 63, 297-300.	3.6	11
102	Towards virtual deformation dilatometry for the design of hot stamping process. Procedia Engineering, 2017, 207, 1821-1826.	1.2	11
103	Potential of Joining Dissimilar Materials by Cold Formed Pin-Structures. Journal of Materials Processing Technology, 2020, 283, 116697.	6.3	11
104	Joining by forming technologies: current solutions and future trends. International Journal of Material Forming, 2022, 15, 1.	2.0	11
105	Measurement of Material Flow in Series Production. Key Engineering Materials, 2011, 473, 137-144.	0.4	10
106	A modular modeling approach for describing the in-plane forming behavior of unidirectional non-crimp-fabrics. Production Engineering, 2014, 8, 635-643.	2.3	10
107	Mechanical Testing of Additive Manufactured Metal Parts. Key Engineering Materials, 2015, 651-653, 713-718.	0.4	10
108	Qualification of laser based additive production for manufacturing of forging Tools. MATEC Web of Conferences, 2015, 21, 08010.	0.2	10

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109	High power laser beam melting of Ti6Al4V on formed sheet metal to achieve hybrid structures. , 2015, , .		10
110	Designing, Manufacturing and Processing of Tailored Blanks in a Sheet-bulk Metal Forming Process. Procedia Manufacturing, 2017, 10, 286-297.	1.9	10
111	Improvement of deep drawability of ultra-fine grained 6000 series aluminum alloy by tailored heat treatment. Procedia Manufacturing, 2018, 15, 976-983.	1.9	10
112	Analysis of Forming Limits in Sheet Metal Forming with Pattern Recognition Methods. Part 1: Characterization of Onset of Necking and Expert Evaluation. Materials, 2018, 11, 1495.	2.9	10
113	Improvement of Numerical Modelling Considering Plane Strain Material Characterization with an Elliptic Hydraulic Bulge Test. Journal of Manufacturing and Materials Processing, 2018, 2, 6.	2.2	10
114	Tribological Behavior of Carbon Based Coatings Adapted to Lubricant-Free Forming Conditions. International Journal of Precision Engineering and Manufacturing - Green Technology, 2018, 5, 361-367.	4.9	10
115	Properties of Tool Steels for Application in Hot Stamping. Steel Research International, 2020, 91, 1900422.	1.8	10
116	A ROUND ROBIN STUDY FOR LASER BEAM MELTING IN METAL POWDER BED. South African Journal of Industrial Engineering, 2016, 27, .	0.2	10
117	Enhanced Formability of Ultrafine-Grained Aluminum Blanks by Local Heat Treatments. Key Engineering Materials, 0, 410-411, 169-176.	0.4	9
118	Ductile Damage and Fatigue Behavior of Semi-Finished Tailored Blanks for Sheet-Bulk Metal Forming Processes. Journal of Materials Engineering and Performance, 2016, 25, 1136-1142.	2.5	9
119	Dynamic correction of oscillatory forces during ultrasonic-assisted metal forming. Production Engineering, 2017, 11, 455-465.	2.3	9
120	Analysis of fundamental dependencies between manufacturing and processing Tailored Blanks in sheet-bulk metal forming processes. Procedia Engineering, 2017, 207, 305-310.	1.2	9
121	Experimental Evaluation of Cold Forging Lubricants Using Double-Cup-Extrusion-Tests. Materials Science Forum, 0, 918, 65-70.	0.3	9
122	Influence of ultrasonic vibration on the shear formability of metallic materials. CIRP Annals - Manufacturing Technology, 2018, 67, 277-280.	3.6	9
123	Investigation of the influence of tool-sided parameters on deformation and occurring tool loads in shear-clinching processes. Procedia Manufacturing, 2018, 15, 1346-1353.	1.9	9
124	Processing of 316L hybrid parts consisting of sheet metal and additively manufactured element by Powder Bed Fusion using a laser beam. Procedia CIRP, 2020, 94, 35-40.	1.9	9
125	Process design for the forming of semi-tubular self-piercing rivets made of high nitrogen steel. Procedia Manufacturing, 2020, 50, 280-285.	1.9	9
126	Investigation of the Springback Behaviour of High-strength Aluminium Alloys Based on Cross Profile Deep Drawing Tests. Procedia Manufacturing, 2020, 47, 1223-1229.	1.9	9

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127	Experimental Study on Joining by Forming of HCT590X + Z and EN-AW 6014 Sheets Using Cold Extruded Pin Structures. Journal of Manufacturing and Materials Processing, 2021, 5, 25.	2.2	9
128	Analysis of Material Behaviour in Experimental and Simulative Setup of Joining by Forming of Aluminium Alloy and High Strength Steel with Shear-Clinching Technology. Advanced Materials Research, 2014, 966-967, 549-556.	0.3	8
129	Influence of Surface Integrity on the Tribological Performance of Cold Forging Tools. Procedia CIRP, 2014, 13, 61-66.	1.9	8
130	Investigation of Influencing Parameters for Tribological Conditions in Dry Forming Processes. Acta Metallurgica Sinica (English Letters), 2015, 28, 1435-1441.	2.9	8
131	Influence of a retrogression and reaging (RRA)-treatment on the mechanical and microstructural characteristics of the aluminium alloy AlZn4,5Mg1. Production Engineering, 2015, 9, 161-166.	2.3	8
132	In-line strategies and methods to reduce balancing efforts within rotor production for electric drives. , 2016, , .		8
133	Innovative approaches for controlling the material flow in sheet-bulk metal forming processes. Manufacturing Review, 2016, 3, 2.	1.5	8
134	Investigation of surface finishing of carbon based coated tools for dry deep drawing of aluminium alloys. IOP Conference Series: Materials Science and Engineering, 2016, 159, 012022.	0.6	8
135	Data-driven inline optimization of the manufacturing process of car body parts. IOP Conference Series: Materials Science and Engineering, 2016, 159, 012002.	0.6	8
136	Edge crack sensitivity of lightweight materials under different load conditions. IOP Conference Series: Materials Science and Engineering, 2016, 159, 012017.	0.6	8
137	Influence of short-term heat treatment on the microstructure and mechanical properties of EN AW-6060 T4 extrusion profilesâ€"Part B. Production Engineering, 2016, 10, 391-398.	2.3	8
138	A non-invasive form finding method with application to metal forming. Production Engineering, 2016, 10, 93-102.	2.3	8
139	Data-driven model development for quality prediction in forming technology. , 2017, , .		8
140	Comparison of extrusion processes in sheet-bulk metal forming for production of filigree functional elements. CIRP Journal of Manufacturing Science and Technology, 2019, 26, 41-49.	4.5	8
141	Analysing resistance element welding with upset auxiliary joining steel-elements under shear load. Procedia Manufacturing, 2019, 29, 329-336.	1.9	8
142	Functional optimization of hot-stamped components by local carburization. International Journal of Lightweight Materials and Manufacture, 2020, 3, 43-54.	2.1	8
143	Manufacturing of tailored blanks by orbital forming with a two-sided material thickening. Journal of Materials Processing Technology, 2021, 287, 116491.	6.3	8
144	Strategies for residual stress adjustment in bulk metal forming. Archive of Applied Mechanics, 2021, 91, 3557-3577.	2.2	8

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145	Characterization of Heat Transfer Coefficients of Tool Materials and Tool Coatings for Hot Stamping of Boron-Manganese Steels. Key Engineering Materials, 2010, 438, 81-88.	0.4	7
146	Bending of High-strength Low-alloyed Steel with Respect to Edge Crack Sensitivity Caused by Shearing Operations. Procedia Engineering, 2014, 81, 712-717.	1.2	7
147	Flexible Rolling of Process Adapted Semi-Finished Parts and its Application in a Sheet-Bulk Metal Forming Process. Key Engineering Materials, 0, 639, 259-266.	0.4	7
148	Precipitation Behaviour and Mechanical Properties during Short-Term Heat Treatment for Tailor Heat Treated Profiles (THTP) of Aluminium Alloy 6060 T4. Materials Science Forum, 0, 877, 400-406.	0.3	7
149	Experimental study on the warm forming and quenching behavior for hot stamping of high-strength aluminum alloys. Journal of Physics: Conference Series, 2017, 896, 012055.	0.4	7
150	Compression testing of martensitic stainless steel with superimposed ultrasonic vibration. Procedia Engineering, 2017, 207, 1970-1975.	1.2	7
151	Influence of the mechanical fatigue progress on the magnetic properties of electrical steel sheets. Archives of Electrical Engineering, 2017, 66, 351-360.	1.0	7
152	Analysis of Forming Limits in Sheet Metal Forming with Pattern Recognition Methods. Part 2: Unsupervised Methodology and Application. Materials, 2018, 11, 1892.	2.9	7
153	Orbital forming of tailored blanks with two-sided local material thickening. International Journal of Advanced Manufacturing Technology, 2018, 97, 3469-3478.	3.0	7
154	Shear-Clinching of Multi-Element Specimens of Aluminium Alloy and Ultra-High-Strength Steel. Key Engineering Materials, 0, 767, 389-396.	0.4	7
155	Additive Manufacturing of Tailored Blank for Sheet-Bulk Metal Forming Processes. IOP Conference Series: Materials Science and Engineering, 2020, 967, 012034.	0.6	7
156	Analytical friction force compensation of flow curves out of layer compression tests with the pin extrusion test. International Journal of Material Forming, 2021, 14, 663-676.	2.0	7
157	Adapted tool design for the cold forging of gears from non-ferrous and light metals. International Journal of Advanced Manufacturing Technology, 2021, 113, 1833-1848.	3.0	7
158	Influence of the Rivet Coating on the Friction during Self-Piercing Riveting. Key Engineering Materials, 0, 883, 11-18.	0.4	7
159	Manufacturing of complex high strength components out of high nitrogen steels at industrial level. Transactions of Nonferrous Metals Society of China, 2012, 22, s512-s518.	4.2	6
160	Basic Investigations of Non-Pre-Punched Joining by Forming of Aluminium Alloy and High Strength Steel with Shear-Clinching Technology. Key Engineering Materials, 2014, 611-612, 1413-1420.	0.4	6
161	Improvement of surface integrity of cold forging tools by adaption of tool making process. Production Engineering, 2014, 8, 131-141.	2.3	6
162	Influence of a Regression Heat Treatment on the Material Properties of a Copper-free 7xxx Series Aluminum Alloy. Procedia CIRP, 2014, 18, 108-113.	1.9	6

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163	Approach to minimize the distortion of 6xxx-aluminum tailor heat treated blanks in industrial applications. Production Engineering, 2015, 9, 569-576.	2.3	6
164	Tool System for Ultrasonic-Assisted Forming and Material Characterisation with 15 kHz Oscillation Frequency. Applied Mechanics and Materials, 0, 794, 427-434.	0.2	6
165	Embossing of Metal Inserts for Subsequent Assembly Injection Moulding of Media Tight Electronic Systems. Key Engineering Materials, 0, 639, 99-106.	0.4	6
166	FE-Based Study of the Cutting Operation within Joining by Forming of Dissimilar Materials Using Shear-Clinching Technology. Applied Mechanics and Materials, 2015, 794, 304-311.	0.2	6
167	New Process Strategies to Manufacture Tailored Blanks out of DP600 by Orbital Forming. Applied Mechanics and Materials, 0, 794, 144-151.	0.2	6
168	Locally Adapted Tribological Conditions as a Method for Influencing the Material Flow in Sheet-Bulk Metal Forming Processes. Key Engineering Materials, 2015, 639, 267-274.	0.4	6
169	Induction Heat Treatment of Sheetâ€Bulk Metalâ€Formed Parts Assisted by Waterâ€“Air Spray Cooling. Steel Research International, 2016, 87, 1220-1227.	1.8	6
170	Specimen's Geometry Related Influences on Load-Bearing Capacity of Joining Aluminium and UHSS by Innovative Shear-Clinching. Journal of Materials Science Research, 2017, 6, 19.	0.1	6
171	Tribological Behavior of Different Tool Steels and Surface Properties under Hot Stamping Conditions. Key Engineering Materials, 0, 767, 212-219.	0.4	6
172	A Concept for Process-Oriented Interdisciplinary Tolerance Management Considering Production-Specific Deviations. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 3441-3450.	0.6	6
173	Failure behavior of different sheet metals after passing a drawbead. Procedia Manufacturing, 2019, 34, 125-132.	1.9	6
174	Influence of tribological conditions on application relevant component properties of cold forged gears. Production Engineering, 2019, 13, 579-588.	2.3	6
175	Researching of commonalities and differences in cold forging of spur and helical gears. Production Engineering, 2019, 13, 391-397.	2.3	6
176	Characterization of tribological conditions within direct hot stamping. Journal of Materials Processing Technology, 2020, 278, 116535.	6.3	6
177	Modeling material behavior of AA5083 aluminum alloy sheet using biaxial tensile tests and its application in numerical simulation of deep drawing. International Journal of Advanced Manufacturing Technology, 2020, 106, 1133-1148.	3.0	6
178	Fringe Projection Profilometry in Production Metrology: A Multi-Scale Comparison in Sheet-Bulk Metal Forming. Sensors, 2021, 21, 2389.	3.8	6
179	Systematic exploration of the L-PBF processing behavior and resulting properties of Î²-stabilized Ti-alloys prepared by in-situ alloy formation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 818, 141374.	5.6	6
180	Analysis of the Influence of Surface Modifications on the Fatigue Behavior of Hot Work Tool Steel Components. Materials, 2021, 14, 7324.	2.9	6

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