

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2590838/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Ductile fracture: Experiments and computations. International Journal of Plasticity, 2011, 27, 147-180.	4.1	426
2	A review on the state-of-the-art microforming technologies. International Journal of Advanced Manufacturing Technology, 2013, 67, 2411-2437.	1.5	202
3	Geometry and grain size effects on the fracture behavior of sheet metal in micro-scale plastic deformation. Materials & Design, 2011, 32, 4738-4746.	5.1	196
4	Modeling of grain size effect on micro deformation behavior in micro-forming of pure copper. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 6638-6648.	2.6	143
5	Deformation behavior and microstructure evolution of titanium alloys with lamellar microstructure in hot working process: A review. Journal of Materials Science and Technology, 2020, 39, 56-73.	5.6	135
6	The size effect on micro deformation behaviour in micro-scale plastic deformation. Materials & Design, 2011, 32, 198-206.	5.1	134
7	Size effect affected formability of sheet metals in micro/meso scale plastic deformation: Experiment and modeling. International Journal of Plasticity, 2015, 68, 34-54.	4.1	112
8	The influence of size effect on the ductile fracture in micro-scaled plastic deformation. International Journal of Plasticity, 2013, 41, 65-81.	4.1	110
9	A review of geometrical and microstructural size effects in micro-scale deformation processing of metallic alloy components. International Journal of Machine Tools and Manufacture, 2016, 109, 94-125.	6.2	109
10	Undercut feature recognition in an injection mould design system. CAD Computer Aided Design, 1999, 31, 777-790.	1.4	98
11	Experimental studies and numerical modeling of the specimen and grain size effects on the flow stress of sheet metal in microforming. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 7674-7683.	2.6	98
12	Size effect on deformation behavior and ductile fracture in microforming of pure copper sheets considering free surface roughening. Materials and Design, 2015, 83, 400-412.	3.3	98
13	Microstructure evolution in the conventional single side and bobbin tool friction stir welding of thick rolled 7085-T7452 aluminum alloy. Materials Characterization, 2018, 138, 48-55.	1.9	97
14	Study on the dynamic recrystallization mechanisms of Inconel 740 superalloy during hot deformation. Journal of Alloys and Compounds, 2020, 820, 153325.	2.8	95
15	Study of size effect in micro-extrusion process of pure copper. Materials & Design, 2011, 32, 3772-3782.	5.1	94
16	Experimental and simulation studies of micro blanking and deep drawing compound process using copper sheet. Journal of Materials Processing Technology, 2013, 213, 101-110.	3.1	92
17	A multiscale investigation into the effect of grain size on void evolution and ductile fracture: Experiments and crystal plasticity modeling. International Journal of Plasticity, 2020, 125, 133-149.	4.1	87
18	Influence of size effect on the springback of sheet metal foils in micro-bending. Computational Materials Science, 2011, 50, 2604-2614.	1.4	83

#	Article	IF	CITATIONS
19	Study of microstructural grain and geometric size effects on plastic heterogeneities at grain-level by using crystal plasticity modeling with high-fidelity representative microstructures. International Journal of Plasticity, 2018, 100, 69-89.	4.1	79
20	Manufacturing of advanced smart tooling for metal forming. CIRP Annals - Manufacturing Technology, 2019, 68, 605-628.	1.7	78
21	An approach to identify design and manufacturing features from a data exchanged part model. CAD Computer Aided Design, 2003, 35, 979-993.	1.4	73
22	Size effect on material surface deformation behavior in micro-forming process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 4799-4806.	2.6	72
23	Modeling of slip, twinning and transformation induced plastic deformation for TWIP steel based on crystal plasticity. International Journal of Plasticity, 2016, 76, 186-212.	4.1	72
24	Mechanisms of DRX nucleation with grain boundary bulging and subgrain rotation during the hot working of nickel-based superalloys with columnar grains. Journal of Alloys and Compounds, 2019, 786, 636-647.	2.8	72
25	A hybrid model for analysis of ductile fracture in micro-scaled plastic deformation of multiphase alloys. International Journal of Plasticity, 2014, 61, 1-16.	4.1	67
26	Anisotropic and asymmetrical yielding and its evolution in plastic deformation: Titanium tubular materials. International Journal of Plasticity, 2017, 90, 177-211.	4.1	67
27	Optimization of β/near-β forging process parameters of Ti-6.5Al-3.5Mo-1.5Zr-0.3Si by using processing maps. Materials Characterization, 2009, 60, 492-498.	1.9	66
28	Experimental studies of the size effect affected microscale plastic deformation in micro upsetting process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 534, 374-383.	2.6	65
29	Hot deformation behavior of GH4169 superalloy associated with stick l´phase dissolution during isothermal compression process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 540, 164-173.	2.6	65
30	Geometry and grain size effects on the forming limit of sheet metals in micro-scaled plastic deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 611, 345-353.	2.6	65
31	DDRX and CDRX of an as-cast nickel-based superalloy during hot compression at γ′ sub-/super-solvus temperatures. Journal of Alloys and Compounds, 2019, 803, 16-29.	2.8	65
32	Hot deformation behavior of the post-cogging FGH4096 superalloy with fine equiaxed microstructure. Materials Characterization, 2011, 62, 887-893.	1.9	63
33	Size effects in multi-scale materials processing and manufacturing. International Journal of Machine Tools and Manufacture, 2021, 167, 103755.	6.2	63
34	Comparative study on local and global mechanical properties of bobbin tool and conventional friction stir welded 7085-T7452 aluminum thick plate. Journal of Materials Science and Technology, 2018, 34, 173-184.	5.6	62
35	Study of the dynamic recrystallization of Ti–6.5Al–3.5Mo–1.5Zr–0.3Si alloy in β-forging process via Finite Element Method modeling and microstructure characterization. Materials & Design, 2011, 32, 1283-1291.	5.1	61
36	Micro selective laser melting of NiTi shape memory alloy: Defects, microstructures and thermal/mechanical properties. Optics and Laser Technology, 2020, 131, 106374.	2.2	61

#	Article	IF	CITATIONS
37	A constitutive model for modeling of the deformation behavior in microforming with a consideration of grain boundary strengthening. Computational Materials Science, 2012, 55, 85-94.	1.4	60
38	Study on the dynamic recrystallization behavior of Ti-alloy Ti–10V–2Fe–3V in β processing via experiment and simulation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 619, 26-34.	2.6	54
39	Competition between work-hardening effect and dynamic-softening behavior for processing as-cast GH4720Li superalloys with original dendrite microstructure during moderate-speed hot compression. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 642, 187-193.	2.6	54
40	Influence of crystal structure on size dependent deformation behavior and strain heterogeneity in micro-scale deformation. International Journal of Plasticity, 2019, 118, 147-172.	4.1	54
41	The application of surface visibility and moldability to parting line generation. CAD Computer Aided Design, 2002, 34, 469-480.	1.4	53
42	Simulation-enabled study of folding defect formation and avoidance in axisymmetrical flanged components. Journal of Materials Processing Technology, 2009, 209, 5077-5086.	3.1	53
43	Experimental and simulation based study on micro-scaled sheet metal deformation behavior in microembossing process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 556, 60-67.	2.6	53
44	Experimental and simulation study of deformation behavior in micro-compound extrusion process. Materials & Design, 2011, 32, 525-534.	5.1	52
45	Properties, microstructure and texture evolution of cold rolled Cu strips under electropulsing treatment. Journal of Alloys and Compounds, 2012, 544, 203-208.	2.8	52
46	Investigation on hot deformation behavior of P/M Ni-base superalloy FGH96 by using processing maps. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 6794-6799.	2.6	50
47	A methodology for evaluation of metal forming system design and performance via CAE simulation. International Journal of Production Research, 2006, 44, 1075-1092.	4.9	49
48	Recrystallization of the hot isostatic pressed nickel-base superalloy FGH4096: I. Microstructure and mechanism. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 8065-8070.	2.6	49
49	Micro-scaled progressive forming of bulk micropart via directly using sheet metals. Materials & Design, 2013, 49, 774-783.	5.1	49
50	Dynamic recrystallization based ductile fracture modeling in hot working of metallic materials. International Journal of Plasticity, 2017, 95, 105-122.	4.1	49
51	A ductile fracture model considering stress state and Zener–Hollomon parameter for hot deformation of metallic materials. International Journal of Mechanical Sciences, 2018, 144, 800-812.	3.6	49
52	Effect of the initial microstructure on the deformation behavior of Ti60 titanium alloy at high temperature processing. Journal of Alloys and Compounds, 2014, 617, 525-533.	2.8	48
53	Bulk nanostructured processing of aluminum alloy. Journal of Materials Processing Technology, 2007, 192-193, 575-581.	3.1	45
54	Experimental and theoretical study on the hot forming limit of 22MnB5 steel. International Journal of Advanced Manufacturing Technology, 2014, 71, 297-306.	1.5	45

#	Article	IF	CITATIONS
55	Ductile fracture and deformation behavior in progressive microforming. Materials and Design, 2015, 83, 14-25.	3.3	45
56	Microstructure and Properties of Al-6061 Alloy by Equal Channel Angular Extrusion for 16 Passes. Materials and Manufacturing Processes, 2007, 22, 819-824.	2.7	44
57	Determination of Optimal Parting Directions in Plastic Injection Mold Design. CIRP Annals - Manufacturing Technology, 1997, 46, 429-432.	1.7	43
58	Studies of the interactive effect of specimen and grain sizes on the plastic deformation behavior in microforming. International Journal of Advanced Manufacturing Technology, 2012, 62, 989-1000.	1.5	43
59	Temperature dependent evolution of anisotropy and asymmetry of $\hat{I}\pm$ -Ti in thermomechanical working: Characterization and modeling. International Journal of Plasticity, 2020, 127, 102650.	4.1	43
60	Dynamic recrystallization of the hot isostatically pressed P/M superalloy FGH4096 in hot working process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 6968-6974.	2.6	42
61	Effect of electroplastic rolling on the ductility and superelasticity of TiNi shape memory alloy. Materials & Design, 2013, 44, 606-611.	5.1	42
62	Meso-scaled progressive forming of bulk cylindrical and flanged parts using sheet metal. Materials & Design, 2013, 43, 249-257.	5.1	42
63	A finite strain thermodynamically-based constitutive modeling and analysis of viscoelastic-viscoplastic deformation behavior of glassy polymers. International Journal of Plasticity, 2019, 122, 135-163.	4.1	42
64	The grain refinement of Al-6061 via ECAE processing: Deformation behavior, microstructure and property. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 526, 84-92.	2.6	41
65	Hot deformation behavior of Ti–5.0Al–2.40Sn–2.02Zr–3.86Mo–3.91Cr alloy with an initial lamellar microstructure in the α+β phase field. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 1812-1818.	2.6	41
66	Work-hardening effect and strain-rate sensitivity behavior during hot deformation of Ti–5Al–5Mo–5V–1Cr–1Fe alloy. Materials and Design, 2015, 82, 84-90.	3.3	41
67	Forming limit of sheet metals in meso-scale plastic forming by using different failure criteria. International Journal of Mechanical Sciences, 2017, 120, 190-203.	3.6	41
68	Effect of discharge voltage on the deformation of Ti Grade 1 rivet in electromagnetic riveting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 591, 26-32.	2.6	40
69	Automatic Determination of 3-D Parting Lines and Surfaces in Plastic Injection Mould Design. CIRP Annals - Manufacturing Technology, 1998, 47, 95-98.	1.7	39
70	Study of dislocation-twin boundary interaction mechanisms in plastic deformation of TWIP steel by discrete dislocation dynamics and dislocation density-based modeling. International Journal of Plasticity, 2021, 145, 103076.	4.1	39
71	Multivariable analysis of micro shearing process customized for progressive forming of micro-parts. International Journal of Mechanical Sciences, 2015, 93, 191-203.	3.6	37
72	Microstructural characterization, formation mechanism and fracture behavior of the needle δ phase in Fe–Ni–Cr type superalloys with high Nb content. Materials Characterization, 2015, 109, 36-42.	1.9	37

#	Article	IF	CITATIONS
73	Interactive effect of grain size and crystal structure on deformation behavior in progressive micro-scaled deformation of metallic materials. International Journal of Machine Tools and Manufacture, 2020, 148, 103473.	6.2	37
74	Microstructure and microtexture evolution of dynamic recrystallization during hot deformation of a nickel-based superalloy. Materials and Design, 2020, 188, 108429.	3.3	37
75	Influences of size effect and stress condition on ductile fracture behavior in micro-scaled plastic deformation. Materials and Design, 2017, 131, 69-80.	3.3	36
76	A novel structural gradient metallic glass composite with enhanced mechanical properties. Scripta Materialia, 2009, 61, 608-611.	2.6	35
77	The improved superelasticity of NiTi alloy via electropulsing treatment for minutes. Journal of Alloys and Compounds, 2014, 584, 225-231.	2.8	35
78	Interactive effect of stress state and grain size on fracture behaviours of copper in micro-scaled plastic deformation. International Journal of Plasticity, 2019, 114, 126-143.	4.1	35
79	Analysis of size dependent earing evolution in micro deep drawing of TWIP steel by using crystal plasticity modeling. International Journal of Mechanical Sciences, 2020, 165, 105200.	3.6	35
80	Core and cavity generation method in injection mould design. International Journal of Production Research, 2001, 39, 121-138.	4.9	34
81	An integrated FEM and ANN methodology for metal-formed product design. Engineering Applications of Artificial Intelligence, 2008, 21, 1170-1181.	4.3	34
82	Experimental studies of plastic deformation behaviors in microheading process. Journal of Materials Processing Technology, 2012, 212, 1501-1512.	3.1	34
83	Effect of electroplastic rolling on deformability and oxidation of NiTiNb shape memory alloy. Journal of Materials Processing Technology, 2013, 213, 30-35.	3.1	34
84	Hot deformation behavior and hot working characteristic of Nickel-base electron beam weldments. Journal of Alloys and Compounds, 2014, 584, 494-502.	2.8	33
85	Microstructure and damage based constitutive modelling of hot deformation of titanium alloys. Journal of Alloys and Compounds, 2020, 831, 154851.	2.8	33
86	Generation of optimal parting direction based on undercut features in injection molded parts. IIE Transactions, 1999, 31, 947-955.	2.1	32
87	Die fatigue life design and assessment via CAE simulation. International Journal of Advanced Manufacturing Technology, 2008, 35, 843-851.	1.5	32
88	Stress analysis of the precision forging die for a bevel gear and its optimal design using the boundary-element method. Journal of Materials Processing Technology, 1995, 53, 511-520.	3.1	31
89	Maximum m superplasticity deformation for Ti–6Al–4V titanium alloy. Journal of Materials Processing Technology, 2007, 192-193, 555-560.	3.1	31
90	Electroplasticity in electrically-assisted forming: Process phenomena, performances and modelling. International Journal of Machine Tools and Manufacture, 2022, 175, 103871.	6.2	31

#	Article	IF	CITATIONS
91	Microstructure evolution of Ti-6Al-2Zr-1Mo-1V alloy and its mechanism in multi-pass flow forming. Journal of Materials Processing Technology, 2018, 261, 86-97.	3.1	29
92	Numerical evaluation on the effective thermal conductivity of the composites with discontinuous inclusions: Periodic boundary condition and its numerical algorithm. International Journal of Heat and Mass Transfer, 2019, 134, 735-751.	2.5	29
93	CAE enabled methodology for die fatigue life analysis and improvement. International Journal of Production Research, 2005, 43, 131-146.	4.9	28
94	Recrystallization of the hot isostatic pressed nickel-base superalloy FGH4096. II: Characterization and application. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 539, 101-106.	2.6	28
95	Thermostability and thermoplastic formability of (Zr65Cu17.5Ni10Al7.5)100â^'xREx (x=0.25–3.25, RE: Y, Gd,) T	j ETQq1 1 5.1	0,784314
96	Element diffusion model of bimetallic hot deformation in metallurgical bonding process. Materials and Design, 2016, 94, 433-443.	3.3	28
97	Effect of low-temperature aging treatment on thermally- and stress-induced phase transformations of nanocrystalline and coarse-grained NiTi wires. Materials and Design, 2017, 131, 49-59.	3.3	28
98	The prediction of macro-defects during the isothermal forging process by the rigid-viscoplastic finite-element method. Journal of Materials Processing Technology, 1992, 32, 599-608.	3.1	27
99	Simulation-enabled casting product defect prediction in die casting process. International Journal of Production Research, 2009, 47, 5203-5216.	4.9	27
100	Constitutive modeling of size effect on deformation behaviors of amorphous polymers in micro-scaled deformation. International Journal of Plasticity, 2017, 89, 197-222.	4.1	27
101	Characterization of the microscale forming limit for metal foils considering free surface roughening and failure mechanism transformation. Journal of Materials Processing Technology, 2019, 272, 111-124.	3.1	27
102	Study on size effect affected progressive microforming of conical flanged parts directly using sheet metals. Journal of Materials Processing Technology, 2019, 272, 72-86.	3.1	27
103	Modelling of Springback in Tube Bending: A Generalized Analytical Approach. International Journal of Mechanical Sciences, 2021, 204, 106516.	3.6	27
104	Deformation mode and wall thickness variation in conventional spinning of metal sheets. International Journal of Machine Tools and Manufacture, 2022, 173, 103846.	6.2	27
105	The application of surface demoldability and moldability to side-core design in die and mold CAD. CAD Computer Aided Design, 2008, 40, 567-575.	1.4	26
106	The optimal determination of forging process parameters for Ti–6.5Al–3.5Mo–1.5Zr–0.3Si alloy with thick lamellar microstructure in two phase field based on P-map. Journal of Materials Processing Technology, 2010, 210, 370-377.	3.1	26
107	Fabrication of bulk ultrafine grained titanium alloy via equal channel angular pressing based thermomechanical treatment. Materials & Design, 2013, 46, 889-894.	5.1	26
108	Discontinuous yielding in Ni-base superalloys during high-speed deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 620, 383-389.	2.6	26

#	Article	IF	CITATIONS
109	Influence of size effect and plastic strain gradient on the springback behaviour of metallic materials in microbending process. International Journal of Mechanical Sciences, 2018, 146-147, 105-115.	3.6	26
110	A modified yield function for modeling of the evolving yielding behavior and micro-mechanism in biaxial deformation of sheet metals. International Journal of Plasticity, 2020, 129, 102707.	4.1	26
111	Deformation behavior and microstructure evolution in thermal-aided mesoforming of titanium dental abutment. Materials and Design, 2016, 89, 1283-1293.	3.3	25
112	Design of internal pins in injection mold CAD via the automatic recognition of undercut features. CAD Computer Aided Design, 2010, 42, 582-597.	1.4	24
113	Characteristic free volumes of bulk metallic glasses: Measurement and their correlation with glass-forming ability. Journal of Applied Physics, 2011, 109, .	1.1	24
114	Flow behavior and hot workability of FGH4096 superalloys with different initial microstructures by using advanced processing maps. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 531, 91-97.	2.6	24
115	Analysis and avoidance of flow-induced defects in meso-forming process: simulation and experiment. International Journal of Advanced Manufacturing Technology, 2013, 68, 1551-1564.	1.5	24
116	Investigation on the maximum strain rate sensitivity ( m ) superplastic deformation of Mg-Li based alloy. Materials and Design, 2016, 112, 151-159.	3.3	24
117	Design solution evaluation for metal forming product development. International Journal of Advanced Manufacturing Technology, 2008, 38, 249-257.	1.5	23
118	The fracture toughness of hot-pressed NbCr2 alloys doped by rare earth yttrium. Scripta Materialia, 2009, 61, 205-207.	2.6	23
119	Abnormal flow behavior and necklace microstructure of powder metallurgy superalloys with previous particle boundaries (PPBs). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 652, 84-91.	2.6	23
120	Mechanical behavior of 7085-T7452 aluminum alloy thick plate joint produced by double-sided friction stir welding: Effect of welding parameters and strain rates. Journal of Manufacturing Processes, 2018, 35, 261-270.	2.8	23
121	Modelling of ultra-thin steel sheet in two-stage tensile deformation considering strain path change and grain size effect and application in multi-stage microforming. International Journal of Machine Tools and Manufacture, 2021, 164, 103713.	6.2	23
122	The simulation of the viscoplastic forming process by the finite-element method. Journal of Materials Processing Technology, 1995, 55, 442-447.	3.1	22
123	Die fatigue life improvement through the rational design of metal-forming system. Journal of Materials Processing Technology, 2009, 209, 1074-1084.	3.1	22
124	Identification of the optimal (α+β) forging process parameters of Ti–6.5Al–3.5Mo–1.5Zr–0.3Si based on processing-maps. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 7279-7285.	2.6	22
125	Structural-gradient-materials produced by gradient temperature heat treatment for dual-property turbine disc. Journal of Alloys and Compounds, 2013, 557, 27-33.	2.8	22
126	Hot deformation behavior of the 1.15C–4.00Cr–3.00V–6.00W–5.00Mo powder metallurgy high speed steel. Materials & Design, 2014, 54, 854-863.	5.1	22

#	Article	IF	CITATIONS
127	Progressive microforming of pin-shaped plunger parts and the grain size effect on its forming quality. Materials and Design, 2020, 187, 108386.	3.3	22
128	The modified GTN-Thomason criterion for modelling of ductile fracture considering shear factor and size effect in micro-scaled plastic deformation. International Journal of Mechanical Sciences, 2021, 204, 106540.	3.6	22
129	Re-precipitation mechanisms of the γ′ phase with sphere, near-sphere, cubic, octets and finally-dendrite in as-cast Ni-based superalloys. Journal of Alloys and Compounds, 2021, 876, 160104.	2.8	22
130	Modeling of constitutive relationships and microstructural variables of Ti–6.62Al–5.14Sn–1.82Zr alloy during high temperature deformation. Materials Characterization, 2008, 59, 1386-1394.	1.9	21
131	Microstructure evolution of copper strips with gradient temperature in electropulsing treatment. Journal of Alloys and Compounds, 2013, 581, 160-165.	2.8	21
132	Analysis of size effect on flow-induced defect in micro-scaled forming process. International Journal of Advanced Manufacturing Technology, 2014, 73, 1475-1484.	1.5	21
133	An advanced method for efficiently generating composite RVEs with specified particle orientation. Composites Science and Technology, 2021, 205, 108647.	3.8	21
134	The rapid solidification of Ti3Al : a molecular dynamics study. Journal of Physics Condensed Matter, 2004, 16, 4203-4210.	0.7	20
135	Deformation Behavior Study of Multi-Pass ECAE Process for Fabrication of Ultrafine or Nanostructured Bulk Materials. Materials and Manufacturing Processes, 2006, 21, 507-512.	2.7	20
136	Study of deformation homogeneity in the multi-pass equal channel angular extrusion process. Journal of Materials Processing Technology, 2007, 192-193, 121-127.	3.1	20
137	High temperature deformation behavior and optimization of hot compression process parameters in TC11 titanium alloy with coarse lamellar original microstructure. Transactions of Nonferrous Metals Society of China, 2013, 23, 353-360.	1.7	20
138	Effect of grain size on the adhesive and ploughing friction behaviours of polycrystalline metals in forming process. International Journal of Mechanical Sciences, 2016, 117, 197-209.	3.6	20
139	Experimental investigations and constitutive modeling of the dynamic recrystallization behavior of Inconel 740 superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 793, 139939.	2.6	20
140	Prediction and analysis of ductile fracture in sheet metal forming—Part I: A modified Ayada criterion. International Journal of Damage Mechanics, 2014, 23, 1189-1210.	2.4	19
141	Formability limits and process window based on fracture analysis of 5A02-O aluminium alloy in splitting spinning. Journal of Materials Processing Technology, 2018, 257, 15-32.	3.1	19
142	Extrapolation based constitutive modeling of flow stress of titanium alloy sheet under hot-working condition. Materials and Design, 2018, 154, 96-107.	3.3	19
143	The effect of stress state and strain partition mode on the damage behavior of a Mg-Ca alloy. International Journal of Plasticity, 2021, 144, 103040.	4.1	19
144	Numerical study on the deformation behaviors of the flexible die forming by using viscoplastic pressure-carrying medium. Computational Materials Science, 2009, 46, 1058-1068.	1.4	18

#	Article	IF	CITATIONS
145	Effect of electropulsing treatment on the microstructure and superelasticity of TiNi alloy. Applied Physics A: Materials Science and Processing, 2013, 111, 1195-1201.	1.1	18
146	Effect of cooling path on the phase transformation of boron steel 22MnB5 in hot stamping process. International Journal of Advanced Manufacturing Technology, 2015, 81, 1391-1402.	1.5	18
147	Experimental investigation and modeling of ductile fracture behavior of TRIP780 steel in hot working conditions. International Journal of Mechanical Sciences, 2016, 110, 108-115.	3.6	18
148	Formation mechanism and control of flaring in forward tube spinning. International Journal of Advanced Manufacturing Technology, 2018, 94, 59-72.	1.5	18
149	Deformation characteristic and geometrical size effect in continuous manufacturing of cylindrical and variable-thickness flanged microparts. Journal of Materials Processing Technology, 2018, 252, 546-558.	3.1	18
150	Element diffusion model with variable coefficient in bimetallic bonding process. Journal of Materials Processing Technology, 2018, 253, 99-108.	3.1	18
151	Size effect on the shear damage under low stress triaxiality in micro-scaled plastic deformation of metallic materials. Materials and Design, 2020, 196, 109107.	3.3	18
152	Analysis and comparison of the instability regimes in the processing maps generated using different instability criteria for Ti–6.5Al–3.5Mo–1.5Zr–0.3Si alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 576, 259-266.	2.6	17
153	Study of deformation and ductile fracture behaviors in micro-scale deformation using a combined surface layer and grain boundary strengthening model. International Journal of Mechanical Sciences, 2017, 131-132, 924-937.	3.6	17
154	Tribological behaviors in titanium sheet and tube forming at elevated temperatures: evaluation and modeling. International Journal of Advanced Manufacturing Technology, 2018, 97, 657-674.	1.5	17
155	Micro-mechanical model for the effective thermal conductivity of the multi-oriented inclusions reinforced composites with imperfect interfaces. International Journal of Heat and Mass Transfer, 2020, 148, 119167.	2.5	17
156	Anisotropic plasticity and fracture of alpha titanium sheets from cryogenic to warm temperatures. International Journal of Plasticity, 2022, 156, 103348.	4.1	17
157	Generation of optimal parting direction based on undercut features in injection molded parts. IIE Transactions, 1999, 31, 947-955.	2.1	16
158	Characteristic free volume change of bulk metallic glasses. Journal of Applied Physics, 2012, 111, .	1.1	16
159	Microstructure and superplastic deformation for aerospace Ti-alloys associated with α-phase curing behavior. Aerospace Science and Technology, 2015, 45, 416-421.	2.5	16
160	Experiment and modeling based studies of the mesoscaled deformation and forming limit of Cu/Ni clad foils using a newly developed damage model. International Journal of Plasticity, 2022, 149, 103173.	4.1	16
161	An anisotropic constitutive model for forming of aluminum tubes under both biaxial tension and pure shear stress states. International Journal of Plasticity, 2022, 152, 103259.	4.1	16
162	The effect of hot pressing time on the microstructure and properties of Laves phase NbCr2 alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 485, 80-85.	2.6	15

#	Article	IF	CITATIONS
163	FE Simulation-Based Folding Defect Prediction and Avoidance in Forging of Axially Symmetrical Flanged Components. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2010, 132, .	1.3	15
164	Superplasticity deformation of Ti–6Al–2Zr–1Mo–1V induced by the cyclic change of strain-rate and MaxmSPD. Journal of Alloys and Compounds, 2010, 491, 213-217.	2.8	15
165	A Knowledge-Based Prototype System to Support Product Conceptual Design. Computer-Aided Design and Applications, 2011, 8, 129-147.	0.4	15
166	Constitutive modeling of multiscale polycrystals considering grain structures and orientations. International Journal of Mechanical Sciences, 2022, 216, 106992.	3.6	14
167	Multi-aspect size effect transition from micro to macroscale: Modelling and experiment. International Journal of Plasticity, 2022, 156, 103364.	4.1	14
168	A new technology of sheet-metal flexible-die forming using a viscoplastic pressure-carrying medium. Journal of Materials Processing Technology, 1995, 52, 359-367.	3.1	13
169	FEA-aided design of multi-stage drawing process and tooling for production of a miniature sheet metal component. International Journal of Advanced Manufacturing Technology, 2010, 46, 993-1000.	1.5	13
170	Adaptive reproducing kernel particle method using gradient indicator for elasto-plastic deformation. Engineering Analysis With Boundary Elements, 2013, 37, 280-292.	2.0	13
171	Drawability and frictional behavior of pure molybdenum sheet in deep-drawing process at elevated temperature. International Journal of Advanced Manufacturing Technology, 2015, 78, 1005-1014.	1.5	13
172	Coupled modeling of anisotropy variation and damage evolution for high strength steel tubular materials. International Journal of Mechanical Sciences, 2016, 105, 41-57.	3.6	13
173	Experimental and numerical study of the size effect on compound Meso/Microforming behaviors and performances for making bulk parts by directly using sheet metals. Journal of Manufacturing Processes, 2021, 66, 506-520.	2.8	13
174	Modelling of the intergranular fracture of TWIP steels working at high temperature by using CZM–CPFE method. International Journal of Plasticity, 2022, 156, 103366.	4.1	13
175	Interphase model for FE prediction of the effective thermal conductivity of the composites with imperfect interfaces. International Journal of Heat and Mass Transfer, 2019, 145, 118796.	2.5	12
176	Evaluation of thermoplastic formability of Zr-based bulk metallic glasses and its correlation with characteristic temperature parameters. Journal of Alloys and Compounds, 2014, 602, 326-330.	2.8	11
177	Prediction and analysis of ductile fracture in sheet metal forming—Part II: Application of the modified Ayada criterion. International Journal of Damage Mechanics, 2016, 25, 120-140.	2.4	11
178	High-precision sheet-metal workpieces manufactured by flexible-die forming using a visco-plastic pressure-carrying medium. Journal of Materials Processing Technology, 1996, 62, 70-75.	3.1	10
179	Dependence of processing window and microstructural evolution on initial material state in direct electric resistance heat treatment of NiTi alloy. Materials and Design, 2018, 139, 549-564.	3.3	10
180	Co-effect of microstructure and surface constraints on plastic deformation in micro- and mesoscaled forming process. International Journal of Advanced Manufacturing Technology, 2018, 98, 1861-1886.	1.5	10

#	Article	IF	CITATIONS
181	Circumferential twist in flow forming of tubular parts: Characterization, understanding and control. Journal of Manufacturing Processes, 2021, 65, 144-152.	2.8	10
182	Process parameters and products quality analysis of flexible-die deep-drawing using a viscoplastic pressure-carrying medium. Journal of Materials Processing Technology, 2001, 115, 384-390.	3.1	9
183	Influence of melt temperature on the Invar effect in (Fe71.2B24Y4.8)96Nb4 bulk metallic glass. Journal of Materials Science, 2014, 49, 6900-6906.	1.7	9
184	Applicability of the uncoupled ductile fracture criteria in micro-scaled plastic deformation. International Journal of Damage Mechanics, 2016, 25, 289-314.	2.4	9
185	A new interpolative homogenization model for evaluation of the effective elasto-plastic responses of two-phase composites. Composite Structures, 2019, 210, 810-821.	3.1	9
186	Multi-scale and multi-step modeling of thermal conductivities of 3D braided composites. International Journal of Mechanical Sciences, 2022, 228, 107466.	3.6	9
187	Study on the maximum m superplasticity deformation of Ti–6.5Al–3.5Mo–1.5Zr–0.3Si alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 513-514, 32-41.	2.6	8
188	Prediction and control of bending quality of double-layered gap tube. International Journal of Mechanical Sciences, 2022, 228, 107474.	3.6	8
189	Coupled Thermo-Mechanical Analysis of Severe Plastic Deformation for Producing Bulk Nanostructured Materials. Advanced Engineering Materials, 2004, 6, 933-936.	1.6	7
190	Port-based ontology modeling to support product conceptualization. Robotics and Computer-Integrated Manufacturing, 2011, 27, 646-656.	6.1	7
191	Numerical and experimental study of the size effect on deformation behavior and quality of microembossed multi-channel structures. Journal of Manufacturing Processes, 2022, 78, 363-375.	2.8	7
192	Intragranularly misoriented grain boundary evolution affected by local constraints and grain size in micro-scale deformation of ultra-thin metallic sheets. International Journal of Plasticity, 2022, 157, 103377.	4.1	7
193	Processing of thin metal strip by casting-cum-rolling. Journal of Materials Processing Technology, 2007, 192-193, 101-107.	3.1	6
194	Investigation on the structural characteristics of metallic glasses based on the first displacement excursion behavior in nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 530, 196-201.	2.6	6
195	Investigation on the inhomogeneous structure of metallic glasses based on the initial elastic deformation in nanoindentation. Intermetallics, 2012, 30, 65-71.	1.8	6
196	Strain-rate sensitivity of powder metallurgy superalloys associated with steady-state DRX during hot compression process. Metals and Materials International, 2017, 23, 350-358.	1.8	6
197	Irregular growth of the γ′ phase in a Ni-based superalloys under slow cooling rate. Materials Letters, 2022, 307, 131067.	1.3	6
198	Effect of ball milling time on microstructure and properties of Laves phase NbCr2 alloys synthesized by hot pressing. Transactions of Nonferrous Metals Society of China, 2009, 19, 545-551.	1.7	5

#	Article	IF	CITATIONS
199	FEM-Based Modeling of Dynamic Recrystallization of AISI 52100 Steel Using Cellular Automaton Method. Key Engineering Materials, 0, 447-448, 406-411.	0.4	5
200	Investigation of the free volume change of Fe41Co7Cr15Mo14C15B6Y2 bulk metallic glass using the cyclic thermal dilatation test. Journal of Non-Crystalline Solids, 2012, 358, 2682-2686.	1.5	5
201	A method for prediction of unstable deformation in hot forging process by simulation. Transactions of Nonferrous Metals Society of China, 2013, 23, 3739-3747.	1.7	5
202	The combined lateral and axial extrusion process of a branched component with two asymmetrically radial features. Materials and Design, 2016, 111, 492-503.	3.3	5
203	Size effect affected deformation characteristics in micro deep drawing of TWIP domed-bottom cups. Procedia Engineering, 2017, 207, 2072-2077.	1.2	5
204	A Two-Stage Physical-Based Model for Predicting Flow Stress of As-cast TiAl Alloy Under Hot Deformation Conditions. Journal of Materials Engineering and Performance, 2018, 27, 5384-5394.	1.2	5
205	Investigation on the enhanced maximum strain rate sensitivity (m) superplasticity of Mg-9Li-1Al alloy by a two-step deformation method. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 764, 138219.	2.6	5
206	A multiscale constitutive model coupled with martensitic transformation kinetics for micro-scaled plastic deformation of metastable metal foils. International Journal of Mechanical Sciences, 2021, 202-203, 106503.	3.6	5
207	Thin-walled Ti41.5Zr2.5Hf5Cu42.5Ni7.5Si1 bulk metallic glass tubes: Promising energy absorbers and lightweight structures. Journal of Alloys and Compounds, 2013, 546, 180-184.	2.8	4
208	Investigation of extrusion limit of Incoloy028 alloy tube by combining numerical and analytical methods. International Journal of Advanced Manufacturing Technology, 2016, 83, 177-185.	1.5	4
209	A Review of Progressive and Compound Forming of Bulk Microparts by Using Sheet Metals. MATEC Web of Conferences, 2018, 190, 01001.	0.1	4
210	Review on progressive microforming of bulk metal parts directly using sheet metals (Keynote Paper). MATEC Web of Conferences, 2015, 21, 09001.	0.1	2
211	Improvement of the thermoplastic formability of Zr65Cu17.5Ni10Al7.5 bulk metallic glass by minor addition of Erbium. Physica B: Condensed Matter, 2016, 502, 68-72.	1.3	2
212	Design Information Revealed by CAE Simulation for Casting Product Development. , 2008, , 323-332.		1
213	Study on the Enhanced Superplasticity of Mg-Li Based Alloy by a Stepped Deformation Method. Defect and Diffusion Forum, 2018, 385, 103-108.	0.4	1
214	Contribution of the Experimental Mechanics to the Automotive Design. , 0, , .		0
215	The cliff-valley approach in the P-maps of PM/W joints for manufacturing the dual-alloys turbine disc. Procedia Engineering, 2017, 207, 1117-1122.	1.2	0
216	Study of Micro-Upsetting by Finite Element Simulation Based on Crystal Plasticity and Grain Boundary Strengthening Theories. Key Engineering Materials, 0, 897, 21-28.	0.4	0

#	Article	IF	CITATIONS
217	Tooling Design and Fatigue Life Evaluation via CAE Simulation for Metal Forming. , 2008, , 711-720.		О
218	Simulation-Enabled Approach for Defect Prediction and Avoidance in Forming Product Development. , 2008, , 3-12.		0