

# Heng Li

## List of Publications by Year in descending order

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docs citations

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times ranked

1218  
citing authors

#	ARTICLE	IF	CITATIONS
1	Time-dependent springback of high strength titanium tubular materials: Experiment and modeling. Journal of Materials Processing Technology, 2022, 299, 117354.	3.1	7
2	Macro-/Meso-Scaled Forming of Tubular Structures/Components. , 2022, , 371-400.		0
3	Advances and challenges on springback control for creep age forming of aluminum alloy. Chinese Journal of Aeronautics, 2022, 35, 8-34.	2.8	9
4	Natural aging behaviors of Al-Cu-Li alloy: PLC effect, properties and microstructure evolution. Materials Characterization, 2022, 184, 111694.	1.9	22
5	Filler parameters affected wrinkling behavior of aluminum alloy double-layered gap tube in rotary draw bending process. International Journal of Advanced Manufacturing Technology, 2022, 119, 5261-5276.	1.5	7
6	An insight into size effect on fracture behavior of Inconel 718 cross-scaled foils. International Journal of Plasticity, 2022, 153, 103274.	4.1	19
7	Residual stress evolution and tailoring of cold pilgered Ti-3Al-2.5V tube. International Journal of Mechanical Sciences, 2022, 225, 107366.	3.6	8
8	Anisotropic plasticity and fracture of alpha titanium sheets from cryogenic to warm temperatures. International Journal of Plasticity, 2022, 156, 103348.	4.1	17
9	Multi-aspect size effect transition from micro to macroscale: Modelling and experiment. International Journal of Plasticity, 2022, 156, 103364.	4.1	14
10	Prediction and control of bending quality of double-layered gap tube. International Journal of Mechanical Sciences, 2022, 228, 107474.	3.6	8
11	Towards intelligent design optimization: Progress and challenge of design optimization theories and technologies for plastic forming. Chinese Journal of Aeronautics, 2021, 34, 104-123.	2.8	10
12	Machine Learning (ML)-Based Prediction and Compensation of Springback for Tube Bending. Minerals, Metals and Materials Series, 2021, , 167-178.	0.3	5
13	Relationship among joined tubular material properties, joining behavior and performance by elastomeric swaging. Thin-Walled Structures, 2021, 162, 107561.	2.7	1
14	Breaking bending limit of difficult-to-form titanium tubes by differential heating-based reconstruction of neutral layer shifting. International Journal of Machine Tools and Manufacture, 2021, 166, 103742.	6.2	30
15	Modelling of Springback in Tube Bending: A Generalized Analytical Approach. International Journal of Mechanical Sciences, 2021, 204, 106516.	3.6	27
16	Springback Analysis for Warm Bending of Titanium Tube Based on Coupled Thermal-Mechanical Simulation. Materials, 2021, 14, 5044.	1.3	3
17	Uncertainty analysis and robust design optimization for the heat-assisted bending of high-strength titanium tube. Science China Technological Sciences, 2021, 64, 2174.	2.0	3
18	Loading conditions constrained wrinkling behaviors of thin-walled sheet/tube parts during metal forming. Journal of Materials Processing Technology, 2021, 296, 117199.	3.1	9

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19	Deformation-based joining for high-strength Ti-3Al-2.5V tubular fittings based on internal roller swaging. International Journal of Mechanical Sciences, 2020, 171, 105367.	3.6	7
20	Temperature dependent evolution of anisotropy and asymmetry of $\dot{\epsilon}$ -Ti in thermomechanical working: Characterization and modeling. International Journal of Plasticity, 2020, 127, 102650.	4.1	43
21	Texture evolution and controlling of high-strength titanium alloy tube in cold pilgering for properties tailoring. Journal of Materials Processing Technology, 2020, 279, 116520.	3.1	22
22	Through-thickness heterogeneity and in-plane anisotropy in creep aging of 7050 Al alloy. Materials and Design, 2020, 196, 109190.	3.3	17
23	Microstructure evolution of Ni47Ti44Nb9 shape memory alloy in high-temperature deformation. International Journal of Lightweight Materials and Manufacture, 2020, 3, 376-386.	1.3	0
24	Exploring the Influence of Pre/Post-Aging on Springback in Al-Mg-Si Alloy Tube Bending. Procedia Manufacturing, 2020, 47, 774-780.	1.9	6
25	Forming of thin-walled AA6061-T4 tubular joint by elastomeric bulging: experiment and computation. International Journal of Advanced Manufacturing Technology, 2020, 107, 25-38.	1.5	5
26	Towards sensitive prediction of wrinkling instability in sheet metal forming by introducing evolution of triple nonlinearity: Tube forming. International Journal of Mechanical Sciences, 2019, 161-162, 105054.	3.6	8
27	Tooling design-related spatial deformation behaviors and crystallographic texture evolution of high-strength Ti-3Al-2.5V tube in cold pilgering. International Journal of Advanced Manufacturing Technology, 2019, 104, 2851-2862.	1.5	8
28	Constitutive modeling related uncertainties: Effects on deformation prediction accuracy of sheet metallic materials. International Journal of Mechanical Sciences, 2019, 157-158, 574-598.	3.6	15
29	Deformation Inhomogeneity. , 2019, , 29-83.		0
30	Deformation-Induced Springback Defects. , 2019, , 185-223.		0
31	Inhomogeneous Deformation-Induced Surface Roughening Defects. , 2019, , 225-256.		2
32	Deformation-Induced Compressive Instability. , 2019, , 137-184.		0
33	Microstructure Abnormality-Related Defects. , 2019, , 277-319.		0
34	Damage Evolution and Ductile Fracture. , 2019, , 85-136.		4
35	Dynamic interplay between dislocations and precipitates in creep aging of an Al-Zn-Mg-Cu alloy. Advances in Manufacturing, 2019, 7, 15-29.	3.2	15
36	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

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37	A modified Johnson-Cook model for NC warm bending of large diameter thin-walled Ti-6Al-4V tube in wide ranges of strain rates and temperatures. Transactions of Nonferrous Metals Society of China, 2018, 28, 298-308.	1.7	25
38	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
39	Natural aging behaviors and mechanisms of 7050 and 5A90 Al alloys: A comparative study. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 718, 157-164.	2.6	38
40	An insight into neutral layer shifting in tube bending. International Journal of Machine Tools and Manufacture, 2018, 126, 51-70.	6.2	60
41	Role of thermal-mechanical loading sequence on creep aging behaviors of 5A90 Al-Li alloy. Journal of Materials Processing Technology, 2018, 255, 354-363.	3.1	14
42	Thermal-mechanical loading sequences related creep aging behaviors of 7050 aluminum alloy. Journal of Alloys and Compounds, 2018, 731, 90-99.	2.8	19
43	Development and application of CATIA-based interference simulation system for tube bending. IOP Conference Series: Materials Science and Engineering, 2018, 392, 062048.	0.3	0
44	Influence of mandrel parameters on cross-sectional deformation of H96 double-ridged rectangular tube with ridge groove fillers in H-typed rotary draw bending. Procedia Manufacturing, 2018, 15, 812-819.	1.9	4
45	A low-density pulse-current-assisted age forming process for high-strength aluminum alloy components. International Journal of Advanced Manufacturing Technology, 2018, 97, 3371-3384.	1.5	12
46	Characterizing of Anisotropy and Asymmetry of Tubular Materials. Materials Science Forum, 2018, 920, 211-216.	0.3	0
47	Macro-meso scale modeling and simulation of surface roughening: Aluminum alloy tube bending. International Journal of Mechanical Sciences, 2018, 144, 696-707.	3.6	20
48	Non-isothermal creep aging behaviors of an Al-Zn-Mg-Cu alloy. Materials Characterization, 2018, 144, 431-439.	1.9	18
49	Damage in Creep Aging Process of an Al-Zn-Mg-Cu Alloy: Experiments and Modeling. Metals, 2018, 8, 285.	1.0	4
50	Forming characteristics of tube free-bending with small bending radii based on a new spherical connection. International Journal of Machine Tools and Manufacture, 2018, 133, 72-84.	6.2	46
51	Dependences of microstructures and properties on initial tempers of creep aged 7050 aluminum alloy. Journal of Materials Processing Technology, 2017, 239, 125-132.	3.1	42
52	Anisotropic and asymmetrical yielding and its evolution in plastic deformation: Titanium tubular materials. International Journal of Plasticity, 2017, 90, 177-211.	4.1	67
53	Sequential multi-objective optimization of thin-walled aluminum alloy tube bending under various uncertainties. Transactions of Nonferrous Metals Society of China, 2017, 27, 608-615.	1.7	14
54	Effect of tooling design on the cold pilgering behavior of zircaloy tube. International Journal of Advanced Manufacturing Technology, 2017, 92, 2169-2183.	1.5	9

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55	A normalized stress invariant-based yield criterion: Modeling and validation. International Journal of Plasticity, 2017, 99, 248-273.	4.1	70
56	FE modeling of a complete warm-bending process for optimal design of heating stages for the forming of large-diameter thin-walled Ti-6Al-4V tubes. Manufacturing Review, 2017, 4, 8.	0.9	3
57	Whole process modeling of joining of flareless AA 6061-T4 tube by extrusion-bulging forming using a polyurethane elastomer medium. Journal of Physics: Conference Series, 2016, 734, 032115.	0.3	0
58	Anisotropic and asymmetrical yielding and its distorted evolution: Modeling and applications. International Journal of Plasticity, 2016, 82, 127-158.	4.1	79
59	Stress relaxation ageing behaviour and constitutive modelling of a 2219 aluminium alloy under the effect of an electric pulse. Journal of Alloys and Compounds, 2016, 679, 316-323.	2.8	44
60	Quasi-static tensile behavior of large-diameter thin-walled Ti-6Al-4V tubes at elevated temperature. Chinese Journal of Aeronautics, 2016, 29, 542-553.	2.8	13
61	Dependence of creep age formability on initial temper of an Al-Zn-Mg-Cu alloy. Chinese Journal of Aeronautics, 2016, 29, 1445-1454.	2.8	23
62	Springback prediction of titanium tube bending considering Bauschinger effect and Young's modulus variation. Journal of Physics: Conference Series, 2016, 734, 032113.	0.3	9
63	Constitutive modeling of compression behavior of TC4 tube based on modified Arrhenius and artificial neural network models. Rare Metals, 2016, 35, 162-171.	3.6	18
64	Plastic wrinkling prediction in thin-walled part forming process: A review. Chinese Journal of Aeronautics, 2016, 29, 1-14.	2.8	40
65	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
66	Dynamic softening behavior of TC18 titanium alloy during hot deformation. Materials & Design, 2015, 71, 68-77.	5.1	101
67	BP artificial neural network modeling for accurate radius prediction and application in incremental in-plane bending. International Journal of Advanced Manufacturing Technology, 2015, 80, 971-984.	1.5	13
68	An imperfection-based perturbation method for plastic wrinkling prediction in tube bending under multi-die constraints. International Journal of Mechanical Sciences, 2015, 98, 178-194.	3.6	28
69	Tribological behaviors between commercial pure titanium sheet and tools in warm forming. Transactions of Nonferrous Metals Society of China, 2015, 25, 2924-2931.	1.7	16
70	Hot Tube-Forming. , 2014, , 321-350.		3
71	Warm bending mechanism of extrados and intrados of large diameter thin-walled CP-Ti tubes. Transactions of Nonferrous Metals Society of China, 2014, 24, 3257-3264.	1.7	15
72	Modelling of Wrinkling in NC Bending of Thin-walled Tubes with Large Diameters under Multi-die Constraints Using Hybrid Method. Procedia Engineering, 2014, 81, 2171-2176.	1.2	7

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73	Tribological evaluation of surface modified H13 tool steel in warm forming of Ti-6Al-4V titanium alloy sheet. Chinese Journal of Aeronautics, 2014, 27, 1002-1009.	2.8	20
74	Thermo-mechanical coupled 3D-FE modeling of heat rotary draw bending for large-diameter thin-walled CP-Ti tube. International Journal of Advanced Manufacturing Technology, 2014, 72, 1187-1203.	1.5	29
75	Multiple instability-constrained tube bending limits. Journal of Materials Processing Technology, 2014, 214, 445-455.	3.1	48
76	A hybrid method for accurate prediction of multiple instability modes in in-plane roll-bending of strip. Journal of Materials Processing Technology, 2014, 214, 1173-1189.	3.1	19
77	Advance and trend of friction study in plastic forming. Transactions of Nonferrous Metals Society of China, 2014, 24, 1263-1272.	1.7	28
78	Quasi-static tensile behavior and constitutive modeling of large diameter thin-walled commercial pure titanium tube. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 569, 96-105.	2.6	31
79	Springback prediction of thick-walled high-strength titanium tube bending. Chinese Journal of Aeronautics, 2013, 26, 1336-1345.	2.8	51
80	“Size effect” related bending formability of thin-walled aluminum alloy tube. Chinese Journal of Aeronautics, 2013, 26, 230-241.	2.8	22
81	Towards an integrated robust and loop tooling design for tube bending. International Journal of Advanced Manufacturing Technology, 2013, 65, 1303-1318.	1.5	11
82	Knowledge-based substep deterministic optimization of large diameter thin-walled Al-alloy tube bending. International Journal of Advanced Manufacturing Technology, 2013, 68, 1989-2004.	1.5	11
83	Springback nonlinearity of high-strength titanium alloy tube upon mandrel bending. International Journal of Precision Engineering and Manufacturing, 2013, 14, 429-438.	1.1	10
84	Significance-based optimization of processing parameters for thin-walled aluminum alloy tube NC bending with small bending radius. Transactions of Nonferrous Metals Society of China, 2012, 22, 147-156.	1.7	20
85	Geometry-dependent springback behaviors of thin-walled tube upon cold bending. Science China Technological Sciences, 2012, 55, 3469-3482.	2.0	16
86	Springback law of thin-walled 6061-T4 Al-alloy tube upon bending. Transactions of Nonferrous Metals Society of China, 2012, 22, s357-s363.	1.7	18
87	Advances and Trends on Tube Bending Forming Technologies. Chinese Journal of Aeronautics, 2012, 25, 1-12.	2.8	209
88	Springback characterization and behaviors of high-strength Ti-3Al-2.5V tube in cold rotary draw bending. Journal of Materials Processing Technology, 2012, 212, 1973-1987.	3.1	81
89	Design and optimisation of mandrel parameters for thin walled aluminium alloy tube NC bending. Materials Research Innovations, 2011, 15, s365-s369.	1.0	6
90	A new model for precision control of the radius in in-plane roll-bending of strip considering rolls and stand deflections. Journal of Materials Processing Technology, 2011, 211, 2072-2084.	3.1	7

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91	Bending behaviors of large diameter thin-walled CP-Ti tube in rotary draw bending. Progress in Natural Science: Materials International, 2011, 21, 401-412.	1.8	27
92	A Study on Multi-defect Constrained Bendability of Thin-walled Tube NC Bending Under Different Clearance. Chinese Journal of Aeronautics, 2011, 24, 102-112.	2.8	35
93	Ductile fracture: Experiments and computations. International Journal of Plasticity, 2011, 27, 147-180.	4.1	426
94	Friction role in bending behaviors of thin-walled tube in rotary-draw-bending under small bending radii. Journal of Materials Processing Technology, 2010, 210, 2273-2284.	3.1	72
95	Forming limits under multi-index constraints in NC bending of aluminum alloy thin-walled tubes with large diameters. Science China Technological Sciences, 2010, 53, 326-342.	2.0	21
96	Deformation behaviors of thin-walled tube in rotary draw bending under push assistant loading conditions. Journal of Materials Processing Technology, 2010, 210, 143-158.	3.1	76
97	A Study On Critical Thinning In Thin-walled Tube Bending Of Al-Alloy 5052O Via Coupled Ductile Fracture Criteria. , 2010, , .		2
98	An accurate 3D-FE based radius prediction model for in-plane roll-bending of strip considering spread effects. Computational Materials Science, 2010, 50, 666-677.	1.4	9
99	A study on plastic wrinkling in thin-walled tube bending via an energy-based wrinkling prediction model. Modelling and Simulation in Materials Science and Engineering, 2009, 17, 035007.	0.8	26
100	Numerical study on deformation behaviors of thin-walled tube NC bending with large diameter and small bending radius. Computational Materials Science, 2009, 45, 921-934.	1.4	63
101	3D numerical study on wrinkling characteristics in NC bending of aluminum alloy thin-walled tubes with large diameters under multi-die constraints. Computational Materials Science, 2009, 45, 1052-1067.	1.4	50
102	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
103	Research on the springback of thin-walled tube NC bending based on the numerical simulation of the whole process. Computational Materials Science, 2008, 42, 537-549.	1.4	51
104	A STUDY ON STEPWISE OPTIMIZATION OF FORMING PARAMETERS FOR THIN-WALLED TUBE NC BENDING. Journal of Advanced Manufacturing Systems, 2008, 07, 15-20.	0.4	3
105	Role of mandrel in NC precision bending process of thin-walled tube. International Journal of Machine Tools and Manufacture, 2007, 47, 1164-1175.	6.2	97
106	The interactive effects of wrinkling and other defects in thin-walled tube NC bending process. Journal of Materials Processing Technology, 2007, 187-188, 502-507.	3.1	40
107	Forming characteristics of thin-walled tube bending process with small bending radius. Transactions of Nonferrous Metals Society of China, 2006, 16, s613-s623.	1.7	30
108	Springback of thin-walled tube NC precision bending and its numerical simulation. Transactions of Nonferrous Metals Society of China, 2006, 16, s631-s638.	1.7	24

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109	Effect of frictions on cross section quality of thin-walled tube NC bending. Transactions of Nonferrous Metals Society of China, 2006, 16, 878-886.	1.7	36
110	A new method to accurately obtain wrinkling limit diagram in NC bending process of thin-walled tube with large diameter under different loading paths. Journal of Materials Processing Technology, 2006, 177, 192-196.	3.1	34
111	Wrinkling Limit Based on FEM Virtual Experiment during NC Bending Process of Thin-Walled Tube. Materials Science Forum, 2004, 471-472, 498-502.	0.3	6
112	Sideways Movement of Strip in In-Plane Roll-Bending Process with Conical Rollers. Advanced Materials Research, 0, 154-155, 1419-1422.	0.3	0
113	A Multi-Objective Optimization Method for Thin-Walled Tube NC Bending. Advanced Materials Research, 0, 213, 383-387.	0.3	0
114	Strain Hardening Modeling of High-Strength Stainless Steel Tube. Advanced Materials Research, 0, 311-313, 2014-2019.	0.3	0
115	Experimental Study on Bendability of Thin-Walled 6061-T4 Tube under Different Bending Velocities. Applied Mechanics and Materials, 0, 184-185, 196-200.	0.2	3
116	Significance Analysis of Processing Parameters on Wall Thinning in Tube Bending. Advanced Materials Research, 0, 622-623, 437-441.	0.3	0
117	Formability and Performance of Al-Zn-Mg-Cu Alloys with Different Initial Tempers in Creep Aging Process. , 0, , .		2