

LiLiang Wang

List of Publications by Year in descending order

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Version: 2024-02-01

93
papers

1,832
citations

318942

23
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355658

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all docs

93
docs citations

93
times ranked

1187
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental and modelling studies of the transient tribological behaviour of a two-phase lubricant under complex loading conditions. <i>Friction</i> , 2022, 10, 911-926.	3.4	5
2	Analysing the Interaction between Microscopic Deformation, Microstructure and Void Evolution of Near- β Titanium Alloys during Non-Superplastic Hot Deformation by an Integrated Crystal Plasticity Finite Element Model. <i>Materials</i> , 2022, 15, 294.	1.3	0
3	Development of a Formability Prediction Model for Aluminium Sandwich Panels with Polymer Core. <i>Materials</i> , 2022, 15, 4140.	1.3	2
4	Design for additive manufacturing (DfAM) of hot stamping dies with improved cooling performance under cyclic loading conditions. <i>Additive Manufacturing</i> , 2021, 37, 101720.	1.7	4
5	Investigation of the friction coefficient evolution and lubricant breakdown behaviour of AA7075 aluminium alloy forming processes at elevated temperatures. <i>International Journal of Extreme Manufacturing</i> , 2021, 3, 025002.	6.3	18
6	Dodecanethiol coated multi-walled carbon nanotube films as flexible current collector for lithium-ion batteries. <i>Materials Letters</i> , 2021, 291, 129508.	1.3	3
7	Experimental and modelling study of friction evolution and lubricant breakdown behaviour under varying contact conditions in warm aluminium forming processes. <i>Tribology International</i> , 2021, 158, 106934.	3.0	14
8	An experimental investigation on the ductility and post-form strength of a martensitic steel in a novel warm stamping process. <i>Journal of Materials Processing Technology</i> , 2020, 275, 116387.	3.1	14
9	Fundamentals, processes and equipment for hot medium pressure forming of light material tubular components. <i>International Journal of Lightweight Materials and Manufacture</i> , 2020, 3, 1-19.	1.3	11
10	A novel test method for continuous nonlinear biaxial tensile deformation of sheet metals by bulging with stepped-dies. <i>International Journal of Mechanical Sciences</i> , 2020, 169, 105321.	3.6	6
11	A general IHTC model for hot/warm aluminium stamping. <i>Applied Thermal Engineering</i> , 2020, 181, 115619.	3.0	2
12	Review on additive manufacturing of tooling for hot stamping. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 109, 87-107.	1.5	37
13	Enhanced formability and forming efficiency for two-phase titanium alloys by Fast light Alloys Stamping Technology (FAST). <i>Materials and Design</i> , 2020, 194, 108948.	3.3	26
14	The study of central cracking mechanism and criterion in cross wedge rolling. <i>International Journal of Machine Tools and Manufacture</i> , 2020, 159, 103647.	6.2	16
15	Influence of silicon carbide and porcelain on tribological performance of Al6061 based hybrid composites. <i>Tribology International</i> , 2020, 151, 106514.	3.0	33
16	Characterisation of the interfacial heat transfer coefficient in hot stamping of titanium alloys. <i>International Communications in Heat and Mass Transfer</i> , 2020, 113, 104535.	2.9	18
17	Characterization of Thermomechanical Boundary Conditions of a Martensitic Steel for a FAST Forming Process. <i>Journal of Manufacturing and Materials Processing</i> , 2020, 4, 57.	1.0	4
18	High-efficiency forming processes for complex thin-walled titanium alloys components: state-of-the-art and perspectives. <i>International Journal of Extreme Manufacturing</i> , 2020, 2, 032001.	6.3	31

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19	Development of an interfacial heat transfer coefficient model for the hot and warm aluminium stamping processes under different initial blank temperature conditions. <i>Journal of Materials Processing Technology</i> , 2019, 273, 116245.	3.1	9
20	Development of the post-form strength prediction model for a high-strength 6xxx aluminium alloy with pre-existing precipitates and residual dislocations. <i>International Journal of Plasticity</i> , 2019, 119, 230-248.	4.1	36
21	Effect of tool coatings on the interfacial heat transfer coefficient in hot stamping of aluminium alloys under variable contact pressure conditions. <i>International Journal of Heat and Mass Transfer</i> , 2019, 137, 74-83.	2.5	13
22	Coating effects on the galling behaviour of aluminium metal forming processes. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 651, 012022.	0.3	3
23	Development of an interactive friction model to predict aluminum transfer in a pin-on-disc sliding system. <i>Tribology International</i> , 2019, 130, 216-228.	3.0	18
24	Multi-objective finite element simulations of a sheet metal-forming process via a cloud-based platform. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 100, 2753-2765.	1.5	19
25	Hot Stamping of Complex-Shaped High-Strength Aluminum Components. , 2019, , .		0
26	Transition of failure mode in hot stamping of AA6082 tailor welded blanks. <i>Journal of Materials Processing Technology</i> , 2018, 257, 33-44.	3.1	18
27	Analysis and modelling of a novel process for extruding curved metal alloy profiles. <i>International Journal of Mechanical Sciences</i> , 2018, 138-139, 524-536.	3.6	38
28	A review on forming techniques for manufacturing lightweight complex-shaped aluminium panel components. <i>International Journal of Lightweight Materials and Manufacture</i> , 2018, 1, 55-80.	1.3	137
29	Formability and microstructure evolution mechanisms of Ti6Al4V alloy during a novel hot stamping process. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 719, 72-81.	2.6	38
30	Effects of lubricant on the IHTC during the hot stamping of AA6082 aluminium alloy: Experimental and modelling studies. <i>Journal of Materials Processing Technology</i> , 2018, 255, 175-183.	3.1	16
31	Effect of porosities on tensile properties of laser-welded Al-Li alloy: an experimental and modelling study. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 95, 659-671.	1.5	25
32	Feasibility studies of a novel extrusion process for curved profiles: Experimentation and modelling. <i>International Journal of Machine Tools and Manufacture</i> , 2018, 126, 27-43.	6.2	52
33	Investigation and Constitutive Modelling of High Strength 6xxx Series Aluminium Alloy: Precipitation Hardening Responses to FAST (Fast Light Alloys Stamping Technology) and Artificial Ageing. <i>Materials Science Forum</i> , 2018, 941, 814-820.	0.3	2
34	Feasibility study of a novel hot stamping process for Ti6Al4V alloy. <i>MATEC Web of Conferences</i> , 2018, 190, 08001.	0.1	1
35	Coupled thermal-electrical finite element analysis of electrical resistance heating in hot stamping of ultra-high strength steel tubes. <i>Procedia Manufacturing</i> , 2018, 15, 1047-1054.	1.9	6
36	Effect of tool coating on interfacial heat transfer coefficient in hot stamping of AA7075 aluminium alloys. <i>Procedia Manufacturing</i> , 2018, 15, 1127-1133.	1.9	2

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37	Characterisation of the contact pressure dependent interfacial heat transfer coefficient for a hot stamping process following a data driven approach. MATEC Web of Conferences, 2018, 190, 08005.	0.1	0
38	Experimental and modelling study of an approach to enhance gas bulging formability of TA15 titanium alloy tube based on dynamic recrystallization. Journal of Materials Processing Technology, 2018, 259, 387-396.	3.1	21
39	Experimental and numerical investigation of the influence of pulsating pressure on hot tube gas forming using oscillating heating. International Journal of Advanced Manufacturing Technology, 2018, 97, 3839-3848.	1.5	16
40	Determination of the interfacial heat transfer coefficient for a hot aluminium stamping process. Journal of Materials Processing Technology, 2017, 247, 158-170.	3.1	47
41	Effect of recrystallization on hot deformation mechanism of TA15 titanium alloy under uniaxial tension and biaxial gas bulging conditions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 708, 149-158.	2.6	18
42	Correlation between softening mechanisms and deformation non-uniformity of laser-welded titanium alloy tube during gas bulging process. Materials Characterization, 2017, 133, 196-205.	1.9	5
43	Hot stamping of AA6082 tailor welded blanks: Experiments and knowledge-based cloud " finite element (KBC-FE) simulation. Journal of Materials Processing Technology, 2017, 250, 228-238.	3.1	18
44	Forming limit prediction for hot stamping processes featuring non-isothermal and complex loading conditions. International Journal of Mechanical Sciences, 2017, 131-132, 792-810.	3.6	29
45	Prediction of earing in TWIP steel sheets based on coupled twinning crystal plasticity model. International Journal of Advanced Manufacturing Technology, 2017, 89, 3037-3047.	1.5	11
46	Springback analysis of AA5754 after hot stamping: experiments and FE modelling. International Journal of Advanced Manufacturing Technology, 2017, 89, 1339-1352.	1.5	49
47	Development of an interactive friction model for the prediction of lubricant breakdown behaviour during sliding wear. Tribology International, 2017, 110, 370-377.	3.0	30
48	Determination of the interfacial heat transfer coefficient between AA7075 and different forming tools in hot stamping processes. Procedia Engineering, 2017, 207, 717-722.	1.2	2
49	Hot stamping of AA6082 tailor welded blanks for automotive applications. Procedia Engineering, 2017, 207, 729-734.	1.2	7
50	A new design of friction test rig and determination of friction coefficient when warm forming an aluminium alloy. Procedia Engineering, 2017, 207, 2274-2279.	1.2	10
51	A novel application of sideways extrusion to produce curved aluminium profiles: Feasibility study. Procedia Engineering, 2017, 207, 2304-2309.	1.2	22
52	Hot stamping of AA6082 tailor welded blanks: experiment and FE simulation. Manufacturing Review, 2016, 3, 8.	0.9	9
53	Knowledge Based Cloud FE simulation - data-driven material characterization guidelines for the hot stamping of aluminium alloys. Journal of Physics: Conference Series, 2016, 734, 032042.	0.3	5
54	Characterization of the interfacial heat transfer coefficient for hot stamping processes. Journal of Physics: Conference Series, 2016, 734, 032079.	0.3	1

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55	Determination of the Interfacial Heat Transfer Coefficient in the Hot Stamping of AA7075. Manufacturing Review, 2016, 3, 16.	0.9	4
56	Hot stamping of an Al-Li alloy: a feasibility study. Manufacturing Review, 2016, 3, 9.	0.9	10
57	Knowledge Based Cloud FE Simulation of Sheet Metal Forming Processes. Journal of Visualized Experiments, 2016, , .	0.2	6
58	An investigation of a new 2D CDM model in predicting failure in HFQing of an automotive panel. MATEC Web of Conferences, 2015, 21, 05011.	0.1	5
59	HFQ forming of AA6082 tailor welded blanks. MATEC Web of Conferences, 2015, 21, 05006.	0.1	3
60	Hot stamping of an Al-Li alloy: A feasibility study. MATEC Web of Conferences, 2015, 21, 05007.	0.1	7
61	Determination of the interfacial heat transfer coefficient in the hot stamping of AA7075. MATEC Web of Conferences, 2015, 21, 05003.	0.1	7
62	Investigation on creep age forming of AA2219 stiffened structures. MATEC Web of Conferences, 2015, 21, 04010.	0.1	2
63	Tool-life prediction under multi-cycle loading during metal forming: a feasibility study. Manufacturing Review, 2015, 2, 28.	0.9	4
64	Determination of a Set of Constitutive Equations for an Al-Li Alloy at SPF Conditions. Materials Today: Proceedings, 2015, 2, S408-S413.	0.9	5
65	Determination of Heat Transfer Coefficient for Hot Stamping Process. Materials Today: Proceedings, 2015, 2, S434-S439.	0.9	19
66	The friction coefficient evolution of a TiN coated contact during sliding wear. Applied Surface Science, 2015, 345, 109-115.	3.1	78
67	Size-dependent mechanical properties in AA6082 tailor welded specimens. Journal of Materials Processing Technology, 2015, 224, 169-180.	3.1	18
68	Effect of melt conditioning on heat treatment and mechanical properties of AZ31 alloy strips produced by twin roll casting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 620, 223-232.	2.6	18
69	Tool life prediction under multi-cycle loading conditions: A feasibility study. MATEC Web of Conferences, 2015, 21, 12007.	0.1	0
70	Predicting Effect of Temperature, Strain Rate and Strain Path Changes on Forming Limit of Lightweight Sheet Metal Alloys. Procedia Engineering, 2014, 81, 736-741.	1.2	17
71	Numerical study of the solution heat treatment, forming, and in-die quenching (HFQ) process on AA5754. International Journal of Machine Tools and Manufacture, 2014, 87, 39-48.	6.2	155
72	Life cycle assessment of the potential environmental benefits of a novel hot forming process in automotive manufacturing. Journal of Cleaner Production, 2014, 83, 80-86.	4.6	46

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73	Determination of hot deformation behavior and processing maps of IN 028 alloy using isothermal hot compression test. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 595, 92-98.	2.6	40
74	Melt Conditioned Twin Roll Casting (MC-TRC) of Thin Mg-Alloy Strips for Direct Stamping of Mg Components. <i>Materials Science Forum</i> , 2013, 765, 170-174.	0.3	6
75	Numerical Investigation on the Hot Forming and Cold-Die Quenching of an Aluminium-Magnesium Alloy into a Complex Component. <i>Materials Science Forum</i> , 2013, 765, 368-372.	0.3	5
76	Friction in aluminium extrusion—Part 1: A review of friction testing techniques for aluminium extrusion. <i>Tribology International</i> , 2012, 56, 89-98.	3.0	50
77	Friction in aluminium extrusion—part 2: A review of friction models for aluminium extrusion. <i>Tribology International</i> , 2012, 56, 99-106.	3.0	26
78	Identification of a friction model for the bearing channel of hot aluminium extrusion dies by using ball-on-disc tests. <i>Tribology International</i> , 2012, 50, 66-75.	3.0	20
79	Formability and failure mechanisms of AA2024 under hot forming conditions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 2648-2656.	2.6	133
80	The isothermal forming process of V-shaped aluminum alloy joint forgings. <i>Jom</i> , 2011, 63, 62-65.	0.9	20
81	Effect of temperature on the frictional behaviour of an aluminium alloy sliding against steel during ball-on-disc tests. <i>Tribology International</i> , 2010, 43, 299-306.	3.0	47
82	Modeling of double action extrusion—A novel extrusion process for friction characterization at the billet—die bearing interface. <i>Tribology International</i> , 2010, 43, 2084-2091.	3.0	11
83	Hybrid forming processes for production of lightweight high strength automotive panel parts. <i>International Heat Treatment and Surface Engineering</i> , 2010, 4, 160-165.	0.2	6
84	Characteristics of the Friction Between Aluminium and Steel at Elevated Temperatures During Ball-on-Disc Tests. <i>Tribology Letters</i> , 2009, 36, 183-190.	1.2	26
85	Evaluation of Plastic Deformation During Metal Forming by Using Lode Parameter. <i>Journal of Materials Engineering and Performance</i> , 2009, 18, 1151-1156.	1.2	5
86	Modelling of plowing and shear friction coefficients during high-temperature ball-on-disc tests. <i>Tribology International</i> , 2009, 42, 15-22.	3.0	18
87	Compressive formability of 7075 aluminum alloy rings under hydrostatic pressure. <i>Transactions of Nonferrous Metals Society of China</i> , 2006, 16, 1103-1109.	1.7	9
88	Friction in Double Action Extrusion. <i>Key Engineering Materials</i> , 0, 424, 153-160.	0.4	6
89	Studies on the Hot Forming and Cold-Die Quenching of AA6082 Tailor Welded Blanks. <i>Key Engineering Materials</i> , 0, 716, 941-947.	0.4	1
90	Formability of AA6082-T6 at Warm and Hot Stamping Conditions. <i>Key Engineering Materials</i> , 0, 716, 107-113.	0.4	7

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91	Determination of Processing Windows for the Hot Stamping of AA7075. Key Engineering Materials, 0, 716, 402-412.	0.4	6
92	Investigating the quench sensitivity of high strength AA6082 aluminium alloy during the new FAST forming process. IOP Conference Series: Materials Science and Engineering, 0, 418, 012028.	0.3	4
93	The Galling Behavior of Advanced Coating Contacts with Aluminium Alloy during Sliding Wear. Key Engineering Materials, 0, 767, 117-123.	0.4	5