Jian Cao

List of Publications by Year
in descending order

306	9,281	44444	68831
papers	citations	50 h-index	81 g-index

311	311	311	5719
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prediction of forming temperature in electrically-assisted double-sided incremental forming using a neural network. Journal of Materials Processing Technology, 2022, 302, 117486.	3.1	17
2	Mechanistic artificial intelligence (mechanistic-AI) for modeling, design, and control of advanced manufacturing processes: Current state and perspectives. Journal of Materials Processing Technology, 2022, 302, 117485.	3.1	32
3	High-throughput, in situ imaging of multi-layer powder-blown directed energy deposition with angled nozzle. Review of Scientific Instruments, 2022, 93, 023701.	0.6	1
4	Toolpath Planning for Manufacturing of Complex Parts Through Incremental Sheet Forming. , 2022, 1, .		1
5	Methods for numerical simulation of knit based morphable structures: knitmorphs. Scientific Reports, 2022, 12, 6630.	1.6	3
6	Data-driven prediction of next-layer melt pool temperatures in laser powder bed fusion based on co-axial high-resolution Planck thermometry measurements. Journal of Manufacturing Processes, 2022, 79, 81-90.	2.8	12
7	Cavitation bubble removal by surfactants in Laser-Induced Plasma Micromachining. Manufacturing Letters, 2022, 32, 96-99.	1.1	1
8	Simulation-guided variable laser power design for melt pool depth control in directed energy deposition. Additive Manufacturing, 2022, 56, 102912.	1.7	8
9	Data-driven analysis of process, structure, and properties of additively manufactured Inconel 718 thin walls. Npj Computational Materials, 2022, 8, .	3.5	17
10	Concurrent n-scale modeling for non-orthogonal woven composite. Computational Mechanics, 2022, 70, 853-866.	2.2	11
11	Powder-borne porosity in directed energy deposition. Journal of Manufacturing Processes, 2022, 80, 69-74.	2.8	6
12	On the hot deformation behavior of Ti-6Al-4V made by additive manufacturing. Journal of Materials Processing Technology, 2021, 288, 116840.	3.1	54
13	Template-bayesian approach for the evaluation of melt pool shape and dimension of a DED-process from in-situ X-ray images. CIRP Annals - Manufacturing Technology, 2021, 70, 183-186.	1.7	5
14	Relating additively manufactured part tensile properties to thermal metrics. CIRP Annals - Manufacturing Technology, 2021, 70, 187-190.	1.7	7
15	Towards bi-metallic injection molds by directed energy deposition. Manufacturing Letters, 2021, 27, 78-81.	1.1	5
16	Mechanical properties of hybrid additively manufactured Inconel 718 parts created via thermal control after secondary treatment processes. Journal of Materials Processing Technology, 2021, 291, 117047.	3.1	12
17	Physical mechanisms in hybrid additive manufacturing: A process design framework. Journal of Materials Processing Technology, 2021, 291, 117048.	3.1	51
18	Mechanistic data-driven prediction of as-built mechanical properties in metal additive manufacturing. Npj Computational Materials, 2021, 7, .	3.5	43

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19	A high-fidelity simulation of double-sided incremental forming: Improving the accuracy by incorporating the effects of machine compliance. Journal of Materials Processing Technology, 2021, 295, 117152.	3.1	8
20	Advancing the Accuracy of Computational Models for Double-Sided Incremental Forming. Minerals, Metals and Materials Series, 2021, , 271-281.	0.3	0
21	Geometry-agnostic data-driven thermal modeling of additive manufacturing processes using graph neural networks. Additive Manufacturing, 2021, 48, 102449.	1.7	15
22	Texturing of metallic surfaces for superhydrophobicity by water jet guided laser micro-machining. Applied Surface Science, 2020, 500, 144286.	3.1	44
23	Micro wave patterns by vibrating-lens assisted laser machining. Journal of Materials Processing Technology, 2020, 277, 116424.	3.1	5
24	Enumeration of additive manufacturing toolpaths using Hamiltonian paths. Manufacturing Letters, 2020, 26, 29-32.	1.1	2
25	Energy Density Comparison via Highspeed, In-situ Imaging of Directed Energy Deposition. Procedia Manufacturing, 2020, 48, 691-696.	1.9	0
26	On the potential of recurrent neural networks for modeling path dependent plasticity. Journal of the Mechanics and Physics of Solids, 2020, 143, 103972.	2.3	126
27	Parameter Identification and Nonparametric Calibration of the Tri-Pyramid Robot. IEEE/ASME Transactions on Mechatronics, 2020, 25, 2309-2317.	3.7	18
28	Vibrating-lens-assisted laser drilling. Journal of Manufacturing Processes, 2020, 55, 389-398.	2.8	13
29	Blank geometry design for carbon fiber reinforced plastic (CFRP) preforming using finite element analysis (FEA). Procedia Manufacturing, 2020, 48, 197-203.	1.9	7
30	Manipulation and Localized Deposition of Particle Groups with Modulated Electric Fields. Micromachines, 2020, 11, 226.	1.4	3
31	Bio-Inspired Functional Surface Fabricated by Electrically Assisted Micro-Embossing of AZ31 Magnesium Alloy. Materials, 2020, 13, 412.	1.3	10
32	Multiscale simulation of fiber composites with spatially varying uncertainties. , 2020, , 355-384.		3
33	Opportunities and Challenges in Metal Forming for Lightweighting: Review and Future Work. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2020, 142, .	1.3	40
34	Stable membrane candidate for deployable membrane space telescopes. Journal of Astronomical Telescopes, Instruments, and Systems, 2020, 6, 1.	1.0	2
35	Generation of Surfaces With Isotropic and Anisotropic Wetting Properties by Curved Water Jet-Guided Laser Micromachining. Journal of Micro and Nano-Manufacturing, 2020, 8, .	0.8	5
36	Simulation of Ultrashort Laser Pulse Absorption at the Waterâ€“Metal Interface in Laser-Induced Plasma Micromachining. Journal of Micro and Nano-Manufacturing, 2020, 8, .	0.8	1

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37	Surface Morphology and Wall Angle Comparison of Microchannels Fabricated in Titanium Alloy Using Laser-Based Processes. Journal of Micro and Nano-Manufacturing, 2020, 8, .	0.8	0
38	Data-Driven Microstructure and Microhardness Design in Additive Manufacturing Using a Self-Organizing Map. Engineering, 2019, 5, 730-735.	3.2	40
39	Porosity Formation and Meltpool Geometry Analysis Using High-speed, in situ Imaging of Directed Energy Deposition. Microscopy and Microanalysis, 2019, 25, 2556-2557.	0.2	13
40	Micro texture fabrication by a non-resonant vibration generator. Journal of Manufacturing Processes, 2019, 45, 732-745.	2.8	13
41	Comparative Experimental Investigation of Micro-channel Fabrication in Ti Alloys by Laser Ablation and Laser-induced Plasma Micro-machining. Procedia Manufacturing, 2019, 34, 418-423.	1.9	9
42	Improving the accuracy of double-sided incremental forming simulations by considering kinematic hardening and machine compliance. Procedia Manufacturing, 2019, 29, 88-95.	1.9	10
43	Experimental study of water jet incremental micro-forming with supporting dies. Journal of Materials Processing Technology, 2019, 268, 117-131.	3.1	15
44	Characterization of 14YWT oxide dispersion strengthened structural materials under electrically-assisted tension. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 745, 484-494.	2.6	11
45	In-situ high-speed X-ray imaging of piezo-driven directed energy deposition additive manufacturing. Scientific Reports, 2019, 9, 962.	1.6	96
46	Current-Induced Ductility Enhancement of a Magnesium Alloy AZ31 in Uniaxial Micro-Tension Below 373 K. Materials, 2019, 12, 111.	1.3	13
47	Multi-scale modeling of mechanical behavior of cured woven textile composites accounting for the influence of yarn angle variation. Composites Part A: Applied Science and Manufacturing, 2019, 124, 105460.	3.8	32
48	Manufacturing of advanced smart tooling for metal forming. CIRP Annals - Manufacturing Technology, 2019, 68, 605-628.	1.7	78
49	In-situ springback compensation in incremental sheet forming. CIRP Annals - Manufacturing Technology, 2019, 68, 317-320.	1.7	33
50	Acceleration strategies for explicit finite element analysis of metal powder-based additive manufacturing processes using graphical processing units. Computational Mechanics, 2019, 64, 879-894.	2.2	24
51	An Experimental and Numerical Study of Dieless Water Jet Incremental Microforming. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .	1.3	4
52	Experimentally validated predictions of thermal history and microhardness in laser-deposited Inconel 718 on carbon steel. Additive Manufacturing, 2019, 27, 540-551.	1.7	64
53	Prediction of rigid body motion in multi-pass single point incremental forming. Journal of Materials Processing Technology, 2019, 269, 117-127.	3.1	23
54	A Real-Time Iterative Machine Learning Approach for Temperature Profile Prediction in Additive Manufacturing Processes. , 2019, , .		29

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55	Linking Thermal History to Mechanical Behavior in Directed Energy Deposited Materials. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 97-98.	0.3	0
56	A calibration method for overconstrained spatial translational parallel manipulators. Robotics and Computer-Integrated Manufacturing, 2019, 57, 241-254.	6.1	31
57	Fabrication of hierarchical freeform surfaces by 2D compliant vibration-assisted cutting. International Journal of Mechanical Sciences, 2019, 152, 454-464.	3.6	41
58	Sustainable Manufacturing With Cyber-Physical Discrete Manufacturing Networks: Overview and Modeling Framework. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .	1.3	10
59	Global-cumulative incremental hole-flanging by tools with complementary-shape cross section. International Journal of Material Forming, 2019, 12, 899-906.	0.9	2
60	A numerical Bayesian-calibrated characterization method for multiscale prepreg preforming simulations with tension-shear coupling. Composites Science and Technology, 2019, 170, 15-24.	3.8	36
61	A new approach for analyzing the temperature rise and heat partition at the interface of coated tool tip-sheet incremental forming systems. International Journal of Heat and Mass Transfer, 2019, 129, 1172-1183.	2.5	28
62	Repairing Automotive Dies With Directed Energy Deposition: Industrial Application and Life Cycle Analysis. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .	1.3	45
63	Design and models of helical needle geometries for core biopsies. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 90, 113-124.	1.5	1
64	Progress toward controlling the shape of Si mirrors coated with a magnetic smart material. , 2019, , .		2
65	Modeling process-structure-property relationships for additive manufacturing. Frontiers of Mechanical Engineering, 2018, 13, 482-492.	2.5	64
66	Modeling of cutting forces in micro end-milling. Journal of Manufacturing Processes, 2018, 31, 844-858.	2.8	50
67	Single point incremental forming: state-of-the-art and prospects. International Journal of Material Forming, 2018, 11, 743-773.	0.9	160
68	Data-driven multi-scale multi-physics models to derive processâ€“structureâ€“property relationships for additive manufacturing. Computational Mechanics, 2018, 61, 521-541.	2.2	162
69	Uncertainty quantification in multiscale simulation of woven fiber composites. Computer Methods in Applied Mechanics and Engineering, 2018, 338, 506-532.	3.4	90
70	General contact force control algorithm in double-sided incremental forming. CIRP Annals - Manufacturing Technology, 2018, 67, 381-384.	1.7	17
71	Towards smart manufacturing process selection in Cyber-Physical Systems. Manufacturing Letters, 2018, 17, 1-5.	1.1	21
72	Design and application of a flexure-based oscillation mechanism for surface texturing. Journal of Manufacturing Processes, 2018, 32, 298-306.	2.8	14

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73	Automated Flexible Forming Strategy for Geometries With Multiple Features in Double-Sided Incremental Forming. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2018, 140, .	1.3	16
74	Cooling rate effect on tensile strength of laser deposited Inconel 718. Procedia Manufacturing, 2018, 26, 912-919.	1.9	18
75	Quantifying Discretization Errors in Electrophoretically-Guided Micro Additive Manufacturing. Micromachines, 2018, 9, 447.	1.4	2
76	Experimental Characterization and Numerical Modeling of the Interaction Between Carbon Fiber Composite Prepregs During a Preforming Process. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2018, 140, .	1.3	12
77	Dieless Water Jet Incremental Micro-Forming. , 2018, , .		1
78	Data-driven prediction of the high-dimensional thermal history in directed energy deposition processes via recurrent neural networks. Manufacturing Letters, 2018, 18, 35-39.	1.1	110
79	Response of High-Pressure Micro Water Jets to Static and Dynamic Nonuniform Electric Fields. Journal of Micro and Nano-Manufacturing, 2018, 6, .	0.8	5
80	Vibration-Assisted Slicing of Soft Tissue for Biopsy Procedures. Journal of Medical Devices, Transactions of the ASME, 2018, 12, .	0.4	4
81	Deposition of Variable Bead Diameter Arrays by Self-Focusing Electrohydrodynamic Jets. Journal of Micro and Nano-Manufacturing, 2018, 6, .	0.8	0
82	Study on design and cutting parameters of rotating needles for core biopsy. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 86, 43-54.	1.5	16
83	Deformation mechanics and failure mode in stretch and shrink flanging by double-sided incremental forming. International Journal of Mechanical Sciences, 2018, 144, 216-222.	3.6	23
84	Membrane mirror evaluation of APERTURE: a precise extremely large reflective telescope using re-configurable elements. , 2018, , .		0
85	Magnetostrictively deforming the surface of a silicon wafer at two locations. , 2018, , .		2
86	Constitutive analysis of electrically-assisted tensile deformation of CP-Ti based on non-uniform thermal expansion, plastic softening and dynamic strain aging. International Journal of Plasticity, 2017, 94, 44-56.	4.1	50
87	Experimental investigations on the forming mechanism of a new incremental stretch-flanging strategy with a featured tool. International Journal of Advanced Manufacturing Technology, 2017, 92, 2953-2964.	1.5	5
88	A framework to link localized cooling and properties of directed energy deposition (DED)-processed Ti-6Al-4V. Acta Materialia, 2017, 132, 106-117.	3.8	119
89	Thermal effect on clad dimension for laser deposited Inconel 718. Journal of Manufacturing Processes, 2017, 28, 550-557.	2.8	46
90	Effects of specimen and grain size on electrically-induced softening behavior in uniaxial micro-tension of AZ31 magnesium alloy: Experiment and modeling. Materials and Design, 2017, 127, 134-143.	3.3	43

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91	Interface Characterization of Alâ€“Cu Microlaminates Fabricated By Electrically Assisted Roll Bonding. Journal of Micro and Nano-Manufacturing, 2017, 5, .	0.8	3
92	A non-orthogonal material model of woven composites in the preforming process. CIRP Annals - Manufacturing Technology, 2017, 66, 257-260.	1.7	23
93	Deployment Design of APERTURE: a precise extremely large reflective telescope using re-configurable elements. , 2017, , .		1
94	Deposition of Bead Arrays With Variable Diameter by Self-Focusing of Electrohydrodynamic Jets. , 2017, , .		0
95	Experimental Characterization of the Interaction Between Carbon Fiber Composite Prepregs During the Preforming Process. , 2017, , .		0
96	Thermomechanical Analysis of an Electrically Assisted Wire Drawing Process. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2017, 139, .	1.3	24
97	On the Fracture Characterization in Double-Sided Incremental Forming of Ti6Al4V Sheets at Elevated Temperatures. Procedia Manufacturing, 2017, 10, 407-416.	1.9	16
98	Controlling the shapes of coated silicon substrates via magnetic fields, a progress report. , 2017, , .		5
99	APERTURE, a precise extremely-large reflective telescope using re-configurable element: a progress report. , 2017, , .		1
100	Tri-pyramid Robot: stiffness modeling of a 3-DOF translational parallel manipulator. Robotica, 2016, 34, 383-402.	1.3	12
101	An integrated computational materials engineering method for woven carbon fiber composites preforming process. AIP Conference Proceedings, 2016, , .	0.3	4
102	Manipulation of Water Jet Trajectory by a Nonuniform Electric Field in Water Jet Material Processing. Journal of Micro and Nano-Manufacturing, 2016, 4, .	0.8	8
103	Dieless Double-Sided Incremental Hole-Flanging With Different Toolpath Strategies. , 2016, , .		1
104	An investigation into the mechanics of double-sided incremental forming using finite element methods. AIP Conference Proceedings, 2016, , .	0.3	6
105	An Efficient and General Finite Element Model for Double-Sided Incremental Forming. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2016, 138, .	1.3	24
106	Control of heating and cooling for direct laser deposition repair of cast iron components. , 2016, , .		4
107	Circumferential pressure measurement for microrolling process monitoring. , 2016, , .		0
108	Preliminary investigations on Double Sided Incremental Forming of thermoplastics. Manufacturing Letters, 2016, 8, 21-26.	1.1	18

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109	Size effects on flow stress behavior during electrically-assisted micro-tension in a magnesium alloy AZ31. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 659, 215-224.	2.6	54
110	Effective forming strategy for double-sided incremental forming considering in-plane curvature and tool direction. CIRP Annals - Manufacturing Technology, 2016, 65, 265-268.	1.7	30
111	A hybrid mixed double-sided incremental forming method for forming Ti6Al4V alloy. CIRP Annals - Manufacturing Technology, 2016, 65, 309-312.	1.7	31
112	Modeling of thermal and mechanical behavior of a magnesium alloy AZ31 during electrically-assisted micro-tension. International Journal of Plasticity, 2016, 85, 230-257.	4.1	86
113	Deformation of rectangular thin glass plate coated with magnetostrictive material. Smart Materials and Structures, 2016, 25, 085038.	1.8	10
114	Anisotropic properties of directed energy deposition (DED)-processed Tiâ€“6Alâ€“4V. Journal of Manufacturing Processes, 2016, 24, 397-405.	2.8	104
115	Springback Reduction by Annealing for Incremental Sheet Forming. Procedia Manufacturing, 2016, 5, 696-706.	1.9	25
116	Toward large-area sub-arcsecond x-ray telescopes II. , 2016, , .		9
117	Shaping Si, NiCo, and glass substrates via stresses in the coatings. Proceedings of SPIE, 2016, , .	0.8	4
118	Improving Surface Hydrophobicity by Microrolling-Based Texturing. Journal of Micro and Nano-Manufacturing, 2016, 4, .	0.8	7
119	Effects of Tool Deflection in Accumulated Double-Sided Incremental Forming Regarding Part Geometry. , 2016, , .		2
120	Pressure and Draw-In Maps for Stamping Process Monitoring. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2016, 138, .	1.3	5
121	Optimization of relative tool position in accumulative double sided incremental forming using finite element analysis and model bias correction. International Journal of Material Forming, 2016, 9, 371-382.	0.9	13
122	Experimental Assessment of Laser Textured Cutting Tools in Dry Cutting of Aluminum Alloys. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2016, 138, .	1.3	61
123	Linking process, structure, property, and performance for metal-based additive manufacturing: computational approaches with experimental support. Computational Mechanics, 2016, 57, 583-610.	2.2	190
124	Thermodynamically consistent microstructure prediction of additively manufactured materials. Computational Mechanics, 2016, 57, 359-370.	2.2	54
125	Design of general kinematotropic mechanisms. Robotics and Computer-Integrated Manufacturing, 2016, 38, 67-81.	6.1	20
126	A review of electrically-assisted manufacturing. International Journal of Precision Engineering and Manufacturing - Green Technology, 2015, 2, 365-376.	2.7	108

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127	Effects of Tool Positions in Accumulated Double-Sided Incremental Forming on Part Geometry. , 2015, , .		0
128	Compression deformation behaviors of sheet metals at various clearances and side forces. MATEC Web of Conferences, 2015, 21, 07009.	0.1	2
129	Stress manipulated coating for fabricating lightweight X-ray telescope mirrors. Optics Express, 2015, 23, 28605.	1.7	17
130	Analytical Modeling of Heat Transfer in Polycrystalline Diamond Compact Cutters in Rock Turning Processes. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2015, 137, .	1.3	10
131	Incremental Metal Forming Processes in Manufacturing. , 2015, , 411-452.		14
132	Stress manipulated coating for figure reshape of light weight X-ray telescope mirrors. , 2015, , .		3
133	Periodic surface pattern fabrication via biprism interference micro-machining. Surface Topography: Metrology and Properties, 2015, 3, 045006.	0.9	4
134	A Mixed Double-Sided Incremental Forming Toolpath Strategy for Improved Geometric Accuracy. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2015, 137, .	1.3	25
135	Feasibility of Fiber-Deposition Control by Secondary Electric Fields in Near-Field Electrospinning. Journal of Micro and Nano-Manufacturing, 2015, 3, .	0.8	13
136	High-Speed Fabrication of Microchannels Using Line-Based Laser Induced Plasma Micromachining. Journal of Micro and Nano-Manufacturing, 2015, 3, .	0.8	11
137	Effects of Tool Positions in Accumulated Double-Sided Incremental Forming on Part Geometry. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2015, 137, .	1.3	14
138	An integrative approach to spatial mapping of pressure distribution in microrolling. CIRP Journal of Manufacturing Science and Technology, 2015, 9, 107-115.	2.3	3
139	In Situ TEM Observation on Martensitic Transformation during Tensile Deformation of SUS304 Metastable Austenitic Stainless Steel. Acta Metallurgica Sinica (English Letters), 2015, 28, 302-306.	1.5	10
140	Enhancement of adhesion strength by micro-rolling-based surface texturing. International Journal of Advanced Manufacturing Technology, 2015, 78, 1427-1435.	1.5	31
141	Embedded Capacitive Pressure Sensing for Electrically Assisted Microrolling. IEEE/ASME Transactions on Mechatronics, 2015, 20, 1005-1014.	3.7	4
142	Joining sheet metals by electrically-assisted roll bonding. CIRP Annals - Manufacturing Technology, 2015, 64, 273-276.	1.7	24
143	Micro-mechanics Modeling for Micro-forming Processes. , 2015, , 733-748.		0
144	Investigation of magnetically smart films applied to correct the surface profile of light weight X-ray optics in two directions. , 2015, , .		1

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145	A general anisotropic yield criterion for pressure-dependent materials. International Journal of Plasticity, 2015, 75, 2-21.	4.1	24
146	An efficient method for thickness prediction in multi-pass incremental sheet forming. International Journal of Advanced Manufacturing Technology, 2015, 77, 469-483.	1.5	50
147	Friction anisotropy of Aluminum 6111-T4 sheet with flat and laser-textured D2 tooling. Tribology International, 2015, 81, 333-340.	3.0	8
148	High throughput microfabrication using laser induced plasma in saline aqueous medium. Journal of Materials Processing Technology, 2015, 217, 77-87.	3.1	31
149	Unidirectional magnetic field assisted Laser Induced Plasma Micro-Machining. Manufacturing Letters, 2015, 3, 1-4.	1.1	35
150	Distributed Manufacturing. , 2015, , 1-10.		0
151	Distributed Manufacturing. , 2015, , 1-11.		0
152	Laser-induced plasma in aqueous media: numerical simulation and experimental validation of spatial and temporal profiles. Applied Optics, 2014, 53, 8283.	2.1	18
153	A Comparative Study on Process Potentials for Frictional Stir- and Electric Hot-assisted Incremental Sheet Forming. Procedia Engineering, 2014, 81, 2324-2329.	1.2	38
154	Experimental study and analytical model of deformation of magnetostrictive films as applied to mirrors for x-ray space telescopes. Applied Optics, 2014, 53, 6256.	0.9	12
155	A Mixed Toolpath Strategy for Improved Geometric Accuracy and Higher Throughput in Double-Sided Incremental Forming. , 2014, , .		7
156	Comparisons of the deflections of magnetically smart films on alloy of NiCo and glass substrates. , 2014, , .		3
157	Toward large-area sub-arcsecond x-ray telescopes. , 2014, , .		2
158	Characterization of electrically-assisted micro-rolling for surface texturing using embedded sensor. CIRP Annals - Manufacturing Technology, 2014, 63, 269-272.	1.7	27
159	Tri-pyramid Robot: Design and kinematic analysis of a 3-DOF translational parallel manipulator. Robotics and Computer-Integrated Manufacturing, 2014, 30, 648-657.	6.1	27
160	Generation of hierarchical micro-structures for anisotropic wetting by elliptical vibration cutting. CIRP Annals - Manufacturing Technology, 2014, 63, 553-556.	1.7	79
161	A preliminary study on the fatigue behavior of sheet metal parts formed with accumulative-double-sided incremental forming. Manufacturing Letters, 2014, 2, 8-11.	1.1	16
162	Incremental Sheet Metal Forming Processes. , 2014, , 1-37.		1

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163	Experimental and numerical study of electrically-assisted micro-rolling. , 2013, , .		4
164	Deformation mechanics in single-point and accumulative double-sided incremental forming. International Journal of Advanced Manufacturing Technology, 2013, 69, 1185-1201.	1.5	64
165	Characterization of Flow Stress for Commercially Pure Titanium Subjected to Electrically Assisted Deformation. Journal of Engineering Materials and Technology, Transactions of the ASME, 2013, 135, .	0.8	147
166	Mechanism investigation for the influence of tool rotation and laser surface texturing (LST) on formability in single point incremental forming. International Journal of Machine Tools and Manufacture, 2013, 73, 37-46.	6.2	106
167	Biomanufacturing. CIRP Annals - Manufacturing Technology, 2013, 62, 585-606.	1.7	45
168	Influence of grain size and grain boundaries on the thermal and mechanical behavior of 70/30 brass under electrically-assisted deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 574, 218-225.	2.6	113
169	A new fast method for solving contact plasticity and its application in analyzing elasto-plastic partial slip. Mechanics of Materials, 2013, 60, 18-35.	1.7	36
170	Pressure Reconstruction for Microrolling Process Monitoring. Procedia CIRP, 2013, 7, 258-263.	1.0	1
171	Wire Electro-Discharge Machining of Titanium Alloy. Procedia CIRP, 2013, 5, 13-18.	1.0	117
172	Laser-induced plasma micro-machining (LIPMM) for enhanced productivity and flexibility in laser-based micro-machining processes. CIRP Annals - Manufacturing Technology, 2013, 62, 211-214.	1.7	54
173	Surface Texturing of Drill Bits for Adhesion Reduction and Tool Life Enhancement. Tribology Letters, 2013, 52, 113-122.	1.2	98
174	Characterization of Flow Stress for Commercially Pure Titanium Subjected to Electrically-Assisted Deformation. , 2013, , .		3
175	Feasibility of Laser Surface Texturing for Friction Reduction in Surgical Blades. , 2013, , .		8
176	Numerical and experimental studies for the effects of through-the-thickness shear on formability in single point incremental forming. , 2013, , .		6
177	Modified Maximum Mechanical Dissipation Principle for Rate-Independent Metal Plasticity. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	1.1	6
178	Analysis and Observations of Current Density Sensitivity and Thermally Activated Mechanical Behavior in Electrically-Assisted Deformation. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2013, 135, .	1.3	40
179	Effect of relative tool position on the geometric accuracy of accumulative DSIF. , 2013, , .		2
180	Update to an application using magnetic smart materials to modify the shape of an x-ray telescope mirror. , 2013, , .		4

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181	Laser surface texturing of medical needles for friction control. International Journal of Mechatronics and Manufacturing Systems, 2013, 6, 215.	0.1	10
182	Application of a shear-modified GTN model to incremental sheet forming. , 2013, , .		4
183	Experimental Study of Failure Modes and Scaling Effects in Micro-Incremental Forming. Journal of Micro and Nano-Manufacturing, 2013, 1, .	0.8	16
184	Line-Based Laser Induced Plasma Micro-Machining (L-LIPMM). , 2013, , .		1
185	Implications: Societal Collective Outcomes, Including Manufacturing. Science Policy Reports, 2013, , 255-285.	0.1	0
186	Comparing theory with experimental data in studying the deformation of magnetically smart films deposited on nickel and glass substrates. Proceedings of SPIE, 2012, , .	0.8	2
187	Progress report on using magneto-strictive sputtered thin films to modify the shape of a x-ray telescope mirror. Proceedings of SPIE, 2012, , .	0.8	1
188	A generalized thermodynamic approach for modeling nonlinear hardening behaviors. International Journal of Plasticity, 2012, 38, 102-122.	4.1	34
189	Analytical prediction of stepped feature generation in multi-pass single point incremental forming. Journal of Manufacturing Processes, 2012, 14, 487-494.	2.8	32
190	Progress report on using magneto-strictive sputtered thin films to modify the shape of a x-ray telescope mirror. , 2012, , .		4
191	Accumulative-DSIF strategy for enhancing process capabilities in incremental forming. CIRP Annals - Manufacturing Technology, 2012, 61, 251-254.	1.7	71
192	Real-time monitoring of pressure distribution in microrolling through embedded capacitive sensing. CIRP Annals - Manufacturing Technology, 2012, 61, 367-370.	1.7	15
193	Topology optimization of die weight reduction for high-strength sheet metal stamping. International Journal of Mechanical Sciences, 2012, 59, 73-82.	3.6	43
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