Ghulam Hussain

List of Publications by Year in Descending Order

94 papers	1,725 citations	23 h-index	37 g-index
96 ext. papers	1,989 ext. citations	3.5 avg, IF	5.27 L-index

#	Paper	IF	Citations
94	Aerodynamic Analyses of Airfoils Using Machine Learning as an Alternative to RANS Simulation. *Applied Sciences (Switzerland)*, **2022**, 12, 5194	2.6	0
93	Progress on single-point incremental forming of polymers. *International Journal of Advanced Manufacturing Technology*, **2021**, 114, 1-26	3.2	5
92	Analysis of wall curling in incremental forming of a sheet metal: role of residual stresses, stretching force and process conditions. *Journal of Materials Research and Technology*, **2021**, 11, 1548-1558	5.5	1
91	Effect of pre-rolling temperature on the interfacial properties and formability of steel-steel bilayer sheet in Single Point Incremental Forming. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, **2021**, 235, 406-416	2.4	2
90	Holistic sustainability assessment of hybrid Al□nP-enriched nanofluids and textured tool in machining of Ti□Al□V alloy. *International Journal of Advanced Manufacturing Technology*, **2021**, 112, 731-743	3.2	7
89	An investigation on the effects of tool rotational speed and material temper on post-ISF tensile properties of Al2219 alloy. *Journal of Materials Research and Technology*, **2021**, 10, 853-867	5.5	6
88	Fuzzy Logic-Based Prediction of Drilling-Induced Temperatures at Varying Cutting Conditions along with Analysis of Chips Morphology and Burrs Formation. *Metals*, **2021**, 11, 277	2.3	4
87	Life Cycle Assessment and Feasibility Study of Solar Based Multi- Generation System. *Sustainable Energy Technologies and Assessments*, **2021**, 47, 101321	4.7	
86	Experimental Investigations on the Effects of Rotational Speed on Temperature and Microstructure Variations in Incremental Forming of T6- Tempered and Annealed AA2219 Aerospace Alloy. *Metals*, **2020**, 10, 809	2.3	7
85	Investigation on the effects of the processing parameters and the number of passes on the flexural properties of polymer nanocomposite fabricated through FSP method. *Materials Research Express*, **2020**, 7, 055310	1.7	1
84	Delamination analysis in single-point incremental forming of steel/steel bi-layer sheet metal. *Archives of Civil and Mechanical Engineering*, **2020**, 20, 1	3.4	3
83	Mechanical properties and microstructure evolution in incremental forming of AA5754 and AA6061 aluminum alloys. *Transactions of Nonferrous Metals Society of China*, **2020**, 30, 51-64	3.3	11
82	Biocompatibility and corrosion resistance of metallic biomaterials. *Corrosion Reviews*, **2020**, 38, 381-402	3.2	14
81	On the Effects of Process Parameters and Optimization of Interlaminate Bond Strength in 3D Printed ABS/CF-PLA Composite. *Polymers*, **2020**, 12,	4.5	13
80	Influence of Forming Parameters on the Mechanical Behavior of a Thin Aluminum Sheet Processed through Single Point Incremental Forming. *Metals*, **2020**, 10, 1461	2.3	4
79	Energy, exergy, exergo-economic and exergo-environmental analyses of solar based hydrogen generation system. *International Journal of Hydrogen Energy*, **2020**, 46, 29049-29049	6.7	6
78	Readiness of subtractive and additive manufacturing and their sustainable amalgamation from the perspective of Industry 4.0: a comprehensive review. *International Journal of Advanced Manufacturing Technology*, **2020**, 111, 2475-2498	3.2	14

77	Characterization of residual stresses in an asymmetrical shape produced through incremental forming. *CIRP Journal of Manufacturing Science and Technology*, **2020**, 31, 478-491	3.4	2
76	Formability of Materials with Small Tools in Incremental Forming. *Chinese Journal of Mechanical Engineering (English Edition)*, **2020**, 33,	2.5	5
75	Post-Forming Mechanical Properties of a Polymer Sheet Processed by Incremental Sheet Forming: Insights into Effects of Plastic Strain, and Orientation and Size of Specimen. *Polymers*, **2020**, 12,	4.5	5
74	Influence of Tool Material, Tool Geometry, Process Parameters, Stacking Sequence, and Heat Sink on Producing Sound Al/Cu Lap Joints through Friction Stir Welding. *Metals*, **2019**, 9, 875	2.3	7
73	Bulging in incremental sheet forming of cold bonded multi-layered Cu clad sheet: Influence of forming conditions and bending. *Transactions of Nonferrous Metals Society of China*, **2019**, 29, 112-122	3.3	7
72	Butt Joining of Bi-Layered Aluminum Sheets through Friction Stir Welding: Tensile Stresses, Bending Stresses, Residual Stresses, and Fractrography. *Metals*, **2019**, 9, 384	2.3	4
71	On the Free-Surface Roughness in Incremental Forming of a Sheet Metal: A Study from the Perspective of ISF Strain, Surface Morphology, Post-Forming Properties, and Process Conditions. *Metals*, **2019**, 9, 553	2.3	5
70	Microstructure and micro-hardness analysis of friction stir welded bi-layered laminated aluminum sheets. *International Journal of Lightweight Materials and Manufacture*, **2019**, 2, 123-130	2.2	5
69	Experimental and numerical simulation of steel/steel (St/St) interface in bi-layer sheet metal. *International Journal of Lightweight Materials and Manufacture*, **2019**, 2, 89-96	2.2	3
68	Mechanical properties of an additive manufactured CF-PLA/ABS hybrid composite sheet. *Journal of Thermoplastic Composite Materials*, **2019**, 089270571986940	1.9	6
67	Mechanical Characteristics of a Roll-Bonded Cu-Clad Steel Sheet Processed Through Incremental Forming. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2019**, 50, 4594-4607	2.3	4
66	Investigation of Impact Strength and Hardness of UHMW Polyethylene Composites Reinforced with Nano-Hydroxyapatite Particles Fabricated by Friction Stir Processing. *Polymers*, **2019**, 11,	4.5	6
65	Failure and strain gradient analyses in incremental forming using GTN model. *International Journal of Lightweight Materials and Manufacture*, **2019**, 2, 177-185	2.2	8
64	Surface roughness as the function of friction indicator and an important parameters-combination having controlling influence on the roughness: recent results in incremental forming. *International Journal of Advanced Manufacturing Technology*, **2019**, 101, 2533-2545	3.2	15
63	Appropriate heat treatment and incremental forming route to produce age-hardened components of Al-2219 alloy with minimized form error and high formability. *Journal of Materials Processing Technology*, **2018**, 256, 262-273	5.3	11
62	Fabrication of UHMW polyethylene/nano-hydroxyapatite biocomposite via heat-assisted friction stir processing. *International Journal of Advanced Manufacturing Technology*, **2018**, 96, 3651-3663	3.2	10
61	Trade-off among mechanical properties and energy consumption in multi-pass friction stir processing of Al7075 alloy employing neural network-based genetic optimization. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, **2017**, 231, 129-139	2.4	14
60	Fabrication of metal-matrix AL7075T651/TiN nano composite employing friction stir process. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, **2017**, 231, 1319-1331	2.4	18

59	On the CO 2 characterization in incremental forming of roll bonded laminates. *Journal of Cleaner Production*, **2017**, 156, 214-225	10.3	15
58	Stress gradient due to incremental forming of bonded metallic laminates. *Materials and Manufacturing Processes*, **2017**, 32, 1384-1390	4.1	8
57	The state of residual stresses in the Cu/Steel bonded laminates after ISF deformation: An experimental analysis. *Journal of Manufacturing Processes*, **2017**, 30, 14-26	5	18
56	Empirical modeling and simultaneous optimization of energy efficiency/demand, cost and productivity in incremental forming of metallic clad composite. *International Journal of Hydrogen Energy*, **2017**, 42, 20375-20385	6.7	5
55	Thermal Model of Rotary Friction Welding for Similar and Dissimilar Metals. *Metals*, **2017**, 7, 224	2.3	9
54	An experimental study on multi-pass friction stir processing of Al/TiN composite: some microstructural, mechanical, and wear characteristics. *International Journal of Advanced Manufacturing Technology*, **2016**, 84, 533-546	3.2	25
53	Effects of tool life criterion on sustainability of milling. *Journal of Cleaner Production*, **2016**, 139, 1105-1117	10.3	19
52	Plasma surface Cu alloyed layer as a lubricant on stainless steel sheet: Wear characteristics and on-job performance in incremental forming. *Journal Wuhan University of Technology, Materials Science Edition*, **2016**, 31, 422-428	1	4
51	SPIF of Cu/Steel Clad Sheet: Annealing Effect on Bond Force and Formability. *Materials and Manufacturing Processes*, **2016**, 31, 758-763	4.1	23
50	Determination of Optimum Process Parameters for Cutting Hole in a Randomly-oriented Glass Fiber Reinforced Epoxy Composite by Milling Process: Maximization of Surface Quality and Cut-hole Strength. *Polymers and Polymer Composites*, **2016**, 24, 81-89	0.8	3
49	Parameter-formability relationship in ISF of tri-layered Cu-Steel-Cu composite sheet metal: Response surface and microscopic analyses. *International Journal of Precision Engineering and Manufacturing*, **2016**, 17, 1633-1642	1.7	13
48	Prediction and control of pillow defect in single point incremental forming using numerical simulations. *Journal of Mechanical Science and Technology*, **2016**, 30, 2151-2161	1.6	25
47	On the comparison of formability of roll-bonded steel-Cu composite sheet metal in incremental forming and stamping processes. *International Journal of Advanced Manufacturing Technology*, **2016**, 87, 267-278	3.2	28
46	Response surface analysis of cold formability of polymers in Incremental Sheet Forming: Effect of parameters and associated thermal softening. *International Journal of Precision Engineering and Manufacturing*, **2016**, 17, 613-621	1.7	12
45	Finite element and experimental analyses of cylindrical hole flanging in incremental forming. *Transactions of Nonferrous Metals Society of China*, **2016**, 26, 2419-2425	3.3	8
44	Forming forces in incremental forming of a geometry with corner feature: investigation into the effect of forming parameters using response surface approach. *International Journal of Advanced Manufacturing Technology*, **2015**, 76, 2185-2197	3.2	12
43	The pillowing tendency of materials in single-point incremental forming: Experimental and finite element analyses. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, **2015**, 229, 744-753	2.4	21
42	High-Speed Incremental Forming Process: A Trade-Off Between Formability and Time Efficiency. *Materials and Manufacturing Processes*, **2015**, 30, 1354-1363	4.1	25

41	Wear performance of Al/TiN dispersion strengthened surface composite produced through friction stir process: A comparison of tool geometries and number of passes. *Wear*, **2015**, 324-325, 45-54	3.5	46
40	A rule-based system for trade-off among energy consumption, tool life, and productivity in machining process. *Journal of Intelligent Manufacturing*, **2015**, 26, 1217-1232	6.7	24
39	Machinability comparison of AISI 4340 and Ti-6Al-4V under cryogenic and hybrid cooling environments: A knowledge engineering approach. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, **2015**, 229, 2144-2164	2.4	19
38	Nano-mechanical characterization of plasma surface tungstenized layer by depth-sensing nano-indentation measurement. *Applied Surface Science*, **2015**, 324, 160-167	6.7	11
37	Establishing Mathematical Models to Predict Grain Size and Hardness of the Friction Stir-Welded AA 7020 Aluminum Alloy Joints. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2015**, 46, 357-365	2.5	30
36	Threshold tool-radius condition maximizing the formability in SPIF considering a variety of materials: Experimental and FE investigations. *International Journal of Machine Tools and Manufacture*, **2015**, 88, 82-94	9.4	45
35	Nanomechanical and Macrotribological Properties of CVD-Grown Graphene as a Middle Layer between Metal Pt Cylinders and SiO2/Si Substrate. *Journal of Nanomaterials*, **2015**, 2015, 1-7	3.2	
34	Force Variations with Defects and a Force-based Strategy to Control Defects in SPIF. *Materials and Manufacturing Processes*, **2014**, 29, 1197-1204	4.1	7
33	Experimental investigations on the role of tool size in causing and controlling defects in single point incremental forming process. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, **2014**, 228, 266-277	2.4	10
32	PEO coating as lubrication means for SPIF of titanium sheet: characteristics and performance. *Materials Research Innovations*, **2014**, 18, S2-727-S2-733	1.9	3
31	Forming Parameters and Forming Defects in Incremental Forming Process: Part B. *Materials and Manufacturing Processes*, **2014**, 29, 454-460	4.1	28
30	Study on formability of vertical parts formed by multi-stage incremental forming. *International Journal of Advanced Manufacturing Technology*, **2014**, 75, 1049-1053	3.2	14
29	Role of Tool Size in Suppressing Defects in SPIF Process. *Advanced Materials Research*, **2013**, 746, 167-172	0.5	1
28	Guidelines for Tool-Size Selection for Single-Point Incremental Forming of an Aerospace Alloy. *Materials and Manufacturing Processes*, **2013**, 28, 324-329	4.1	40
27	Pyramid as test geometry to evaluate formability in incremental forming: Recent results. *Journal of Mechanical Science and Technology*, **2012**, 26, 2337-2345	1.6	18
26	Forming Parameters and Forming Defects in Incremental Forming of an Aluminum Sheet: Correlation, Empirical Modeling, and Optimization: Part A. *Materials and Manufacturing Processes*, **2011**, 26, 1546-1553	4.1	51
25	Improving profile accuracy in SPIF process through statistical optimization of forming parameters. *Journal of Mechanical Science and Technology*, **2011**, 25, 177-182	1.6	39
24	Optimization of abrasive water jet cutting of ductile materials. *Journal Wuhan University of Technology, Materials Science Edition*, **2011**, 26, 88-92	1	16

23	On the Effect of Curvature Radius on the Spif-Ability. *Advanced Materials Research*, **2010**, 129-131, 1222-1227	0.5	5
22	Role of Material Properties in Improving Sheet Formability in SPIF Process. *Advanced Materials Research*, **2010**, 139-141, 600-604	0.5	1
21	New Methodologies for the Determination of Precise Forming Limit Curve in Single Point Incremental Forming Process. *Advanced Materials Research*, **2010**, 97-101, 126-129	0.5	3
20	Prediction and Research of Single Point Incremental Forming Limit. *Advanced Materials Research*, **2010**, 97-101, 4005-4009	0.5	
19	The formability of annealed and pre-aged AA-2024 sheets in single-point incremental forming. *International Journal of Advanced Manufacturing Technology*, **2010**, 46, 543-549	3.2	40
18	The performance of flat end and hemispherical end tools in single-point incremental forming. *International Journal of Advanced Manufacturing Technology*, **2010**, 46, 1113-1118	3.2	51
17	A new parameter and its effect on the formability in single point incremental forming: A fundamental investigation. *Journal of Mechanical Science and Technology*, **2010**, 24, 1617-1621	1.6	8
16	Prediction of Single Point Incremental Forming Limit. *Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering*, **2010**, 46, 102	1.3	8
15	Empirical modelling of the influence of operating parameters on the spifability of a titanium sheet using response surface methodology. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, **2009**, 223, 73-81	2.4	16
14	A new formability indicator in single point incremental forming. *Journal of Materials Processing Technology*, **2009**, 209, 4237-4242	5.3	60
13	Electric hot incremental forming: A novel technique. *International Journal of Machine Tools and Manufacture*, **2008**, 48, 1688-1692	9.4	146
12	The Friction and Wear Properties of TiAlNb Intermetallics by Plasma Surface Alloying. *Tribology Letters*, **2008**, 30, 61-67	2.8	17
11	Formability evaluation of a pure titanium sheet in the cold incremental forming process. *International Journal of Advanced Manufacturing Technology*, **2008**, 37, 920-926	3.2	68
10	Tool and lubrication for negative incremental forming of a commercially pure titanium sheet. *Journal of Materials Processing Technology*, **2008**, 203, 193-201	5.3	78
9	An experimental study on the effect of thinning band on the sheet formability in negative incremental forming. *International Journal of Machine Tools and Manufacture*, **2008**, 48, 1170-1178	9.4	17
8	A novel method to test the thinning limits of sheet metals in negative incremental forming. *International Journal of Machine Tools and Manufacture*, **2007**, 47, 419-435	9.4	169
7	A comparative study on the forming limits of an aluminum sheet-metal in negative incremental forming. *Journal of Materials Processing Technology*, **2007**, 187-188, 94-98	5.3	31
6	An experimental study on some formability evaluation methods in negative incremental forming. *Journal of Materials Processing Technology*, **2007**, 186, 45-53	5.3	60

5	The effect of variation in the curvature of part on the formability in incremental forming: An experimental investigation. *International Journal of Machine Tools and Manufacture*, **2007**, 47, 2177-2181	9.4	34
4	A Fundamental Investigation on the Formability of a Commercially-Pure Titanium Sheet-Metal in the Incremental Forming and Stamping Processes **2007**, 943		
3	Fundamental Studies on Incremental Forming of Titanium Sheet-Metal **2006**, 135		1
2	Artificial neural network modelling and optimization of elastic and an-elastic spring back in polymer parts produced through ISF. *International Journal of Advanced Manufacturing Technology*,1	3.2	1
1	Energy consumption, carbon emissions, product cost, and process time in incremental sheet forming process: A holistic review from sustainability perspective. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*,095440542210935	2.4	2