Sushanta Panda

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8539799/publications.pdf

Version: 2024-02-01

58 papers	1,451 citations	279701 23 h-index	360920 35 g-index
59 all docs	59 docs citations	59 times ranked	816 citing authors

#	Article	IF	Citations
1	Nanoindentation and microstructure analysis of resistance spot welded dual phase steel. Materials Letters, 2010, 64, 207-210.	1.3	103
2	A study on heat affected zone softening in resistance spot welded dual phase steel by nanoindentation. Journal of Materials Science, 2010, 45, 1638-1647.	1.7	98
3	Characterization of tensile properties of tailor welded IF steel sheets and their formability in stretch forming. Journal of Materials Processing Technology, 2007, 183, 321-332.	3.1	91
4	Mechanical properties, springback, and formability of W-temper and peak aged 7075 aluminum alloy sheets: Experiments and modeling. International Journal of Mechanical Sciences, 2020, 170, 105344.	3.6	67
5	Limiting drawing ratio and deep drawing behavior of dual phase steel tailor welded blanks: FE simulation and experimental validation. Journal of Materials Processing Technology, 2015, 217, 48-64.	3.1	58
6	Microstructure and Mechanical Performance of Friction Stir Spot-Welded Aluminum-5754 Sheets. Journal of Materials Engineering and Performance, 2013, 22, 131-144.	1.2	55
7	Failure strains of anisotropic thin sheet metals: Experimental evaluation and theoretical prediction. International Journal of Mechanical Sciences, 2019, 151, 356-374.	3.6	55
8	Necking and fracture limit analyses of different pre-strained sheet materials in polar effective plastic strain locus using Yld2000-2d yield model. Journal of Materials Processing Technology, 2019, 267, 289-307.	3.1	48
9	Characterization of Tensile Properties, Limiting Strains, and Deep Drawing Behavior of AA5754-H22 Sheet at Elevated Temperature. Journal of Materials Engineering and Performance, 2015, 24, 4267-4282.	1.2	43
10	Microstructures, Forming Limit and Failure Analyses of Inconel 718 Sheets for Fabrication of Aerospace Components. Journal of Materials Engineering and Performance, 2017, 26, 1513-1530.	1.2	42
11	Improvement in formability of tailor welded blanks by application of counter pressure in biaxial stretch forming. Journal of Materials Processing Technology, 2008, 204, 70-79.	3.1	41
12	Prediction of fracture and deep drawing behavior of solution treated Inconel-718 sheets: Numerical modeling and experimental validation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 733, 393-407.	2.6	38
13	Effect of solution treatment on deep drawability of IN718 sheets: Experimental analysis and metallurgical characterization. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 727, 97-112.	2.6	34
14	Investigations Into the Influence of Weld Zone on Formability of Fiber Laser-Welded Advanced High Strength Steel. Journal of Materials Engineering and Performance, 2014, 23, 1465-1479.	1.2	33
15	Experimental Investigations on Formability of Aluminum Tailor Friction Stir Welded Blanks in Deep Drawing Process. Journal of Materials Engineering and Performance, 2015, 24, 1038-1049.	1.2	33
16	Formability assessment and failure prediction of laser welded dual phase steel blanks using anisotropic plastic properties. International Journal of Mechanical Sciences, 2017, 126, 203-221.	3.6	33
17	Formability and fracture in deep drawing sheet metals: Extended studies for pre-strained anisotropic thin sheets. International Journal of Mechanical Sciences, 2020, 170, 105346.	3.6	33
18	Influence of out-of-plane stretch forming induced different strain paths on micro-texture evolution, slip system activity and Taylor factor distribution in Alâ€“Li alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 830, 142267.	2.6	33

#	Article	IF	Citations
19	Prediction of earing defect and deep drawing behavior of commercially pure titanium sheets using CPB06 anisotropy yield theory. Journal of Manufacturing Processes, 2018, 33, 256-267.	2.8	31
20	Parameter optimization and texture evolution in single point incremental sheet forming process. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2020, 234, 126-139.	1.5	31
21	Finite element analysis of effects of soft zones on formability of laser welded advanced high strength steels. Science and Technology of Welding and Joining, 2009, 14, 52-61.	1.5	30
22	Experimental and numerical studies on the forming behavior of tailor welded steel sheets in biaxial stretch forming. Materials & Design, 2010, 31, 1365-1383.	5.1	30
23	Microstructures and failure analyses of DP980 laser welded blanks in formability context. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 652, 250-263.	2.6	30
24	Constitutive Behavior and Deep Drawability of Three Aluminum Alloys Under Different Temperatures and Deformation Speeds. Journal of Materials Engineering and Performance, 2017, 26, 3954-3969.	1.2	22
25	Influence of SC-HAZ microstructure on the mechanical behavior of Si-TRIP steel welds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 718, 216-227.	2.6	22
26	Study of formability of tailor-welded blanks in plane-strain stretch forming. International Journal of Advanced Manufacturing Technology, 2009, 44, 675-685.	1.5	21
27	Implementation of Yld96 anisotropy plasticity theory for estimation of polar effective plastic strain based failure limit of pre-strained thin steels. Thin-Walled Structures, 2018, 126, 26-37.	2.7	21
28	A new method for joining metal and polymer sheets in sandwich panels for highly improved interface strength. Composite Structures, 2020, 251, 112661.	3.1	21
29	Single point incremental forming of AA6061 thin sheet: calibration of ductile fracture models incorporating anisotropy and post forming analyses. International Journal of Material Forming, 2019, 12, 623-642.	0.9	20
30	Improvement in Material Flow During Nonisothermal Warm Deep Drawing of Nonheat Treatable Aluminum Alloy Sheets. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2017, 139, .	1.3	16
31	2D nanomaterials in 3D/4D-printed biomedical devices. Journal of Materials Research, 2021, 36, 4024-4050.	1.2	16
32	Microstructure, forming limit diagram, and strain distribution of pre-strained DP-IF steel tailorâ€“welded blank for auto body application. International Journal of Advanced Manufacturing Technology, 2019, 104, 1749-1767.	1.5	15
33	Forming of serpentine micro-channels on SS304 and AA1050 ultra-thin metallic sheets using stamping technology. Journal of Manufacturing Processes, 2020, 56, 1099-1113.	2.8	15
34	Finite Element Validation of Forming Limit Diagram of IN-718 Sheet Metal. Materials Today: Proceedings, 2015, 2, 2037-2045.	0.9	14
35	Investigations into Improvement in Formability of AA5754 and AA6082 Sheets at Elevated Temperatures. Journal of Materials Engineering and Performance, 2019, 28, 2967-2982.	1.2	12
36	Formability Analysis of AA5754 Alloy at Warm Condition: Appraisal of Strain Rate Sensitive Index. Materials Today: Proceedings, 2015, 2, 1996-2004.	0.9	11

#	Article	IF	Citations
37	Mechanical Properties and Stretch Forming Behaviour of Electron Beam Welded Titanium Sheets of Grade-2 and Grade-5. Materials Today: Proceedings, 2017, 4, 908-916.	0.9	11
38	Studies on texture and formability of Zircaloy-4 produced by pilgering route. Journal of Materials Research and Technology, 2019, 8, 2120-2129.	2.6	11
39	Quasi-static crushing behavior of stretch formed domes of laser welded tailored blanks. Thin-Walled Structures, 2021, 159, 107288.	2.7	9
40	Uniaxial tensile deformation behaviour of electron beam welded commercially pure titanium and Ti6Al4V joints: Experimental and metallurgical characterization. Journal of Manufacturing Processes, 2022, 76, 444-456.	2.8	9
41	Effect of Bending Strain in Forming Limit Strain and Stress of IN-718 Sheet Metal. Materials Science Forum, 0, 830-831, 238-241.	0.3	8
42	Effect of Orientation of Weld Line on Formability of Electron Beam-Welded Dissimilar Thickness Titanium Sheets. Journal of Materials Engineering and Performance, 2018, 27, 5913-5925.	1.2	8
43	Warm redrawing of AA6082 sheets and investigations into the effect of aging heat treatment on cup wall strength. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 768, 138445.	2.6	8
44	Resistance spot-welding of AISI-1008 steel joints with MWCNT coating interlayer. Materials and Manufacturing Processes, 2021, 36, 448-456.	2.7	8
45	Effect of solution treatment on the formability and part performance of IN718 sheet material. Advances in Materials and Processing Technologies, 2018, 4, 680-694.	0.8	7
46	Effect of pre-cut hole diameter on deformation mechanics in multi-stage incremental hole flanging of deep drawing quality steel. Archives of Civil and Mechanical Engineering, 2021, 21, 1.	1.9	7
47	Process Optimization and Characterization of Ultra-Thin Dissimilar Sheet Material Joints for Battery Applications Using Ultrasonic Welding. Journal of Materials Engineering and Performance, 2022, 31, 4133-4149.	1.2	7
48	Application of Barlat Yld-96 Yield Criterion for Predicting Formability of Pre-Strained Dual Phase Steel Sheets. , 2016, , .		6
49	Implementation of YLD-96 Plasticity Theory in Formability Analysis of Bi-axial Pre-strained Steel Sheets. Procedia Engineering, 2017, 173, 1085-1092.	1.2	6
50	Experimental investigations on forming limit diagram of ultra thin SS 304 steel: effect of circular grid size, sheet orientation, punch size and deformation speed. Advances in Materials and Processing Technologies, 2019, 5, 25-38.	0.8	6
51	Microstructure and Mechanical Properties of Resistance-Spot-Welded AISI-1008 Steel Lap Joints Using Multiwalled Carbon Nanotubes as an Interlayer. Journal of Materials Engineering and Performance, 2021, 30, 3333-3341.	1.2	6
52	Fabrication of longitudinal welded tube of aluminum alloy for structural application using friction stir welding process and its characterization. Archives of Civil and Mechanical Engineering, 2022, 22, 1.	1.9	6
53	Application of non-associated flow rule for prediction of nonuniform material flow during deep drawing of tailor welded blanks. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2023, 237, 618-629.	1.5	3
54	Experimental and numerical studies on the formability of AA5754 and AA6082 thin sheets in nonisothermal warm redrawing process. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2022, 236, 155-165.	0.7	1

#	Article	IF	Citations
55	Punch-less and die-less sheet hydroforming process for manufacturing of serpentine-shaped micro-channels in ultra-thin sheets. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2022, 236, 9610-9621.	1.1	1
56	Numerical and Experimental Studies on Strain Distribution and Weld Line Movement in Stretch Forming of Tailor Welded Blanks. AIP Conference Proceedings, 2007, , .	0.3	0
57	Nonisothermal Warm Deep Drawing Behavior of Automotive Grade Aluminum Alloy Sheets. IOP Conference Series: Materials Science and Engineering, 2021, 1132, 012006.	0.3	0
58	Failure Prediction and Forming Behavior of AA5754 Sheets at Warm Temperature. Lecture Notes on Multidisciplinary Industrial Engineering, 2019, , 53-65.	0.4	0