

Sushil K Mishra

List of Publications by Year in descending order

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papers

886
citations

471509
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45
all docs

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docs citations

45
times ranked

803
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of microstructure and texture on forming behaviour of AA-6061 aluminium alloy sheet. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 679, 56-65.	5.6	82
2	Development of novel grain morphology during hot extrusion of magnesium AZ21 alloy. Acta Materialia, 2010, 58, 1495-1502.	7.9	76
3	Forming limit diagram of Advanced High Strength Steels (AHSS) based on strain-path diagram. Materials and Design, 2015, 85, 149-155.	7.0	53
4	Tension-compression asymmetry in an extruded Mg alloy AM30: Temperature and strain rate effects. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 572, 8-18.	5.6	49
5	Deformation twinning in AISI 316L austenitic stainless steel: Role of strain and strain path. Materials Science and Technology, 2007, 23, 1118-1126.	1.6	48
6	Flow stress constitutive relationship between lamellar and equiaxed microstructure during hot deformation of Ti-6Al-4V. Journal of Materials Processing Technology, 2019, 270, 216-227.	6.3	47
7	Forming behavior and microstructural evolution during single point incremental forming process of AA-6061 aluminum alloy sheet. International Journal of Advanced Manufacturing Technology, 2018, 95, 921-935.	3.0	41
8	Effect of strain amplitude on low cycle fatigue and microstructure evolution in Ti-6Al-4V: A TKD and TEM characterization. Materials Characterization, 2019, 155, 109829.	4.4	35
9	Deformation behavior of Ti-6Al-4V microstructures under uniaxial loading: Equiaxed Vs. transformed- β^2 microstructures. Materials Characterization, 2021, 171, 110780.	4.4	34
10	Understanding activation energy of dynamic recrystallization in Inconel 718. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 744, 638-651.	5.6	32
11	Effect of microstructure evolution during plastic deformation on the formability of Transformation Induced Plasticity and Quenched & Partitioned AHSS. Materials and Design, 2018, 152, 65-77.	7.0	31
12	Modeling of finite deformation of pseudoelastic NiTi shape memory alloy considering various inelasticity mechanisms. International Journal of Plasticity, 2019, 115, 216-237.	8.8	28
13	Texture evolution during annealing of AZ31 Mg alloy rolled sheet and its effect on ductility. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 599, 1-8.	5.6	26
14	Improved predictability of forming limit curves through microstructural inputs. International Journal of Material Forming, 2009, 2, 59-67.	2.0	22
15	Recrystallization behavior of a cold rolled Ti-15V-3Sn-3Cr-3Al alloy. Journal of Materials Research, 2019, 34, 3082-3092.	2.6	22
16	Temperature Effects on the Deformation and Fracture of a Quenched-and-Partitioned Steel. , , .		21
17	Effect of Strain and Strain Path on Texture and Twin Development in Austenitic Steel with Twinning-Induced Plasticity. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1598-1609.	2.2	20
18	Effect of microstructure and cutting speed on machining behavior of Ti6Al4V alloy. Journal of Mechanical Science and Technology, 2017, 31, 2177-2184.	1.5	19

#	ARTICLE	IF	CITATIONS
19	Novel laser surface treatment approach to suppress sensitisation in modified type 316(N) stainless steel weld metal. Science and Technology of Welding and Joining, 2008, 13, 335-343.	3.1	18
20	Crystallographic orientation and boundary effects on misorientation development in austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 617, 228-234.	5.6	18
21	Correlating Hot Deformation Parameters with Microstructure Evolution During Thermomechanical Processing of Inconel 718 Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 4714-4731.	2.2	18
22	Laser surface treatment of \pm titanium alloy to develop a β -rich phase with very high hardness. Journal of Materials Processing Technology, 2021, 288, 116873.	6.3	15
23	Analyses of orientation dependent nanoindentation response of pseudoelastic NiTi alloy using a crystal plasticity model. Mechanics of Materials, 2019, 135, 1-12.	3.2	14
24	Effect of plastic anisotropy on forming behavior of AA-6061 aluminum alloy sheet. Journal of Strain Analysis for Engineering Design, 2016, 51, 507-517.	1.8	13
25	A new approach to control and optimize the laser surface heat treatment of materials. Journal of Materials Processing Technology, 2018, 262, 492-502.	6.3	12
26	Alpha-case Formation in Ti-6Al-4V in a Different Oxidizing Environment and Its Effect on Tensile and Fatigue Crack Growth Behavior. Oxidation of Metals, 2022, 97, 77-95.	2.1	10
27	Postanneal Mechanical Properties of Prestrained AA5182-O Sheets. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2011, 133, .	2.2	9
28	Hot deformation behaviour of Ti-6Al-4V alloy with a transformed microstructure: a multimodal characterisation. Philosophical Magazine, 2019, 99, 1429-1459.	1.6	9
29	Prediction of strain path and forming limit curve of AHSS by incorporating microstructure evolution. International Journal of Advanced Manufacturing Technology, 2020, 106, 5085-5098.	3.0	8
30	Microstructure and texture evolution during incremental sheet forming of AA1050 alloy. Journal of Materials Science, 2022, 57, 6385-6398.	3.7	8
31	Investigations of size effect on formability and microstructure evolution in SS304 thin foils. Journal of Strain Analysis for Engineering Design, 2018, 53, 517-528.	1.8	7
32	Strain path diagram simulation of AA 5182 Aluminum alloy. Procedia Engineering, 2013, 64, 1252-1258.	1.2	6
33	Microstructural Development Due to Laser Treatment and Its Effect on Machinability of Ti6Al4V Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 3450-3467.	2.2	5
34	A numerical approach on achieving uniform thickness distribution in pressure thermoforming. Manufacturing Letters, 2019, 21, 24-27.	2.2	5
35	Influence of Single-Point Incremental Force Process Parameters on Forming Characteristics and Microstructure Evolution of AA-6061 Alloy Sheet. Journal of Materials Engineering and Performance, 2019, 28, 7141-7154.	2.5	5
36	Transient thermal analysis of close pressure thermoforming process. Journal of Manufacturing Processes, 2021, 62, 513-522.	5.9	5

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37	Development and Removal of Alpha-Case Layer From Heat Treated Titanium Alloys. , 2017, , .		4
38	The Role of Microstructure Inhomogeneity in Ti-6Al-4V Forging on Fracture Toughness Behavior. Journal of Materials Engineering and Performance, 2022, 31, 7989-8003.	2.5	4
39	On the phenomena of partial crystallization of highly undercooled magnesium silicate molten droplets. Scientific Reports, 2021, 11, 13666.	3.3	3
40	Experimental and Numerical Analysis on Dual Phase Steel (DP780) Sheet Forming Limit and Effect of Microstructure Evolution on Formability. Journal of Materials Engineering and Performance, 2020, 29, 8247-8260.	2.5	2
41	Post-Anneal Mechanical Properties of Pre-Strained AA5182-O Sheets. , 2011, , .		1
42	Contact Analysis for Contact Thermoforming of PMMA Sheet. Materials Performance and Characterization, 2020, 9, 285-302.	0.3	1
43	Local Strain Calculations Using Electron Backscattered Diffraction (EBSD) Measurements and Digital Image Processing. Materials Science Forum, 0, 702-703, 562-565.	0.3	0
44	A Review on the Material Development and Corresponding Properties for Power Plant Applications. Materials Performance and Characterization, 2022, 11, 53-87.	0.3	0