

V Anil Kumar

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Strain hardening of Titanium alloy Ti6Al4V sheets with prior heat treatment and cold working. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 662, 537-550.	2.6	72
2	Recent advances in processing of titanium alloys and titanium aluminides for space applications: A review. Journal of Materials Research, 2021, 36, 689-716.	1.2	49
3	Multi-stage heat treatment of aluminum alloy AA7049. Transactions of Nonferrous Metals Society of China, 2013, 23, 1570-1575.	1.7	45
4	Hot workability and microstructure control in Co20Cr15W10Ni cobalt-based superalloy. Journal of Alloys and Compounds, 2016, 676, 527-541.	2.8	38
5	Effect of Heat Treatment Parameters on the Microstructure and Properties of Inconel-625 Superalloy. Journal of Materials Engineering and Performance, 2017, 26, 3048-3057.	1.2	29
6	Characterization and Qualification of LPBF Additively Manufactured AISI-316L Stainless Steel Brackets for Aerospace Application. , 2020, 5, 603-616.		25
7	Hot Deformation Behavior of Aluminum Alloys AA7010 and AA7075. Journal of Materials Engineering and Performance, 2019, 28, 5021-5036.	1.2	23
8	Study on Variants of Solution Treatment and Aging Cycle of Titanium Alloy Ti6Al4V. Journal of Materials Engineering and Performance, 2016, 25, 1492-1501.	1.2	21
9	Role of microstructure on the tension/compression asymmetry in a two-phase Ti-5Al-3Mo-1.5V titanium alloy. Journal of Alloys and Compounds, 2019, 795, 151-162.	2.8	19
10	Evolution of microstructure in niobium rich ($Ti_{50}Al_{30}Nb_{15}V_{3}$) based titanium aluminide alloy during hot compression. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 754, 708-718.	2.6	17
11	Effect of boron on microstructure evolution and hot tensile deformation behavior of Ti-5Al-5V-5Mo-1Cr-1Fe alloy. Journal of Alloys and Compounds, 2020, 831, 154672.	2.8	16
12	Study of Aluminum Alloy AA2219 After Heat Treatment. Metal Science and Heat Treatment, 2015, 57, 350-353.	0.2	15
13	Aging Behavior in 15-5 PH Precipitation Hardening Martensitic Stainless Steel. Materials Science Forum, 2012, 710, 483-488.	0.3	13
14	Influence of heat treatment on the microstructure evolution and elevated temperature mechanical properties of Hastelloy-X processed by laser directed energy deposition. Journal of Alloys and Compounds, 2021, 868, 159207.	2.8	13
15	Effect of Prior and Post-Weld Heat Treatment on Electron Beam Weldments of ($Ti_{50}Al_{30}Nb_{15}V_{3}$) Titanium alloy Ti-5Al-3Mo-1.5V. Journal of Materials Engineering and Performance, 2016, 25, 2147-2156.	1.2	12
16	Development of ductile $Ti_{50}Al_{30}Nb_{15}V_{3}$ titanium aluminide through ingot metallurgy route, thermomechanical processing and characterization. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 703, 124-136.	2.6	12
17	Effect of Test Temperature on Tensile Behavior of Ti-5Al-5V-2Mo-1Cr-1Fe ($Ti_{50}Al_{30}Nb_{15}V_{3}$) Titanium Alloy with Initial Microstructures in Hot Forged and Heat Treated Conditions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 2702-2719.	1.1	10
18	Investigation of Cracks Generated in Columbium Alloy (C-103) Sheets During Deep Drawing Operation. Journal of Failure Analysis and Prevention, 2010, 10, 228-232.	0.5	9

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19	Processing and Characterization of Inconel 625 Nickel Base Superalloy. Materials Science Forum, 0, 830-831, 38-40.	0.3	9
20	Mechanical Behavior of Commercially Pure Titanium Weldments at Lower Temperatures. Journal of Materials Engineering and Performance, 2018, 27, 2192-2204.	1.2	9
21	Reactive and liquid-phase sintering techniques. , 2018, , 303-318.		9
22	Hot deformation behavior of Hastelloy-X preforms built using directed energy deposition based laser additive manufacturing. Materials Letters, 2020, 270, 127737.	1.3	9
23	Investigation of Cracks Generated During Flow Forming of Nb-Hf-Ti Alloy Sheet. Journal of Failure Analysis and Prevention, 2007, 7, 424-428.	0.5	8
24	Solution Treatment and Aging of Thick Rings from Titanium Alloy Ti6Al4V. Metal Science and Heat Treatment, 2015, 57, 169-174.	0.2	8
25	Effect of Strain Rate and Temperature on the Tensile Flow Behavior and Microstructure Evolution in Fe-0.3 Pct C-CrMoV Grade Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 161-178.	1.1	8
26	Investigation on effect of optimized RRA in strength and SCC resistance for aluminium alloy AA7010. Materials Today: Proceedings, 2020, 27, 2385-2389.	0.9	8
27	Electron Beam Welding Studies on Nb-Hf-Ti Refractory Alloy. Materials Science Forum, 0, 710, 608-613.	0.3	7
28	Melting and Microstructure Analysis of $\hat{1}^2$ -Ti Alloy Ti-5Al-5Mo-1Cr-1Fe With and Without Boron. Transactions of the Indian Institute of Metals, 2015, 68, 207-215.	0.7	7
29	Solution Treatment and Aging (STA) Study of Ti Alloy Ti5Al3Mo1.5V. Journal of Materials Engineering and Performance, 2015, 24, 24-31.	1.2	7
30	Effect of Variants of Thermomechanical Working and Annealing Treatment on Titanium Alloy Ti6Al4V Closed Die Forgings. Journal of Materials Engineering and Performance, 2016, 25, 2551-2562.	1.2	7
31	Plasma Arc Welding of High Strength 0.3% CrMoV (ESR) Steel. Transactions of the Indian Institute of Metals, 2017, 70, 1317-1322.	0.7	7
32	Microstructure Evolution during High-Temperature Deformation of Ti-5Al-5V-2Mo-1Cr-1Fe Alloy under Compression. Journal of Materials Engineering and Performance, 2021, 30, 3258-3272.	1.2	6
33	On the anisotropy in room-temperature mechanical properties of laser powder bed fusion processed Ti6Al4V-ELI alloy for aerospace applications. Journal of Materials Science, 2022, 57, 9599-9618.	1.7	6
34	Development of High Nitrogen Stainless Steel for Cryogenic Applications. Materials Science Forum, 2015, 830-831, 23-26.	0.3	5
35	Optimization of Heat Treatment Cycles and Characterization of Aluminum Alloy AA7010. Journal of Materials Engineering and Performance, 2019, 28, 776-787.	1.2	5
36	Melting and Thermomechanical Processing of High Strength 0.3% CrMoV (ESR) Steel. Transactions of the Indian Institute of Metals, 2018, 71, 1475-1485.	0.7	4

#	ARTICLE	IF	CITATIONS
37	Microstructure Evolution during Hot Working of Nb-10Hf-1Ti Refractory Alloy. , 2021, 6, 111-121.		4
38	Tailoring the Microstructure and Mechanical Properties of Titanium Alloy Ti6Al4V Forgings with Different Combinations of Thermo-Mechanical Processing and Heat Treatment Cycles. , 2021, 6, 839-855.		4
39	Development of Titanium Alloy Hemispherical Forging for Pressure Vessel of Launch Vehicle. Materials Science Forum, 2015, 830-831, 3-6.	0.3	3
40	High-Temperature Tensile Behaviors of Base Metal and Electron Beam-Welded Joints of Ni-20Cr-9Mo-4Nb Superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 2654-2672.	1.1	3
41	Effect of Heat Treatment and Combination of Cold Rolling and Heat Treatment on Microstructure and Mechanical Properties of Titanium Alloy Ti6Al2V2Zr1.5Mo. Journal of Materials Engineering and Performance, 2018, 27, 4405-4422.	1.2	3
42	Hot deformation characteristics and microstructure evolution of Ti-5Al-3Mo-1.5V alloy. International Journal of Advances in Engineering Sciences and Applied Mathematics, 2021, 13, 49-62.	0.7	3
43	Characterization of Titanium Alloy Ti6Al4V-ELI Components made by Laser Powder Bed Fusion Route for Space Applications. , 0, , 1.		3
44	Development of Large-Sized Titanium Alloy Ti6Al4V and Nickel-Based Superalloy Inconel-718 Forgings for Reusable Launch Vehicle-Technology Demonstrator Flight. Current Science, 2018, 114, 131.	0.4	3
45	Simulation and Experimental Validation of EBW Studies in Austenitic Stainless Steel AISI-321. , 2020, 5, 581-592.		3
46	Manufacturing of Inconel 718 Based Honeycomb Panels for Metallic Thermal Protection Systems. Materials Science Forum, 0, 710, 197-202.	0.3	2
47	Effect of Cooling Medium on Solution Treatment Response of Titanium Alloy Ti-5Al-5V-2Mo. Materials Science Forum, 2015, 830-831, 123-126.	0.3	2
48	Processing and Characterization of Superinvar for Space Application. Materials Science Forum, 2015, 830-831, 30-33.	0.3	2
49	Development and Characterization of 15Cr-5Ni-1W Martensitic Precipitation Hardening Stainless Steel for Aerospace Applications. Materials Science Forum, 2015, 830-831, 15-18.	0.3	2
50	Tensile Behavior of Electron Beam-Welded and Post-Weld Vacuum-Annealed Nb-10% Hf-1% Ti Refractory Alloy Weldments. Journal of Materials Engineering and Performance, 2018, 27, 353-360.	1.2	2
51	Processing and Characterization of 3D-Printed Inconel-718 Component through Laser Powder Bed Fusion Route for High-Temperature Space Application. , 2021, 6, 133-146.		2
52	Effect of Pre- and Post Weld Heat Treatment on Microstructure Development and Mechanical Properties of 0.3%C-CrMoV (ESR) High-Strength Low-Alloy Steel. Journal of Materials Engineering and Performance, 2021, 30, 7835-7850.	1.2	2
53	Hot Deformation Studies on $\hat{1}20$ Stabilized TiAl Alloy Made Through Ingot Metallurgy Route. Transactions of the Indian Institute of Metals, 2021, 74, 2977-2989.	0.7	2
54	Equal Channel Angular Pressing of Al Alloy AA2219. Advanced Materials Research, 2009, 67, 53-58.	0.3	1

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55	Age Hardening Behavior in Al-8Zn-2Mg-2Cu Wrought Aluminum Alloy. Materials Science Forum, 0, 710, 527-532.	0.3	1
56	Evaluation of High Temperature Properties and Microstructural Characterization of Resistance Spot Welded Steel Lap Shear Joints. High Temperature Materials and Processes, 2016, 35, 145-151.	0.6	1
57	Studies on Similar and Dissimilar Metal EBW Joints of Fe-31Ni-5Co and Co-20Cr-15W-10Ni Alloys. Journal of Materials Engineering and Performance, 2017, 26, 2963-2973.	1.2	1
58	Effect of Prior Thermomechanical Treatment on Annealed Microstructure and Microhardness in Cobalt-Based Superalloy Co-20Cr-15W-10Ni. High Temperature Materials and Processes, 2018, 37, 333-339.	0.6	1
59	Investigation on mechanical properties and microstructure of Ti-5Al-5V-5Mo-1Cr-1Fe Titanium alloy butt welded EBW joints. Materials Today: Proceedings, 2018, 5, 28061-28070.	0.9	1
60	Effect of Retrogression and Re-Aging on Tensile Mechanical Properties in Transverse Direction of Extruded Rods from Aluminum Alloy AA7049. Metal Science and Heat Treatment, 2021, 63, 42-46.	0.2	1
61	High Temperature Tensile Deformation Response of ± 2 Titanium Aluminide Processed through Ingot Metallurgy Route. Transactions of the Indian Institute of Metals, 2021, 74, 2081-2092.	0.7	1
62	Development of Hardening and Tempering Cycle for High Strength Low Alloy Fastener Grade Steel. Materials Science Forum, 2012, 710, 506-510.	0.3	0
63	Influence of Retrogression and Reaging Treatment on Intergranular Corrosion Resistance and Exfoliation Corrosion Resistance in AA7010 Aluminum Alloy. Materials Performance and Characterization, 2021, 10, 1-10.	0.2	0
64	Differential Heat Treatment Response of Cast plus Homogenized and Forged Billets of Aluminum Alloy AA7075. Journal of Materials Engineering and Performance, 2021, 30, 7863-7870.	1.2	0
65	Microstructural and Mechanical Characterization of 1.6-mm-Thick Nimonic-75 Superalloy Welds. Materials Performance and Characterization, 2022, 11, 200-209.	0.2	0