Shibayan Roy

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4548530/publications.pdf

Version: 2024-02-01

38	1,335	361296	360920
papers	citations	20 h-index	35 g-index

38	38	38	977
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The influence of temperature and strain rate on the deformation response and microstructural evolution during hot compression of a titanium alloy Tiâ€“6Alâ€“4Vâ€“0.1B. Journal of Alloys and Compounds, 2013, 548, 110-125.	2.8	147
2	Development of solidification microstructure in boron-modified alloy Tiâ€“6Alâ€“4Vâ€“0.1B. Acta Materialia, 2011, 59, 5494-5510.	3.8	138
3	Orientation dependent spheroidization response and macro-zone formation during sub Î²-transus processing of Ti-6Al-4V alloy. Acta Materialia, 2017, 134, 283-301.	3.8	98
4	Accumulative roll bonding of aluminum alloys 2219/5086 laminates: Microstructural evolution and tensile properties. Materials & Design, 2012, 36, 529-539.	5.1	91
5	Microstructure and texture evolution during accumulative roll bonding of aluminium alloy AA5086. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 8469-8478.	2.6	77
6	Mechanical and tribological characterization of human tooth. Materials Characterization, 2008, 59, 747-756.	1.9	76
7	Annealing response of the intermetallic alloy Tiâ€“22Alâ€“25Nb. Intermetallics, 2010, 18, 1122-1131.	1.8	71
8	Microstructure and texture evolution during Î² extrusion of boron modified Tiâ€“6Alâ€“4V alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 540, 152-163.	2.6	65
9	On characterization of deformation microstructure in Boron modified Tiâ€“6Alâ€“4V alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 528, 449-458.	2.6	55
10	Microstructure and Texture Evolution During Sub-Transus Thermomechanical Processing of Ti-6Al-4V-0.1B Alloy: Part I. Hot Rolling in (Î±Â+ÂÎ²) Phase Field. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 3303-3321.	1.1	53
11	Enhanced superplasticity for (Î±+Î²)-hot rolled Tiâ€“6Alâ€“4Vâ€“0.1B alloy by means of dynamic globularization. Materials & Design, 2014, 58, 52-64.	5.1	46
12	Deformation mechanisms during superplastic testing of Tiâ€“6Alâ€“4Vâ€“0.1B alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 574, 205-217.	2.6	45
13	Microstructure and texture evolution during accumulative roll bonding of aluminium alloys AA2219/AA5086 composite laminates. Journal of Materials Science, 2012, 47, 6402-6419.	1.7	35
14	Microstructure and Texture Evolution During Sub-Transus Thermo-Mechanical Processing of Ti-6Al-4V-0.1B Alloy: Part II. Static Annealing in (Î±Â+ÂÎ²) Regime. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 3322-3336.	1.1	30
15	Effect of extrusion ratio on the microstructure, texture and mechanical properties of (Mg/AZ91)mâ€“SiCp composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 624, 279-290.	2.6	30
16	X-ray diffraction line profile analysis of deformation microstructure in boron modified Tiâ€“6Alâ€“4V alloy. Materials Characterization, 2011, 62, 35-42.	1.9	27
17	The effects of microstructural stability on the compressive response of two cast aluminum alloys up to 300 Â°C. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 700, 519-529.	2.6	23
18	Effect of Hypoeutectic Boron Addition on the Î² Transus of Ti-6Al-4V Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 2535-2541.	1.1	22

#	Article	IF	Citations
19	Unique texture transition during sub Î²-transus annealing of warm-rolled Ti-6Al-4V alloy: Role of orientation dependent spheroidization. Scripta Materialia, 2018, 154, 1-7.	2.6	22
20	Hardness properties and microscopic investigation of crackâ€“crystal interaction in SiO2â€“MgOâ€“Al2O3â€“K2Oâ€“B2O3â€“F glass ceramic system. Journal of Materials Science: Materials in Medicine, 2010, 21, 109-122.	1.7	20
21	Crystallographic texture and microstructure evolution during hot compression of Tiâ€“6Alâ€“4Vâ€“0.1B alloy in the (Îµâ€‰+â€‰Î²)-regime. Philosophical Magazine, 2014, 94, 358-380.	0.7	19
22	On the development of two characteristically different crystal morphology in SiO2â€“MgOâ€“Al2O3â€“K2Oâ€“B2O3â€“F glass-ceramic system. Journal of Materials Science: Materials in Medicine, 2009, 20, 51-66.	1.7	17
23	In vitro dissolution behavior of SiO2â€“MgOâ€“Al2O3â€“K2Oâ€“B2O3â€“F glassâ€“ceramic system. Journal of Materials Science: Materials in Medicine, 2008, 19, 3123-3133.	1.7	14
24	Effect of processing routes on evolution of texture heterogeneity in 2014 aluminium alloy deformed by equal channel angular pressing (ECAP). Materials Science and Technology, 2012, 28, 1445-1458.	0.8	14
25	Cost-effective wear and oxidation resistant electrodeposited Niâ€“pumice coating. Surface and Coatings Technology, 2014, 251, 201-209.	2.2	13
26	Texture evolution in an Alâ€“Cu alloy during equal channel angular pressing: the effect of starting microstructure. Journal of Materials Science, 2011, 46, 6518-6527.	1.7	12
27	Zn2+- Controlled Crystallization and Microstructure in K-Li-Mg-B-Si-Al-F Glass. MRS Advances, 2018, 3, 3525-3533.	0.5	12
28	Texture Evolution in Boron Modified Ti-6Al-4V Alloy. Ceramic Transactions, 2008, , 585-592.	0.1	10
29	Indentation Response and Structureâ€Property Correlation in a Bimodal Tiâ€“6Alâ€“4V Alloy. Advanced Engineering Materials, 2017, 19, 1700298.	1.6	10
30	Statistical modeling of microstructure evolution in a Ti-6Al-4V alloy during isothermal compression. Acta Materialia, 2021, 210, 116827.	3.8	9
31	On the absence of shear cracking and grain boundary cavitation in secondary tensile regions of Tiâ€“6Alâ€“4Vâ€“0.1B alloy during hot (Îµâ€‰+â€‰Î²)-compression. Philosophical Magazine, 2014, 94, 447-463.	0.7	8
32	Novel insights on the near atomic scale spatial distributions of substitutional alloying and interstitial impurity elements in Ti-6Al-4V alloy. Journal of Alloys and Compounds, 2022, 907, 164511.	2.8	7
33	Effect of hypoeutectic boron modification on the dynamic properties of Ti-6Al-4V alloy. Journal of Materials Research, 2016, 31, 2804-2816.	1.2	5
34	Site-specific microstructure, porosity and mechanical properties of LENSâ„¢ processed Tiâ€“6Alâ€“4V alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 820, 141494.	2.6	5
35	Process Simulation Role in the Development of New Alloys Based on an Integrated Computational Materials Engineering Approach. , 2014, , .		3
36	Additive manufacturing of titanium alloys: microstructure and texture evolution, defect formation and mechanical response. , 2021, , 151-182.		3

#	Article	IF	Citations
37	The Role of Processing Routes on the Evolution of Microstructure and Texture Heterogeneity during ECAP of Al-Cu Alloy. Materials Science Forum, 2011, 702-703, 113-118.	0.3	2
38	New-Age Al-Cu-Mn-Zr (ACMZ) Alloy for High Temperature-High Strength Applications: A Review. , 0, , .		1