Abhishek Mehta

List of Publications by Year
in descending order

32 papers	955 citations	567144 15 h-index	477173 29 g-index
32 all docs	32 docs citations	32 times ranked	647 citing authors

#	Article	IF	Citations
1	Elimination of extraordinarily high cracking susceptibility of aluminum alloy fabricated by laser powder bed fusion. Journal of Materials Science and Technology, 2022, 103, 50-58.	5.6	21
2	Microstructural Development in Inconel 718 Nickel-Based Superalloy Additively Manufactured by Laser Powder Bed Fusion. Metallography, Microstructure, and Analysis, 2022, 11, 88-107.	0.5	16
3	High strength aluminum-cerium alloy processed by laser powder bed fusion. Additive Manufacturing, 2022, 52, 102657.	1.7	4
4	Microstructural characteristics and mechanical properties of additively manufactured Cuâ€“10Sn alloys by laser powder bed fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 838, 142775.	2.6	12
5	Effects of Alloy Composition and Solid-State Diffusion Kinetics on Powder Bed Fusion Cracking Susceptibility. Journal of Phase Equilibria and Diffusion, 2021, 42, 5-13.	0.5	17
6	Investigation of sluggish diffusion in FCC Al_{0.25}CoCrFeNi high-entropy alloy. Materials Research Letters, 2021, 9, 239-246.	4.1	42
7	Composition-dependent solidification cracking of aluminum-silicon alloys during laser powder bed fusion. Acta Materialia, 2021, 208, 116698.	3.8	97
8	Additive manufacturing and mechanical properties of the dense and crack free Zr-modified aluminum alloy 6061 fabricated by the laser-powder bed fusion. Additive Manufacturing, 2021, 41, 101966.	1.7	28
9	Measurement of Interdiffusion and Tracer Diffusion Coefficients in FCC Co-Cr-Fe-Ni Multi-Principal Element Alloy. Journal of Phase Equilibria and Diffusion, 2021, 42, 696-707.	0.5	8
10	Microstructure, mechanical performance, and corrosion behavior of additively manufactured aluminum alloy 5083 with 0.7 and 1.0Âwt% Zr addition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 823, 141679.	2.6	36
11	Mechanical Behavior Assessment of Ti-6Al-4V ELI Alloy Produced by Laser Powder Bed Fusion. Metals, 2021, 11, 1671.	1.0	15
12	Phase reversion kinetics of thermally decomposed (Î±Â+ Î³â€²) phases to Î³-phase in U â€“ 10Âwt% Mo alloy. Journal of Nuclear Materials, 2020, 530, 151983.	1.3	7
13	High Entropy and Sluggish Diffusion â€œCoreâ€• Effects in Senary FCC Alâ€“Coâ€“Crâ€“Feâ€“Niâ€“Mn Alloys. ACS Combinatorial Science, 2020, 22, 757-767.	3.8	30
14	Anode Materials: Stabilization of Sn Anode through Structural Reconstruction of a Cuâ€“Sn Intermetallic Coating Layer (Adv. Mater. 42/2020). Advanced Materials, 2020, 32, 2070319.	11.1	20
15	Anomalous growth of Al8Mo3 phase during interdiffusion and reaction between Al and Mo. Journal of Nuclear Materials, 2020, 539, 152337.	1.3	9
16	Laser powder bed fusion of Alâ€“10 wt% Ce alloys: microstructure and tensile property. Journal of Materials Science, 2020, 55, 14611-14625.	1.7	51
17	Stabilization of Sn Anode through Structural Reconstruction of a Cuâ€“Sn Intermetallic Coating Layer. Advanced Materials, 2020, 32, e2003684.	11.1	53
18	Interdiffusion, Solubility Limit, and Role of Entropy in FCC Al-Co-Cr-Fe-Ni Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 3142-3153.	1.1	19

#	Article	IF	Citations
19	Interdiffusion and Reaction Between Al and Zr in the Temperature Range of 425 to 475ÂÂ°C. Journal of Phase Equilibria and Diffusion, 2019, 40, 482-494.	0.5	15
20	Effects of Marker Size and Distribution on the Development of Kirkendall Voids, and Coefficients of Interdiffusion and Intrinsic Diffusion. Journal of Phase Equilibria and Diffusion, 2019, 40, 156-169.	0.5	10
21	Phase Transformations and Microstructural Development in the U-10 WtÂPct Mo Alloy with Varying Zr Contents After Heat Treatments Relevant to the Monolithic Fuel Plate Fabrication Process. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 72-96.	1.1	9
22	Microstructure, precipitates and mechanical properties of powder bed fused inconel 718 before and after heat treatment. Journal of Materials Science and Technology, 2019, 35, 1153-1164.	5.6	94
23	Microstructure, precipitates and hardness of selectively laser melted AlSi10Mg alloy before and after heat treatment. Materials Characterization, 2018, 143, 5-17.	1.9	201
24	Direct-Contact Cytotoxicity Evaluation of CoCrFeNi-Based Multi-Principal Element Alloys. Journal of Functional Biomaterials, 2018, 9, 59.	1.8	10
25	Simultaneous Measurement of Isotope-Free Tracer Diffusion Coefficients and Interdiffusion Coefficients in the Cu-Ni System. Journal of Phase Equilibria and Diffusion, 2018, 39, 862-869.	0.5	14
26	Microstructural Characterization of AA6061 Versus AA6061 HIP Bonded Claddingâ€"Cladding Interface. Journal of Phase Equilibria and Diffusion, 2018, 39, 246-254.	0.5	17
27	Mechanical properties examined by nanoindentation for selected phases relevant to the development of monolithic uranium-molybdenum metallic fuels. Journal of Nuclear Materials, 2017, 487, 443-452.	1.3	28
28	Composition-dependent interdiffusion coefficient, reduced elastic modulus and hardness in Î³-, Î³â€²- and Î²-phases in the Ni-Al system. Journal of Alloys and Compounds, 2017, 727, 153-162.	2.8	25
29	Martensitic transformation and mechanical properties of Ni49+xMn36â€"xIn15 (x=0, 0.5, 1.0, 1.5 and 2.0) alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 646, 57-65.	2.6	14
30	Relating Diffusion Couple Experiment Results to Observed As-Fabricated Microstructures in Low-Enriched U-10wt.% Mo Monolithic Fuel Plates. Defect and Diffusion Forum, 0, 375, 18-28.	0.4	10
31	Interdiffusion, Reactions, and Phase Transformations Observed during Fabrication of Low Enriched Uranium Monolithic Fuel System for Research and Test Reactors. Defect and Diffusion Forum, 0, 383, 10-16.	0.4	8
32	Fundamental Core Effects in Transition Metal High-Entropy Alloys: â€œHigh-Entropyâ€•and â€œSluggish Diffusionâ€•Effects. , 0, 29, 75-93.		15