

# Mehdi Malekan

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10805177/publications.pdf>

Version: 2024-02-01

37  
papers

549  
citations

687363

13  
h-index

677142

22  
g-index

37  
all docs

37  
docs citations

37  
times ranked

349  
citing authors

#	ARTICLE	IF	CITATIONS
1	Micro-mechanisms and precipitation kinetics of delta ( $\delta$ ) phase in Inconel 718 superalloy during aging. <i>Journal of Alloys and Compounds</i> , 2019, 795, 207-212.	5.5	65
2	Enhanced mechanical properties of as-cast AZ91 magnesium alloy by combined RE-Sr addition and hot extrusion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 792, 139817.	5.6	60
3	Homogenization kinetics of a typical nickel-based superalloy. <i>Journal of Alloys and Compounds</i> , 2019, 793, 277-282.	5.5	35
4	Mechanical properties and crystallization kinetics of Er-containing Cu-Zr-Al bulk metallic glasses with excellent glass forming ability. <i>Vacuum</i> , 2020, 174, 109223.	3.5	32
5	Microstructure and mechanical properties of a Cu-Zr based bulk metallic glass containing atomic scale chemical heterogeneities. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 729, 433-438.	5.6	29
6	A new intermetallic phase formation in Mg Si Ni magnesium-based in-situ formed alloys. <i>Vacuum</i> , 2019, 164, 349-354.	3.5	27
7	Crystallization kinetics of Cu <sub>47</sub> Zr <sub>47</sub> Al <sub>6</sub> and (Cu <sub>47</sub> Zr <sub>47</sub> Al <sub>6</sub> ) <sub>99</sub> Sn <sub>1</sub> bulk metallic glasses. <i>Journal of Non-Crystalline Solids</i> , 2018, 498, 272-280.	3.1	26
8	Effect of microalloying by Ca on the microstructure and mechanical properties of as-cast and wrought Mg-Mg <sub>2</sub> Si composites. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 820, 141574.	5.6	26
9	Effect of Si and Ni on microstructure and mechanical properties of in-situ magnesium-based composites in the as-cast and extruded conditions. <i>Materials Chemistry and Physics</i> , 2019, 232, 305-310.	4.0	25
10	Thermal behavior of newly developed Zr <sub>33</sub> Hf <sub>8</sub> Ti <sub>6</sub> Cu <sub>32</sub> Ni <sub>10</sub> Co <sub>5</sub> Al <sub>6</sub> high-entropy bulk metallic glass. <i>Journal of Alloys and Compounds</i> , 2022, 892, 162220.	5.5	25
11	Precipitation kinetics of $\gamma$ phase and its mechanism in a Nb-bearing nickel-based superalloy during aging. <i>Vacuum</i> , 2020, 178, 109456.	3.5	23
12	Microstructure Evolution and Mechanical Properties of the AZ91 Magnesium Alloy with Sr and Ti Additions in the As-Cast and As-Aged Conditions. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 6853-6863.	2.5	17
13	Effects of Zr addition on solidification characteristics of Al-Zn-Mg-Cu alloy using thermal analysis. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 134, 1457-1469.	3.6	14
14	Amorphization and mechano-crystallization of high-energy ball milled Fe Ti alloys. <i>Journal of Non-Crystalline Solids</i> , 2019, 520, 119466.	3.1	14
15	Serration dynamics in the presence of chemical heterogeneities for a Cu-Zr based bulk metallic glass. <i>Journal of Alloys and Compounds</i> , 2019, 775, 298-303.	5.5	14
16	Soft Magnetic High Entropy FeCoNiCuMn Alloy with Excellent Ductility and High Electrical Resistance. <i>Metals and Materials International</i> , 2022, 28, 556-564.	3.4	13
17	Superplasticity of bulk metallic glasses (BMGs): A review. <i>Journal of Non-Crystalline Solids</i> , 2022, 583, 121503.	3.1	12
18	Crystallization kinetics of mechanically alloyed amorphous Fe-Ti alloys during annealing. <i>Advanced Powder Technology</i> , 2020, 31, 3215-3221.	4.1	10

#	ARTICLE	IF	CITATIONS
19	Superplastic formability of the developed Zr <sub>40</sub> Hf <sub>10</sub> Ti <sub>5</sub> Al <sub>10</sub> Cu <sub>25</sub> Ni <sub>10</sub> high entropy bulk metallic glass with enhanced thermal stability. <i>Journal of Non-Crystalline Solids</i> , 2022, 576, 121265.	3.1	10
20	The influence of heat treatment on the structure and tensile properties of thin-section A356 aluminum alloy casts refined by Ti, B and Zr. <i>Journal of Materials Research</i> , 2017, 32, 3540-3547.	2.6	8
21	Effective role of minor silicon addition on crystallization kinetics of Cu <sub>50</sub> Zr <sub>43</sub> Al <sub>7</sub> bulk metallic glass. <i>Applied Physics A: Materials Science and Processing</i> , 2021, 127, 1.	2.3	8
22	Thermodynamic and kinetic interpretation of the glass-forming ability of Y-containing Cu-Zr-Al bulk metallic glasses. <i>Journal of Non-Crystalline Solids</i> , 2022, 576, 121266.	3.1	8
23	Delta processing effects on the creep behavior of a typical Nb-bearing nickel-based superalloy. <i>Vacuum</i> , 2021, 184, 109913.	3.5	7
24	Substructure induced dendrite-fragmentation during thermomechanical processing of as-cast Mg-Sn-Li-Zn alloy. <i>Materials Letters</i> , 2021, 305, 130690.	2.6	6
25	Microstructure, mechanical properties and wear behaviour of the AZ91/Mg <sub>2</sub> Si/SiC hybrid composites. <i>Materials Science and Technology</i> , 2021, 37, 1333-1341.	1.6	6
26	Microstructure and mechanical properties of the Mg/Zn/Cu/SiCp composite in the as-cast and as-extruded conditions. <i>Journal of Materials Research</i> , 2019, 34, 3707-3716.	2.6	4
27	Effects of Al <sub>3</sub> Ni and Al <sub>7</sub> Cr Intermetallics and T6 Heat Treatment on the Microstructure and Tensile Properties of Al-Zn-Mg-Cu Alloy. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 3432-3442.	2.5	4
28	Under glass transition temperature diffusion bonding of bulk metallic glass and aluminum. <i>Materials Chemistry and Physics</i> , 2021, 269, 124758.	4.0	4
29	Enhanced mechanical properties of Mg/Ni/RE alloys via hot extrusion. <i>Materials Science and Technology</i> , 2021, 37, 1285-1290.	1.6	4
30	Determination of dendrite coherency point characteristics in Al-Si-Mg alloy. <i>International Journal of Cast Metals Research</i> , 2021, 34, 14-20.	1.0	3
31	Thermodynamically-guided machine learning modelling for predicting the glass-forming ability of bulk metallic glasses. <i>Scientific Reports</i> , 2022, 12, .	3.3	3
32	Throughput study of diffusion along the twin boundaries in Mg-5Sn-0.3Li as-cast alloy and its effect on the homogenization during hot deformation. <i>Materials Letters</i> , 2020, 281, 128446.	2.6	2
33	Investigating the effect of GTAW parameters on the porosity formation of C70600 copper-nickel alloy. <i>Canadian Metallurgical Quarterly</i> , 2023, 62, 180-189.	1.2	2
34	Effect of Pr on the grain refinement and mechanical properties of AM50 alloy in as-cast condition. <i>AIP Conference Proceedings</i> , 2018, .	0.4	1
35	Complex reaction behaviour of ceramic mould with the molten AZ91 alloy during investment casting. <i>Materials Science and Technology</i> , 2021, 37, 377-383.	1.6	1
36	Microstructure, tensile and bending behaviour of the as-cast AM50 alloy modified with different antimony and copper additions. <i>Materials Science and Technology</i> , 2021, 37, 86-102.	1.6	1

#	ARTICLE	IF	CITATIONS
37	Computational Modeling of Compressive Behavior of Wire-Reinforced Bulk Metallic Glass Matrix Composites. Transactions of the Indian Institute of Metals, 2021, 74, 649-658.	1.5	0