M Vedat Akdeniz

List of Publications by Year
in descending order

44 papers	642 citations	687363 13 h-index	610901 24 g-index
44 all docs	44 docs citations	44 times ranked	479 citing authors

#	Article	IF	Citations
1	The effect of substitutional impurities on the evolution of Fe-Al diffusion layer. Acta Materialia, 1998, 46, 1185-1192.	7.9	103
2	The role of Si addition on the interfacial interaction in Feî—¸Al diffusion layer. Scripta Metallurgica Et Materialia, 1994, 31, 1723-1728.	1.0	81
3	Effect of ternary alloying elements addition on atomic ordering characteristics of Feâ€“Al intermetallics. Acta Materialia, 1999, 47, 2067-2075.	7.9	67
4	Nano-scale phase separation in amorphous Feâ€“B alloys: Atomic and cluster ordering. Acta Materialia, 2009, 57, 171-181.	7.9	48
5	Atomic size effect of alloying elements on the formation, evolution and strengthening of Î³â€²-Ni3Al precipitates in Ni-based superalloys. Intermetallics, 2019, 109, 37-47.	3.9	44
6	Atomic ordering characteristics of Ni3Al intermetallics with substitutional ternary additions. Acta Materialia, 1997, 45, 1077-1083.	7.9	32
7	Solidification behavior, glass forming ability and thermal characteristics of soft magnetic Feâ€“Coâ€“Bâ€“Siâ€“Nbâ€“Cu bulk amorphous alloys. Intermetallics, 2011, 19, 1330-1337.	3.9	30
8	Effect of (Mo, W) substitution for Nb on glass forming ability and magnetic properties of Feâ€“Co-based bulk amorphous alloys fabricated by centrifugal casting. Journal of Alloys and Compounds, 2011, 509, 2334-2337.	5.5	24
9	Modelling and Monte Carlo simulation of the atomic ordering processes in Ni3Al intermetallics. Modelling and Simulation in Materials Science and Engineering, 2007, 15, 1-12.	2.0	21
10	Microstructural evolution and room-temperature mechanical properties of as-cast and heat-treated Fe50Al50â^'nNbn alloys (n=1, 3, 5, 7, and 9at%). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 664, 17-25.	5.6	19
11	Microstructures and phase selection in rapidly solidified Zn-Mg alloys. Journal of Materials Science, 1996, 31, 545-550.	3.7	18
12	Effect of vanadium on atomic ordering characteristics and anti-phase boundary energies of B2â€“FeCo alloys. Intermetallics, 2010, 18, 893-899.	3.9	17
13	The Site Preferences of Transition Elements and Their Synergistic Effects on the Bonding Strengthening and Structural Stability of Î³â€²-Ni3Al Precipitates in Ni-Based Superalloys: A First-Principles Investigation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 2298-2313.	2.2	17
14	Effect of Ternary Alloying Elements Addition on the Order-Disorder Transformation Temperatures of B2-Type Ordered Fe-Al-X Intermetallics. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1809-1816.	2.2	16
15	High-temperature site preference and atomic short-range ordering characteristics of ternary alloying elements in Î³â€™-Ni₃Al intermetallics. Philosophical Magazine, 2017, 97, 2615-2631.	1.6	13
16	Microalloying effects on the microstructure and kinetics of nanoscale precipitation in Niâ€“Alâ€“Fe alloy. Intermetallics, 2012, 23, 217-227.	3.9	9
17	Impurity-Driven Nanocrystallization of Zr-Based Bulk Amorphous Alloys. Journal of Nanoscience and Nanotechnology, 2008, 8, 894-900.	0.9	6
18	Synthesis of AlNiCo core/shell nanopowders. Journal of Magnetism and Magnetic Materials, 2016, 417, 112-116.	2.3	6

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19	Effect of Mo addition on microstructure, ordering, and room-temperature mechanical properties of Fe-50Al. Transactions of Nonferrous Metals Society of China, 2018, 28, 1970-1979.	4.2	6
20	Modeling of the atomic ordering processes in Fe3Al intermetallics by the monte carlo simulation method combined with electronic theory of alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 721-734.	2.2	5
21	Size dependent stability and surface energy of amorphous FePt nanoalloy. Journal of Alloys and Compounds, 2019, 788, 787-798.	5.5	5
22	Structures in rapidly solidified zinc. Materials Science and Engineering, 1988, 98, 321-323.	0.1	4
23	Microstructural and magnetic characterization of iron precipitation in Niâ€“Feâ€“Al alloys. Materials Characterization, 2011, 62, 606-614.	4.4	4
24	Magnetic monitoring approach to nanocrystallization kinetics in Fe-based bulk amorphous alloy. Intermetallics, 2013, 43, 152-161.	3.9	4
25	Microstructural Investigation and Phase Relationships of Fe-Al-Hf Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 3412-3421.	2.2	4
26	Effect of melt superheat on the geometry of melt spun pure zinc ribbon. Scripta Metallurgica Et Materialia, 1995, 32, 1471-1475.	1.0	3
27	Structural characterization of iron-based bulk metallic glass alloys produced by centrifugal casting. Chemical Engineering Communications, 2003, 190, 925-935.	2.6	3
28	Solidification behaviour of bulk glass-forming alloy systems. Journal of Alloys and Compounds, 2005, 386, 185-191.	5.5	3
29	Site Selection and Pseudo-Clustering Behaviors of Alloying Elements in Aluminum-Lean Î³-TiAl Intermetallics. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 267-274.	2.2	3
30	Kinetics of nanoscale precipitation in Niâ€“Feâ€“Al alloys: A magnetic monitoring approach. Journal of Alloys and Compounds, 2011, 509, 6781-6786.	5.5	3
31	Effects of Nanoparticle Geometry and Temperature on the Structural Evolution in FeCo Nanoalloys. Acta Physica Polonica A, 2014, 125, 600-602.	0.5	3
32	Synthesis and Characterization of Fe80B20Nanoalloys Produced by Surfactant Assisted Ball Milling. Acta Physica Polonica A, 2014, 125, 597-599.	0.5	3
33	The Effect of Alloying Additions on the Interfacial Interactions at the Fe-Al Interface During Coating. NATO ASI Series Series B: Physics, 1996, , 681-686.	0.2	3
34	Effect of Thickness on Magnetic Properties of Fe36Co36B19.2Si4.8Mo2W2Thin Film Prepared by Thermionic Vacuum Arc. Acta Physica Polonica A, 2012, 121, 147-148.	0.5	3
35	Effect of Y Addition on the Structural Properties and Oxidation Behavior of Fe₆₀Al_{40-n}Y_n Alloys (n= 1, 3, and 5 at.%). Materials at High Temperatures, 2022, 39, 220-230.	1.0	3
36	Glass Forming Ability and Magnetic Properties of Fe36Ni36B19.2Si4.8Nb4â^'x M x (M=Cu, Zr, Ti, Y, Pt) Bulk Glassy Alloys Fabricated by Suction Casting. Journal of Superconductivity and Novel Magnetism, 2013, 26, 1683-1685.	1.8	2

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37	On the Optimization of the Microstructural and Mechanical Properties of Model Ni-Based Superalloys Through the Alloying Effects of Refractory Mo and W Elements. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2022, 53, 1859-1872.	2.2	2
38	Modeling of the atomic ordering processes in Fe3Al intermetallics by the monte carlo simulation method combined with electronic theory of alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 721-734.	2.2	1
39	Solidification Microstructures and Carbides Morphology in Rapidly Solidified Fe-Al-Cr-C Alloys. Metals and Materials International, 2008, 14, 397-402.	3.4	1
40	Theoretical prediction of bulk glass forming ability (BGFA) of Tiâ€“Cu based multicomponent alloys. Journal of Non-Crystalline Solids, 2009, 355, 373-378.	3.1	1
41	Microstructure, phase relationships and microhardness of Fe₆₀Al_{40â€“n}Hf_n alloys (n = 1, 3, and 5 at.%). International Journal of Materials Research, 2021, 112, 280-287.	0.3	1
42	Radiation effect studies on partially crystalline bulk amorphous Fe-based metallic glass. Radiation Effects and Defects in Solids, 2022, 177, 294-306.	1.2	1
43	Modeling the kinetics of atomic ordering in high temperature intermetallics. Chemical Engineering Communications, 2003, 190, 898-910.	2.6	0
44	A generalized polytetrahedral cluster approach to partial coordination numbers in binary metallic glasses. Philosophical Magazine, 2011, 91, 2985-3005.	1.6	0