Mitsuharu Todai

List of Publications by Year
in descending order

41 papers	1,224 citations	566801 15 h-index	377514 34 g-index
41 all docs	41 docs citations	41 times ranked	1011 citing authors

#	Article	IF	Citations
1	Design and development of (Ti, Zr, Hf)-Al based medium entropy alloys and high entropy alloys. Materials Chemistry and Physics, 2022, 276, 125409.	2.0	9
2	Athermal Ï‰ Phase and Lattice Modulation in Binary Zr-Nb Alloys. Materials, 2022, 15, 2318.	1.3	1
3	Influence of input energy density on morphology of unique layered microstructure of <i>Î³</i>-TiAl alloys fabricated by electron beam powder bed fusion. Keikinzoku/Journal of Japan Institute of Light Metals, 2022, 72, 298-303.	0.1	0
4	Development of TiNbTaZrMo bio-high entropy alloy (BioHEA) super-solid solution by selective laser melting, and its improved mechanical property and biocompatibility. Scripta Materialia, 2021, 194, 113658.	2.6	95
5	Development of Tiâ€“Zrâ€“Hfâ€“Yâ€“La high-entropy alloys with dual hexagonal-close-packed structure. Scripta Materialia, 2020, 186, 242-246.	2.6	28
6	Kinetic Arrest of R-B19â€² Transformation in Iron-Doped Tiâ€“Ni Shape Memory Alloy. Materials Transactions, 2020, 61, 49-54.	0.4	3
7	Liquid Phase Separation in Ag-Co-Cr-Fe-Mn-Ni, Co Cr-Cu-Fe-Mn-Ni and Co-Cr-Cu-Fe-Mn-Ni-B High Entropy Alloys for Biomedical Application. Crystals, 2020, 10, 527.	1.0	14
8	Development of Coâ€“Crâ€“Moâ€“Feâ€“Mnâ€“W and Coâ€“Crâ€“Moâ€“Feâ€“Mnâ€“Wâ€“Ag High-Entropy Alloys Based on Coâ€“Crâ€“Mo Alloys. Materials Transactions, 2020, 61, 567-576.	0.4	13
9	Improvement of High Temperature Fatigue Properties of TiAl Alloys Fabricated by Electron Beam Melting Through Hot Isostatic Pressing Process. Journal of Smart Processing, 2020, 9, 180-184.	0.0	2
10	Development of non-equiatomic Ti-Nb-Ta-Zr-Mo high-entropy alloys for metallic biomaterials. Scripta Materialia, 2019, 172, 83-87.	2.6	124
11	Additive manufacturing of dense components in betaâ€titanium alloys with crystallographic texture from a mixture of pure metallic element powders. Materials and Design, 2019, 173, 107771.	3.3	93
12	Solidification Microstructure of High Entropy Alloys Composed With 4 Group (Ti, Zr, Hf), 5 Group (V,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.1	6
13	Beta titanium single crystal with bone-like elastic modulus and large crystallographic elastic anisotropy. Journal of Alloys and Compounds, 2019, 782, 667-671.	2.8	26
14	Microstructure and Mechanical Properties of TiAl Alloys Prepared by Additive Manufacturing. Journal of Smart Processing, 2019, 8, 78-83.	0.0	1
15	Microstructure of equiatomic and non-equiatomic Ti-Nb-Ta-Zr-Mo high-entropy alloys for metallic biomaterials. Journal of Alloys and Compounds, 2018, 753, 412-421.	2.8	112
16	Influence of unique layered microstructure on fatigue properties of Ti-48Al-2Cr-2Nb alloys fabricated by electron beam melting. Intermetallics, 2018, 95, 1-10.	1.8	50
17	Effects of Heat Treatment on Unique Layered Microstructure and Tensile Properties of TiAl Fabricated by Electron Beam Melting. Materials Science Forum, 2018, 941, 1366-1371.	0.3	12
18	Ï‰-phase transformation and lattice modulation in biomedical Î²-phase Ti-Nb-Al alloys. Journal of Alloys and Compounds, 2018, 766, 511-516.	2.8	18

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19	Unusual dynamic precipitation softening induced by dislocation glide in biomedical beta-titanium alloys. Scientific Reports, 2017, 7, 8056.	1.6	9
20	Novel TiNbTaZrMo high-entropy alloys for metallic biomaterials. Scripta Materialia, 2017, 129, 65-68.	2.6	262
21	Effect of building direction on the microstructure and tensile properties of Ti-48Al-2Cr-2Nb alloy additively manufactured by electron beam melting. Additive Manufacturing, 2017, 13, 61-70.	1.7	148
22	Design of the Next Generation Metallic Biomaterials. Materia Japan, 2017, 56, 584-588.	0.1	2
23	Ï‰ Phase Transformation and Mechanical Properties in Binary Zr-Nb Biomedical Alloy. Materials Science Forum, 2016, 879, 1969-1973.	0.3	1
24	Microstructure and fracture toughness in boron added NbSi2(C40)/MoSi2(C11b) duplex crystals. Scripta Materialia, 2016, 113, 236-240.	2.6	29
25	Development of Single Crystalline Bone Plate with Low Youngâ€™s Modulus Using Beta-type Ti-15Mo-5Zr-3Al Alloy. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2015, 101, 501-505.	0.1	4
26	Temperature dependence of diffuse satellites in Tiâ€“(50 â^' x)Pdâ€“ x Fe (14 â©½ x â©½ 20 (at.%)) alloys. Journal of Alloys and Compounds, 2014, 615, 1047-1051.	2.8	2
27	Relation between negative temperature coefficient in electrical resistivity and athermal Ï‰ phase in Tiâ€“xNb (26â‰xâ‰29at.%) alloys. Journal of Alloys and Compounds, 2013, 577, S431-S434.	2.8	16
28	Direction of atom displacement in incommensurate state of Tiâ€“32Pdâ€“18Fe shape memory alloy. Materials Letters, 2013, 108, 293-296.	1.3	4
29	Isothermal martensitic transformation of the R-phase in a Tiâ€“44Niâ€“6Fe at.% alloy. Scripta Materialia, 2013, 69, 239-241.	2.6	15
30	^|^beta;-Phase Instability and Effects on the Physical Properties in Binary Ti-Nb Biomaterial Single Crystals. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2013, 77, 281-286.	0.2	2
31	β-Phase Instability in Binary Ti–<i>x</i>Nb Biomaterial Single Crystals. Materials Transactions, 2013, 54, 156-160.	0.4	16
32	Martensitic transformation from incommensurate state with nano-scale domain structure in a Tiâ€“42Niâ€“8Fe (at.%) alloy under a compressive stress. Philosophical Magazine Letters, 2011, 91, 29-34.	0.5	3
33	Relation between incommensurate satellites and phonon softening in Tiâ€“Ni-based shape memory alloys. Scripta Materialia, 2011, 64, 541-543.	2.6	11
34	Isothermal nature of martensitic transformation in an Ni45Co5Mn36.5In13.5 magnetic shape memory alloy. Scripta Materialia, 2011, 64, 927-930.	2.6	43
35	Premartensitic State of Ti-Pd-Fe Shape Memory Alloys Studied by Electrical Resistivity, Magnetic Susceptibility and Specific Heat Measurements. Materials Transactions, 2010, 51, 906-910.	0.4	9
36	Crystal structure of the martensite phase in the ferromagnetic shape memory compound Ni2MnGa studied by electron diffraction. Scripta Materialia, 2009, 61, 473-476.	2.6	23

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37	Position of Incommensurate Satellites Appearing in Ti-Ni Based Shape Memory Alloys. Solid State Phenomena, 0, 172-174, 150-154.	0.3	0
38	Effect of Phase Stability on Some Physical and Mechanical Properties in Î²-Ti Single Crystal for Biomedical Applications. Materials Science Forum, 0, 783-786, 1372-1376.	0.3	2
39	Fabrication of the Beta-Titanium Alloy Rods from a Mixture of Pure Metallic Element Powders via Selected Laser Melting. Materials Science Forum, 0, 941, 1260-1263.	0.3	6
40	Microstructure and Fatigue Properties of TiAl with Unique Layered Microstructure Fabricated by Electron Beam Melting. Materials Science Forum, 0, 941, 1597-1602.	0.3	10
41	Fabrication of Be-Ta Ti Alloys without Pre-Alloyed Powders via SLM. Materials Science Forum, 0, 1016, 1797-1801.	0.3	0