

# Mitsuharu Todai

## List of Publications by Year in descending order

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41  
papers

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566801

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all docs

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docs citations

41  
times ranked

1011  
citing authors

#	ARTICLE	IF	CITATIONS
1	Novel TiNbTaZrMo high-entropy alloys for metallic biomaterials. Scripta Materialia, 2017, 129, 65-68.	2.6	262
2	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
3	Development of non-equiatomic Ti-Nb-Ta-Zr-Mo high-entropy alloys for metallic biomaterials. Scripta Materialia, 2019, 172, 83-87.	2.6	124
4	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
5	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
6	Additive manufacturing of dense components in beta-titanium alloys with crystallographic texture from a mixture of pure metallic element powders. Materials and Design, 2019, 173, 107771.	3.3	93
7	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
8	Isothermal nature of martensitic transformation in an Ni <sub>45</sub> Co <sub>5</sub> Mn <sub>36.5</sub> In <sub>13.5</sub> magnetic shape memory alloy. Scripta Materialia, 2011, 64, 927-930.	2.6	43
9	Microstructure and fracture toughness in boron added NbSi <sub>2</sub> (C40)/MoSi <sub>2</sub> (C11b) duplex crystals. Scripta Materialia, 2016, 113, 236-240.	2.6	29
10	Development of Ti-Zr-Hf-Y-La high-entropy alloys with dual hexagonal-close-packed structure. Scripta Materialia, 2020, 186, 242-246.	2.6	28
11	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
12	Crystal structure of the martensite phase in the ferromagnetic shape memory compound Ni <sub>2</sub> MnGa studied by electron diffraction. Scripta Materialia, 2009, 61, 473-476.	2.6	23
13	̳-phase transformation and lattice modulation in biomedical ̳ <sup>2</sup> -phase Ti-Nb-Al alloys. Journal of Alloys and Compounds, 2018, 766, 511-516.	2.8	18
14	Relation between negative temperature coefficient in electrical resistivity and athermal ̳ phase in Ti-xNb (26â%â%29at.%) alloys. Journal of Alloys and Compounds, 2013, 577, S431-S434.	2.8	16
15	&beta;-Phase Instability in Binary Ti&ndash;Nb Biomaterial Single Crystals. Materials Transactions, 2013, 54, 156-160.	0.4	16
16	Isothermal martensitic transformation of the R-phase in a Ti-44Ni-6Fe at.% alloy. Scripta Materialia, 2013, 69, 239-241.	2.6	15
17	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
18	Development of Co-Cr-Mo-Fe-Mn-W and Co-Cr-Mo-Fe-Mn-W-Ag High-Entropy Alloys Based on Co-Cr-Mo Alloys. Materials Transactions, 2020, 61, 567-576.	0.4	13

#	ARTICLE	IF	CITATIONS
19	Effects of Heat Treatment on Unique Layered Microstructure and Tensile Properties of TiAl Fabricated by Electron Beam Melting. <i>Materials Science Forum</i> , 2018, 941, 1366-1371.	0.3	12
20	Relation between incommensurate satellites and phonon softening in Ti-Ni-based shape memory alloys. <i>Scripta Materialia</i> , 2011, 64, 541-543.	2.6	11
21	Microstructure and Fatigue Properties of TiAl with Unique Layered Microstructure Fabricated by Electron Beam Melting. <i>Materials Science Forum</i> , 0, 941, 1597-1602.	0.3	10
22	Premartensitic State of Ti-Pd-Fe Shape Memory Alloys Studied by Electrical Resistivity, Magnetic Susceptibility and Specific Heat Measurements. <i>Materials Transactions</i> , 2010, 51, 906-910.	0.4	9
23	Unusual dynamic precipitation softening induced by dislocation glide in biomedical beta-titanium alloys. <i>Scientific Reports</i> , 2017, 7, 8056.	1.6	9
24	Design and development of (Ti, Zr, Hf)-Al based medium entropy alloys and high entropy alloys. <i>Materials Chemistry and Physics</i> , 2022, 276, 125409.	2.0	9
25	Fabrication of the Beta-Titanium Alloy Rods from a Mixture of Pure Metallic Element Powders via Selected Laser Melting. <i>Materials Science Forum</i> , 0, 941, 1260-1263.	0.3	6
26	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
27	Direction of atom displacement in incommensurate state of Ti-32Pd-18Fe shape memory alloy. <i>Materials Letters</i> , 2013, 108, 293-296.	1.3	4
28	Development of Single Crystalline Bone Plate with Low Young's Modulus Using Beta-type Ti-15Mo-5Zr-3Al Alloy. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2015, 101, 501-505.	0.1	4
29	Martensitic transformation from incommensurate state with nano-scale domain structure in a Ti-42Ni-8Fe (at.%) alloy under a compressive stress. <i>Philosophical Magazine Letters</i> , 2011, 91, 29-34.	0.5	3
30	Kinetic Arrest of R-B19' Transformation in Iron-Doped Ti-Ni Shape Memory Alloy. <i>Materials Transactions</i> , 2020, 61, 49-54.	0.4	3
31	^  ^beta;-Phase Instability and Effects on the Physical Properties in Binary Ti-Nb Biomaterial Single Crystals. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2013, 77, 281-286.	0.2	2
32	Temperature dependence of diffuse satellites in Ti-(50 at% x)Pd-x Fe (14 at% x 1/2 x 1/2 20 (at.%) alloys. <i>Journal of Alloys and Compounds</i> , 2014, 615, 1047-1051.	2.8	2
33	Effect of Phase Stability on Some Physical and Mechanical Properties in Ti-Ti Single Crystal for Biomedical Applications. <i>Materials Science Forum</i> , 0, 783-786, 1372-1376.	0.3	2
34	Design of the Next Generation Metallic Biomaterials. <i>Materia Japan</i> , 2017, 56, 584-588.	0.1	2
35	Improvement of High Temperature Fatigue Properties of TiAl Alloys Fabricated by Electron Beam Melting Through Hot Isostatic Pressing Process. <i>Journal of Smart Processing</i> , 2020, 9, 180-184.	0.0	2
36	% Phase Transformation and Mechanical Properties in Binary Zr-Nb Biomedical Alloy. <i>Materials Science Forum</i> , 2016, 879, 1969-1973.	0.3	1

#	ARTICLE	IF	CITATIONS
37	Microstructure and Mechanical Properties of TiAl Alloys Prepared by Additive Manufacturing. Journal of Smart Processing, 2019, 8, 78-83.	0.0	1
38	Athermal $\beta$ Phase and Lattice Modulation in Binary Zr-Nb Alloys. Materials, 2022, 15, 2318.	1.3	1
39	Position of Incommensurate Satellites Appearing in Ti-Ni Based Shape Memory Alloys. Solid State Phenomena, 0, 172-174, 150-154.	0.3	0
40	Fabrication of Be-Ta Ti Alloys without Pre-Alloyed Powders via SLM. Materials Science Forum, 0, 1016, 1797-1801.	0.3	0
41	Influence of input energy density on morphology of unique layered microstructure of $\beta$ -TiAl alloys fabricated by electron beam powder bed fusion. Keikinzoku/Journal of Japan Institute of Light Metals, 2022, 72, 298-303.	0.1	0