Masaki Tahara

List of Publications by Year
in descending order

76 papers	1,109 citations	516710 16 h-index	434195 31 g-index
78 all docs	78 docs citations	78 times ranked	556 citing authors

#	Article	IF	Citations
1	Lattice modulation and superelasticity in oxygen-added Î²-Ti alloys. Acta Materialia, 2011, 59, 6208-6218.	7.9	223
2	Cyclic deformation behavior of a Tiâ€“26 at.% Nb alloy. Acta Materialia, 2009, 57, 2461-2469.	7.9	103
3	Nanodomain structure and its effect on abnormal thermal expansion behavior of a Tiâ€“23Nbâ€“2Zrâ€“0.7Taâ€“1.2O alloy. Acta Materialia, 2013, 61, 4874-4886.	7.9	102
4	Effect of nitrogen addition and annealing temperature on superelastic properties of Tiâ€“Nbâ€“Zrâ€“Ta alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 6844-6852.	5.6	50
5	Heating-induced martensitic transformation and time-dependent shape memory behavior of Tiâ€“Nbâ€“O alloy. Acta Materialia, 2014, 80, 317-326.	7.9	44
6	Role of oxygen atoms in Î±â€³ martensite of Ti-20 at.% Nb alloy. Scripta Materialia, 2016, 112, 15-18.	5.2	40
7	SHAPE MEMORY EFFECT AND CYCLIC DEFORMATION BEHAVIOR OF Tiâ€“Nbâ€“N ALLOYS. Functional Materials Letters, 2009, 02, 79-82.	1.2	37
8	Wide-range temperature dependences of Brillouin scattering properties in polymer optical fiber. Japanese Journal of Applied Physics, 2014, 53, 042502.	1.5	32
9	Effect of Sn and Zr addition on the martensitic transformation behavior of Ti-Mo shape memory alloys. Journal of Alloys and Compounds, 2017, 695, 76-82.	5.5	32
10	Plastic deformation behaviour of single-crystalline martensite of Ti-Nb shape memory alloy. Scientific Reports, 2017, 7, 15715.	3.3	31
11	Effect of Nitrogen Addition on Superelasticity of Ti-Zr-Nb Alloys. Materials Transactions, 2009, 50, 2726-2730.	1.2	28
12	Role of interstitial atoms in the microstructure and non-linear elastic deformation behavior of Tiâ€“Nb alloy. Journal of Alloys and Compounds, 2013, 577, S404-S407.	5.5	28
13	Effect of Sn and Zr content on superelastic properties of Ti-Mo-Sn-Zr biomedical alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 704, 72-76.	5.6	24
14	Effect of Annealing Temperature on Microstructure and Superelastic Properties of Ti-Au-Cr-Zr Alloy. Materials Transactions, 2015, 56, 404-409.	1.2	18
15	Effect of Cr additions on the phase constituent, mechanical properties, and shape memory effect of nearâ€“eutectoid Tiâ€“4Au towards the biomaterial applications. Journal of Alloys and Compounds, 2021, 867, 159037.	5.5	18
16	Effect of 3d transition metal additions on the phase constituent, mechanical properties, and shape memory effect of nearâ€“eutectoid Tiâ€“4Au biomedical alloys. Journal of Alloys and Compounds, 2021, 857, 157599.	5.5	16
17	Formation process of the incompatible martensite microstructure in a beta-titanium shape memory alloy. Acta Materialia, 2017, 124, 351-359.	7.9	15
18	Microstructural Evolution in Î²â€Metastable Tiâ€“Moâ€“Snâ€“Al Alloy During Isothermal Aging. Advanced Engineering Materials, 2019, 21, 1900416.	3.5	15

#	Article	IF	Citations
19	Compatibility at Junction Planes between Habit Plane Variants with Internal Twin in Ti-Ni-Pd Shape Memory Alloy. Materials Transactions, 2016, 57, 233-240.	1.2	11
20	Influence of the precipitates on the shape memory effect and superelasticity of the nearâ€“eutectoid Tiâ€“Auâ€“Fe alloy towards biomaterial applications. Intermetallics, 2021, 133, 107180.	3.9	11
21	Microstructure of Î±Â+Âî² dual phase formed from isothermal Î±â€³phase via novel decomposition pathway in metastable Î²-Ti alloy. Journal of Alloys and Compounds, 2021, 868, 159237.	5.5	11
22	Enhancement of the shape memory effect by the introductions of Cr and Sn into the Î²â€“Ti alloy towards the biomedical applications. Journal of Alloys and Compounds, 2021, 875, 160088.	5.5	11
23	Development of ã€ˆ001ã€‰-fiber texture in cold-groove-rolled Ti-Mo-Al-Zr biomedical alloy. Materialia, 2018, 1, 52-61.	2.7	10
24	Effects of Cr and Sn additives on the martensitic transformation and deformation behavior of Ti-Cr-Sn biomedical shape memory alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 822, 141668.	5.6	10
25	Compressive Fracture Behavior of Bi-added Ni₅₀Mn₂₈Ga₂₂ Ferromagnetic Shape Memory Alloys. Materials Research Society Symposia Proceedings, 2013, 1516, 139-144.	0.1	9
26	Elaboration of magnetostrain-active NiMnGa particles/polymer layered composites. Materials Letters, 2021, 289, 129427.	2.6	9
27	Enhancement of mechanical properties and shape memory effect of Tiâ€“Crâ€“based alloys via Au and Cu modifications. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 123, 104707.	3.1	9
28	Isothermal martensitic transformation behavior of Tiâ€“Nbâ€“O alloy. Materials Letters, 2019, 257, 126691.	2.6	8
29	Anisotropy of Young's Modulus in a Ti-Mo-Al-Zr Alloy with Goss Texture. Materials Transactions, 2016, 57, 1998-2001.	1.2	8
30	Effect of Cold-Rolling Rate on Texture in Ti-Mo-Al-Zr Shape Memory Alloy. Materials Science Forum, 0, 738-739, 262-266.	0.3	7
31	Effect of Al and Cu Contents on Mechanical Properties of Au-Cu-Al Shape Memory Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 80, 27-36.	0.4	7
32	Effect of Sn Content on Phase Constitution and Mechanical Properties of Ti-Cr-Sn Shape Memory Alloys. Materials Today: Proceedings, 2015, 2, S825-S828.	1.8	7
33	Investigations of Effects of Intermetallic Compound on the Mechanical Properties and Shape Memory Effect of Tiâ€“Auâ€“Ta Biomaterials. Materials, 2021, 14, 5810.	2.9	7
34	Martensitic Transformation and Related Properties of AuTi-FeTi Pseudobinary Alloys. Advanced Materials Research, 0, 922, 25-30.	0.3	6
35	Brillouin characterization of slimmed polymer optical fibers for strain sensing with extremely wide dynamic range. Optics Express, 2018, 26, 28030.	3.4	6
36	Investigations of mechanical properties and deformation behaviors of the Cr modified Tiâ€“Au shape memory alloys. Journal of Alloys and Compounds, 2022, 897, 163134.	5.5	6

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37	Effect of Zr Addition on Martensitic Transformation in TiMoSn Alloy. Advanced Materials Research, 0, 922, 137-142.	0.3	5
38	Effect of Nb Addition on Martensitic Transformation Behavior of AuTi-15Co Based Biomedical Shape Memory Alloys. Materials Transactions, 2015, 56, 429-434.	1.2	5
39	Deformation Behavior of Ti-4Au-5Cr-8Zr Superelastic Alloy With or Without Containing Ti3Au Precipitates. Materials Today: Proceedings, 2015, 2, S821-S824.	1.8	5
40	Evaluations of mechanical properties and shape memory behaviors of the agingâ€"treated Tiâ€"Auâ€"Mo alloys. Materials Chemistry and Physics, 2021, 269, 124775.	4.0	5
41	Enhancement of the superelastic behavior of the Tiâ€"Auâ€"Crâ€"based shape memory alloys via the manipulations of annealingâ€"treatments and Ta additions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 847, 143312.	5.6	5
42	Phase constituent and microstructure manipulations via annealing for enhancements of mechanical property and functionalities of Tiâ€"Auâ€"Crâ€"Ta biomedical shape memory alloys. Journal of Alloys and Compounds, 2022, 920, 166016.	5.5	5
43	Effect of Nitrogen Addition on Superelasticity of Ti-Zr-Nb Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2008, 72, 955-959.	0.4	4
44	Martensitic transformation and superelastic properties of titanium alloys containing interstitial elements. Keikinzoku/Journal of Japan Institute of Light Metals, 2012, 62, 257-262.	0.4	4
45	Martensitic Transformation and Mechanical Properties of Fe-added Au-Cu-Al Shape Memory Alloy with Various Heat Treatment Conditions. Materials Research Society Symposia Proceedings, 2014, 1760, 1.	0.1	4
46	Preferential Morphology of Self-accommodation Microstructure in Ti-Ni-Pd Shape Memory Alloy. Materials Today: Proceedings, 2015, 2, S549-S552.	1.8	4
47	Martensitic Transformation and Mechanical Properties of AuCuAl-Based Biomedical Shape Memory Alloys Containing Various Quaternary Elements. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2016, 80, 71-76.	0.4	4
48	Evaluation of the Shape Memory Effect by Micro-Compression Testing of Single Crystalline Ti-27Nb Ni-Free Alloy. Materials, 2020, 13, 110.	2.9	4
49	Investigations of Deformation Behavior and Microstructure of Al Tailored Tiâ€"Mo High Temperature Shape Memory Alloys during Isothermal Holding at 393 K. Micro, 2022, 2, 113-122.	2.0	4
50	New dislocation dissociation accompanied by anti-phase shuffling in the Î±â€³ martensite phase of a Ti alloy. Acta Materialia, 2022, 227, 117705.	7.9	4
51	Promoted mechanical properties and functionalities via Taâ€"tailored Tiâ€"Auâ€"Cr shape memory alloys towards biomedical applications. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 133, 105358.	3.1	4
52	Effect of Heat Treatment Condition on Texture in Ti-Mo-Al-Zr Shape Memory Alloy. Advanced Materials Research, 0, 922, 622-625.	0.3	3
53	Oxidation Behavior of Au-55 mol%Ti High Temperature Shape Memory Alloy during Heating in Ar-50 vol%O₂ Environment. Materials Transactions, 2015, 56, 600-604.	1.2	3
54	Phase Constituent and Reverse Martensitic Transformation Temperature of PtTi-CoTi Diffusion Couple Heat-Treated at 1373K. Materials Research Society Symposia Proceedings, 2015, 1760, 163.	0.1	3

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55	Mechanical property enhancement of the Agâ€“tailored Auâ€“Cuâ€“Al shape memory alloy via the ductile phase toughening. Intermetallics, 2021, 139, 107349.	3.9	3
56	Achievement of Room Temperature Superelasticity in Ti-Mo-Al Alloy System via Manipulation of Ï‰ Phase Stability. Materials, 2022, 15, 861.	2.9	3
57	Effect of Zr Addition on Mechanical and Shape Memory Properties of Ti-5Mo-3Sn Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 80, 37-44.	0.4	2
58	Effect of Annealing Temperature on Texture Formation of Ti-4Au-5Cr-8Zr Biomedical Superelastic Alloy. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 80, 45-50.	0.4	2
59	Deformation of Biomedical AuCuAl-Based Shape Memory Alloy Micropillars. MRS Advances, 2017, 2, 1411-1415.	0.9	2
60	Compressive Deformation Behavior and Magnetic Susceptibility of Au₂CuAl Biomedical Shape Memory Alloys. Materials Transactions, 2019, 60, 662-665.	1.2	2
61	The strain rate sensitivity behavior in Ti based shape memory alloys. Transactions of the Materials Research Society of Japan, 2013, 38, 545-548.	0.2	1
62	Mechanical Properties of Ti-Fe-Sn Biomedical Alloys with or without Aging Treatment. Materials Science Forum, 0, 783-786, 2423-2428.	0.3	1
63	Determination of Preferred Morphology of Self-Accommodating Martensite in Ti-Nb-Al Shape Memory Alloy Using Optical Microscopy. Advanced Materials Research, 0, 922, 260-263.	0.3	1
64	The Effect of Aging Temperature on Morphology of Î± Phase in Ti-3Mo-6Sn-5Zr Shape Memory Alloy. Materials Today: Proceedings, 2015, 2, S817-S820.	1.8	1
65	Phase Constitution and Martensitic Transformation Behavior of Au-51Ti-18Co Biomedical Shape Memory Alloy Heat-Treated at 1173K to 1373K. Materials Science Forum, 2016, 879, 256-261.	0.3	1
66	Role of Interstitial Oxygen Atom on Martensitic Transformation of Ti-Nb Alloy. Advances in Science and Technology, 0, , .	0.2	1
67	Micro-compression study of Ni-Fe(Co)-Ga magnetic shape memory alloy for MEMS sensors. , 2017, , .		1
68	Phase Reaction and Diffusion Behavior between AuTi and CoTi Intermetallic Compounds. Materials Transactions, 2019, 60, 631-635.	1.2	1
69	Mechanical Properties Enhancement of the Au-Cu-Al Alloys via Phase Constitution Manipulation. Materials, 2021, 14, 3122.	2.9	1
70	Goss Orientation Evolution in Tiâ€“5.5Moâ€“8Alâ€“6Zr Shape Memory Alloy upon Heat Treatment. Materials Transactions, 2019, 60, 1890-1897.	1.2	1
71	Formation Process of Triangular Morphology of Self-Accommodation Martensite in Ti-Nb-Al Shape Memory Alloy. MATEC Web of Conferences, 2015, 33, 06001.	0.2	0
72	Incompatibility of Martensite Variant Clusters in Self-accommodation Microstructure in Ti-Ni-Pd High Temperature Shape Memory Alloy. Materials Research Society Symposia Proceedings, 2015, 1760, 193.	0.1	0

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73	Lattice Parameter Dependence of Kinematic Compatibility in Martensite Microstructure of Cubic-Orthorhombic Transformation. Materials Transactions, 2016, 57, 751-754.	1.2	0
74	An <i>In Situ</i> Observation of Slip Deformation in a Compressed Ti-Mo-Al Single Crystal. Materials Science Forum, 2018, 941, 1463-1467.	0.3	0
75	Plastic Deformation Behavior of Single Crystalline Martensite in Î²-Titanium Shape Memory Alloy. Materia Japan, 2018, 57, 345-348.	0.1	0
76	Effect of cross-sectional area reduction rate and alloy composition on the formation of <001>-fiber texture in Ti-Mo-Al-Zr alloy wire. MATEC Web of Conferences, 2020, 321, 11019.	0.2	0