Naoya Masahashi

List of Publications by Year
in descending order

114	3,359	201674	161849
papers	citations	27 h-index	54 g-index

114	114	114	2715
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Antibacterial Activity of an Anodized TiNbSn Alloy Prepared in Sodium Tartrate Electrolyte. Frontiers in Bioengineering and Biotechnology, 2022, 10, 883335.	4.1	8
2	Î²-type TiNbSn Alloy Plates With Low Young Modulus Accelerates Osteosynthesis in Rabbit Tibiae. Clinical Orthopaedics and Related Research, 2022, 480, 1817-1832.	1.5	9
3	Low Young's modulus of cold groove-rolled Î² Tiâ€“Nbâ€“Sn alloys for orthopedic applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 802, 140645.	5.6	22
4	Photoactivity of an anodized biocompatible TiNbSn alloy prepared in sodium tartrate/hydrogen peroxide aqueous solution. Applied Surface Science, 2021, 543, 148829.	6.1	10
5	Wear resistance of surface-modified TiNbSn alloy. Journal of Materials Science, 2021, 56, 14333-14347.	3.7	10
6	Mechanical properties of anodized TiNbSn alloy for biomedical applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 825, 141898.	5.6	8
7	Acceleration of Fracture Healing in Mouse Tibiae Using Intramedullary Nails Composed of Î²-Type TiNbSn Alloy with Low Youngâ€™s Modulus. Tohoku Journal of Experimental Medicine, 2021, 255, 135-142.	1.2	8
8	Effects of elastic intramedullary nails composed of low Young's modulus Tiâ€Nbâ€Sn alloy on healing of tibial osteotomies in rabbits. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 700-707.	3.4	12
9	Improved Osseointegration of a TiNbSn Alloy with a Low Youngâ€™s Modulus Treated with Anodic Oxidation. Scientific Reports, 2019, 9, 13985.	3.3	23
10	Bioactive TiNbSn alloy prepared by anodization in sulfuric acid electrolytes. Materials Science and Engineering C, 2019, 98, 753-763.	7.3	16
11	Effect of Composition on the Strength and Electrical Conductivity of Cu-Ti Binary Alloy Wires Fabricated by Aging and Intense Drawing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 1389-1396.	2.2	24
12	Effects of intramedullary nails composed of a new Î²â€type Tiâ€Nbâ€Sn alloy with low Young's modulus on fracture healing in mouse tibiae. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 2841-2848.	3.4	16
13	High Strength and High Electrical Conductivity Cu-Ti Alloy Wires Fabricated by Aging and Severe Drawing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 4956-4965.	2.2	22
14	Study of bioactivity on a TiNbSn alloy surface. Thin Solid Films, 2017, 639, 22-28.	1.8	12
15	Apatite Formation and Biocompatibility of a Low Youngâ€™s Modulus Ti-Nb-Sn Alloy Treated with Anodic Oxidation and Hot Water. PLoS ONE, 2016, 11, e0150081.	2.5	23
16	Photo-induced properties of anodic oxide on Tiâ€“Pd alloy prepared in acetic acid electrolyte. Journal of Alloys and Compounds, 2016, 669, 91-100.	5.5	5
17	Fabrication of Antibacterial Photocatalytic Titanium Foil by Anodic Oxidation. Chemistry Letters, 2015, 44, 277-278.	1.3	5
18	Electroforming of oxide-nanoparticle-reinforced copper-matrix composite. Journal of Materials Research, 2015, 30, 521-527.	2.6	9

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19	Catalytic activities of sonochemically prepared Au-core/Pd-shell-structured bimetallic nanoparticles immobilised on TiO₂and its dependence on Pd-shell thickness. Journal of Experimental Nanoscience, 2015, 10, 235-247.	2.4	3
20	Local structure of vanadium in Ti-6Al-4V alloy anodized in acetic acid aqueous solution and its contribution to visible light response in photocatalysis. Applied Catalysis B: Environmental, 2015, 162, 180-186.	20.2	5
21	In-vitro biomechanical evaluation of stress shielding and initial stability of a low-modulus hip stem made of Î² type Ti-33.6Nb-4Sn alloy. Medical Engineering and Physics, 2014, 36, 1665-1671.	1.7	35
22	Fabrication of a TiO2 photocatalyst by anodic oxidation of Ti in an acetic acid electrolyte. Surface and Coatings Technology, 2014, 240, 226-232.	4.8	14
23	Fabrication of a high-performance hip prosthetic stem using Î² Tiâ€“33.6Nbâ€“4Sn. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 30, 140-149.	3.1	41
24	Effect of swaging on Young×³s modulus of Î² Tiâ€“33.6Nbâ€“4Sn alloy. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 32, 310-320.	3.1	30
25	Formation Mechanism of Noble Metal Nanoparticles in Aqueous Solution by Solution Plasma. Science of Advanced Materials, 2014, 6, 1569-1572.	0.7	5
26	Structural and characteristic variation of anodic oxide on pure Ti with anodization duration. Applied Surface Science, 2013, 283, 1018-1023.	6.1	20
27	Solid-state bonding of alloy-designed Cuâ€“Zn brass and steel associated with phase transformation by spark plasma sintering. Journal of Materials Science, 2013, 48, 5801-5809.	3.7	7
28	Fabrication of visible-light-responsive titanium dioxide layer on titanium using anodic oxidization in nitric acid. Applied Surface Science, 2013, 270, 513-518.	6.1	16
29	Mechanical properties and microstructures of Î² Tiâ€“25Nbâ€“11Sn ternary alloy for biomedical applications. Materials Science and Engineering C, 2013, 33, 1629-1635.	7.3	58
30	Effect of stress-induced Î±â€³ martensite on Young's modulus of Î² Tiâ€“33.6Nbâ€“4Sn alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 588, 403-410.	5.6	74
31	Fabrication of Photocatalyst by Anodization of Titanium Alloy. Journal of Smart Processing, 2013, 2, 320-325.	0.1	1
32	Visible Light Responsive TiO2 Photocatalyst Prepared by Anodization of Tiâ€“6Alâ€“4V Alloy. Chemistry Letters, 2012, 41, 544-545.	1.3	2
33	A new concept of hip joint stem and its fabrication using metastable TiNbSn alloy. Journal of Alloys and Compounds, 2012, 536, S582-S585.	5.5	21
34	Angle resolved XPS studies on an anodic oxide formed on Tiâ€“Nbâ€“Sn alloy and the photo-induced change in carbon contaminants adsorbed on its surface. Applied Surface Science, 2012, 258, 6052-6055.	6.1	16
35	Photo-induced properties of anodic oxide films on Ti6Al4V. Thin Solid Films, 2012, 520, 4956-4964.	1.8	30
36	Visible light response of nitrogen and sulfur co-doped TiO2 photocatalysts fabricated by anodic oxidation. Catalysis Today, 2011, 164, 399-403.	4.4	26

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37	Development of Orthodontic Devices Made by Ni-free Ti Alloys. Materia Japan, 2010, 49, 119-121.	0.1	0
38	Photocatalytic Activities and Crystal Structures of Titanium Dioxide by Anodization: Their Dependence upon Current Density. Materials Transactions, 2010, 51, 1443-1448.	1.2	16
39	Fabrication of Titanium Dioxide Photocatalysts by Anodic Oxidation. Materia Japan, 2010, 49, 55-61.	0.1	1
40	Photo-induced characteristics of a Tiâ€“Nbâ€“Sn biometallic alloy with low Young's modulus. Thin Solid Films, 2010, 519, 276-283.	1.8	19
41	Dielectric properties of anodic oxide film on Nb solid solution/Nb2N two phase alloys. Thin Solid Films, 2010, 519, 719-724.	1.8	1
42	Dependence of photocatalytic activities upon the structures of Au/Pd bimetallic nanoparticles immobilized on TiO2 surface. Applied Catalysis B: Environmental, 2010, 94, 248-253.	20.2	107
43	Mechanical Properties-Graded Ti Alloy Implants for Orthopedic Applications. Materials Science Forum, 2009, 631-632, 205-210.	0.3	5
44	Fabrication of a High Performance Ti Alloy Implant for an Artificial Hip Joint. Materials Science Forum, 2009, 620-622, 591-594.	0.3	8
45	Preparation of superparamagnetic magnetite nanoparticles by reverse precipitation method: Contribution of sonochemically generated oxidants. Ultrasonics Sonochemistry, 2009, 16, 525-531.	8.2	57
46	Visible light responses of sulfur-doped rutile titanium dioxide photocatalysts fabricated by anodic oxidation. Applied Catalysis B: Environmental, 2009, 91, 152-156.	20.2	76
47	Enhanced photocatalytic activity of rutile TiO2 prepared by anodic oxidation in a high concentration sulfuric acid electrolyte. Applied Catalysis B: Environmental, 2009, 90, 255-261.	20.2	78
48	Hydrocarbon Decomposition on a Hydrophilic TiO₂ Surface by UV Irradiation: Spectral and Quantitative Analysis Using in-Situ XPS Technique. Langmuir, 2009, 25, 11586-11591.	3.5	85
49	Effects of Ultrasonic Irradiation on Preparation of Titanium Dioxide Photocatalyst by Anodic Oxidation Method. Materials Transactions, 2009, 50, 2182-2186.	1.2	3
50	Microstructure and superhydrophilicity of anodic TiO2 films on pure titanium. Thin Solid Films, 2008, 516, 7488-7496.	1.8	38
51	Superhydrophilicity and XPS study of boron-doped TiO2. Applied Surface Science, 2008, 254, 7056-7060.	6.1	22
52	Sonochemical immobilization of noble metal nanoparticles on the surface of maghemite: Mechanism and morphological control of the products. Ultrasonics Sonochemistry, 2008, 15, 875-880.	8.2	27
53	Magnetically Retrievable Palladium/Maghemite Nanocomposite Catalysts Prepared by Sonochemical Reduction Method. Chemistry Letters, 2008, 37, 922-923.	1.3	12
54	Superhydrophilicity of Rutile TiO2 Prepared by Anodic Oxidation in High Concentration Sulfuric Acid Electrolyte. Chemistry Letters, 2008, 37, 1126-1127.	1.3	13

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55	Fracture Behaviors of Niobium Alloys by Hydrogenation and its Application for Fine Powder Fabrication. Materials Science Forum, 2007, 539-543, 2719-2724.	0.3	0
56	Mechanical Properties of Porous Titanium Compacts Reinforced by UHMWPE. Materials Science Forum, 2007, 539-543, 1033-1037.	0.3	7
57	Corrosion Behavior of Pre-Treated Fe-Al Alloys in Aqueous Acid Solutions. Solid State Phenomena, 2007, 127, 233-238.	0.3	1
58	Fabrication of bulk anatase TiO2 by the spark plasma sintering method. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 452-453, 721-726.	5.6	20
59	Microstructural Observation of Ordered Î²-Ta2H in Hydrogenated Tantalum. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 956-963.	2.2	1
60	Corrosion behavior of ironâ€“aluminum alloys and its composite steel in sulfuric acid. Corrosion Science, 2006, 48, 829-839.	6.6	20
61	X-ray photoelectron spectroscopic study of ordered stoichiometric FeAl fractured in situ. Journal of Alloys and Compounds, 2006, 413, 239-243.	5.5	16
62	Effect of pressure application on microstructure evolution in a composite of Feâ€“Al alloy and CrMo steel. Journal of Alloys and Compounds, 2006, 413, 281-288.	5.5	5
63	Fabrication and Mechanical Properties of Porous Co–Cr–Mo Alloy Compacts without Ni Addition. Materials Transactions, 2006, 47, 283-286.	1.2	11
64	Microstructure and bonding properties of diffusionâ€“bonded composite comprising an Feâ€“Al alloy and carbon steel. Journal of Materials Science, 2006, 41, 1691-1696.	3.7	1
65	Fabrication of iron aluminum alloy/steel laminate by clad rolling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 1665-1673.	2.2	16
66	Fracture behavior of niobium by hydrogenation and its application for fine powder fabrication. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 1301-1309.	2.2	8
67	Composition dependence of youngâ€™s modulus in Ti-V, Ti-Nb, and Ti-V-Sn alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 3239-3249.	2.2	72
68	Improvement of Oxidation Resistance of an Fe–Mn–Si–Cr Shape Memory Alloy by Annealing under Vacuum. Materials Transactions, 2005, 46, 1745-1748.	1.2	10
69	Effect of Pressure Application by HIP on Microstructure Evolution during Diffusion Bonding. Materials Transactions, 2005, 46, 1651-1655.	1.2	9
70	Microstructures and bond strengths of plasma-sprayed hydroxyapatite coatings on porous titanium substrates. Journal of Materials Science: Materials in Medicine, 2005, 16, 635-640.	3.6	36
71	Fabrications and Corrosion Resistance of Iron-Aluminum Alloy/High Carbon Steel Composites Prepared by Clad Rolling. Materials Science Forum, 2005, 502, 379-384.	0.3	3
72	Laminates based on an iron aluminide intermetallic alloy and a CrMo steel. Intermetallics, 2005, 13, 717-726.	3.9	21

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73	Hydrogen pulverization of refractory metals, alloys and intermetallics. Metals and Materials International, 2004, 10, 45-53.	3.4	4
74	Effect of structural changes on degradation of hydrogen absorbing capacity in cyclically hydrogenated TiMn2 based alloys. Journal of Alloys and Compounds, 2004, 376, 232-240.	5.5	11
75	Microstructure and properties of iron aluminum alloy/CrMo steel composite prepared by clad rolling. Journal of Alloys and Compounds, 2004, 379, 272-279.	5.5	20
76	Composition dependence of hydrogen absorbing properties in melt quenched and annealed TiMn2 based alloys. Journal of Alloys and Compounds, 2004, 379, 290-297.	5.5	14
77	Microstructure Evolution Mechanism in Iron Aluminides/CrMo Steel Composite Prepared by Solid State Bonding. ISIJ International, 2004, 44, 878-885.	1.4	6
78	Production of Tantalum Powder by Hydrogenation Process. Hosokawa Powder Technology Foundation ANNUAL REPORT, 2004, 12, 124-130.	0.0	0
79	Multiple cracking of tantalum by hydrogenation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 685-690.	2.2	12
80	Mechanical properties of porous titanium compacts prepared by powder sintering. Scripta Materialia, 2003, 49, 1197-1202.	5.2	496
81	Effect of composition on hydrogen absorbing properties in binary TiMn2 based alloys. Journal of Alloys and Compounds, 2003, 352, 210-217.	5.5	34
82	Hydrogenation-induced fragmentation in Taâ€“Ni alloy. Journal of Alloys and Compounds, 2003, 359, 236-243.	5.5	15
83	Microstructure and phase stability of TiAlâ€“W ternary alloy. Intermetallics, 2003, 11, 807-816.	3.9	11
84	Effect of Heat Treatment and Sn Content on Superelasticity in Biocompatible TiNbSn Alloys. Materials Transactions, 2002, 43, 2978-2983.	1.2	256
85	Diffusion Bonding Associated with Phase Transformation in (γ+β) Micro-duplex Titanium Aluminides. Materials Transactions, 2001, 42, 1028-1034.	1.2	7
86	Microstructure and Oxidation Behavior of Low Pressure Plasma Sprayed Iron Aluminides.. ISIJ International, 2001, 41, 1010-1017.	1.4	17
87	Degradation of hydrogen absorbing capacity in cyclically hydrogenated TiMn2. Acta Materialia, 2001, 49, 927-935.	7.9	55
88	Diffusion Bonding Enhanced by Phase Transformation in Micro-duplex Titanium Aluminides. Materials Transactions, JIM, 2000, 41, 429-436.	0.9	3
89	Hydrogen Pulverization in Intermetallic-based Alloys. Materials Research Society Symposia Proceedings, 2000, 646, 312.	0.1	0
90	Defect Control in Nitrogen Doped Czochralski Silicon Crystals. Solid State Phenomena, 1999, 69-70, 161-166.	0.3	28

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91	Development of preferred orientation in annealing of Feâ€“3.25%Si in a high magnetic field. Journal of Materials Research, 1998, 13, 457-461.	2.6	100
92	Physical and mechanical properties in Ni3Al with and without boron. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 223, 42-53.	5.6	15
93	APFIM study of Î² and Î³ microduplex TiAl intermetallic alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 223, 29-35.	5.6	7
94	Microstructure control and ductility in Ni3Al polycrystals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 239-240, 309-316.	5.6	6
95	Fracture toughness of gamma-base titanium aluminides. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1995, 26, 305-313.	2.2	25
96	Fracture properties of Î³-base TiAl alloys with lamellar microstructure at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1994, 184, 37-44.	5.6	10
97	Flexural strength, fracture toughness and fatigue crack growth behaviour of chromium alloyed ?-base TiAl. Journal of Materials Science, 1994, 29, 5199-5206.	3.7	6
98	Effect of isothermal forging on the fracture properties of binary Î³-base titanium aluminides at room temperature. Scripta Metallurgica Et Materialia, 1994, 31, 215-220.	1.0	5
99	The Microchemistry Studies of Ductile Ll2 Ni-Based Intermetallics. Materials Research Society Symposia Proceedings, 1994, 364, 749.	0.1	1
100	High-temperature strength and fracture toughness in Î³-phase titanium aluminides. Journal of Materials Science, 1993, 28, 6631-6638.	3.7	12
101	The phase stability of gamma titanium aluminides with the Î² phase. Scripta Metallurgica Et Materialia, 1992, 27, 1079-1084.	1.0	28
102	High Temperature Deformation Behavior of Titanium-Aluminide Based Gamma Plus Beta Microduplex Alloy.. ISIJ International, 1991, 31, 728-737.	1.4	75
103	Microstructural characterization of twin-roll cast gamma titanium aluminide sheets.. ISIJ International, 1991, 31, 289-297.	1.4	15
104	Ternary Alloying of Gamma Titanium-Aluminides for Hot-Workability. Materials Research Society Symposia Proceedings, 1990, 213, 795.	0.1	14
105	Lattice location of B atoms in Ni0.75Al0.15Ti0.10 intermetallic compounds as observed by the channeling method. Nuclear Instruments & Methods in Physics Research B, 1990, 45, 471-475.	1.4	2
106	Atomistic defect structures of Ni3Al containing C, B and Be. Acta Metallurgica, 1988, 36, 1815-1822.	2.1	61
107	Mechanical properties of Ni3Al containing C, B and Be. Acta Metallurgica, 1988, 36, 1823-1836.	2.1	102
108	High temperature strength and ductility of recrystallized Ni3Al-Ni3Mn alloys. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1988, 19, 345-352.	1.4	15

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109	Hydrogen embrittlement of pseudobinary l12-type Ni3(Alo.4Mno.6) intermetallic compound. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1988, 19, 353-358.	1.4	82
110	High-temperature strength and ductility of L12-type Ni3Al-Ni3Mn intermetallic compound. Journal of Materials Science, 1987, 22, 2599-2608.	3.7	15
111	Electronic and structural studies of grain boundary strength and fracture in L12 ordered alloysâ€”III. On the effect of stoichiometry. Acta Metallurgica, 1987, 35, 381-391.	2.1	59
112	Improved ductility and strength of Ni3Al compound by beryllium addition. Scripta Metallurgica, 1986, 20, 1317-1321.	1.2	76
113	Electronic and structural studies of grain boundary strength and fracture in Ll2 ordered alloysâ€”II. On the effect of third elements in Ni3Al alloy. Acta Metallurgica, 1985, 33, 1259-1269.	2.1	166
114	Fabrication and Corrosion Properties of Iron Aluminum Alloy/Steel Laminated Composite Prepared by Clad Rolling. Materials Science Forum, 0, 539-543, 866-871.	0.3	2