

Mitsuo Niinomi

List of Publications by Year in descending order

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350
papers

16,093
citations

38660

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h-index

18606

119
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368
all docs

368
docs citations

368
times ranked

8481
citing authors

#	ARTICLE	IF	CITATIONS
1	Facile formation with HA/Sr ²⁺ -GO-based composite coatings via green hydrothermal treatment on β -type TiNbTaZr alloys: Morphological and electrochemical insights. <i>Journal of Materials Research</i> , 2022, 37, 2512-2524.	1.2	11
2	Microstructure and mechanical properties of Ti-Nb-Fe-Zr alloys with high strength and low elastic modulus. <i>Transactions of Nonferrous Metals Society of China</i> , 2022, 32, 503-512.	1.7	11
3	Microstructure, mechanical properties, and cytotoxicity of low Young's modulus Ti-Nb-Fe-Sn alloys. <i>Journal of Materials Science</i> , 2022, 57, 5634-5644.	1.7	6
4	Antibacterial Properties and Biocompatibility of Hydroxyapatite Coating Doped with Various Cu Contents on Titanium. <i>Materials Transactions</i> , 2022, 63, 1072-1079.	0.4	3
5	Co-Cr-based alloys. , 2021, , 103-126.		1
6	Further development of mechanically biocompatible metallic biomaterials. <i>Materia Japan</i> , 2021, 60, 273-280.	0.1	0
7	Influence of Sintering Temperature on Mechanical Properties of Ti-Nb-Zr-Fe Alloys Prepared by Spark Plasma Sintering. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 5719-5727.	1.2	2
8	Hydroxyapatite coating on titanium alloy TNTZ for increasing osseointegration and reducing inflammatory response in vivo on Rattus norvegicus Wistar rats. <i>Ceramics International</i> , 2021, 47, 16094-16100.	2.3	22
9	Antibacterial Cu-Doped Calcium Phosphate Coating on Pure Titanium. <i>Materials Transactions</i> , 2021, 62, 1052-1055.	0.4	4
10	Exfoliation Resistance, Microstructure, and Oxide Formation Mechanisms of the White Oxide Layer on CP Ti and Ti-Nb-Ta-Zr Alloys. <i>Materials</i> , 2021, 14, 6599.	1.3	1
11	Phenomenological law and process of β phase evolution in a β -type bio-Titanium alloy TNTZ during aging. <i>Materials Characterization</i> , 2021, 182, 111576.	1.9	1
12	Microstructure, Mechanical Properties, and Springback of Ti-Nb Alloys Modified by Mo Addition. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 5366-5373.	1.2	1
13	Low Young's Modulus and High Strength Obtained in Ti-Nb-Zr-Cr Alloys by Optimizing Zr Content. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 2871-2878.	1.2	6
14	Fatigue Property and Cytocompatibility of a Biomedical Co-Cr-Mo Alloy Subjected to a High Pressure Torsion and a Subsequent Short Time Annealing. <i>Materials Transactions</i> , 2020, 61, 361-367.	0.4	7
15	Relationship between Microstructure and Fatigue Properties of Forged Ti-5Al-2Sn-2Zr-4Mo-4Cr for Aircraft Applications. <i>Materials Transactions</i> , 2020, 61, 2017-2024.	0.4	2
16	Application of atmospheric-pressure plasma treatment to coat Ti-alloy orthodontic wire with white oxide layer. <i>Japanese Journal of Applied Physics</i> , 2020, 59, SAAC09.	0.8	3
17	Relationship between Microstructure and Fatigue Properties of Forged Ti-5Al-2Sn-2Zr-4Mo-4Cr for Aircraft Applications. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2020, 84, 200-207.	0.2	0
18	Factors Leading to Low Elastic Modulus and Current Status of Medically Applied Research of β -type Ti-Nb-based Alloys. <i>Materia Japan</i> , 2020, 59, 588-593.	0.1	2

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19	Titanium Alloys. , 2019, , 213-224.		19
20	Effect of Nb Content on Microstructures and Mechanical Properties of Ti-xNb-2Fe Alloys. Journal of Materials Engineering and Performance, 2019, 28, 5501-5508.	1.2	15
21	Low-Young's-Modulus Materials for Biomedical Applications. , 2019, , 435-457.		0
22	Functional Materials Developed in IMR. , 2019, , 89-103.		0
23	The plasma electrolytic oxidation (PEO) coatings to enhance in-vitro corrosion resistance of Ti-29Nb-13Ta-4.6Zr alloys: The combined effect of duty cycle and the deposition frequency. Surface and Coatings Technology, 2019, 374, 345-354.	2.2	40
24	Ti-Based Biomedical Alloys. , 2019, , 61-76.		2
25	Fatigue failure of metallic biomaterials. , 2019, , 153-188.		3
26	Development of low-Young's modulus Ti-Nb-based alloys with Cr addition. Journal of Materials Science, 2019, 54, 8675-8683.	1.7	22
27	Design and development of metallic biomaterials with biological and mechanical biocompatibility. Journal of Biomedical Materials Research - Part A, 2019, 107, 944-954.	2.1	58
28	Low Springback and Low Young's Modulus in Ti-29Nb-13Ta-4.6Zr Alloy Modified by Mo Addition. Materials Transactions, 2019, 60, 1755-1762.	0.4	5
29	Effects of Fe on Microstructures and Mechanical Properties of Ti-15Nb-25Zr-(0, 2, 4, 8)Fe Alloys Prepared by Spark Plasma Sintering. Materials Transactions, 2019, 60, 1763-1768.	0.4	5
30	High-cycle fatigue properties of an easily hot-workable (β -type) titanium alloy butt joint prepared by friction stir welding below β transus temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 742, 553-563.	2.6	8
31	Development of Strengthening and Toughening of β -type Titanium Alloys. Materia Japan, 2019, 58, 193-200.	0.1	1
32	Suppression of Grain Boundary β Formation by Addition of Silicon in a Near- β Titanium Alloy. Materials Transactions, 2019, 60, 1749-1754.	0.4	0
33	Fully Depleted Ti-Nb-Ta-Zr-O Nanotubes: Interfacial Charge Dynamics and Solar Hydrogen Production. ACS Applied Materials & Interfaces, 2018, 10, 22997-23008.	4.0	70
34	Mechanical Performance of Titanium Alloys with Added Lightweight Interstitial Element for Biomedical Applications. Materials Science Forum, 2018, 941, 2458-2464.	0.3	0
35	Relationship between Microstructure and Mechanical Strength of Dental Semiprecious Alloys Subjected to Solution Treatment. Materials Science Forum, 2018, 941, 1105-1110.	0.3	0
36	Low Young's Modulus Ti-Nb-O with High Strength and Good Plasticity. Materials Transactions, 2018, 59, 858-860.	0.4	9

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37	Synthesis of biphasic calcium phosphate (BCP) coatings on β -type titanium alloys reinforced with rutile-TiO ₂ compounds: adhesion resistance and in-vitro corrosion. <i>Journal of Sol-Gel Science and Technology</i> , 2018, 87, 713-724.	1.1	33
38	Recent Progress in Research and Development of Metallic Structural Biomaterials with Mainly Focusing on Mechanical Biocompatibility. <i>Materials Transactions</i> , 2018, 59, 1-13.	0.4	23
39	In vivo osteoconductivity of surface modified Ti-29Nb-13Ta-4.6Zr alloy with low dissolution of toxic trace elements. <i>PLoS ONE</i> , 2018, 13, e0189967.	1.1	6
40	Abnormal Deformation Behavior of Oxygen-Modified β -Type Ti-29Nb-13Ta-4.6Zr Alloys for Biomedical Applications. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 139-149.	1.1	27
41	Effects of Mo Addition on the Mechanical Properties and Microstructures of Ti-Mn Alloys Fabricated by Metal Injection Molding for Biomedical Applications. <i>Materials Transactions</i> , 2017, 58, 271-279.	0.4	14
42	Change in Mechanical Properties of Biomechanical Ti-12Cr Subjected to Heat Treatment and Surface Modification Processing. <i>Materials Transactions</i> , 2017, 58, 951-957.	0.4	0
43	Improved fatigue properties with maintaining low Young's modulus achieved in biomedical beta-type titanium alloy by oxygen addition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 704, 10-17.	2.6	44
44	Development and Performance of Low-Cost Beta-Type Ti-Based Alloys for Biomedical Applications Using Mn Additions. , 2017, , 229-245.		0
45	Low-Modulus Ti Alloys Suitable for Rods in Spinal Fixation Devices. , 2017, , 3-21.		2
46	Grain Refinement Mechanism and Evolution of Dislocation Structure of Co-Cr-Mo Alloy Subjected to High-Pressure Torsion. <i>Materials Transactions</i> , 2016, 57, 1109-1118.	0.4	15
47	Electrochemical Surface Treatment of a β -titanium Alloy to Realize an Antibacterial Property and Bioactivity. <i>Metals</i> , 2016, 6, 76.	1.0	19
48	Osteoanabolic Implant Materials for Orthopedic Treatment. <i>Advanced Healthcare Materials</i> , 2016, 5, 1740-1752.	3.9	29
49	Influence of oxygen on omega phase stability in the Ti-29Nb-13Ta-4.6Zr alloy. <i>Scripta Materialia</i> , 2016, 123, 144-148.	2.6	57
50	Change in Mechanical Properties of Biomechanical Ti-12Cr Subjected to Heat Treatment and Surface Modification Processing. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2016, 80, 764-771.	0.2	0
51	Osteoanabolic Implants: Osteoanabolic Implant Materials for Orthopedic Treatment (Adv. Healthcare) Tj ETQq1 1 0,784314 rgBT /Ove	3.9	2
52	Inhibited grain growth in hydroxyapatite-graphene nanocomposites during high temperature treatment and their enhanced mechanical properties. <i>Ceramics International</i> , 2016, 42, 11248-11255.	2.3	35
53	Enhancing the durability of spinal implant fixture applications made of Ti-6Al-4V ELI by means of cavitation peening. <i>International Journal of Fatigue</i> , 2016, 92, 360-367.	2.8	8
54	Corrosion Behavior of MgZnCa Bulk Amorphous Alloys Fabricated by Spark Plasma Sintering. <i>Acta Metallurgica Sinica (English Letters)</i> , 2016, 29, 793-799.	1.5	17

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55	Enhancement of Mechanical Biocompatibility of Titanium Alloys by Deformation-Induced Transformation. <i>Materials Science Forum</i> , 2016, 879, 125-130.	0.3	1
56	Improvement of microstructure, mechanical and corrosion properties of biomedical Ti-Mn alloys by Mo addition. <i>Materials and Design</i> , 2016, 110, 414-424.	3.3	54
57	Current Situation and Challenges and Prospects of the Design and Manufacturing Process of the Spinal Implants. <i>Materia Japan</i> , 2016, 55, 142-146.	0.1	1
58	Optimization of Microstructure and Mechanical Properties of Co-Cr-Mo Alloys by High-Pressure Torsion and Subsequent Short Annealing. <i>Materials Transactions</i> , 2016, 57, 1887-1896.	0.4	10
59	Athermal and deformation-induced β -phase transformations in biomedical beta-type alloy Ti-9Cr-0.2O. <i>Acta Materialia</i> , 2016, 106, 162-170.	3.8	56
60	Corrosion behavior, mechanical properties and cell cytotoxicity of Zr-based bulk metallic glasses. <i>Intermetallics</i> , 2016, 72, 69-75.	1.8	21
61	Microstructural evolution and mechanical properties of biomedical Co-Cr-Mo alloy subjected to high-pressure torsion. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016, 59, 226-235.	1.5	26
62	Biomedical titanium alloys with Young's moduli close to that of cortical bone. <i>International Journal of Energy Production and Management</i> , 2016, 3, 173-185.	1.9	241
63	Fabrication of low-cost beta-type Ti-Mn alloys for biomedical applications by metal injection molding process and their mechanical properties. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016, 59, 497-507.	1.5	71
64	Developing biomedical nano-grained β -type titanium alloys using high pressure torsion for improved cell adherence. <i>RSC Advances</i> , 2016, 6, 7426-7430.	1.7	25
65	Improvement in mechanical strength of low-cost β -type Ti-Mn alloys fabricated by metal injection molding through cold rolling. <i>Journal of Alloys and Compounds</i> , 2016, 664, 272-283.	2.8	42
66	Beta-Type Titanium Alloys for use as Rods in Spinal Fixation Devices. , 2016, , 215-221.		1
67	Change in Mechanical Strength and Bone Contactability of Biomedical Titanium Alloy with Low Young's Modulus Subjected to Fine Particle Bombarding Process. <i>Materials Transactions</i> , 2015, 56, 218-223.	0.4	3
68	Differences in Wear Behaviors at Sliding Contacts for β -Type and (α + β) Ti-6Al-4V Alloy. <i>Materials Transactions</i> , 2015, 56, 317-326.	0.4	15
69	Evaluation of Adhesion of Hydroxyapatite Films Fabricated on Biomedical β -Type Titanium Alloy after Immersion in Ringer's Solution. <i>Materials Transactions</i> , 2015, 56, 1703-1710.	0.4	1
70	Fatigue characteristics of a biomedical β -type titanium alloy with titanium boride. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 640, 154-164.	2.6	26
71	Phase transformation and its effect on mechanical characteristics in warm-deformed Ti-29Nb-13Ta-4.6Zr alloy. <i>Metals and Materials International</i> , 2015, 21, 202-207.	1.8	15
72	Effect of heterogeneous precipitation caused by segregation of substitutional and interstitial elements on mechanical properties of a β -type Ti alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 643, 109-118.	2.6	10

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73	β -Type titanium alloys for spinal fixation surgery with high Young's modulus variability and good mechanical properties. <i>Acta Biomaterialia</i> , 2015, 24, 361-369.	4.1	41
74	Titanium Alloys for Biomedical Applications. Springer Series in Biomaterials Science and Engineering, 2015, , 179-213.	0.7	47
75	Wear transition of solid-solution-strengthened Ti-29Nb-13Ta-4.6Zr alloys by interstitial oxygen for biomedical applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015, 51, 398-408.	1.5	17
76	In vitro biocompatibility of Ti-Mg alloys fabricated by direct current magnetron sputtering. <i>Materials Science and Engineering C</i> , 2015, 54, 1-7.	3.8	16
77	Microstructures, mechanical properties and cytotoxicity of low cost beta Ti-Mn alloys for biomedical applications. <i>Acta Biomaterialia</i> , 2015, 26, 366-376.	4.1	80
78	Mechanical properties and cytocompatibility of oxygen-modified β -type Ti-Cr alloys for spinal fixation devices. <i>Acta Biomaterialia</i> , 2015, 12, 352-361.	4.1	43
79	Predominant factor determining wear properties of β -type and (α + β)-type titanium alloys in metal-to-metal contact for biomedical applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015, 41, 208-220.	1.5	47
80	A review of surface modification of a novel low modulus β -type titanium alloy for biomedical applications. <i>International Journal of Surface Science and Engineering</i> , 2014, 8, 138.	0.4	8
81	Color tone and interfacial microstructure of white oxide layer on commercially pure Ti and Ti-Nb-Ta-Zr alloys. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 11RD02.	0.8	14
82	Precipitation of β phase and hardening in dental-casting Ag-20Pd-12Au-14.5Cu alloys subjected to aging treatments. <i>Materials Science and Engineering C</i> , 2014, 36, 329-335.	3.8	2
83	Hardening behavior after high-temperature solution treatment of Ag-20Pd-12Au-xCu alloys with different Cu contents for dental prosthetic restorations. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 35, 123-131.	1.5	3
84	Reduction in anisotropy of mechanical properties of coilable (α + β)-type titanium alloy thin sheet through simple heat treatment for use in next-generation aircraft applications. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 594, 103-110.	2.6	18
85	Adhesive strength of medical polymer on anodic oxide nanostructures fabricated on biomedical β -type titanium alloy. <i>Materials Science and Engineering C</i> , 2014, 36, 244-251.	3.8	17
86	Effects of micro- and nano-scale wave-like structures on fatigue strength of a beta-type titanium alloy developed as a biomaterial. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 29, 393-402.	1.5	21
87	Microstructure and fatigue behaviors of a biomedical Ti-Nb-Ta-Zr alloy with trace CeO ₂ additions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 619, 112-118.	2.6	16
88	Deformation-induced changeable Young's modulus with high strength in β -type Ti-Cr-O alloys for spinal fixture. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 30, 205-213.	1.5	43
89	Contribution of β and β precipitates to hardening in as-solutionized Ag-20Pd-12Au-14.5Cu alloys for dental prosthesis applications. <i>Materials Science and Engineering C</i> , 2014, 37, 204-209.	3.8	5
90	Changeable Young's modulus with large elongation-to-failure in β -type titanium alloys for spinal fixation applications. <i>Scripta Materialia</i> , 2014, 82, 29-32.	2.6	59

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91	Bending springback behavior related to deformation-induced phase transformations in Ti-12Cr and Ti-29Nb-13Ta-4.6Zr alloys for spinal fixation applications. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 34, 66-74.	1.5	13
92	Developments of titanium alloys with high mechanical biocompatibility for biomedical applications. Keikinzoku/Journal of Japan Institute of Light Metals, 2014, 64, 374-381.	0.1	1
93	Nanostructure Of β -type Titanium Alloys Through Severe Plastic Deformation. Advanced Materials Letters, 2014, 5, 378-383.	0.3	10
94	Endurance of Low-Modulus β -Type Titanium Alloys for Spinal Fixation. , 2014, , 205-212.		0
95	Enhancement of adhesive strength of hydroxyapatite films on Ti-29Nb-13Ta-4.6Zr by surface morphology control. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 18, 232-239.	1.5	19
96	Deformation-induced β phase in modified Ti-29Nb-13Ta-4.6Zr alloy by Cr addition. Acta Biomaterialia, 2013, 9, 8027-8035.	4.1	49
97	Experimental application of pulsed laser-induced water jet for endoscopic submucosal dissection: Mechanical investigation and preliminary experiment in swine. Digestive Endoscopy, 2013, 25, 255-263.	1.3	17
98	Biocompatibility of Ti-alloys for long-term implantation. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 20, 407-415.	1.5	664
99	Phase Constitution and Heat Treatment Behavior of Low Cost Ti-Mn System Alloys. Key Engineering Materials, 2013, 551, 217-222.	0.4	1
100	Comparison of Mechanical Properties of a Biomedical β Titanium Alloy Added with Pure Rare Earth and Rare Earth Oxides. Materials Science Forum, 2013, 750, 147-151.	0.3	0
101	White-Ceramic Conversion on Ti-29Nb-13Ta-4.6Zr Surface for Dental Applications. Advances in Materials Science and Engineering, 2013, 2013, 1-9.	1.0	10
102	Improvement of adhesive strength of segmented polyurethane on Ti-29Nb-13Ta-4.6Zr alloy through H_2O_2 treatment for biomedical applications. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101B, 776-783.	1.6	7
103	Effects of Alloying Elements on the HAp Formability on Ti Alloys after Alkali Treatment. Materials Transactions, 2013, 54, 1295-1301.	0.4	3
104	Mechanical Properties and Biocompatibility of Low Cost-Type Ti-Mn System Binary Alloys for Biomedical Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2013, 77, 253-258.	0.2	9
105	Development of Titanium Alloys with High Mechanical Biocompatibility with Focusing on Controlling Elastic Modulus. Materia Japan, 2013, 52, 219-228.	0.1	8
106	Effect of Oxide Particles Formed through Addition of Rare-Earth Metal on Mechanical Properties of Biomedical β -Type Titanium Alloy. Materials Transactions, 2013, 54, 1361-1367.	0.4	6
107	Mechanical Properties of Ti-12Cr Alloy with Self-Tunable Young's Modulus for Use in Spinal Fixation Devices. , 2013, , 1551-1556.		0
108	Young's Modulus Changeable β -Type Binary Ti-Cr Alloys for Spinal Fixation Applications. Key Engineering Materials, 2012, 508, 117-123.	0.4	3

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109	Effect of Deformation-Induced ω Phase on the Mechanical Properties of Metastable β -Type Ti-V Alloys. <i>Materials Transactions</i> , 2012, 53, 1379-1384.	0.4	28
110	Development of New Titanium-Molybdenum Alloys with Changeable Young's Modulus for Spinal Fixture Devices. <i>Journal of Solid Mechanics and Materials Engineering</i> , 2012, 6, 695-700.	0.5	1
111	Specific characteristics of mechanically and biologically compatible titanium alloy rods for use in spinal fixation applications. <i>Materials Letters</i> , 2012, 86, 178-181.	1.3	14
112	Mechanism of unique hardening of dental Ag-Pd-Au-Cu alloys in relation with constitutional phases. <i>Journal of Alloys and Compounds</i> , 2012, 519, 15-24.	2.8	16
113	Development of new metallic alloys for biomedical applications. <i>Acta Biomaterialia</i> , 2012, 8, 3888-3903.	4.1	1,249
114	Micro-arc oxidation treatment to improve the hard-tissue compatibility of Ti-29Nb-13Ta-4.6Zr alloy. <i>Applied Surface Science</i> , 2012, 262, 34-38.	3.1	64
115	Difference of Microstructure and Fatigue Properties between Forged and Rolled Ti-6Al-4V. <i>Key Engineering Materials</i> , 2012, 508, 161-165.	0.4	2
116	PHOSPHATE GLASSES AND GLASS-CERAMICS FOR BIOMEDICAL APPLICATIONS. <i>Phosphorus Research Bulletin</i> , 2012, 26, 8-15.	0.1	25
117	Beta type Ti-Mo alloys with changeable Young's modulus for spinal fixation applications. <i>Acta Biomaterialia</i> , 2012, 8, 1990-1997.	4.1	172
118	Optimization of Cr content of metastable β -type Ti-Cr alloys with changeable Young's modulus for spinal fixation applications. <i>Acta Biomaterialia</i> , 2012, 8, 2392-2400.	4.1	107
119	Effect of Zr on super-elasticity and mechanical properties of Ti-24at% Nb-(0, 2, 4)at% Zr alloy subjected to aging treatment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 536, 197-206.	2.6	85
120	Microstructural factors determining mechanical properties of laser-welded Ti-4.5Al-2.5Cr-1.2Fe-0.1C alloy for use in next-generation aircraft. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 550, 55-65.	2.6	19
121	Formation of L10-type ordered β' phase in as-solutionized dental Ag-Pd-Au-Cu alloys and hardening behavior. <i>Materials Science and Engineering C</i> , 2012, 32, 503-509.	3.8	9
122	Improvement in fatigue strength while keeping low Young's modulus of a β -type titanium alloy through yttrium oxide dispersion. <i>Materials Science and Engineering C</i> , 2012, 32, 542-549.	3.8	28
123	Effect of terminal functional groups of silane layers on adhesive strength between biomedical Ti-29Nb-13Ta-4.6Zr alloy and segment polyurethanes. <i>Surface and Coatings Technology</i> , 2012, 206, 3137-3141.	2.2	22
124	Development of thermo-mechanical processing for fabricating highly durable β -type Ti-Nb-Ta-Zr rod for use in spinal fixation devices. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012, 9, 207-216.	1.5	45
125	Heterogeneous structure and mechanical hardness of biomedical β -type Ti-29Nb-13Ta-4.6Zr subjected to high-pressure torsion. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012, 10, 235-245.	1.5	53
126	Improvement in Fatigue Strength of Biomedical β -type Ti-Nb-Ta-Zr Alloy While Maintaining Low Young's Modulus Through Optimizing β -Phase Precipitation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 294-302.	1.1	81

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127	Microstructures and Mechanical Properties of Ternary Ti-10Cr-(V, Fe, Mo) Alloys with Self-tunable Young's Moduli for Biomedical Applications. ISIJ International, 2012, 52, 1655-1660.	0.6	3
128	Titanium and Its Alloys. Journal of the Japan Society for Technology of Plasticity, 2012, 53, 983-988.	0.0	0
129	High mechanical functionalization of Ti-Al-Cr-Fe-C system alloy for next-generation aircraft applications through microstructural control. Keikinzoku/Journal of Japan Institute of Light Metals, 2011, 61, 705-710.	0.1	5
130	Fabrication of hydroxyapatite film on Ti-29Nb-13Ta-4.6Zr using a MOCVD technique. Keikinzoku/Journal of Japan Institute of Light Metals, 2011, 61, 24-29.	0.1	0
131	Improvement in Fatigue Strength of Biomedical β -Type Ti-Nb-Ta-Zr Alloy while Maintaining Low Young's Modulus through Optimizing ω -Phase Precipitation. Materials Transactions, 2011, . .	0.4	2
132	Heterogeneous β Phase Precipitation and Peculiar Aging Strengthening in Biomedical β -Type Ti-Nb-Ta-Zr Alloy Having Vortical Structure. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2011, 75, 198-206.	0.2	8
133	Creation of Functionality by Ubiquitous Elements in Titanium Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2011, 75, 21-28.	0.2	24
134	Mechanical Properties and Biocompatibilities of Zr-Nb System Alloys with Different Nb Contents for Biomedical Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2011, 75, 445-451.	0.2	16
135	Development of high Zr-containing Ti-based alloys with low Young's modulus for use in removable implants. Materials Science and Engineering C, 2011, 31, 1436-1444.	3.8	113
136	Mechanical and biodegradable properties of porous titanium filled with poly-L-lactic acid by modified in situ polymerization technique. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 1206-1218.	1.5	19
137	Relationship between various deformation-induced products and mechanical properties in metastable Ti-30Zr-Mo alloys for biomedical applications. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 2009-2016.	1.5	38
138	Self-adjustment of Young's modulus in biomedical titanium alloys during orthopaedic operation. Materials Letters, 2011, 65, 688-690.	1.3	117
139	Improvements in the Superelasticity and Change in Deformation Mode of β -Type TiNb ₂₄ Zr ₂ Alloys Caused by Aging Treatments. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 2843-2849.	1.1	23
140	Microstructures and mechanical properties of metastable Ti-30Zr-(Cr, Mo) alloys with changeable Young's modulus for spinal fixation applications. Acta Biomaterialia, 2011, 7, 3230-3236.	4.1	119
141	Effects of TiB on the mechanical properties of Ti-29Nb-13Ta-4.6Zr alloy for use in biomedical applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5600-5609.	2.6	20
142	Relationship between microstructures and mechanical properties of Ti-4.5Al-2Mo-1.6V-0.5Fe-0.3Si-0.03C for next-generation aircraft applications. Keikinzoku/Journal of Japan Institute of Light Metals, 2011, 61, 711-717.	0.1	1
143	Relationship between Unique Hardening Behavior and Microstructure of Dental Silver Alloy Subjected to Solution Treatment. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2010, 74, 337-344.	0.2	12
144	Structure and Mechanical Properties of Melt-Extracted β -Ti-Type Ti-Nb-Ta-Zr (TNTZ) Wire with High Bending Ductility. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2010, 74, 515-519.	0.2	0

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