

Mitsuo Niinomi

List of Publications by Year in descending order

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papers

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citations

38742

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#	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. Journal of Materials Research, 2022, 37, 2512-2524.	2.6	11
2	Microstructure and mechanical properties of Ti-Nb-Fe-Zr alloys with high strength and low elastic modulus. Transactions of Nonferrous Metals Society of China, 2022, 32, 503-512.	4.2	11
3	Microstructure, mechanical properties, and cytotoxicity of low Young's modulus Ti-Nb-Fe-Sn alloys. Journal of Materials Science, 2022, 57, 5634-5644.	3.7	6
4	Antibacterial Properties and Biocompatibility of Hydroxyapatite Coating Doped with Various Cu Contents on Titanium. Materials Transactions, 2022, 63, 1072-1079.	1.2	3
5	Co-Cr-based alloys. , 2021, , 103-126.		1
6	Further development of mechanically biocompatible metallic biomaterials. Materia Japan, 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. Journal of Materials Engineering and Performance, 2021, 30, 5719-5727.	2.5	2
8	Hydroxyapatite coating on titanium alloy TNTZ for increasing osseointegration and reducing inflammatory response in vivo on Rattus norvegicus Wistar rats. Ceramics International, 2021, 47, 16094-16100.	4.8	22
9	Antibacterial Cu-Doped Calcium Phosphate Coating on Pure Titanium. Materials Transactions, 2021, 62, 1052-1055.	1.2	4
10	Exfoliation Resistance, Microstructure, and Oxide Formation Mechanisms of the White Oxide Layer on CP Ti and Ti-Nb-Ta-Zr Alloys. Materials, 2021, 14, 6599.	2.9	1
11	Phenomenological law and process of β phase evolution in a β -type bio-Titanium alloy TNTZ during aging. Materials Characterization, 2021, 182, 111576.	4.4	1
12	Microstructure, Mechanical Properties, and Springback of Ti-Nb Alloys Modified by Mo Addition. Journal of Materials Engineering and Performance, 2020, 29, 5366-5373.	2.5	1
13	Low Young's Modulus and High Strength Obtained in Ti-Nb-Zr-Cr Alloys by Optimizing Zr Content. Journal of Materials Engineering and Performance, 2020, 29, 2871-2878.	2.5	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. Materials Transactions, 2020, 61, 361-367.	1.2	7
15	Relationship between Microstructure and Fatigue Properties of Forged Ti-5Al-2Sn-2Zr-4Mo-4Cr for Aircraft Applications. Materials Transactions, 2020, 61, 2017-2024.	1.2	2
16	Application of atmospheric-pressure plasma treatment to coat Ti-alloy orthodontic wire with white oxide layer. Japanese Journal of Applied Physics, 2020, 59, SAAC09.	1.5	3
17	Relationship between Microstructure and Fatigue Properties of Forged Ti-5Al-2Sn-2Zr-4Mo-4Cr for Aircraft Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2020, 84, 200-207.	0.4	0
18	Factors Leading to Low Elastic Modulus and Current Status of Medically Applied Research of β -type Ti-Nb-based Alloys. Materia Japan, 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.	2.5	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.	4.8	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.	3.7	22
27	Design and development of metallic biomaterials with biological and mechanical biocompatibility. Journal of Biomedical Materials Research - Part A, 2019, 107, 944-954.	4.0	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.	1.2	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.	1.2	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.	5.6	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.	1.2	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.	8.0	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.	1.2	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. Journal of Sol-Gel Science and Technology, 2018, 87, 713-724.	2.4	33
38	Recent Progress in Research and Development of Metallic Structural Biomaterials with Mainly Focusing on Mechanical Biocompatibility. Materials Transactions, 2018, 59, 1-13.	1.2	23
39	In vivo osteoconductivity of surface modified Ti-29Nb-13Ta-4.6Zr alloy with low dissolution of toxic trace elements. PLoS ONE, 2018, 13, e0189967.	2.5	6
40	Abnormal Deformation Behavior of Oxygen-Modified β -Type Ti-29Nb-13Ta-4.6Zr Alloys for Biomedical Applications. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 139-149.	2.2	27
41	Effects of Mo Addition on the Mechanical Properties and Microstructures of Ti-Mn Alloys Fabricated by Metal Injection Molding for Biomedical Applications. Materials Transactions, 2017, 58, 271-279.	1.2	14
42	Change in Mechanical Properties of Biomechanical Ti-12Cr Subjected to Heat Treatment and Surface Modification Processing. Materials Transactions, 2017, 58, 951-957.	1.2	0
43	Improved fatigue properties with maintaining low Young's modulus achieved in biomedical beta-type titanium alloy by oxygen addition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 704, 10-17.	5.6	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. Materials Transactions, 2016, 57, 1109-1118.	1.2	15
47	Electrochemical Surface Treatment of a β -titanium Alloy to Realize an Antibacterial Property and Bioactivity. Metals, 2016, 6, 76.	2.3	19
48	Osteoanabolic Implant Materials for Orthopedic Treatment. Advanced Healthcare Materials, 2016, 5, 1740-1752.	7.6	29
49	Influence of oxygen on omega phase stability in the Ti-29Nb-13Ta-4.6Zr alloy. Scripta Materialia, 2016, 123, 144-148.	5.2	57
50	Change in Mechanical Properties of Biomechanical Ti-12Cr Subjected to Heat Treatment and Surface Modification Processing. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2016, 80, 764-771.	0.4	0
51	Osteoanabolic Implants: Osteoanabolic Implant Materials for Orthopedic Treatment (Adv. Healthcare) Tj ETQq1 1 0,784314 rgBT /Overl	7.6	2
52	Inhibited grain growth in hydroxyapatite-graphene nanocomposites during high temperature treatment and their enhanced mechanical properties. Ceramics International, 2016, 42, 11248-11255.	4.8	35
53	Enhancing the durability of spinal implant fixture applications made of Ti-6Al-4V ELI by means of cavitation peening. International Journal of Fatigue, 2016, 92, 360-367.	5.7	8
54	Corrosion Behavior of MgZnCa Bulk Amorphous Alloys Fabricated by Spark Plasma Sintering. Acta Metallurgica Sinica (English Letters), 2016, 29, 793-799.	2.9	17

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55	Enhancement of Mechanical Biocompatibility of Titanium Alloys by Deformation-Induced Transformation. Materials Science Forum, 2016, 879, 125-130.	0.3	1
56	Improvement of microstructure, mechanical and corrosion properties of biomedical Ti-Mn alloys by Mo addition. Materials and Design, 2016, 110, 414-424.	7.0	54
57	Current Situation and Challenges and Prospects of the Design and Manufacturing Process of the Spinal Implants. Materia Japan, 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. Materials Transactions, 2016, 57, 1887-1896.	1.2	10
59	Athermal and deformation-induced β -phase transformations in biomedical beta-type alloy Ti-9Cr-0.2O. Acta Materialia, 2016, 106, 162-170.	7.9	56
60	Corrosion behavior, mechanical properties and cell cytotoxicity of Zr-based bulk metallic glasses. Intermetallics, 2016, 72, 69-75.	3.9	21
61	Microstructural evolution and mechanical properties of biomedical Co-Cr-Mo alloy subjected to high-pressure torsion. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 59, 226-235.	3.1	26
62	Biomedical titanium alloys with Young's moduli close to that of cortical bone. International Journal of Energy Production and Management, 2016, 3, 173-185.	3.7	241
63	Fabrication of low-cost beta-type Ti-Mn alloys for biomedical applications by metal injection molding process and their mechanical properties. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 59, 497-507.	3.1	71
64	Developing biomedical nano-grained β -type titanium alloys using high pressure torsion for improved cell adherence. RSC Advances, 2016, 6, 7426-7430.	3.6	25
65	Improvement in mechanical strength of low-cost β -type Ti-Mn alloys fabricated by metal injection molding through cold rolling. Journal of Alloys and Compounds, 2016, 664, 272-283.	5.5	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. Materials Transactions, 2015, 56, 218-223.	1.2	3
68	Differences in Wear Behaviors at Sliding Contacts for β -Type and (α + β) Ti-6Al-4V Alloy. Materials Transactions, 2015, 56, 317-326.	1.2	15
69	Evaluation of Adhesion of Hydroxyapatite Films Fabricated on Biomedical β -Type Titanium Alloy after Immersion in Ringer's Solution. Materials Transactions, 2015, 56, 1703-1710.	1.2	1
70	Fatigue characteristics of a biomedical β -type titanium alloy with titanium boride. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 640, 154-164.	5.6	26
71	Phase transformation and its effect on mechanical characteristics in warm-deformed Ti-29Nb-13Ta-4.6Zr alloy. Metals and Materials International, 2015, 21, 202-207.	3.4	15
72	Effect of heterogeneous precipitation caused by segregation of substitutional and interstitial elements on mechanical properties of a β -type Ti alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 643, 109-118.	5.6	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.	8.3	41
74	Titanium Alloys for Biomedical Applications. Springer Series in Biomaterials Science and Engineering, 2015, , 179-213.	1.0	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.	3.1	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.	7.3	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.	8.3	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.	8.3	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.	3.1	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.	1.5	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.	7.3	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.	3.1	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.	5.6	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.	7.3	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.	3.1	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.	5.6	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.	3.1	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.	7.3	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.	5.2	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.	3.1	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.	0.4	1
93	Nanostructure Of β -type Titanium Alloys Through Severe Plastic Deformation. Advanced Materials Letters, 2014, 5, 378-383.	0.6	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.	3.1	19
96	Deformation-induced β phase in modified Ti-29Nb-13Ta-4.6Zr alloy by Cr addition. Acta Biomaterialia, 2013, 9, 8027-8035.	8.3	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.	2.3	17
98	Biocompatibility of Ti-alloys for long-term implantation. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 20, 407-415.	3.1	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.	1.8	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.	3.4	7
103	Effects of Alloying Elements on the HAp Formability on Ti Alloys after Alkali Treatment. Materials Transactions, 2013, 54, 1295-1301.	1.2	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.	0.4	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.	1.2	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. Materials Transactions, 2012, 53, 1379-1384.	1.2	28
110	Development of New Titanium-Molybdenum Alloys with Changeable Young's Modulus for Spinal Fixture Devices. Journal of Solid Mechanics and Materials Engineering, 2012, 6, 695-700.	0.5	1
111	Specific characteristics of mechanically and biologically compatible titanium alloy rods for use in spinal fixation applications. Materials Letters, 2012, 86, 178-181.	2.6	14
112	Mechanism of unique hardening of dental Ag-Pd-Au-Cu alloys in relation with constitutional phases. Journal of Alloys and Compounds, 2012, 519, 15-24.	5.5	16
113	Development of new metallic alloys for biomedical applications. Acta Biomaterialia, 2012, 8, 3888-3903.	8.3	1,249
114	Micro-arc oxidation treatment to improve the hard-tissue compatibility of Ti-29Nb-13Ta-4.6Zr alloy. Applied Surface Science, 2012, 262, 34-38.	6.1	64
115	Difference of Microstructure and Fatigue Properties between Forged and Rolled Ti-6Al-4V. Key Engineering Materials, 2012, 508, 161-165.	0.4	2
116	PHOSPHATE GLASSES AND GLASS-CERAMICS FOR BIOMEDICAL APPLICATIONS. Phosphorus Research Bulletin, 2012, 26, 8-15.	0.6	25
117	Beta type Ti-Mo alloys with changeable Young's modulus for spinal fixation applications. Acta Biomaterialia, 2012, 8, 1990-1997.	8.3	172
118	Optimization of Cr content of metastable β -type Ti-Cr alloys with changeable Young's modulus for spinal fixation applications. Acta Biomaterialia, 2012, 8, 2392-2400.	8.3	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. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 536, 197-206.	5.6	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. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 550, 55-65.	5.6	19
121	Formation of L10-type ordered β' phase in as-solutionized dental Ag-Pd-Au-Cu alloys and hardening behavior. Materials Science and Engineering C, 2012, 32, 503-509.	7.3	9
122	Improvement in fatigue strength while keeping low Young's modulus of a β -type titanium alloy through yttrium oxide dispersion. Materials Science and Engineering C, 2012, 32, 542-549.	7.3	28
123	Effect of terminal functional groups of silane layers on adhesive strength between biomedical Ti-29Nb-13Ta-4.6Zr alloy and segment polyurethanes. Surface and Coatings Technology, 2012, 206, 3137-3141.	4.8	22
124	Development of thermo-mechanical processing for fabricating highly durable β -type Ti-Nb-Ta-Zr rod for use in spinal fixation devices. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 9, 207-216.	3.1	45
125	Heterogeneous structure and mechanical hardness of biomedical β -type Ti-29Nb-13Ta-4.6Zr subjected to high-pressure torsion. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 10, 235-245.	3.1	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. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 294-302.	2.2	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.	1.4	3
128	Titanium and Its Alloys. Journal of the Japan Society for Technology of Plasticity, 2012, 53, 983-988.	0.3	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.	0.4	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.	0.4	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, , .	1.2	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.	0.4	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.	0.4	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.	0.4	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.	7.3	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.	3.1	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.	3.1	38
138	Self-adjustment of Young's modulus in biomedical titanium alloys during orthopaedic operation. Materials Letters, 2011, 65, 688-690.	2.6	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.	2.2	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.	8.3	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.	5.6	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.	0.4	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.	0.4	12
144	Structure and Mechanical Properties of Melt-Extracted Beta-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.	0.4	0

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145	Fabrication of Beta-Ti-Type Ti-Nb-Ta-Zr (TNTZ) Wire with High-Ductility by Arc-Melt-Type Melt-Extraction Method. Materials Transactions, 2010, 51, 377-380.	1.2	0
146	Quality improvement of a β -type titanium alloy cast for biomedical applications by using a calcia mold. Keikinzoku/Journal of Japan Institute of Light Metals, 2010, 60, 170-176.	0.4	0
147	Effects of Nb and O Contents on Microstructures and Mechanical Functionalities of Biomedical Ti-Nb-Ta-Zr-O System Alloys. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2010, 96, 93-100.	0.4	0
148	Effect of Young's modulus in metallic implants on atrophy and bone remodeling. , 2010, , 90-99.		4
149	Development of biomedical porous titanium filled with medical polymer by in-situ polymerization of monomer solution infiltrated into pores. Journal of the Mechanical Behavior of Biomedical Materials, 2010, 3, 41-50.	3.1	18
150	Effect of Oxygen on Phase Precipitation and Mechanical Functionality in Ti-29Nb-13Ta-4.6Zr. Key Engineering Materials, 2010, 436, 179-184.	0.4	1
151	Preparation of Ti-Based and Zr-Based Bio-Metallic Wires by Arc-Melting Type Melt-Extraction Method. Materials Science Forum, 2010, 638-642, 2127-2132.	0.3	0
152	Phase Constitution and Heat Treatment Behavior of Ti-7mass% Mn-Al Alloys. Materials Science Forum, 2010, 654-656, 855-858.	0.3	16
153	Effect of Y_{2O_3} on Mechanical Properties of Ti-29Nb-13Ta-4.6Zr for Biomedical Applications. Materials Science Forum, 2010, 654-656, 2138-2141.	0.3	5
154	Formability of Ti-29Nb-13Ta-4.6Zr Biomaterial at High Temperatures. Key Engineering Materials, 2010, 443, 620-625.	0.4	1
155	Improvement of the fatigue life of titanium alloys for biomedical devices through microstructural control. Expert Review of Medical Devices, 2010, 7, 481-488.	2.8	20
156	The commercial potential of MIM titanium alloy. Metal Powder Report, 2009, 64, 17-20.	0.1	6
157	Ti-25Ta alloy with the best mechanical compatibility in Ti-Ta alloys for biomedical applications. Materials Science and Engineering C, 2009, 29, 1061-1065.	7.3	148
158	Passive films and corrosion resistance of Ti-Hf alloys in 5% HCl solution. Surface and Coatings Technology, 2009, 204, 180-186.	4.8	22
159	Effects of Nd Content on the Dynamic Elastic Modulus and Mechanical Properties of Titanium-Neodymium Alloys. Materials Transactions, 2009, 50, 368-372.	1.2	5
160	Isothermal Aging Behavior of Beta Titanium–Manganese Alloys. Materials Transactions, 2009, 50, 2737-2743.	1.2	40
161	Effect of Oxygen Content on Microstructure and Mechanical Properties of Biomedical Ti-29Nb-13Ta-4.6Zr Alloy under Solutionized and Aged Conditions. Materials Transactions, 2009, 50, 2716-2720.	1.2	64
162	High Mechanical Functionalization of Metallic Biomaterials through Thermomechanical Treatments. Journal of Biomechanical Science and Engineering, 2009, 4, 345-355.	0.3	3

#	ARTICLE	IF	CITATIONS
163	Anomalous Thermal Expansion of Cold-Rolled Ti-Nb-Ta-Zr Alloy. Materials Transactions, 2009, 50, 423-426.	1.2	31
164	Metallic biomaterials. Journal of Artificial Organs, 2008, 11, 105-110.	0.9	248
165	Surface hardening of biomedical Ti-29Nb-13Ta-4.6Zr and Ti-6Al-4V ELI by gas nitriding. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 486, 193-201.	5.6	62
166	Mechanical biocompatibilities of titanium alloys for biomedical applications. Journal of the Mechanical Behavior of Biomedical Materials, 2008, 1, 30-42.	3.1	1,017
167	In situ X-ray analysis of mechanism of nonlinear super elastic behavior of Ti-Nb-Ta-Zr system beta-type titanium alloy for biomedical applications. Materials Science and Engineering C, 2008, 28, 406-413.	7.3	44
168	Changes in mechanical properties of Ti alloys in relation to alloying additions of Ta and Hf. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 483-484, 153-156.	5.6	52
169	Microstructures and mechanical properties of Ti-50mass% Ta alloy for biomedical applications. Journal of Alloys and Compounds, 2008, 466, 535-542.	5.5	101
170	Development of allergy-free titanium alloys for brass instruments and their characteristics. Keikinzoku/Journal of Japan Institute of Light Metals, 2008, 58, 604-610.	0.4	0
171	Mechanical Properties of Implant Rods made of Low-Modulus β -Type Titanium Alloy, Ti-29Nb-13Ta-4.6Zr, for Spinal Fixture. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2008, 72, 674-678.	0.4	11
172	“Strategy for Ubiquitous Titanium Alloys” Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2008, 72, 915.	0.4	3
173	Biologically and Mechanically Biocompatible Titanium Alloys. Materials Transactions, 2008, 49, 2170-2178.	1.2	159
174	Wear and Mechanical Properties, and Cell Viability of Gas-Nitrided Beta-Type Ti-Nb-Ta-Zr System Alloy for Biomedical Applications. Materials Transactions, 2008, 49, 166-174.	1.2	20
175	Fretting-Fatigue Properties and Fracture Mechanism of Semi-Precious Alloy for Dental Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2008, 72, 63-71.	0.4	5
176	Change in Fatigue Strength of Biomedical β -Type Titanium Alloy through Heat Treatment Processes. Zairyo/Journal of the Society of Materials Science, Japan, 2008, 57, 893-898.	0.2	2
177	Titanium and Its Alloys. , 2008, , 2876-2892.		1
178	Formability of Hydroxyapatite on Beta-Type Ti-Nb-Ta-Zr Alloy for Biomedical Applications through Alkaline Treatment Process. Key Engineering Materials, 2007, 352, 297-300.	0.4	0
179	Recent Research and Development in Metallic Materials for Biomedical, Dental and Healthcare Products Applications. Materials Science Forum, 2007, 539-543, 193-200.	0.3	28
180	Bioactive Ceramic Surface Modification of β -Type Ti-Nb-Ta-Zr System Alloy by Alkali Solution Treatment. Materials Transactions, 2007, 48, 293-300.	1.2	20

#	ARTICLE	IF	CITATIONS
181	Frictional wear characteristics of biomedical Ti-29Nb-13Ta-4.6Zr alloy with various microstructures in air and simulated body fluid. Biomedical Materials (Bristol), 2007, 2, S167-S174.	3.3	15
182	Mechanical characteristics and microstructure of drawn wire of Ti-29Nb-13Ta-4.6Zr for biomedical applications. Materials Science and Engineering C, 2007, 27, 154-161.	7.3	67
183	Multifunctional low-rigidity β -type Ti-Nb-Ta-Zr system alloys as biomaterials. , 2007, , 75-84.		1
184	Effect of loading rate on absorbed energy and fracture surface area in wrought aluminum alloys. Keikinzoku/Journal of Japan Institute of Light Metals, 2006, 56, 15-20.	0.4	0
185	Effect of Aging Treatment on Mechanical Properties of Ti-29Nb-13Ta-4.6Zr Alloy for Biomedical Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 295-303.	0.4	15
186	Analysis of Tensile Deformation Behaviors of Ti-XNb-10Ta-5Zr Alloys for Biomedical Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 572-578.	0.4	4
187	Materials Technology for Improving QOL, Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 259.	0.4	1
188	Effect of Microstructure on Tensile Properties and Static Fracture Toughness of Dental Gold Alloy. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 337-342.	0.4	1
189	Tensile Deformation Behavior of Ti-30Nb-10Ta-XZr Alloys for Biomedical Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 89-95.	0.4	7
190	Microstructural Modification in a Beta Titanium Alloy for Implant Applications. Materials Transactions, 2006, 47, 90-95.	1.2	11
191	Nanotube oxide coating on Ti-29Nb-13Ta-4.6Zr alloy prepared by self-organizing anodization. Electrochimica Acta, 2006, 52, 94-101.	5.2	98
192	Feasibility Study on Smart Coating for Failure Prevention under Thermo-mechanical Fatigue Loading. Journal of Intelligent Material Systems and Structures, 2006, 17, 1099-1103.	2.5	2
193	Notch fatigue properties of a Ti-29Nb-13Ta-4.6Zr alloy for biomedical applications. Keikinzoku/Journal of Japan Institute of Light Metals, 2005, 55, 575-581.	0.4	12
194	Effect of Microstructure on Tensile Properties and Static Fracture Toughness of Dental Gold Alloy. Materials Transactions, 2005, 46, 1540-1544.	1.2	1
195	Contact pressure and fretting fatigue characteristics of highly workable titanium alloy with equiaxed .ALPHA. and Widmanstaetten .ALPHA. structure. Keikinzoku/Journal of Japan Institute of Light Metals, 2005, 55, 661-667.	0.4	5
196	Mechanical Properties and Cyto-Toxicity of Newly Designed .BETA. Type Ti Alloys for Dental Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2005, 69, 96-102.	0.4	0
197	Assessment of Thermo-Mechanical Fatigue Behaviors of Cast Al-Si Alloys by Experiments and Multi-Step Numerical Simulation. Materials Transactions, 2005, 46, 111-117.	1.2	8
198	Image-Based Mechanical Analysis of Multifilamentary Microstructure Formation in Al-Fe Heavily Deformed In-Situ Composites. Materials Transactions, 2005, 46, 2229-2236.	1.2	11

#	ARTICLE	IF	CITATIONS
199	Influences of spatial distribution of Si particles on crack propagation in model Al-Si cast alloys. Keikinzoku/Journal of Japan Institute of Light Metals, 2005, 55, 75-81.	0.4	2
200	Mechanical Properties of Biocompatible Beta-Type Titanium Alloy Coated with Calcium Phosphate Invert Glass-Ceramic Layer. Materials Transactions, 2005, 46, 1564-1569.	1.2	17
201	Fatigue Characteristics of Low Cost β Titanium Alloys for Healthcare and Medical Applications. Materials Transactions, 2005, 46, 1570-1577.	1.2	16
202	Effect of Microstructure on Fatigue Strength of Bovine Compact Bones. JSME International Journal Series A-Solid Mechanics and Material Engineering, 2005, 48, 472-480.	0.4	17
203	Microstructure and fretting fatigue characteristics of highly workable titanium alloy with equiaxed α and Widmanstätten α structure. Keikinzoku/Journal of Japan Institute of Light Metals, 2005, 55, 654-660.	0.4	2
204	Corrosion resistance and biocompatibility of Ti-Ta alloys for biomedical applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 398, 28-36.	5.6	253
205	Improvement in fatigue characteristics of newly developed beta type titanium alloy for biomedical applications by thermo-mechanical treatments. Materials Science and Engineering C, 2005, 25, 248-254.	7.3	147
206	Mechanical properties of Ti-4.5Al-3V-2Mo-2Fe and possibility for healthcare applications. Materials Science and Engineering C, 2005, 25, 296-303.	7.3	17
207	Relationships between tensile deformation behavior and microstructure in Ti-Nb-Ta-Zr system alloys. Materials Science and Engineering C, 2005, 25, 363-369.	7.3	127
208	Mechanical properties and microstructures of low cost β titanium alloys for healthcare applications. Materials Science and Engineering C, 2005, 25, 304-311.	7.3	47
209	Mechanical properties and cyto-toxicity of new beta type titanium alloy with low melting points for dental applications. Materials Science and Engineering C, 2005, 25, 417-425.	7.3	53
210	Effect of Ta content on mechanical properties of Ti-30Nb-xTa-5Zr. Materials Science and Engineering C, 2005, 25, 370-376.	7.3	60
211	Japanese research and development on metallic biomedical, dental, and healthcare materials. Jom, 2005, 57, 18-24.	1.9	51
212	Numerical simulation of fracture of model Al-Si alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 2979-2992.	2.2	4
213	Dental Precision Casting of Ti-29Nb-13Ta-4.6Zr Using Calcia Mold. Materials Science Forum, 2005, 475-479, 2303-2308.	0.3	8
214	Effects of Striker Edge Radius on Load-Deflection Curve and Absorbed Energy in Instrumented Charpy Impact Test. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2005, 91, 485-492.	0.4	2
215	Assessment of Fracture Toughness by CT and Round Bar Specimens in a HT780 Steel. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2005, 91, 415-420.	0.4	0
216	Recent Applications, Research and Development in Titanium and Its Alloys. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2004, 90, 462-471.	0.4	12

#	ARTICLE	IF	CITATIONS
217	Effects of Ta content on Young's modulus and tensile properties of binary Ti-Ta alloys for biomedical applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 371, 283-290.	5.6	333
218	Decomposition of martensite β during aging treatments and resulting mechanical properties of Ti-Ta alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 384, 92-101.	5.6	119
219	NOVEL METHOD FOR APATITE COATING ON Ti-29Nb-13Ta-4.6Zr ALLOY. Phosphorus Research Bulletin, 2004, 17, 258-261.	0.6	2
220	CALCIUM PHOSPHATE GLASS-CERAMIC COATING ON A TITANIUM ALLOY. Phosphorus Research Bulletin, 2004, 17, 29-36.	0.6	4
221	Fatigue, Fretting Fatigue and Corrosion Characteristics of Biocompatible Beta Type Titanium Alloy Conducted with Various Thermo-Mechanical Treatments. Materials Transactions, 2004, 45, 1540-1548.	1.2	47
222	Tensile Deformation Behavior of Ti-Nb-Ta-Zr Biomedical Alloys. Materials Transactions, 2004, 45, 1113-1119.	1.2	86
223	Dynamic Young's Modulus and Mechanical Properties of Ti-Hf Alloys. Materials Transactions, 2004, 45, 1549-1554.	1.2	30
224	Fretting Fatigue Characteristics with Relating Contact Pressure and Surface Roughness of Highly Workable Titanium Alloy, Ti-4.5Al-3V-2Mo-2Fe. Materials Transactions, 2004, 45, 1586-1593.	1.2	7
225	Tensile Properties and Surface Reaction Layer of Biomaterial, Ti-29Nb-13Ta-4.6Zr, Cast by Dental Precision Casting Process Using Various Investment Materials. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2004, 90, 154-161.	0.4	12
226	Morphology of Calcium Phosphate Invert Glass-Ceramic Layer Coated on Surface of Beta Type Titanium Alloy for Biomedical Applications. Materia Japan, 2004, 43, 1034-1034.	0.1	0
227	Relationship between Tensile Properties and Casting Defect of Ti-29Nb-13Ta-4.6Zr for Biomedical Applications Cast by Dental Precision Casting Process Using Various Investment Materials. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2004, 90, 827-834.	0.4	0
228	Recent research and development in titanium alloys for biomedical applications and healthcare goods. Science and Technology of Advanced Materials, 2003, 4, 445-454.	6.1	780
229	Bioactive calcium phosphate invert glass-ceramic coating on β -type Ti-29Nb-13Ta-4.6Zr alloy. Biomaterials, 2003, 24, 283-290.	11.4	70
230	Fatigue performance and cyto-toxicity of low rigidity titanium alloy, Ti-29Nb-13Ta-4.6Zr. Biomaterials, 2003, 24, 2673-2683.	11.4	478
231	Joining of Calcium Phosphate Invert Glass-Ceramics on a β -Type Titanium Alloy. Journal of the American Ceramic Society, 2003, 86, 1031-1033.	3.8	14
232	Effects of contact pressure and surface roughness on fretting fatigue characteristics of a high workable Ti-4.5Al-3V-2Mo-2Fe alloy. Keikinzoku/Journal of Japan Institute of Light Metals, 2003, 53, 563-569.	0.4	4
233	Fretting fatigue and frictional wear characteristics of a high workable Ti-4.5Al-3V-2Mo-Fe alloy. Keikinzoku/Journal of Japan Institute of Light Metals, 2003, 53, 251-257.	0.4	0
234	Aging Characteristics and Mechanical Properties of Ti-29Nb-13Ta-4.6Zr Coated with Calcium Phosphate Invert Glass-Ceramic for Biomedical Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2003, 67, 604-613.	0.4	14

#	ARTICLE	IF	CITATIONS
235	Effect of Nb Content on Microstructure, Tensile Properties and Elastic Modulus of Ti-XNb-10Ta-5Zr Alloys for Biomedical Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2003, 67, 681-687.	0.4	15
236	Microstructures and Mechanical Properties of Ti-Ni and Ti-Ni-Co Type Shape Memory Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2003, 67, 595-603.	0.4	4
237	Effects of Thermomechanical Processings on Fatigue Properties of Ti-29Nb-13Ta-4.6Zr for Biomedical Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2003, 67, 652-660.	0.4	30
238	OS11W0187 Effects of frictional wear characteristics and microstructure on fretting fatigue strength of high workable titanium alloy, Ti-4.5Al-3V-2Mo-2Fe. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2003, 2003.2, _OS11W0187- _OS11W0187.	0.0	0
239	OS07W0159 Effects of microstructures on fatigue properties of dental drawn and cast Ag-Pd-Cu-Au-Zn alloys. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2003, 2003.2, _OS07W0159- _OS07W0159.	0.0	0
240	OS07W0157 Effect of Nb content on mechanical properties of Ti-Nb-Ta-Zr quaternary alloys fabricated by powder metallurgy processing for biomedical applications. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2003, 2003.2, _OS07W0157- _OS07W0157.	0.0	0
241	Microstructure and fretting fatigue characteristics of a Ti-4.5%Al-3% V-2%Mo-2%Fe alloy.. Keikinzoku/Journal of Japan Institute of Light Metals, 2002, 52, 371-377.	0.4	4
242	Fatigue Properties of Cast Ag-Pd-Cu-Au-Zn Alloy for Dental Applications in the Relation with Casting Defects. Materials Transactions, 2002, 43, 3160-3166.	1.2	6
243	é«~ç”Yä½“ëžâ•æ©Yëf½æ€\$Tiâ•é†Ti-29Nb-13Ta-4.6Zrâ•é—ç™º. Materia Japan, 2002, 41, 221-223.	0.1	19
244	Development of Low Rigidity β-type Titanium Alloy for Biomedical Applications. Materials Transactions, 2002, 43, 2970-2977.	1.2	301
245	Effect of Nb on Microstructural Characteristics of Ti-Nb-Ta-Zr Alloy for Biomedical Applications. Materials Transactions, 2002, 43, 2964-2969.	1.2	40
246	Wear Characteristics of Surface Oxidation Treated New Biomedical β-type Titanium Alloy in Simulated Body Environment. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2002, 88, 567-574.	0.4	22
247	Fretting Fatigue Characteristics of New Biomedical β-type Titanium Alloy in Air and Simulated Body Environment. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2002, 88, 553-560.	0.4	18
248	Recent metallic materials for biomedical applications. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 477-486.	2.2	1,179
249	Aging behavior of the Ti-29Nb-13Ta-4.6Zr new beta alloy for medical implants. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 487-493.	2.2	71
250	Improvement in mechanical properties of dental cast Ti-6Al-7Nb by thermochemical processing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 503-510.	2.2	15
251	Microstructure and Fatigue Crack Initiation and Propagation Characteristics of Cast α+β-Type Titanium Alloys Conducted with Thermochemical Heat Processing for Dental Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2002, 66, 1098-1106.	0.4	3
252	Fatigue Properties and Microstructure of Newly Developed Ti-29Nb-14Ta-4.6Zr for Biomedical Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2002, 66, 715-722.	0.4	20

#	ARTICLE	IF	CITATIONS
253	Effect of .BETA. Phase Stability at Room Temperature on Mechanical Properties in .BETA.-Rich .ALPHA.+ .BETA. Type Ti-4.5Al-3V-2Mo-2Fe Alloy.. ISIJ International, 2002, 42, 191-199.	1.4	18
254	605 Fretting Fatigue Characteristics and Microstructure of Ti-4.5Al-3V-2Mo-2Fe for Aircraft Applications. The Proceedings of the JSME Materials and Processing Conference (M&P), 2002, 10.2, 452-457.	0.1	0
255	Cold Crucible Levitation Melting of Biomedical Ti-30 wt%Ta Alloy.. Dental Materials Journal, 2001, 20, 156-163.	1.8	2
256	Effect of Cooling Rate on Microstructure and Fracture Characteristics of β-Rich α + β Type Ti-4.5Al-3V-2Mo-2Fe Alloy. Materials Transactions, 2001, 42, 1339-1348.	1.2	18
257	BIOMIMETIC APATITE FORMATION ON CALCIUM PHOSPHATE INVERT GLASSES. Phosphorus Research Bulletin, 2001, 12, 39-44.	0.6	8
258	Effect of microstructure on fracture characteristics of Ti-6Al-2Sn-2Zr-2Mo-2Cr-Si. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2001, 32, 2795-2804.	2.2	17
259	Calcium phosphate invert glass-ceramic coatings joined by self-development of compositionally gradient layers on a titanium alloy. Biomaterials, 2001, 22, 577-582.	11.4	46
260	Fracture characteristics and microstructural factors in single and duplex annealed Ti-4.5Al-3V-2Mo-2Fe. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 308, 216-224.	5.6	23
261	Fatigue characteristics of ultra high molecular weight polyethylene with different molecular weight for implant material. Journal of Materials Science: Materials in Medicine, 2001, 12, 267-272.	3.6	20
262	Machinable calcium pyrophosphate glass-ceramics. Journal of Materials Research, 2001, 16, 876-880.	2.6	19
263	Apatite Formation on Calcium Phosphate Invert Glasses in Simulated Body Fluid. Journal of the American Ceramic Society, 2001, 84, 450-52.	3.8	67
264	Friction Wear Property of Newly Designed β-type Biomedical Titanium Alloys in Air and Ringer's Solution. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2001, 87, 500-507.	0.4	2
265	Effect of Microstructure on Fracture Characteristics of Ti-6Al-2Sn-2Mo-2Zr-2Cr-Si Alloy. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2001, 87, 55-62.	0.4	1
266	Alloying titanium and tantalum by cold crucible levitation melting (CCLM) furnace. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 280, 208-213.	5.6	60
267	The role of microstructures on the strengthening mechanisms of a thermomechanically processed 2091 Al-Li alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 284, 14-24.	5.6	11
268	An investigation of the effect of fatigue deformation on the residual mechanical properties of Ti-6Al-4V ELI. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2000, 31, 1937-1948.	2.2	28
269	Effects of microstructure on the short fatigue crack initiation and propagation characteristics of biomedical Ti-6Al-4V titanium alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2000, 31, 1949-1958.	2.2	75
270	Heat Treatment Processes and Mechanical Properties of New β-type Biomedical Ti-29Nb-13Ta-4.6Zr Alloy. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2000, 86, 610-616.	0.4	18

#	ARTICLE	IF	CITATIONS
271	Tensile Properties and Cyto-toxicity of New Biomedical β -type Titanium Alloys. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2000, 86, 602-609.	0.4	23
272	Effects of Thermochemical Treatment on Mechanical Properties of Cast Ti-6Al-7Nb Alloy for Dental Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2000, 64, 895-902.	0.4	4
273	Effects of Microstructure and Simulated Body Environment on Fatigue Crack Propagation Behavior of Ti-5Al-2.5Fe for Biomedical Use. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2000, 86, 492-498.	0.4	0
274	Effect of Molecular Weight on Fatigue Characteristics of Ultra-High Molecular Weight Polyethylene for Implant Material. Zairyo/Journal of the Society of Materials Science, Japan, 2000, 49, 35-40.	0.2	1
275	Relationship between fracture toughness and microstructure of Ti-6Al-2Sn-4Zr-2Mo alloy reinforced with TiB particles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 263, 319-325.	5.6	28
276	Corrosion wear fracture of new β type biomedical titanium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 263, 193-199.	5.6	161
277	Recent titanium R&D for biomedical applications in japan. Jom, 1999, 51, 32-34.	1.9	75
278	Relationship between Fatigue Life, Changing of Mechanical Properties and Dislocation Structure during Fatigue in Pure Titanium. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1999, 63, 1527-1534.	0.4	3
279	Mechanical properties of biomedical titanium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1998, 243, 231-236.	5.6	1,662
280	Fracture characteristics of fatigued Ti-6Al-4V ELI as an implant material. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1998, 243, 237-243.	5.6	69
281	Design and mechanical properties of new β type titanium alloys for implant materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1998, 243, 244-249.	5.6	1,071
282	Effect of Microstructure on Fracture Characteristics of Compact Bone.. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 1998, 64, 312-318.	0.2	8
283	Development of β -Type Titanium Alloys for Implant Materials.. Materia Japan, 1998, 37, 843-846.	0.1	23
284	Change in Mechanical Properties of Ti-6Al-4V ELI during Fatigue Failure Process. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1998, 62, 140-149.	0.4	9
285	Fracture Toughness and Microstructure in TiB Particulate-reinforced Ti-6Al-2Sn-4Zr-2Mo Composites. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 1998, 84, 452-457.	0.4	2
286	Effect of Microstructure on Small Fatigue Crack Initiation and Propagation Characteristics of Ti-6Al-7Nb Alloy. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1998, 62, 952-960.	0.4	8
287	Microstructure and fracture characteristics in reactive sintering TiAl intermetallic compound.. Keikinzoku/Journal of Japan Institute of Light Metals, 1997, 47, 521-526.	0.4	4
288	Fracture characteristics, microstructure, and tissue reaction of Ti-5Al-2.5Fe for orthopedic surgery. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1996, 27, 3925-3935.	2.2	24

#	ARTICLE	IF	CITATIONS
289	Practure characteristics of light alloys. Keikinzoku/Journal of Japan Institute of Light Metals, 1996, 46, 352-360.	0.4	0
290	Strength, toughness and microstructural parameters in 2091 Al-Li system alloy.. Keikinzoku/Journal of Japan Institute of Light Metals, 1995, 45, 127-132.	0.4	3
291	Effects of Fe and Ca on impact fatigue characteristics of AC2B-T6 aluminum casting alloys.. Keikinzoku/Journal of Japan Institute of Light Metals, 1995, 45, 88-94.	0.4	3
292	Effect of stress triaxiality on fracture behavior of 2091 aluminum alloys.. Keikinzoku/Journal of Japan Institute of Light Metals, 1995, 45, 654-659.	0.4	3
293	Effect of manufacturing process on strength and toughness of 2091 Al-Li system alloy.. Keikinzoku/Journal of Japan Institute of Light Metals, 1995, 45, 121-126.	0.4	1
294	Fracture Characteristics and Microstructures of Intermetallic Compound Ti-24Al-11Nb(at%). Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1995, 59, 708-716.	0.4	4
295	Effects of Aging Treatments on Fracture Characteristics of 6061 Aluminum Alloy Reinforced with SiC Whisker. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1994, 58, 468-475.	0.4	12
296	Effect of microstructure on mechanical properties in intermetallic compound Ti3Al-Nb.. Keikinzoku/Journal of Japan Institute of Light Metals, 1994, 44, 628-634.	0.4	0
297	Microstructural Control by Retrogression and Reaging Treatment in SiC Whisker Reinforced Aluminum Alloy Composite. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1994, 58, 1086-1094.	0.4	1
298	Fracture characteristics of Al-Si and Al-Fe system powder metallurgy alloys.. Keikinzoku/Journal of Japan Institute of Light Metals, 1993, 43, 263-268.	0.4	0
299	Strength and toughness of microstructurally controlled .ALPHA.+BETA. type titanium alloys by thermochemical processings with hydrogen.. Keikinzoku/Journal of Japan Institute of Light Metals, 1992, 42, 638-643.	0.4	3
300	Strength, Toughness and Thermomechanical Processings in Ti-15V-3Cr-3Sn-3Al Alloys. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 1992, 78, 1862-1869.	0.4	6
301	Toughness and Strength of Microstructurally Controlled Titanium Alloys.. ISIJ International, 1991, 31, 848-855.	1.4	31
302	Mechanical properties of Al-Si and Al-Fe powder metallurgy alloys.. Keikinzoku/Journal of Japan Institute of Light Metals, 1991, 41, 772-777.	0.4	0
303	Fatigue Crack Propagation Characteristics in SiC_p/6061-T6 Composite. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1991, 55, 72-78.	0.4	9
304	Fracture Characteristics of Titanium-based Intermetallic Compound Ti₃Al. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1991, 55, 1023-1030.	0.4	1
305	Impact Fatigue Properties of Carburized SCM415 Steels. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 1991, 77, 155-162.	0.4	2
306	Effect of Thermomechanical Treatment Conditions on Mechanical Properties of Ti-10V-2Fe-3Al Alloys. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 1990, 76, 1712-1719.	0.4	1

#	ARTICLE	IF	CITATIONS
307	Evaluation of dynamic crack initiation and growth toughness by computer aided charpy impact testing system. Nuclear Engineering and Design, 1989, 111, 27-33.	1.7	23
308	Effects of Strain-induced Transformation and Temperature on Fracture Toughness of Titanium Alloys. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 1989, 75, 537-544.	0.4	2
309	Mechanical properties of SiC whisker reinforced aluminum alloys.. Keikinzoku/Journal of Japan Institute of Light Metals, 1988, 38, 593-599.	0.4	4
310	Evaluation of fracture toughness of aluminum alloys by tear test.. Keikinzoku/Journal of Japan Institute of Light Metals, 1988, 38, 9-15.	0.4	8
311	Effects of Triaxiality and Microstructure on the Ductile Fracture Morphology of Al-Zn-Mg-Cu-Zr Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1988, 52, 26-33.	0.4	6
312	Effect of Microstructure on Impact Toughness of Al-Li Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1988, 52, 34-42.	0.4	1
313	Effect of Substructure Formed in Prior β Grain on Crack Initiation and Propagation Toughness of Ti-6 Al-2 Sn-4 Zr-6 Mo Alloy. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 1988, 74, 543-550.	0.4	5
314	Impact toughness of Al-Li system alloys at low temperatures.. Keikinzoku/Journal of Japan Institute of Light Metals, 1987, 37, 816-823.	0.4	5
315	Fatigue crack propagation in Al-Si alloy castings.. Keikinzoku/Journal of Japan Institute of Light Metals, 1987, 37, 824-830.	0.4	11
316	Effect of Microstructural Factor on Impact Toughness of Ti-6Al-2Sn-4Zr-6Mo Alloy. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 1987, 73, 1397-1404.	0.4	3
317	On the accuracy of measurement of dynamic elastic-plastic fracture toughness parameters by the instrumented charpy test. Engineering Fracture Mechanics, 1987, 26, 83-94.	4.3	21
318	Impact Toughness of Hydrogen Charged Ti-6Al-2Sn-4Zr-6Mo Alloy. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 1987, 73, 1405-1412.	0.4	1
319	Toughness and Microstructural Factor of Ti-6Al-4V Alloy. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 1986, 72, 633-640.	0.4	4
320	Mechanical properties and Portevin-Le Chatelier effect in Al-Si alloy.. Keikinzoku/Journal of Japan Institute of Light Metals, 1986, 36, 555-561.	0.4	8
321	Instrumented Impact Testing of Ceramics. Transactions of the Japan Institute of Metals, 1986, 27, 775-783.	0.5	14
322	Effect of intermediate thermomechanical treatment on toughness of Al-Li system alloy.. Keikinzoku/Journal of Japan Institute of Light Metals, 1986, 36, 718-727.	0.4	1
323	Effect of Hydrogen Charging on the Impact Toughness of Ti-6Al-4V Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1986, 50, 449-455.	0.4	1
324	On Accuracy of Measurement of Dynamic Elastic-Plastic Fracture Toughness by Instrumented Charpy Test. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 1986, 72, 2133-2140.	0.4	6

#	ARTICLE	IF	CITATIONS
325	Effect of intermediate thermomechanical treatment on toughness of Al-Zn-Mg-Cu alloys.. Keikinzoku/Journal of Japan Institute of Light Metals, 1985, 35, 512-519.	0.4	0
326	Evaluation of Dynamic Fracture Toughness Parameters by Instrumented Charpy Test. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 1985, 71, 1934-1940.	0.4	3
327	Dissolution of Ferrous Alloys into Molten Pure Aluminium under Forced Flow. Transactions of the Japan Institute of Metals, 1984, 25, 429-439.	0.5	3
328	Dissolution of Ferrous Alloys into Molten Aluminium. Transactions of the Japan Institute of Metals, 1982, 23, 780-787.	0.5	20
329	On the Alloy Layers Formed by the Reaction between Ferrous Alloys and Molten Aluminium. Transactions of the Japan Institute of Metals, 1982, 23, 709-717.	0.5	8
330	Dissolution of Ferrous Alloys into Molten Aluminium. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1978, 42, 549-555.	0.4	5
331	Bending Fatigue and Spring Back Properties of Implant Rods Made of β -Type Titanium Alloy for Spinal Fixture. Advanced Materials Research, 0, 89-91, 400-404.	0.3	6
332	Low Modulus Titanium Alloys for Inhibiting Bone Atrophy. , 0, , .		21
333	Microstructure and Mechanical Properties of a Biomedical β -Type Titanium Alloy Subjected to Severe Plastic Deformation after Aging Treatment. Key Engineering Materials, 0, 508, 152-160.	0.4	8
334	Microstructural Change of β -Phase and Hardness Change in As-Solutionized Dental Ag-20Pd-12Au-14.5Cu Alloy. Key Engineering Materials, 0, 508, 166-171.	0.4	0
335	Young's Modulus Changeable Titanium Alloys for Orthopaedic Applications. Materials Science Forum, 0, 706-709, 557-560.	0.3	1
336	Influence of Fe Content of Ti-Mn-Fe Alloys on Phase Constitution and Heat Treatment Behavior. Materials Science Forum, 0, 706-709, 1893-1898.	0.3	25
337	Research and Development of Low-Cost Titanium Alloys for Biomedical Applications. Key Engineering Materials, 0, 551, 133-139.	0.4	8
338	Advances in Development of Titanium Alloys for Spinal Fixation Applications-Titanium Alloys with High Fatigue Strength and Low Springback for Spinal Fixation Applications-. Key Engineering Materials, 0, 575-576, 446-452.	0.4	1
339	Development of Changeable Young's Modulus with Good Mechanical Properties in β -Type Ti-Cr-O Alloys. Key Engineering Materials, 0, 575-576, 453-460.	0.4	0
340	Microstructural Analysis of Biomedical Co-Cr-Mo Alloy Subjected to High-Pressure Torsion Processing. Key Engineering Materials, 0, 616, 263-269.	0.4	2
341	Effect of Subsurface Deformation on Sliding Wear Behavior of Ti-29Nb-13Ta-4.6Zr Alloys for Biomedical Applications. Key Engineering Materials, 0, 616, 270-274.	0.4	1
342	Biomedical Polymer Surface Modification of Beta-Type Titanium Alloy for Implants through Anodic Oxide Nanostructures. Materials Science Forum, 0, 783-786, 1261-1264.	0.3	2

#	ARTICLE	IF	CITATIONS
343	Wear Properties of Ti-6Al-4V/Ti-29Nb-13Ta-4.6Zr Combination for Spinal Implants. Advanced Materials Research, 0, 922, 424-428.	0.3	2
344	Mechanical Performance and Biocompatibility of Biomedical Beta-Type Titanium Alloy Subjected to Micro-Shot Peening. Materials Science Forum, 0, 783-786, 1215-1220.	0.3	0
345	Optimization of Mo Content in Beta-Type Ti-Mo Alloys for Obtaining Larger Changeable Young's Modulus during Deformation for Use in Spinal Fixation Applications. Materials Science Forum, 0, 783-786, 1307-1312.	0.3	1
346	Relationship between Heterogeneous Microstructure and Fatigue Strength of Ti-Nb-Ta-Zr Alloy for Biomedical Materials Subjected to Aging Treatments. Materials Science Forum, 0, 783-786, 1313-1319.	0.3	0
347	Nanostructure and Fatigue Behavior of β -Type Titanium Alloy Subjected to High-Pressure Torsion after Aging Treatment. Advanced Materials Research, 0, 891-892, 9-14.	0.3	0
348	Beta-Type Titanium Alloys for use as Rods in Spinal Fixation Devices. , 0, , 213-221.		0
349	Recent Progress in Mechanically Biocompatible Titanium-Based Materials. Advances in Bioinformatics and Biomedical Engineering Book Series, 0, , 206-212.	0.4	0
350	Microstructure, Mechanical Properties, and Cytotoxicity of β -Type Ti-Nb-Cr Alloys Designed by Electron Parameter. Journal of Materials Engineering and Performance, 0, , 1.	2.5	1