Takayuki Narushima

List of Publications by Year
in descending order

87 papers	2,234 citations	293460 24 h-index	286692 43 g-index
87 all docs	87 docs citations	87 times ranked	1821 citing authors

#	Article	IF	Citations
1	Formation of carbon-added anatase-rich TiO2 layers on titanium and their antibacterial properties in visible light. Dental Materials, 2021, 37, e37-e46.	1.6	7
2	Unique crystallographic texture formation in Inconel 718 by laser powder bed fusion and its effect on mechanical anisotropy. Acta Materialia, 2021, 212, 116876.	3.8	174
3	Effect of Precursor Deficiency Induced Ca/P Ratio on Antibacterial and Osteoblast Adhesion Properties of Ag-Incorporated Hydroxyapatite: Reducing Ag Toxicity. Materials, 2021, 14, 3158.	1.3	8
4	Effect of Scan Length on Densification and Crystallographic Texture Formation of Pure Chromium Fabricated by Laser Powder Bed Fusion. Crystals, 2021, 11, 9.	1.0	18
5	Fabrication of Ag and Ta co-doped amorphous calcium phosphate coating films by radiofrequency magnetron sputtering and their antibacterial activity. Materials Science and Engineering C, 2020, 109, 110599.	3.8	24
6	Predicting the Parabolic Rate Constants of High-Temperature Oxidation of Ti Alloys Using Machine Learning. Oxidation of Metals, 2020, 94, 205-218.	1.0	16
7	Crystallographic orientation control of pure chromium via laser powder bed fusion and improved high temperature oxidation resistance. Additive Manufacturing, 2020, 36, 101624.	1.7	36
8	Using HAADF-STEM for atomic-scale evaluation of incorporation of antibacterial Ag atoms in a Î²-tricalcium phosphate structure. Nanoscale, 2020, 12, 16596-16604.	2.8	7
9	Precipitation during Î³-Îµ Phase Transformation in Biomedical Co-Cr-Mo Alloys Fabricated by Electron Beam Melting. Metals, 2020, 10, 71.	1.0	7
10	Effect of Nonmetallic Inclusions on Fatigue Properties of Superelastic Ti-Ni Fine Wire. Metals, 2019, 9, 999.	1.0	5
11	Overcoming the strength-ductility trade-off by the combination of static recrystallization and low-temperature heat-treatment in Co-Cr-W-Ni alloy for stent application. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 766, 138400.	2.6	21
12	Visibleâ€lightâ€responsive antibacterial activity of Auâ€incorporated TiO₂ layers formed on Tiâ€"(0â€"10)at%Au alloys by air oxidation. Journal of Biomedical Materials Research - Part A, 2019, 107, 991-1000.	2.1	12
13	Mechanisms of oxidation of pure and Si-segregated Î±-Ti surfaces. Applied Surface Science, 2019, 463, 686-692.	3.1	8
14	Antibacterial activity of Ag nanoparticle-containing hydroxyapatite powders in simulated body fluids with Cl ions. Materials Chemistry and Physics, 2019, 223, 473-478.	2.0	11
15	Synchronous improvement in strength and ductility of biomedical Coâ€"Crâ€"Mo alloys by unique low-temperature heat treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 739, 53-61.	2.6	16
16	Experimental and theoretical study of the effect of Si on the oxidative behavior of Ti-6Al-4V alloys. Journal of Alloys and Compounds, 2019, 776, 519-528.	2.8	22
17	Heterogeneous microstructures and corrosion resistance of biomedical Co-Cr-Mo alloy fabricated by electron beam melting (EBM). Additive Manufacturing, 2018, 24, 103-114.	1.7	32
18	Preparation of orthophosphate glasses in the MgOâ€"CaOâ€"SiO2â€"Nb2O5â€"P2O5 system. Bio-Medical Materials and Engineering, 2017, 28, 23-30.	0.4	3

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19	In vitro performance of Ag-incorporated hydroxyapatite and its adhesive porous coatings deposited by electrostatic spraying. Materials Science and Engineering C, 2017, 77, 556-564.	3.8	36
20	In vitro evaluation of Ag-containing calcium phosphates: Effectiveness of Ag-incorporated Î²-tricalcium phosphate. Materials Science and Engineering C, 2017, 75, 926-933.	3.8	31
21	First principles study of oxidation of Si-segregated Î±-Ti(0001) surfaces. Japanese Journal of Applied Physics, 2017, 56, 125701.	0.8	10
22	Effect of Si on the oxidation reaction of Î±-Ti(0â€‰0â€‰0â€‰1) surface: <i>ab initio</i> molecular dynamics study. Science and Technology of Advanced Materials, 2017, 18, 998-1004.	2.8	8
23	The antihistamine olopatadine regulates T cell activation in palladium allergy. International Immunopharmacology, 2016, 35, 70-76.	1.7	8
24	TiO2 layers on Ti-Au alloy formed by two-step thermal oxidation and their photocatalytic activity in visible-light. Materials Letters, 2016, 185, 290-294.	1.3	10
25	Formation of Porous Layer with Low Ni Content on NiTi Substrate by Dealloying in Metallic Melts. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2016, 63, 766-770.	0.1	0
26	Structure and physicochemical properties of CaOâ€"P2O5â€"Nb2O5â€"Na2O glasses. Journal of Non-Crystalline Solids, 2016, 432, 60-64.	1.5	34
27	Microstructural evolution and mechanical properties of biomedical Coâ€"Crâ€"Mo alloy subjected to high-pressure torsion. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 59, 226-235.	1.5	26
28	Fabrication of low-cost beta-type Tiâ€"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.	1.5	71
29	Structures and dissolution behaviors of MgOâ€"CaOâ€"P2O5â€"Nb2O5 glasses. Journal of Non-Crystalline Solids, 2016, 438, 18-25.	1.5	22
30	Improvement in mechanical strength of low-cost Î²-type Tiâ€"Mn alloys fabricated by metal injection molding through cold rolling. Journal of Alloys and Compounds, 2016, 664, 272-283.	2.8	42
31	Structures and dissolution behaviors of CaOâ€"P2O5â€"TiO2/Nb2O5 (Ca/P â‰¥ 1) invert glasses. Journal of Non-Crystalline Solids, 2015, 426, 35-42.	1.5	20
32	Synthesis and characterization of Ag-containing calcium phosphates with various Ca/P ratios. Materials Science and Engineering C, 2015, 53, 111-119.	3.8	36
33	Formation of TiO2 layers on commercially pure Ti and Tiâ€"Mo and Tiâ€"Nb alloys by two-step thermal oxidation and their photocatalytic activity. Applied Surface Science, 2015, 357, 2198-2205.	3.1	15
34	Microstructures, mechanical properties and cytotoxicity of low cost beta Tiâ€"Mn alloys for biomedical applications. Acta Biomaterialia, 2015, 26, 366-376.	4.1	80
35	NKG2D+ IFN-Î³+ CD8+ T Cells Are Responsible for Palladium Allergy. PLoS ONE, 2014, 9, e86810.	1.1	23
36	Evaluation of Thin Amorphous Calcium Phosphate Coatings on Titanium Dental Implants Deposited Using Magnetron Sputtering. Implant Dentistry, 2014, 23, 343-350.	1.7	23

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37	Effects of Niobium Ions Released from Calcium Phosphate Invert Glasses Containing Nb₂O₅ on Osteoblast-Like Cell Functions. ACS Applied Materials & Interfaces, 2012, 4, 5684-5690.	4.0	70
38	Enhancement of nickel elution by lipopolysaccharide-induced inflammation. Journal of Dermatological Science, 2011, 62, 50-7.	1.0	10
39	Recovery of Calcium from BF Slag and Synthesis of Zeolite A Using Its Residue. ISIJ International, 2011, 51, 901-905.	0.6	15
40	Alkali Hydrothermal Synthesis of Zeolite A Using Oxide By-products. ISIJ International, 2011, 51, 158-165.	0.6	7
41	Microscopic observations and inflammatory cytokine productions of human macrophage phagocytising submicron titanium particles. Journal of Materials Science: Materials in Medicine, 2010, 21, 267-275.	1.7	23
42	Gene expression analyses of human macrophage phagocytizing sub-Î¼â€‰ titanium particles by allergy DNA chip (GenopalTM). Bio-Medical Materials and Engineering, 2009, 19, 63-70.	0.4	7
43	Calcium Phosphate Films with/without Heat Treatments Fabricated Using RF Magnetron Sputtering. Journal of Biomechanical Science and Engineering, 2009, 4, 392-403.	0.1	16
44	â€œStrategy for Ubiquitous Titanium Alloysâ€• Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2008, 72, 915.	0.2	3
45	Evaluation of Sliding Wear Resistant Property of C.P. Titanium and SP-700 Titanium Alloy Surface-hardened by Arâ€“5%CO Gas. ISIJ International, 2008, 48, 89-98.	0.6	10
46	éª¨é•©å•æ€§å•ä¸Šã'ç›®çš„ã•ã—ãŸãƒã,¿ãƒ³æœ—™ã®è¡¨é¢å‡¦ç†. Keikinzoku/Journal of Japan Institute of Light Metals, 2008, 58, 577-582.	0.2	18
47	Austenitic Grain Growth behavior Immediately after Dynamic Recrystallization in HSLA Steels and Austenitic Stainless Steel. ISIJ International, 2008, 48, 1419-1428.	0.6	6
48	Fabrication of calcium phosphate films for coating on titanium substrates heated up to 773 K by RF magnetron sputtering and their evaluations. Biomedical Materials (Bristol), 2007, 2, S160-S166.	1.7	41
49	Variations in the Microstructure and Hardness with Solution Treating and Aging Conditions in New .ALPHA.+.BETA. Titanium Alloy Ti-4.5%Al-6%Nb-2%Fe-2%Mo. ISIJ International, 2007, 47, 1042-1049.	0.6	1
50	Alloy Design and Properties of New Î±+Î² Titanium Alloy with Excellent Cold Workability, Superplasticity and Cytocompatibility. ISIJ International, 2007, 47, 745-752.	0.6	7
51	Alloy Design and Property Evaluation of New .BETA. Type Titanium Alloy with Excellent Cold Workability and Biocompatibility. ISIJ International, 2006, 46, 292-301.	0.6	6
52	Accumulation of Element Ti in Macrophage-like RAW264 Cells Cultured in Medium with 1 ppm Ti and Effects on Cell Viability, SOD Production and TNF-.ALPHA. Secretion. Dental Materials Journal, 2006, 25, 726-732.	0.8	19
53	.BETA. Grain Refinement due to Small Amounts of Yttrium Addition in .ALPHA.+.BETA. Type Titanium Alloy, SP-700. ISIJ International, 2006, 46, 129-137.	0.6	26
54	Surface Hardening Treatment in Use of CO Gas and Post-Heat Treatment in C.P. Titanium and Titanium Alloys. Solid State Phenomena, 2006, 118, 109-114.	0.3	6

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55	Surface Hardening Treatment for C.P. Titanium and Titanium Alloys in Use of Arâ€“5%CO Gas. ISIJ International, 2006, 46, 1329-1338.	0.6	11
56	Surface Hardening Treatment for Titanium and Titanium Alloys in Use of CO₂ Gas. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2006, 92, 1-9.	0.1	6
57	Hydrothermal Synthesis of Zeolite A Using Blast Furnace Slag. ISIJ International, 2005, 45, 937-945.	0.6	57
58	Effects of Dynamic Recrystallization on .GAMMA. Grain Refinement and Improvement of Micro Segregation of As Cast Austenite in 9% Ni Steel. ISIJ International, 2005, 45, 338-346.	0.6	16
59	Development of dental and medical systems for reconstruction of human body with high performance titanium materials. International Congress Series, 2005, 1284, 324-325.	0.2	2
60	Application of SrÎ²-alumina solid electrolyte to a CO2 gas sensor. Solid State Ionics, 2003, 156, 329-336.	1.3	12
61	Grain Refinement of As Cast Austenite by Dynamic Recrystallization in HSLA Steels. ISIJ International, 2003, 43, 1063-1072.	0.6	27
62	Oxidation of Silicon and Silicon Carbide in Ozoneâ€Containing Atmospheres at 973 K. Journal of the American Ceramic Society, 2002, 85, 2049-2055.	1.9	15
63	Calorimetric study on hydration of CaO-based oxides. Journal of Alloys and Compounds, 2001, 321, 276-281.	2.8	12
64	Highâ€Temperature Morphological Evolution of Lithographically Introduced Cavities in Silicon Carbide. Journal of the American Ceramic Society, 2001, 84, 921-928.	1.9	13
65	Activity of Ga₂O₃ in B₂O₃ Flux and Standard Free Energies of Formation of GaBO₃ and InBO₃. Materials Transactions, JIM, 2000, 41, 714-718.	0.9	5
66	Electrical conductivity of alkaline-earth metal Î²-aluminas and their application to a CO2 gas sensor. Solid State Ionics, 1999, 121, 313-319.	1.3	11
67	Electrical conductivity and ionic transference number of Sr and BaÃŽÂ²-aluminas. Solid State Ionics, 1999, 124, 119-124.	1.3	13
68	Effect of Alloying Elements on Carbon Solubility in Liquid Silicon Equilibrated with Silicon Carbide. Materials Transactions, JIM, 1998, 39, 819-823.	0.9	10
69	High-Temperature Oxidation of Silicon Carbide and Silicon Nitride. Materials Transactions, JIM, 1997, 38, 821-835.	0.9	151
70	Solubility of Carbon in Liquid Silicon Equilibrated with Silicon Carbide. Materials Transactions, JIM, 1997, 38, 990-994.	0.9	38
71	Oxygen Solubility in Liquid Si–X (X=Sb, B, P and As) Alloys. Materials Transactions, JIM, 1995, 36, 763-769.	0.9	15
72	Oxygen Solubility in Liquid Gallium and Liquid Indium. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1995, 59, 37-43.	0.2	8

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73	Theoretical estimation of the effect of minor elements on the solubility of oxygen in silicon melt. Journal of Crystal Growth, 1994, 139, 357-362.	0.7	3
74	High-Temperature Oxidation of Chemically Vapor-Deposited Silicon Nitride in a Carbon Monoxide-Carbon Dioxide Atmosphere. Journal of the American Ceramic Society, 1994, 77, 2921-2925.	1.9	4
75	High-Temperature Active Oxidation and Active-to-Passive Transition of Chemically Vapor-Deposited Silicon Nitride in N2-O2 and Ar-O2 Atmospheres. Journal of the American Ceramic Society, 1994, 77, 2369-2375.	1.9	26
76	Active-to-Passive Transition and Bubble Formation for High-Temperature Oxidation of Chemically Vapor-Deposited Silicon Carbide in CO-CO2 Atmosphere. Journal of the American Ceramic Society, 1994, 77, 1079-1082.	1.9	30
77	Oxygen Solubility in Liquid Silicon. Materials Transactions, JIM, 1994, 35, 522-528.	0.9	37
78	Nitrogen Solubility in Liquid Silicon. Materials Transactions, JIM, 1994, 35, 821-826.	0.9	24
79	High-Temperature Active Oxidation of Chemically Vapor-Deposited Silicon Carbide in COCO2 Atmosphere. Journal of the American Ceramic Society, 1993, 76, 2521-2524.	1.9	54
80	Oxidation of Chemically Vapor-Deposited Silicon Nitride in Dry Oxygen at 1923 to 2003 K. Journal of the American Ceramic Society, 1993, 76, 1047-1051.	1.9	20
81	Phase Diagrams of the Ga₂O₃–B₂O₃ and In₂O₃–B₂O₃ Binary Systems. Materials Transactions, JIM, 1993, 34, 1195-1199.	0.9	10
82	High-Temperature Active Oxidation of Chemically Vapor-Deposited Silicon Carbide in an ArO2 Atmosphere. Journal of the American Ceramic Society, 1991, 74, 2583-2586.	1.9	100
83	High-Temperature Oxidation of Chemically Vapor-Deposited Silicon Carbide in Wet Oxygen at 1823 to 1923 K. Journal of the American Ceramic Society, 1990, 73, 3580-3584.	1.9	94
84	High-Temperature Passive Oxidation of Chemically Vapor Deposited Silicon Carbide. Journal of the American Ceramic Society, 1989, 72, 1386-1390.	1.9	176
85	Precipitates in Biomedical Co-Cr-Mo-C-Si-Mn Alloys. Advanced Materials Research, 0, 277, 51-58.	0.3	12
86	Microstructural Analysis of Biomedical Co-Cr-Mo Alloy Subjected to High-Pressure Torsion Processing. Key Engineering Materials, 0, 616, 263-269.	0.4	2
87	Precipitate Phases and Mechanical Properties of Heat-Treated ASTM F 90 Co-Cr-W-Ni Alloy. Key Engineering Materials, 0, 616, 258-262.	0.4	7