Tomiharu Matsushita

List of Publications by Year
in descending order

29 papers	1,878 citations	331670 21 h-index	477307 29 g-index
29 all docs	29 docs citations	29 times ranked	2250 citing authors

#	Article	IF	Citations
1	Drug-Releasing Gelatin Coating Reinforced with Calcium Titanate Formed on Tiâ€“6Alâ€“4V Alloy Designed for Osteoporosis Bone Repair. Coatings, 2022, 12, 139.	2.6	5
2	Bioactivation Treatment with Mixed Acid and Heat on Titanium Implants Fabricated by Selective Laser Melting Enhances Preosteoblast Cell Differentiation. Nanomaterials, 2021, 11, 987.	4.1	10
3	Stand-Alone Anterior Cervical Discectomy and Fusion Using an Additive Manufactured Individualized Bioactive Porous Titanium Implant without Bone Graft: Results of a Prospective Clinical Trial. Asian Spine Journal, 2021, 15, 373-380.	2.0	5
4	Mechanical, Histological, and Scanning Electron Microscopy Study of the Effect of Mixed-Acid and Heat Treatment on Additive-Manufactured Titanium Plates on Bonding to the Bone Surface. Materials, 2020, 13, 5104.	2.9	10
5	Osteogenic capacity of mixed-acid and heat-treated titanium mesh prepared by a selective laser melting technique. RSC Advances, 2018, 8, 26069-26077.	3.6	7
6	Strontium and magnesium ions released from bioactive titanium metal promote early bone bonding in a rabbit implant model. Acta Biomaterialia, 2017, 63, 383-392.	8.3	58
7	Two-in-One Biointerfacesâ€”Antimicrobial and Bioactive Nanoporous Gallium Titanate Layers for Titanium Implants. Nanomaterials, 2017, 7, 229.	4.1	45
8	Histologic Evaluation of Bone Regeneration using Titanium Mesh Prepared by Selective Laser Melting Technique. Journal of Hard Tissue Biology, 2017, 26, 257-260.	0.4	7
9	In vivo experimental study of anterior cervical fusion using bioactive polyetheretherketone in a canine model. PLoS ONE, 2017, 12, e0184495.	2.5	28
10	Bioactive treatment promotes osteoblast differentiation on titanium materials fabricated by selective laser melting technology. Dental Materials Journal, 2016, 35, 118-125.	1.8	38
11	Fabrication of dense Î±-alumina layer on Ti-6Al-4V alloy hybrid for bearing surfaces of artificial hip joint. Materials Science and Engineering C, 2016, 69, 1229-1239.	7.3	25
12	Bioactivity of solâ€“gel-derived TiO2 coating on polyetheretherketone: In vitro and in vivo studies. Acta Biomaterialia, 2016, 35, 305-317.	8.3	68
13	Effect of pore size on bone ingrowth into porous titanium implants fabricated by additive manufacturing: An in vivo experiment. Materials Science and Engineering C, 2016, 59, 690-701.	7.3	629
14	Additive-manufactured patient-specific titanium templates for thoracic pedicle screw placement: novel design with reduced contact area. European Spine Journal, 2016, 25, 1698-1705.	2.2	57
15	In vivo study of the early bone-bonding ability of Ti meshes formed with calcium titanate via chemical treatments. Journal of Materials Science: Materials in Medicine, 2015, 26, 271.	3.6	14
16	Custom-made titanium devices as membranes for bone augmentation in implant treatment: Modeling accuracy of titanium products constructed with selective laser melting. Journal of Cranio-Maxillo-Facial Surgery, 2015, 43, 1289-1295.	1.7	52
17	Novel artificial hip joint: A layer of alumina on Tiâ€“6Alâ€“4V alloy formed by micro-arc oxidation. Materials Science and Engineering C, 2015, 55, 393-400.	7.3	41
18	Osteoinduction on Acid and Heat Treated Porous Ti Metal Samples in Canine Muscle. PLoS ONE, 2014, 9, e88366.	2.5	42

#	Article	IF	Citations
19	Evaluation of bioactivity of alkali- and heat-treated titanium using fluorescent mouse osteoblasts. Journal of Bone and Mineral Metabolism, 2014, 32, 660-670.	2.7	15
20	Controlled release of strontium ions from a bioactive Ti metal with a Ca-enriched surface layer. Acta Biomaterialia, 2014, 10, 2282-2289.	8.3	63
21	Osteoconduction of porous Ti metal enhanced by acid and heat treatments. Journal of Materials Science: Materials in Medicine, 2013, 24, 1707-1715.	3.6	24
22	Apatite-forming ability of titanium in terms of pH of the exposed solution. Journal of the Royal Society Interface, 2012, 9, 2145-2155.	3.4	79
23	Bone-bonding properties of Ti metal subjected to acid and heat treatments. Journal of Materials Science: Materials in Medicine, 2012, 23, 2981-2992.	3.6	34
24	A novel synthetic material for spinal fusion: a prospective clinical trial of porous bioactive titanium metal for lumbar interbody fusion. European Spine Journal, 2011, 20, 1486-1495.	2.2	88
25	Preparation of bioactive Tiâ€15Zrâ€4Nbâ€4Ta alloy from HCl and heat treatments after an NaOH treatment. Journal of Biomedical Materials Research - Part A, 2011, 97A, 135-144.	4.0	35
26	Apatite formation on surface titanate layer with different Na content on Ti metal. Journal of the Ceramic Society of Japan, 2010, 118, 19-24.	1.1	39
27	Positively charged bioactive Ti metal prepared by simple chemical and heat treatments. Journal of the Royal Society Interface, 2010, 7, S503-13.	3.4	106
28	Cross-sectional analysis of the surface ceramic layer developed on Ti metal by NaOH-heat treatment and soaking in SBF. Journal of the Ceramic Society of Japan, 2009, 117, 1126-1130.	1.1	61
29	Osteoinductive porous titanium implants: Effect of sodium removal by dilute HCl treatment. Biomaterials, 2006, 27, 2682-2691.	11.4	193