Akiko Yamamoto

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Effect of inorganic salts, amino acids and proteins on the degradation of pure magnesium in vitro. Materials Science and Engineering C, 2009, 29, 1559-1568.	3.8	314
2	Characteristics and cytocompatibility of biodegradable polymer film on magnesium by spin coating. Colloids and Surfaces B: Biointerfaces, 2012, 93, 67-74.	2.5	203
3	High corrosion resistance of magnesium coated with hydroxyapatite directly synthesized in an aqueous solution. Electrochimica Acta, 2009, 54, 7085-7093.	2.6	176
4	Cytotoxicity evaluation of ceramic particles of different sizes and shapes. Journal of Biomedical Materials Research Part B, 2004, 68A, 244-256.	3.0	163
5	Novel Ti-base superelastic alloys with large recovery strain and excellent biocompatibility. Acta Biomaterialia, 2015, 17, 56-67.	4.1	123
6	Metal ion release from titanium with active oxygen species generated by rat macrophagesin vitro. , 2000, 49, 238-243.		113
7	XPS Characterization of the Surface Oxide Film of 316L Stainless Steel Samples that were Located in Quasi-Biological Environments. Materials Transactions, 2002, 43, 3088-3092.	0.4	108
8	The enhanced characteristics of osteoblast adhesion to photofunctionalized nanoscale TiO2 layers on biomaterials surfaces. Biomaterials, 2010, 31, 3827-3839.	5.7	102
9	A new technique for direct measurement of the shear force necessary to detach a cell from a material. Biomaterials, 1998, 19, 871-879.	5.7	96
10	Precipitation control of calcium phosphate on pure magnesium by anodization. Corrosion Science, 2008, 50, 2906-2913.	3.0	95
11	Quantitative evaluation of cell attachment to glass, polystyrene, and fibronectin- or collagen-coated polystyrene by measurement of cell adhesive shear force and cell detachment energy. , 2000, 50, 114-124.		87
12	Cytocompatibility evaluation of Ni-free stainless steel manufactured by nitrogen adsorption treatment. Materials Science and Engineering C, 2004, 24, 737-743.	3.8	77
13	Influence of pH and flow on the polarisation behaviour of pure magnesium in borate buffer solutions. Corrosion Science, 2008, 50, 3561-3568.	3.0	69
14	Mechanical properties and microstructures of new Tiâ€"Feâ€"Ta and Tiâ€"Feâ€"Taâ€"Zr system alloys. Materials Science and Engineering C, 2005, 25, 312-320.	3.8	66
15	In vitro degradation of biodegradable polymer-coated magnesium under cell culture condition. Applied Surface Science, 2012, 258, 6353-6358.	3.1	65
16	Selective cell affinity of biomimetic micro-nano-hybrid structured TiO2 overcomes the biological dilemma of osteoblasts. Dental Materials, 2010, 26, 275-287.	1.6	54
17	Mutagenicity evaluation of forty-one metal salts by theumu test. Journal of Biomedical Materials Research Part B, 2002, 59, 176-183.	3.0	46
18	The Influence of Selective Laser Melting (SLM) Process Parameters on In-Vitro Cell Response. International Journal of Molecular Sciences, 2018, 19, 1619.	1.8	45

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19	Control of degradation rate of bioabsorbable magnesium by anodization and steam treatment. Materials Science and Engineering C, 2010, 30, 1085-1093.	3.8	39
20	Influence of biodegradable polymer coatings on corrosion, cytocompatibility and cell functionality of Mg-2.0Zn-0.98Mn magnesium alloy. Colloids and Surfaces B: Biointerfaces, 2016, 144, 284-292.	2.5	39
21	In vitro degradation of ZM21 magnesium alloy in simulated body fluids. Materials Science and Engineering C, 2016, 65, 59-69.	3.8	39
22	Generic tendency of metal salt cytotoxicity for six cell lines. , 1999, 47, 396-403.		35
23	A micro-fluidic study of whole blood behaviour on PMMA topographical nanostructures. Journal of Nanobiotechnology, 2008, 6, 3.	4.2	35
24	Cytocompatibility and mechanical properties of novel porous 316L stainless steel. Materials Science and Engineering C, 2013, 33, 2736-2743.	3.8	35
25	Fretting Fatigue Properties of Ti-6Al-4V Alloy in Pseudo-Body Fluid and Evaluation of Biocompatibility by Cell Culture Method. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1995, 59, 463-470.	0.2	32
26	Mechanical and biocorrosive properties of magnesium-aluminum alloy scaffold for biomedical applications. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 98, 213-224.	1.5	30
27	Friction-Wear Properties of Nickel-Free Co–Cr–Mo Alloy in a Simulated Body Fluid. Materials Transactions, 2005, 46, 1588-1592.	0.4	26
28	Osteoblast adhesion to functionally graded hydroxyapatite coatings doped with silver. Journal of Biomedical Materials Research - Part A, 2011, 97A, 490-497.	2.1	26
29	<i>In vivo</i> corrosion behaviour of magnesium alloy in association with surrounding tissue response in rats. Biomedical Materials (Bristol), 2016, 11, 025001.	1.7	26
30	Collagen immobilization on 316L stainless steel surface with cathodic deposition of calcium phosphate. Applied Surface Science, 2011, 257, 5037-5045.	3.1	24
31	Biological behavior of titanium processed by severe plastic deformation. Applied Surface Science, 2019, 472, 54-63.	3.1	23
32	Polarization Behavior of Pure Magnesium under a Controlled Flow in a NaCl Solution. Materials Transactions, 2008, 49, 1456-1461.	0.4	21
33	Fatigue Behaviors and Microstructures in an Extruded Mg-Al-Zn Alloy. Materials Transactions, 2008, 49, 681-684.	0.4	21
34	ãƒžã,°ãƒã,·ã,¦ãƒå•é‡'ã®åŒ»ç™‚å¿œç"¨. Keikinzoku/Journal of Japan Institute of Light Metals, 2008, 58, 570-576.	0.1	21
35	Effects of Biological Factors on the Repassivation Current of Titanium. Materials Transactions, 2004, 45, 1635-1639.	0.4	18
36	A titanium surface with nano-ordered spikes and pores enhances human dermal fibroblastic extracellular matrix production and integration of collagen fibers. Biomedical Materials (Bristol), 2016, 11, 015010.	1.7	18

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37	Surface characterization of TiNi deformed by high-pressure torsion. Applied Surface Science, 2014, 289, 338-344.	3.1	17
38	<i>In vitro</i> and <i>in vivo</i> analysis of the biodegradable behavior of a magnesium alloy for biomedical applications. Dental Materials Journal, 2019, 38, 11-21.	0.8	16
39	Cytocompatibility evaluation and surface characterization of TiNi deformed by high-pressure torsion. Materials Science and Engineering C, 2014, 43, 411-417.	3.8	15
40	Fabrication and Mechanical Properties of Composite Structure by Warm Spraying of Zr-Base Metallic Glass. Materials Transactions, 2008, 49, 317-323.	0.4	14
41	Tribological properties of biocompatible Tiâ€"10W and Tiâ€"7.5TiCâ€"7.5W. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 30, 214-222.	1.5	13
42	Cytocompatibility Evaluation of Ti-Ni and Ti-Mo-Al System Shape Memory Alloys. Materials Transactions, 2007, 48, 361-366.	0.4	12
43	Surface characterization and cytocompatibility evaluation of silanized magnesium alloy AZ91 for biomedical applications. Science and Technology of Advanced Materials, 2012, 13, 064214.	2.8	12
44	Influence of SaOS-2 cells on corrosion behavior of cast Mg-2.0Zn0.98Mn magnesium alloy. Colloids and Surfaces B: Biointerfaces, 2017, 150, 288-296.	2.5	12
45	Cell Proliferation, Corrosion Resistance and Mechanical Properties of Novel Titanium Foam with Sheet Shape. Materials Transactions, 2012, 53, 724-732.	0.4	11
46	Acoustic emission analysis of the compressive deformation of iron foams and their biocompatibility study. Materials Science and Engineering C, 2019, 97, 367-376.	3.8	10
47	Poly(l-lactic acid)/vaterite composite coatings on metallic magnesium. Journal of Materials Science: Materials in Medicine, 2014, 25, 2639-2647.	1.7	7
48	Effect of high-pressure torsion deformation on surface properties and biocompatibility of Ti-50.9â€‰mol. %Ni alloys. Biointerphases, 2014, 9, 029007.	0.6	7
49	Short term evaluation of material blood compatibility using a microchannel array. Journal of Materials Science: Materials in Medicine, 2007, 18, 1175-1184.	1.7	6
50	Corrosion behavior, in vitro and in vivo biocompatibility of a newly developed Tiâ€"16Nbâ€"3Moâ€"1Sn superelastic alloy. Materials Science and Engineering C, 2019, 104, 109906.	3.8	6
51	Cytocompatibility of Siloxane-Containing Vaterite/Poly(l-lactic acid) Composite Coatings on Metallic Magnesium. Materials, 2013, 6, 5857-5869.	1.3	5
52	Initial organ distribution and biological safety of Mg ²⁺ released from a Mg alloy implant. Biomedical Materials (Bristol), 2018, 13, 035006.	1.7	5
53	Cytocompatibility evaluation of nano-sintered Ti-15Zr-4Nb-2Ta-0.2Pd alloy produced by spark plasma sintering technique. IOP Conference Series: Materials Science and Engineering, 2018, 430, 012036.	0.3	5
54	Effect of ECAP Die Angle on Mechanical Properties and Biocompatibility of SS316L. Metals, 2021, 11, 1513.	1.0	5

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55	Morphological Change of Fibroblast Cells on Titanium and Platinum Cultured at Anodic and Cathodic Potentials. Zairyo To Kankyo/ Corrosion Engineering, 2008, 57, 400-408.	0.0	5
56	Blood interaction with nano-topography. , 2006, , .		4
57	Medical application of magnesium and its alloys as degradable biomaterials. , 2010, , 318-320.		4
58	The Effect of Metal Materials on Heat Shock Protein 70Bâ€™ Gene Expression. Open Biotechnology Journal, 2007, 1, 14-17.	0.6	4
59	Development of a Model System for Gas Cavity Formation Behavior of Magnesium Alloy Implantation. ACS Biomaterials Science and Engineering, 2022, 8, 2437-2444.	2.6	4
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61	Synthesis and Characterization of a Tiâ€“Zrâ€Based Alloy with Ultralow Young's Modulus and Excellent Biocompatibility. Advanced Engineering Materials, 2022, 24, .	1.6	3
62	Optically Patternable Polymer Films as Model Interfaces to Study Cellular Behaviour on Topographically Structured Materials. Journal of Biomaterials Science, Polymer Edition, 2011, 22, 577-588.	1.9	1
63	Osteogenic response under the periosteum by magnesium implantation in rat tibia. Dental Materials Journal, 2021, 40, 498-507.	0.8	1
64	Stents: Functions, Characteristics, and Materials. Springer Series in Biomaterials Science and Engineering, 2015, , 233-250.	0.7	1
65	Evaluation of Biodegradability of Bioabsorbable Metallic Materials Based on the Understanding of Material-tissue Interaction. Materia Japan, 2020, 59, 600-605.	0.1	1
66	New Method for Evaluating Material Blood Compatibility Using Microchannel Array. Key Engineering Materials, 2005, 288-289, 495-498.	0.4	0
67	A Micro-Fluidic Technique for the Evaluation of the Blood Compatibility of Nanostructured Polymer Surfaces. , 2006, , .		0
68	Effect of Formation of Adhesion Plaque and Cytoskeleton on Cell Adhesive Shear Force and Cell Detachment Energy to Glass Surface. The Proceedings of the JSME Annual Meeting, 2003, 2003.5, 1-2.	0.0	0
69	238 Effect of Direction of Stress Fiber on Cell Adhesive Shear Force and Cell Detachment Energy. Proceedings of the JSME Bioengineering Conference and Seminar, 2005, 2004.17, 291-292.	0.0	0
70	Cytocompatibility of Mg Alloys and the Effect of Cells on their Degradation in Biological Environment. , 2014, , 381-385.		0
71	Improvement of Cytocompatibility of Magnesium Alloy ZM21 by Surface Modification. , 2014, , 375-380.		0
72	J0320301 Titanium Foam Coating for Orthopedic Implants. The Proceedings of Mechanical Engineering Congress Japan, 2014, 2014, _J0320301--_J0320301-.	0.0	0

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73	Transition and Provisional Trends in Implant Materials and Their Biocompatibility. Materia Japan, 2017, 56, 225-228.	0.1	0
74	Quantitative Evaluation of Nucleic Acid Degradability of Copper Alloy Surfaces and Its Correlation to Antibacterial Activity. Antibiotics, 2021, 10, 1439.	1.5	0