Akiko Nagai

List of Publications by Year
in descending order

93	1,318	361413	414414
papers	citations	20 h-index	32 g-index

96	96	96	1490
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Local Injection of Hydroxyapatite Electret Ameliorated Infarct Size After Myocardial Infarction. Circulation Reports, 2022, 4, 38-47.	1.0	0
2	Electrical polarization and ionic conduction properties of Î²-tricalcium phosphate bioceramics with controlled vacancies by sodium ion substitution. Ceramics International, 2022, , .	4.8	0
3	Solâ€“gel synthesis and electrical properties of sodium ion conducting solid electrolyte with Na5YSi4O12-type structure. Open Ceramics, 2021, 8, 100175.	2.0	3
4	Corrosion Behavior and Bacterial Viability on Different Surface States of Copper. Zairyo To Kankyo/ Corrosion Engineering, 2021, 70, 265-270.	0.2	0
5	An oriented hydroxyapatite film with arrayed plateâ€like particles enhance chondrogenic differentiation of ATDC5 cells. Journal of Biomedical Materials Research - Part A, 2020, 108, 537-544.	4.0	1
6	Cardiomyocyte uptake mechanism of a hydroxyapatite nanoparticle mediated gene delivery system. Beilstein Journal of Nanotechnology, 2020, 11, 1685-1692.	2.8	1
7	Time-Transient Effects of Silver and Copper in the Porous Titanium Dioxide Layer on Antibacterial Properties. Journal of Functional Biomaterials, 2020, 11, 44.	4.4	18
8	Investigation of antibacterial effect of copper introduced titanium surface by electrochemical treatment against facultative anaerobic bacteria. Dental Materials Journal, 2020, 39, 639-647.	1.8	17
9	Corrosion Behavior and Bacterial Viability on Different Surface States of Copper. Materials Transactions, 2020, 61, 1143-1148.	1.2	8
10	Surface Modification with Micro-arc Oxidation. , 2019, , 523-534.		1
11	Chemical and Biological Roles of Zinc in a Porous Titanium Dioxide Layer Formed by Micro-Arc Oxidation. Coatings, 2019, 9, 705.	2.6	21
12	Plate-like hydroxyapatite synthesized from dodecanedioic acid enhances chondrogenic cell proliferation. Bio-Medical Materials and Engineering, 2019, 30, 375-386.	0.6	1
13	Investigation of Realizing Both Antibacterial Property and Osteogenic Cell Compatibility on Titanium Surface by Simple Electrochemical Treatment. ACS Biomaterials Science and Engineering, 2019, 5, 5623-5630.	5.2	38
14	The Effects of Various Metallic Surfaces on Cellular and Bacterial Adhesion. Metals, 2019, 9, 1145.	2.3	22
15	The effect of glucose modification of hydroxyapatite nanoparticles on gene delivery. Journal of Biomedical Materials Research - Part A, 2019, 107, 61-66.	4.0	12
16	Controlled Crystallization of Calcium Carbonate via Cooperation of Polyaspartic Acid and Polylysine Under Double-Diffusion Conditions in Agar Hydrogels. ACS Omega, 2018, 3, 16681-16692.	3.5	13
17	Size Control Synthesis of Hydroxyapatite Plates and Their Application in the Preparation of Highly Oriented Films. Crystal Growth and Design, 2018, 18, 5038-5044.	3.0	17
18	Crystallization of Calcium Phosphate in Agar Hydrogels in the Presence of Polyacrylic Acid under Double Diffusion Conditions. Crystal Growth and Design, 2017, 17, 604-611.	3.0	18

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19	Morphological and functional changes in RAW 264 macrophageâ€like cells in response to a hydrated layer of carbonateâ€substituted hydroxyapatite. Journal of Biomedical Materials Research - Part A, 2017, 105, 1063-1070.	4.0	16
20	Ag nanoparticleâ€“coated zirconia for antibacterial prosthesis. Materials Science and Engineering C, 2017, 78, 1054-1060.	7.3	37
21	Effects of controlled microâ€/nanosurfaces on osteoblast proliferation. Journal of Biomedical Materials Research - Part A, 2017, 105, 2589-2596.	4.0	17
22	Synthesis and enhanced bone regeneration of carbonate substituted octacalcium phosphate. Bio-Medical Materials and Engineering, 2017, 28, 9-21.	0.6	10
23	Deposition of boron doped DLC films on TiNb and characterization of their mechanical properties and blood compatibility. Science and Technology of Advanced Materials, 2017, 18, 76-87.	6.1	19
24	A critical phenomenon of phase transition in hydroxyapatite investigated by thermally stimulated depolarization currents. Journal of the American Ceramic Society, 2017, 100, 501-505.	3.8	5
25	Regulation of periodontal ligament-derived cells by type III collagen-coated hydroxyapatite. Bio-Medical Materials and Engineering, 2017, 29, 15-27.	0.6	2
26	Phospholipid polymer electrodeposited on titanium inhibits platelet adhesion. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 554-560.	3.4	8
27	Differences in the calcification of preosteoblast cultured on sputterâ€deposited titanium, zirconium, and gold. Journal of Biomedical Materials Research - Part A, 2016, 104, 639-651.	4.0	13
28	Comparison of nerve regenerative efficacy between decellularized nerve graft and nonwoven chitosan conduit. Bio-Medical Materials and Engineering, 2016, 27, 75-85.	0.6	7
29	Electrostatic induction power generator using hydroxyapatite ceramic electrets. Materials Research Bulletin, 2016, 74, 50-56.	5.2	24
30	Controlled calcite nucleation on polarized calcite single crystal substrates in the presence of polyacrylic acid. Journal of Crystal Growth, 2015, 415, 7-14.	1.5	4
31	Hierarchical periodic micro/nano-structures on nitinol and their influence on oriented endothelialization and anti-thrombosis. Materials Science and Engineering C, 2015, 57, 1-6.	7.3	37
32	Concentration-dependent effects of fibronectin adsorbed on hydroxyapatite surfaces on osteoblast adhesion. Materials Science and Engineering C, 2015, 48, 378-383.	7.3	23
33	G0400303 Blood compatibility of a-BC:H films prepared by pulsed plasma CVD. The Proceedings of Mechanical Engineering Congress Japan, 2015, 2015, _G0400303-_G0400303-.	0.0	0
34	No changes in cerebral microcirculatory parameters in rat during local cortex exposure to microwaves. In Vivo, 2015, 29, 207-15.	1.3	4
35	No Dynamic Changes in Blood-brain Barrier Permeability Occur in Developing Rats During Local Cortex Exposure to Microwaves. In Vivo, 2015, 29, 351-7.	1.3	7
36	No Dynamic Changes in Inflammation-related Microcirculatory Parameters in Developing Rats During Local Cortex Exposure to Microwaves. In Vivo, 2015, 29, 561-7.	1.3	1

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37	Femtosecond laser induced periodic nanostructures and microstructures on ti plate for control of cell spreading. , 2014, , .		0
38	Effect of periodic nanostructures formed with femtosecond laser on cell spreading. , 2014, , .		0
39	Enhanced osteoconductivity of titanium implant by polarizationâ€induced surface charges. Journal of Biomedical Materials Research - Part A, 2014, 102, 3077-3086.	4.0	9
40	Anodic oxidation of a Coâ€“Niâ€“Crâ€“Mo alloy and its inhibitory effect on platelet activation. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 659-666.	3.4	6
41	Thermally stimulated depolarization current measurements in cubic and tetragonal yttria-stabilized zirconia. Solid State Ionics, 2014, 262, 500-503.	2.7	10
42	Mouse embryonic stem cells cultured under serum- and feeder-free conditions maintain their self-renewal capacity on hydroxyapatite. Materials Science and Engineering C, 2014, 34, 214-220.	7.3	6
43	Cell spreading on titanium dioxide film formed and modified with aerosol beam and femtosecond laser. Applied Surface Science, 2014, 288, 649-653.	6.1	41
44	Cooperative effects of polarization and polyaspartic acid on formation of calcium carbonate films with a multiple phase structure on oriented calcite substrates. Journal of Crystal Growth, 2014, 402, 179-186.	1.5	6
45	Fundamental electrical properties of ceramic electrets. Materials Research Bulletin, 2013, 48, 3854-3859.	5.2	15
46	Effect of Poly(acrylic acid) and Polarization on the Controlled Crystallization of Calcium Carbonate on Single-Phase Calcite Substrates. Crystal Growth and Design, 2013, 13, 2928-2937.	3.0	20
47	Thermally Stimulated Depolarization Current in 3 Mol% Yttria-Doped Zirconia. Key Engineering Materials, 2013, 582, 135-138.	0.4	2
48	Electric poling of cement composites of hydroxyapatite whiskers with chitosan and their chemical properties in simulated body fluid. Journal of the Ceramic Society of Japan, 2013, 121, 895-900.	1.1	0
49	Dielectric evaluation of fluorine substituted hydroxyapatite. Journal of the Ceramic Society of Japan, 2013, 121, 770-774.	1.1	9
50	Expression of heme oxygenase in the eutopic and ectopic endometrium in patients with adenomyosis. Gynecological Endocrinology, 2012, 28, 892-896.	1.7	5
51	Electrical conduction and polarization of calcite single crystals. Physics and Chemistry of Minerals, 2012, 39, 761-768.	0.8	8
52	Acceleration of new bone formation by an electrically polarized hydroxyapatite microgranule/platelet-rich plasma composite. Acta Biomaterialia, 2012, 8, 2778-2787.	8.3	22
53	Characterization of air-formed surface oxide film on a Coâ€“Niâ€“Crâ€“Mo alloy (MP35N) and its change in Hanksâ€™ solution. Applied Surface Science, 2012, 258, 5490-5498.	6.1	32
54	Surface properties of Al2O3-YSZ ceramic composites modified by a combination of biomimetic coatings and electric polarization. Applied Surface Science, 2012, 262, 45-50.	6.1	3

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55	SURFACE PROPERTIES OF CERAMIC HYDROXYAPATITE ELECTRETS. Phosphorus Research Bulletin, 2012, 26, 6-7.	0.6	0
56	Electrically polarized micro-arc oxidized TiO2 coatings with enhanced surface hydrophilicity. Acta Biomaterialia, 2012, 8, 860-865.	8.3	53
57	Response of osteoblast-like MG63 cells to TiO2 layer prepared by micro-arc oxidation and electric polarization. Journal of the European Ceramic Society, 2012, 32, 2647-2652.	5.7	23
58	Endothelial cell migration and morphogenesis on silk fibroin scaffolds containing hydroxyapatite electret. Journal of Biomedical Materials Research - Part A, 2012, 100A, 969-977.	4.0	9
59	POLARIZED YTTRIA-STABILIZED ZIRCONIA IMPROVES DURABILITY FOR DEGRADATION AND APATITE FORMATION IN SIMULATED BODY FLUID. Phosphorus Research Bulletin, 2012, 26, 77-80.	0.6	2
60	SINTERING AND OSTEOCLAST BEHAVIOR OF CARBONATE APATITE CERAMICS. Phosphorus Research Bulletin, 2012, 27, 45-49.	0.6	0
61	OCTACALCIUM PHOSPHATE-MEDIATED CEMENT AS A ROOT CANAL FILLING MATERIAL FOR PRIMARY TEETH. Phosphorus Research Bulletin, 2012, 26, 33-38.	0.6	0
62	Improving bioactivity and durability of yttria-stabilized zirconia. Journal of Materials Science, 2011, 46, 7335-7343.	3.7	10
63	Electric polarization and mechanism of Bâ€¢type carbonated apatite ceramics. Journal of Biomedical Materials Research - Part A, 2011, 99A, 116-124.	4.0	20
64	The Storing Properties of Electric Energy in Bone. Key Engineering Materials, 2011, 493-494, 170-174.	0.4	0
65	IMPROVED WETTABILITY INCREASES OSTEOBLASTIC ADHESION ON HYDROXYAPATITE. Phosphorus Research Bulletin, 2011, 25, 28-32.	0.6	2
66	Polarized hydroxyapatite promotes spread and motility of osteoblastic cells. Journal of Biomedical Materials Research - Part A, 2010, 92A, 783-790.	4.0	38
67	Biocompatibility and water durability of alumina-zirconia ceramics blended with microsized HA particles. Journal of the Ceramic Society of Japan, 2010, 118, 498-501.	1.1	0
68	Enhanced osteoblastic adhesion through improved wettability on polarized hydroxyapatite. Journal of the Ceramic Society of Japan, 2010, 118, 474-478.	1.1	25
69	Enhancement of nerve regeneration along a chitosan nanofiber mesh tube on which electrically polarized Î²-tricalcium phosphate particles are immobilized. Acta Biomaterialia, 2010, 6, 4027-4033.	8.3	27
70	Electrical Polarization of Î²â€Tricalcium Phosphate Ceramics. Journal of the American Ceramic Society, 2010, 93, 2175-2177.	3.8	35
71	Fast Oxide Ion Conduction Due to Carbonate Substitution in Hydroxyapatite. Journal of the American Ceramic Society, 2010, 93, 3577-3579.	3.8	18
72	Polarization and microstructural effects of ceramic hydroxyapatite electrets. Journal of Applied Physics, 2010, 107, .	2.5	46

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73	Polarization of hybridized calcium phosphoaluminosilicates with 45S5-type bioglasses. Biomedical Materials (Bristol), 2010, 5, 025001.	3.3	12
74	Efficacy of polarized hydroxyapatite and silk fibroin composite dressing gel on epidermal recovery from fullâ€thickness skin wounds. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 90B, 641-646.	3.4	101
75	Surface Electric Fields Increase Osteoblast Adhesion through Improved Wettability on Hydroxyapatite Electret. ACS Applied Materials & Interfaces, 2009, 1, 2181-2189.	8.0	71
76	Rate of Bonelike Apatite Formation Accelerated on Polarized Porous Hydroxyapatite. Journal of the American Ceramic Society, 2008, 91, 3943-3949.	3.8	36
77	Hydroxyapatite electret accelerates reendothelialization and attenuates intimal hyperplasia occurring after endothelial removal of the rabbit carotid artery. Life Sciences, 2008, 82, 1162-1168.	4.3	25
78	Involvement of altered arginase activity, arginase I expression and NO production in accelerated intimal hyperplasia following cigarette smoke extract. Life Sciences, 2008, 83, 453-459.	4.3	4
79	Conduction properties of non-stoichiometric hydroxyapatite whiskers for biomedical use. Journal of the Ceramic Society of Japan, 2008, 116, 815-821.	1.1	18
80	Electrovector effect on bone-like apatite crystal growth on Inside pores of polarized porous hydroxyapatite ceramics in simulated body fluid. Journal of the Ceramic Society of Japan, 2008, 116, 23-27.	1.1	9
81	Regulation of Osteoblast-Like Cell Behaviors on Hydroxyapatite by Electrical Polarization. Key Engineering Materials, 2007, 361-363, 1055-1058.	0.4	7
82	Modulation of Osteoblast-Like Cell Behavior Cultured on Hydroxyapatite by Thrombin. Journal of the Ceramic Society of Japan, 2007, 115, 205-209.	1.3	1
83	Possible involvement of enhanced arginase activity due to up-regulated arginases and decreased hydroxyarginine in accelerating intimal hyperplasia with hyperglycemia. Vascular Pharmacology, 2007, 47, 272-280.	2.1	12
84	Exposure of neonatal rats to diethylstilbestrol affects the expression of genes involved in ovarian differentiation. Journal of Medical and Dental Sciences, 2003, 50, 35-40.	0.4	16
85	Increased Expression of Mullerian-Inhibiting Substance Correlates with Inhibition of Follicular Growth in the Developing Ovary of Rats Treated with E2 Benzoate. Endocrinology, 2002, 143, 304-312.	2.8	20
86	Neonatal estrogen exposure inhibits steroidogenesis in the developing rat ovary. Developmental Dynamics, 2001, 221, 443-453.	1.8	48
87	Comparison of Hydroxyapatite with Carbonate Apatite in Osteoclastic Cell Resorptive Activity. Key Engineering Materials, 0, 361-363, 1039-1042.	0.4	2
88	Electrical Polarization Depresses Low Temperature Degradation and Promotes Bioactivity of Chemically Treated Yttria-Stabilized Zirconia. Key Engineering Materials, 0, 493-494, 11-15.	0.4	0
89	Enhanced Effects of New Bone Formation by an Electrically Polarized Hydroxyapatite Microgranule/Platelet-Rich Plasma Composite Gel. Key Engineering Materials, 0, 529-530, 82-87.	0.4	2
90	Effect of Polarization Treatment Time on Inhibition of Low Temperature Degradation in Y-Doped ZrO₂. Key Engineering Materials, 0, 529-530, 601-604.	0.4	0

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91	Surface Electric Fields of Apatite Electret Promote Osteoblastic Responses. Key Engineering Materials, 0, 529-530, 357-360.	0.4	4
92	Drug Adsorption Property of Surfaces of Polarized Calcium Phosphate Powders. Key Engineering Materials, 0, 566, 302-305.	0.4	0
93	Biocompatibility of Titanium Dioxide Film Modified by Femtosecond Laser Irradiation. Materials Science Forum, 0, 783-786, 1377-1382.	0.3	2