Toshiyuki Ikoma

List of Publications by Year
in descending order

129	5,128	125106	111975
papers	citations	35 h-index	67 g-index

131	131	131	7485
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Local administration and enhanced release of bone metabolic antibodies from hydroxyapatite/chondroitin sulfate nanocomposite microparticles using zinc cations. Journal of Materials Chemistry B, 2021, 9, 757-766.	2.9	2
2	Recent advances in bioprinting technologies for engineering different cartilage-based tissues. Materials Science and Engineering C, 2021, 123, 112005.	3.8	29
3	Interfacial Modeling of Fibrinogen Adsorption onto LiNbO3 Single Crystalâ€“Single Domain Surfaces. International Journal of Molecular Sciences, 2021, 22, 5946.	1.8	1
4	Magnetic Field Alignment, a Perspective in the Engineering of Collagen-Silica Composite Biomaterials. Biomolecules, 2021, 11, 749.	1.8	6
5	Fabrication of mechanically robust bilayer membranes of hydroxyapatite/collagen composites. Materials Letters, 2021, 291, 129514.	1.3	4
6	Apatite Coating of Iron Oxide Nanoparticles by Alternate Addition of Calcium and Phosphate Solutions: A Calcium and Carboxylate (Ca-COO) Complex-Mediated Apatite Deposition. Journal of Inorganic and Organometallic Polymers and Materials, 2020, 30, 1132-1140.	1.9	3
7	Fabrication of continuous apatite-graded collagen sponges via electrolysis method. Journal of Materials Chemistry B, 2019, 7, 4040-4048.	2.9	3
8	Interfacial interaction of anesthetic lidocaine and mesoporous silica nanoparticles in aqueous solutions and its release properties. Journal of Materials Chemistry B, 2019, 7, 7026-7032.	2.9	10
9	Physical cues of biomaterials guide stem cell fate of differentiation: The effect of elasticity of cell culture biomaterials. Open Physics, 2018, 16, 943-955.	0.8	13
10	Preparation of Î±-alumina powder and binder For 3D printer. MRS Advances, 2018, 3, 969-975.	0.5	5
11	Collagen Scaffolds in Cartilage Tissue Engineering and Relevant Approaches for Future Development. Tissue Engineering and Regenerative Medicine, 2018, 15, 673-697.	1.6	149
12	In vivo osteoconductivity of surface modified Ti-29Nb-13Ta-4.6Zr alloy with low dissolution of toxic trace elements. PLoS ONE, 2018, 13, e0189967.	1.1	6
13	Collagen and Hydroxyapatite Composite Membranes as Drug-Carrying Support for Biomedical Applications. MRS Advances, 2017, 2, 1083-1088.	0.5	4
14	Hierarchical viscosity of aqueous solution of tilapia scale collagen investigated via dielectric spectroscopy between 500â€‰MHz and 2.5â€‰THz. Scientific Reports, 2017, 7, 45398.	1.6	6
15	Fabrication of hydroxyapatite microparticles including silver nano-dots at grain boundary for long-term antimicrobial property. MRS Advances, 2017, 2, 1285-1290.	0.5	1
16	Effects of Particle Sizes and Natural Polymers on Mechanical Properties of Alpha Tricalcium Phosphate Cements. MRS Advances, 2016, 1, 1277-1282.	0.5	1
17	Fabrication of 3D Graphene and 3D Graphene Oxide Devices for Sensing VOCs. MRS Advances, 2016, 1, 1359-1364.	0.5	6
18	Calcium phosphate with high specific surface area synthesized by a reverse micro-emulsion method. MRS Advances, 2016, 1, 723-728.	0.5	2

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19	Hafnium-doped hydroxyapatite nanoparticles with ionizing radiation for lung cancer treatment. Acta Biomaterialia, 2016, 37, 165-173.	4.1	76
20	Threeâ€Ðimensionally Extended Host Electrodes for Biosensor Applications. ChemElectroChem, 2016, 3, 552-557.	1.7	0
21	Chondrogenic differentiation of human mesenchymal stem cells on fish scale collagen. Journal of Bioscience and Bioengineering, 2016, 122, 219-225.	1.1	32
22	Synthesis and osteo-compatibility of novel reduced graphene oxideâ€“aminosilica hybrid nanosheets. Materials Science and Engineering C, 2016, 61, 251-256.	3.8	11
23	Effect of enzymatically cross-linked tilapia scale collagen for osteoblastic differentiation of human mesenchymal stem cells. Journal of Bioactive and Compatible Polymers, 2016, 31, 31-41.	0.8	12
24	<Original Article>Drug delivery and transmission of lidocaine using iontophoresis in combination with direct and alternating currents. Journal of Medical and Dental Sciences, 2016, 63, 71-77.	0.4	3
25	Rapid oriented fibril formation of fish scale collagen facilitates early osteoblastic differentiation of human mesenchymal stem cells. Journal of Biomedical Materials Research - Part A, 2015, 103, 2531-2539.	2.1	51
26	Photoluminescence and doping mechanism of theranostic Eu³⁺/Fe³⁺dual-doped hydroxyapatite nanoparticles. Science and Technology of Advanced Materials, 2014, 15, 055005.	2.8	32
27	Porous fluorine-doped tin oxide as a promising substrate for electrochemical biosensorsâ€”demonstration in hydrogen peroxide sensing. Journal of Materials Chemistry B, 2014, 2, 7779-7784.	2.9	23
28	Preparation of a zeolite NaP1/hydroxyapatite nanocomposite and study of its behavior as inorganic fertilizer. Journal of Chemical Technology and Biotechnology, 2014, 89, 963-968.	1.6	21
29	Effective Composite Preparation between Graphite and Iron Particles by the Interfacial Mediation of Force-Activated Oxygen Atoms. Industrial & Engineering Chemistry Research, 2014, 53, 16736-16753.	1.8	5
30	Synthesis of Luminescent Nanoporous Silica Spheres Functionalized with Folic Acid for Targeting to Cancer Cells. Inorganic Chemistry, 2014, 53, 6817-6827.	1.9	31
31	Application of a Quartz Crystal Microbalance with Dissipation for In Situ Monitoring of Interfacial Phenomena between Bioceramics and Cells. , 2013, , 557-575.		0
32	Efficient Methane Conversion to Hydrogen by the Force-Activated Oxides on Iron Particle Surfaces. Journal of Physical Chemistry C, 2013, 117, 16104-16118.	1.5	18
33	ERK-Dependent Downregulation of Skp2 Reduces Myc Activity with HGF, Leading to Inhibition of Cell Proliferation through a Decrease in Id1 Expression. Molecular Cancer Research, 2013, 11, 1437-1447.	1.5	14
34	Mechanochemical fabrication of ironâ€“graphite composites. Journal of Composite Materials, 2013, 47, 1241-1246.	1.2	7
35	Mechanochemical Fabrication of Carbon Fiber/Nylon-6 Composites with Interfacial Bondings. Industrial & Engineering Chemistry Research, 2013, 52, 2182-2189.	1.8	23
36	Effective Functionalization of Disordered Oxide Lattices on Iron Particle Surfaces Using Mechanochemical Reactions. Journal of Physical Chemistry C, 2013, 117, 9908-9919.	1.5	13

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37	Analytical Investigation of Protein Mediation Between Biomaterials and Cells. Materials Express, 2012, 2, 1-22.	0.2	24
38	Efficient incorporation of monomeric anthracene into nanoporous silica/surfactant nanocomposite spheres using a mechanochemical solid state reaction. Journal of Materials Chemistry, 2012, 22, 18741.	6.7	24
39	Mechanochemical Preparation of 8-Hydroxyquinoline/Hydroxyapatite Hybrid Nanocrystals and Their Photofunctional Interfaces. Industrial & Engineering Chemistry Research, 2012, 51, 11294-11300.	1.8	18
40	Construction and characterization of a tissueâ€engineered oral mucosa equivalent based on a chitosanâ€fish scale collagen composite. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2012, 100B, 1792-1802.	1.6	36
41	Preparation of copperâ€“graphite composite particles by milling process. Journal of Composite Materials, 2012, 46, 2829-2834.	1.2	13
42	Immobilization of folic acid on Eu3+-doped nanoporous silica spheres. Chemical Communications, 2011, 47, 8430.	2.2	20
43	Synthesis of Nano-sized Boehmites for Optimum Phosphate Sorption. Separation Science and Technology, 2011, 46, 818-824.	1.3	16
44	Detection of Interfacial Phenomena with Osteoblast-like Cell Adhesion on Hydroxyapatite and Oxidized Polystyrene by the Quartz Crystal Microbalance with Dissipation. Langmuir, 2011, 27, 7635-7644.	1.6	36
45	Fabrication, microstructure, and BMP-2 delivery of novel biodegradable and biocompatible silicateâ€“collagen hybrid fibril sheets. Journal of Materials Chemistry, 2011, 21, 10942.	6.7	34
46	BMP-2-loaded silica nanotube fibrous meshes for bone generation. Science and Technology of Advanced Materials, 2011, 12, 065003.	2.8	14
47	Interfacial Serum Protein Effect on Biological Apatite Growth. Journal of Physical Chemistry C, 2011, 115, 22523-22533.	1.5	29
48	Effect of Interfacial Proteins on Osteoblast-like Cell Adhesion to Hydroxyapatite Nanocrystals. Langmuir, 2011, 27, 7645-7653.	1.6	43
49	Effects of increased collagen-matrix density on the mechanical properties and in vivo absorbability of hydroxyapatiteâ€“collagen composites as artificial bone materials. Biomedical Materials (Bristol), 2011, 6, 015012.	1.7	23
50	Surface plasmon resonance biosensor with high anti-fouling ability for the detection of cardiac marker troponin T. Analytica Chimica Acta, 2011, 703, 80-86.	2.6	52
51	Efficient synthesis of Eu(III)-containing nanoporous silicas. Materials Letters, 2011, 65, 2287-2290.	1.3	24
52	Synthesis and luminescence properties of Eu(III)-doped nanoporous silica spheres. Journal of Colloid and Interface Science, 2011, 363, 456-464.	5.0	47
53	Transfection efficiency for size-separated cells synchronized in cell cycle by microfluidic device. Biomedical Microdevices, 2011, 13, 725-729.	1.4	7
54	Microstructures and rheological properties of tilapia fish-scale collagen hydrogels with aligned fibrils fabricated under magnetic fields. Acta Biomaterialia, 2011, 7, 644-652.	4.1	79

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55	Nano/Microstructural Effect of Hydroxyapatite Nanocrystals on Hepatocyte Cell Aggregation and Adhesion. Macromolecular Bioscience, 2011, 11, 1586-1593.	2.1	14
56	Minerals and Aligned Collagen Fibrils in Tilapia Fish Scales: Structural Analysis Using Dark-Field and Energy-Filtered Transmission Electron Microscopy and Electron Tomography. Microscopy and Microanalysis, 2011, 17, 788-798.	0.2	34
57	Competitive adsorption of fibronectin and albumin on hydroxyapatite nanocrystals. Science and Technology of Advanced Materials, 2011, 12, 034411.	2.8	17
58	Long-term immobilization of strontium ions using zeolite A/calcium phosphate nanocomposites. Journal of the Ceramic Society of Japan, 2010, 118, 1044-1049.	0.5	4
59	Thermal expansion of type A carbonate apatite. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 173, 171-175.	1.7	13
60	Crystal structure refinement of A-type carbonate apatite by X-ray powder diffraction. Journal of Materials Science, 2010, 45, 2419-2426.	1.7	44
61	Development of collagen condensation method to improve mechanical strength of tissue engineering scaffolds. Materials Characterization, 2010, 61, 907-911.	1.9	17
62	Cartilage regeneration using a porous scaffold, a collagen sponge incorporating a hydroxyapatite/chondroitinsulfate composite. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 173, 204-207.	1.7	12
63	Fetal bovine serum adsorption onto hydroxyapatite sensor monitoring by quartz crystal microbalance with dissipation technique. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 173, 176-181.	1.7	21
64	Structural analysis of rattleâ€type hollow mesoporous silica spheres using electron tomography and energy filtered imaging. Surface and Interface Analysis, 2010, 42, 1548-1551.	0.8	21
65	Rattleâ€Type Fe₃O₄@SiO₂ Hollow Mesoporous Spheres as Carriers for Drug Delivery. Small, 2010, 6, 471-478.	5.2	361
66	Formation of Hydroxyapatite Nanocrystals on the Surface of Caâ€“Alâ€Layered Double Hydroxide. Journal of the American Ceramic Society, 2010, 93, 1195-1200.	1.9	21
67	In vivo Evaluation of a Novel Chitosan/ HAp Composite Biomaterial as a Carrier of rhBMP-2. Journal of Hard Tissue Biology, 2010, 19, 181-186.	0.2	3
68	In vitroformation and thermal transition of novel hybrid fibrils from type I fish scale collagen and type I porcine collagen. Science and Technology of Advanced Materials, 2010, 11, 035001.	2.8	15
69	Reusable hydroxyapatite nanocrystal sensors for protein adsorption. Science and Technology of Advanced Materials, 2010, 11, 045002.	2.8	34
70	Structural analysis of hydroxyapatite coating on magnetite nanoparticles using energy filter imaging and electron tomography. Journal of Electron Microscopy, 2010, 59, 173-179.	0.9	16
71	Cell cycle and size sorting of mammalian cells using a microfluidic device. Analytical Methods, 2010, 2, 657.	1.3	22
72	Elemental distribution analysis of type I collagen fibrils in tilapia fish scale with energy-filtered transmission electron microscope. Micron, 2009, 40, 665-668.	1.1	27

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73	Protein Adsorption on Hydroxyapatite Nanosensors with Different Crystal Sizes Studied In Situ by a Quartz Crystal Microbalance with the Dissipation Method. Journal of the American Ceramic Society, 2009, 92, 1125-1128.	1.9	30
74	Magnetic SBA-15/poly(N-isopropylacrylamide) composite: Preparation, characterization and temperature-responsive drug release property. Microporous and Mesoporous Materials, 2009, 123, 107-112.	2.2	94
75	Novel Long-Term Immobilization Method for Radioactive Iodine-129 Using a Zeolite/Apatite Composite Sintered Body. ACS Applied Materials & Interfaces, 2009, 1, 1579-1584.	4.0	46
76	An Efficient Route to Rattle-Type Fe3O4@SiO2 Hollow Mesoporous Spheres Using Colloidal Carbon Spheres Templates. Chemistry of Materials, 2009, 21, 2547-2553.	3.2	235
77	A Collagen Sponge Incorporating a Hydroxyapatite/Chondroitinsulfate Composite as a Scaffold for Cartilage Tissue Engineering. Journal of Biomaterials Science, Polymer Edition, 2009, 20, 1861-1874.	1.9	20
78	Porous hydroxyapatite and biphasic calcium phosphate ceramics promote ectopic osteoblast differentiation from mesenchymal stem cells. Science and Technology of Advanced Materials, 2009, 10, 025003.	2.8	51
79	In Vivo Biological Responses and Bioresorption of Tilapia Scale Collagen as a Potential Biomaterial. Journal of Biomaterials Science, Polymer Edition, 2009, 20, 1353-1368.	1.9	73
80	Nanocasting Route to Ordered Mesoporous Carbon with FePt Nanoparticles and Its Phenol Adsorption Property. Journal of Physical Chemistry C, 2009, 113, 5998-6002.	1.5	34
81	Amelioration of Anemia in the ICGN Mouse, a Renal Anemia Model, with a Subcutaneous Bolus Injection of Erythropoietin Adsorbed to Hydroxyapatite Matrix. Journal of Veterinary Medical Science, 2009, 71, 1365-1371.	0.3	3
82	Sustained Efficacy of Erythropoietin with a Hydroxyapatite Carrier Administered in Mice. Journal of Veterinary Medical Science, 2009, 71, 729-736.	0.3	4
83	Intraosseous delivery of paclitaxel-loaded hydroxyapatitealginate composite beads delaying paralysis caused by metastatic spine cancer in rats. Journal of Neurosurgery: Spine, 2008, 9, 502-510.	0.9	22
84	Synthesis and Characterization of Metal Ions Containing Hydroxyapatite Microparticles with High Specific Surface Area. Journal of Nanoscience and Nanotechnology, 2007, 7, 839-843.	0.9	11
85	Surface Structural Biomimetics and the Osteoinduction of Calcium Phosphate Biomaterials. Journal of Nanoscience and Nanotechnology, 2007, 7, 808-813.	0.9	43
86	Drug-Supported Microparticles of Calcium Carbonate Nanocrystals and Its Covering with Hydroxyapatite. Journal of Nanoscience and Nanotechnology, 2007, 7, 822-827.	0.9	34
87	Collagen Coating on Hydroxyapatite Surfaces Modified with Organosilane by Chemical Vapor Deposition Method. Journal of Nanoscience and Nanotechnology, 2007, 7, 833-838.	0.9	3
88	Three-dimensional porous hydroxyapatite/collagen composite with rubber-like elasticity. Journal of Biomaterials Science, Polymer Edition, 2007, 18, 393-409.	1.9	34
89	Preparation and Characterization of Hydroxyapatite/Collagen Nanocomposite Gel. Journal of Nanoscience and Nanotechnology, 2007, 7, 818-821.	0.9	10
90	Preparation and characterization of multilayered hydroxyapatite/silk fibroin film. Journal of Bioscience and Bioengineering, 2007, 103, 514-520.	1.1	49

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91	Phenotype and gene expression pattern of osteoblast-like cells cultured on polystyrene and hydroxyapatite with pre-adsorbed type-I collagen. Journal of Biomedical Materials Research - Part A, 2007, 83A, 362-371.	2.1	32
92	Fabrication and mechanical and tissue ingrowth properties of unidirectionally porous hydroxyapatite/collagen composite. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2007, 80B, 166-173.	1.6	67
93	Competitive adsorption of bovine serum albumin and lysozyme on characterized calcium phosphates by polyacrylamide gel electrophoresis method. Journal of Materials Science: Materials in Medicine, 2007, 18, 2243-2249.	1.7	39
94	Effect of collagen fibril formation on bioresorbability of hydroxyapatite/collagen composites. Journal of Materials Science: Materials in Medicine, 2007, 18, 2179-2183.	1.7	27
95	Pre-adsorbed type-I collagen structure-dependent changes in osteoblastic phenotype. Biochemical and Biophysical Research Communications, 2006, 344, 1234-1240.	1.0	25
96	Influence of gamma Irradiation on the Mechanical Strength and In Vitro Biodegradation of Porous Hydroxyapatite/Collagen Composite. Journal of the American Ceramic Society, 2006, 89, 060623005134013-???.	1.9	7
97	Fabrication of hydroxyapatite ultra-thin layer on gold surface and its application for quartz crystal microbalance technique. Biomaterials, 2006, 27, 5748-5754.	5.7	86
98	Type-A zeolites with hydroxyapatite surface layers formed by an ion exchange reaction. Journal of the European Ceramic Society, 2006, 26, 469-474.	2.8	23
99	The densification of zeolite/apatite composites using a pulse electric current sintering method: A long-term assurance material for the disposal of radioactive waste. Journal of the European Ceramic Society, 2006, 26, 481-486.	2.8	28
100	Synthesis and characterization of Linde A zeolite coated with a layered double hydoxide. Journal of the European Ceramic Society, 2006, 26, 463-467.	2.8	18
101	Control of pore structure and mechanical property in hydroxyapatite/collagen composite using unidirectional ice growth. Materials Letters, 2006, 60, 999-1002.	1.3	101
102	A dewetting process to nano-pattern collagen on hydroxyapatite. Materials Letters, 2006, 60, 3647-3650.	1.3	14
103	Injectable porous hydroxyapatite microparticles as a new carrier for protein and lipophilic drugs. Journal of Controlled Release, 2006, 110, 260-265.	4.8	163
104	Deposition of bone-like apatite on modified silk fibroin films from simulated body fluid. Journal of Applied Polymer Science, 2006, 99, 2822-2830.	1.3	37
105	Fabrication of Transparent Hydroxyapatite Sintered Body with High Crystal Orientation by Pulse Electric Current Sintering. Journal of the American Ceramic Society, 2005, 88, 243-245.	1.9	55
106	In-Situ IR Spectral Measurement in Organic Matrix-Mediated Hydroxyapatite Formation. Journal of the Ceramic Society of Japan, 2005, 113, 112-115.	1.3	6
107	Hydrothermal Formation of Hydroxyapatite Layers on the Surface of Type-A Zeolite. Journal of the American Ceramic Society, 2004, 87, 1395-1397.	1.9	31
108	Increasing the Crystallinity of Hydroxyapatite Nanoparticles in Composites Containing Bioaffinitive Organic Polymers by Mechanical Stressing. Journal of the American Ceramic Society, 2004, 87, 1014-1017.	1.9	12

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109	Cross-linkage of hydroxyapatite/gelatin nanocomposite using EGDE. Journal of Materials Science, 2004, 39, 5547-5550.	1.7	9
110	Preferential Alignment of Hydroxyapatite Crystallites in Nanocomposites with Chemically Disintegrated Silk Fibroin. Journal of Nanoparticle Research, 2004, 6, 259-265.	0.8	22
111	Effects of hyaluronic acid on the rheological properties of zinc carboxylate gels. Materials Science and Engineering C, 2004, 24, 703-707.	3.8	1
112	Preparation of Higher-Order Zeolite Materials by Using Dextran Templating. Angewandte Chemie - International Edition, 2004, 43, 6691-6695.	7.2	35
113	Collagen immobilized PVA hydrogel-hydroxyapatite composites prepared by kneading methods as a material for peripheral cuff of artificial cornea. Materials Science and Engineering C, 2004, 24, 729-735.	3.8	58
114	Preparation and mechanical property of core-shell type chitosan/calcium phosphate composite fiber. Materials Science and Engineering C, 2004, 24, 723-728.	3.8	40
115	Biomimetic synthesis of bone-like nanocomposites using the self-organization mechanism of hydroxyapatite and collagen. Composites Science and Technology, 2004, 64, 819-825.	3.8	248
116	Novel hydrogels composed of malic acid and zinc: their synthesis and characterization. Journal of Non-Crystalline Solids, 2004, 342, 125-131.	1.5	1
117	Dextran templating for the synthesis of metallic and metal oxide sponges. Nature Materials, 2003, 2, 386-390.	13.3	300
118	Physical properties of type I collagen extracted from fish scales of Pagrus major and Oreochromis niloticas. International Journal of Biological Macromolecules, 2003, 32, 199-204.	3.6	320
119	Microstructure, mechanical, and biomimetic properties of fish scales from Pagrus major. Journal of Structural Biology, 2003, 142, 327-333.	1.3	264
120	An improved method to prepare hyaluronic acid and type II collagen composite matrices. Journal of Biomedical Materials Research Part B, 2002, 61, 330-336.	3.0	55
121	Control of surface morphology of ZnO by hydrochloric acid etching. Thin Solid Films, 2002, 411, 91-95.	0.8	50
122	The cross-linkage effect of hydroxyapatite/collagen nanocomposites on a self-organization phenomenon. Journal of Materials Science: Materials in Medicine, 2002, 13, 993-997.	1.7	44
123	Title is missing!. Journal of Materials Science Letters, 2001, 20, 1199-1201.	0.5	101
124	Preparation and dielectric property of sintered monoclinic hydroxyapatite. Journal of Materials Science Letters, 1999, 18, 1225-1228.	0.5	49
125	Preparation and Structure Refinement of Monoclinic Hydroxyapatite. Journal of Solid State Chemistry, 1999, 144, 272-276.	1.4	98
126	Cytotoxicity and Cancer Detection Ability of the Luminescent Nanoporous Silica Spheres Immobilized with Folic Acid Derivative. Key Engineering Materials, 0, 529-530, 630-635.	0.4	2

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127	Electrolytic Deposition of Calcium Phosphates Films on Nitinol Stents. Key Engineering Materials, 0, 529-530, 243-246.	0.4	0
128	Investigation of Multilayered Protein Adsorption on Carbonate Apatite with a QCM Technique. Key Engineering Materials, 0, 529-530, 74-77.	0.4	1
129	Fabrication of Three Different Types of Porous Carbonate-Substituted Apatite Ceramics for Artificial Bone. Key Engineering Materials, 0, 529-530, 143-146.	0.4	2