

# Iain R Gibson

## List of Publications by Citations

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64  
papers

3,298  
citations

31  
h-index

57  
g-index

65  
ext. papers

3,530  
ext. citations

4.4  
avg, IF

4.82  
L-index

#	Paper	IF	Citations
64	A comparative study on the in vivo behavior of hydroxyapatite and silicon substituted hydroxyapatite granules. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2002</b> , 13, 1199-206	4.5	393
63	Novel synthesis and characterization of an AB-type carbonate-substituted hydroxyapatite. <i>Journal of Biomedical Materials Research Part B</i> , <b>2002</b> , 59, 697-708		339
62	Preparation of macroporous calcium phosphate cement tissue engineering scaffold. <i>Biomaterials</i> , <b>2002</b> , 23, 3063-72	15.6	180
61	Transformation of monetite to hydroxyapatite in bioactive coatings on titanium. <i>Surface and Coatings Technology</i> , <b>2001</b> , 137, 270-276	4.4	143
60	Effect of the proportion of organic material in bone on thermal decomposition of bone mineral: an investigation of a variety of bones from different species using thermogravimetric analysis coupled to mass spectrometry, high-temperature X-ray diffraction, and Fourier transform infrared spectroscopy. <i>Calcified Tissue International</i> , <b>2004</b> , 75, 321-8	3.9	130
59	Structural analysis of Si-substituted hydroxyapatite: zeta potential and X-ray photoelectron spectroscopy. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2002</b> , 13, 1123-7	4.5	129
58	Synthesis and characterization of carbonate hydroxyapatite. <i>Journal of Materials Science: Materials in Medicine</i> , <b>1998</b> , 9, 779-83	4.5	127
57	Preparation and characterization of magnesium/carbonate co-substituted hydroxyapatites. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2002</b> , 13, 685-93	4.5	116
56	Effect of Silicon Substitution on the Sintering and Microstructure of Hydroxyapatite. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 85, 2771-2777	3.8	113
55	The uptake of titanium ions by hydroxyapatite particles-structural changes and possible mechanisms. <i>Biomaterials</i> , <b>2006</b> , 27, 1749-61	15.6	112
54	Characterization of the transformation from calcium-deficient apatite to beta-tricalcium phosphate. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2000</b> , 11, 799-804	4.5	106
53	In vivo assessment of hydroxyapatite and silicate-substituted hydroxyapatite granules using an ovine defect model. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2005</b> , 16, 429-40	4.5	91
52	Adsorption and release studies of sodium ampicillin from hydroxyapatite and glass-reinforced hydroxyapatite composites. <i>Biomaterials</i> , <b>2001</b> , 22, 1393-400	15.6	89
51	Magnesium- and strontium-co-substituted hydroxyapatite: the effects of doped-ions on the structure and chemico-physical properties. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2012</b> , 23, 2867-79	4.5	85
50	Sr-containing hydroxyapatite: morphologies of HA crystals and bioactivity on osteoblast cells. <i>Materials Science and Engineering C</i> , <b>2013</b> , 33, 1132-42	8.3	81
49	A comparison of cortical and trabecular bone from C57 Black 6 mice using Raman spectroscopy. <i>Bone</i> , <b>2009</b> , 44, 899-907	4.7	64
48	Setting characteristics and mechanical behaviour of a calcium phosphate bone cement containing tetracycline. <i>Biomaterials</i> , <b>2001</b> , 22, 897-901	15.6	58

47	The effects of oxalate-containing products on the exposed dentine surface: an SEM investigation. <i>Journal of Oral Rehabilitation</i> , <b>2001</b> , 28, 1037-44	3.4	56
46	Influence of yttria concentration upon electrical properties and susceptibility to ageing of yttria-stabilised zirconias. <i>Journal of the European Ceramic Society</i> , <b>1998</b> , 18, 661-667	6	55
45	Calcium phosphate coatings obtained by Nd:YAG laser cladding: physicochemical and biologic properties. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2003</b> , 64, 630-7	5.4	55
44	Study of the order-disorder transition in yttria-stabilised zirconia by neutron diffraction. <i>Journal of Materials Chemistry</i> , <b>1996</b> , 6, 895-898		55
43	Effect of powder characteristics on the sinterability of hydroxyapatite powders. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2001</b> , 12, 163-71	4.5	50
42	Ferroelasticity and hysteresis in LaCoO <sub>3</sub> based perovskites. <i>Acta Materialia</i> , <b>2002</b> , 50, 715-723	8.4	48
41	In situ thermal and structural characterization of bioactive calcium phosphate glass ceramics containing TiO <sub>2</sub> and MgO oxides: High temperature XRD studies. <i>Journal of Non-Crystalline Solids</i> , <b>2005</b> , 351, 810-817	3.9	47
40	Qualitative X-ray Diffraction Analysis of Metastable Tetragonal (t?) Zirconia. <i>Journal of the American Ceramic Society</i> , <b>2001</b> , 84, 615-618	3.8	46
39	Influence of aging heat treatment on mechanical properties of biomedical Ti-Zr based ternary alloys containing niobium. <i>Journal of Materials Science: Materials in Medicine</i> , <b>1998</b> , 9, 625-30	4.5	45
38	Calcining influence on the powder properties of hydroxyapatite. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2001</b> , 12, 181-8	4.5	45
37	Porous glass reinforced hydroxyapatite materials produced with different organic additives. <i>Journal of Non-Crystalline Solids</i> , <b>2002</b> , 304, 286-292	3.9	45
36	Production of calcium phosphate coatings on Ti6Al4V obtained by Nd:yttrium-aluminum-garnet laser cladding. <i>Journal of Applied Physics</i> , <b>2001</b> , 90, 4231-4236	2.5	41
35	In vitro degradation studies of calcium phosphate glass ceramics prepared by controlled crystallization. <i>Journal of Non-Crystalline Solids</i> , <b>2003</b> , 330, 81-89	3.9	40
34	Effect of chemical composition on hydrophobicity and zeta potential of plasma sprayed HA/CaO-P <sub>2</sub> O <sub>5</sub> glass coatings. <i>Biomaterials</i> , <b>2001</b> , 22, 3105-12	15.6	33
33	In vitro cellular response to titanium electrochemically coated with hydroxyapatite compared to titanium with three different levels of surface roughness. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2003</b> , 14, 511-9	4.5	31
32	The role of the chemical composition of monetite on the synthesis and properties of β-tricalcium phosphate. <i>Materials Science and Engineering C</i> , <b>2014</b> , 34, 123-9	8.3	25
31	The effect of low levels of zirconia addition on the mechanical properties of hydroxyapatite. <i>Journal of Materials Science Letters</i> , <b>2001</b> , 20, 1719-1722		20
30	Enhanced In Vivo Response to Silicate-Substituted Hydroxyapatite. <i>Key Engineering Materials</i> , <b>2001</b> , 218-220, 203-206	0.4	20

29	Preparation of osteocompatible Si(IV)-enriched chitosan-silicate hybrids. <i>Journal of the Ceramic Society of Japan</i> , <b>2010</b> , 118, 989-992	1	19
28	Nano-scale hydroxyapatite compositions for the utilization of CO <sub>2</sub> recovered using post-combustion carbon capture. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 5367-5377	13	18
27	The use of silver as a selective precipitant for <sup>129</sup> I in radioactive waste management. <i>Waste Management</i> , <b>1990</b> , 10, 303-308	8.6	15
26	Comparison of Sintering and Mechanical Properties of Hydroxyapatite and Silicon-Substituted Hydroxyapatite. <i>Key Engineering Materials</i> , <b>2003</b> , 240-242, 919-922	0.4	13
25	Oxide ion transport in highly defective cubic stabilized zirconias. <i>Ionics</i> , <b>1995</b> , 1, 279-285	2.7	13
24	Synthesis and Phase Stability of Silicate-Substituted $\beta$ -Tricalcium Phosphate. <i>Key Engineering Materials</i> , <b>2007</b> , 361-363, 67-70	0.4	11
23	Influence of Phase Purity on the in Vivo Response to Hydroxyapatite. <i>Key Engineering Materials</i> , <b>2000</b> , 192-195, 373-376	0.4	11
22	Physicochemical degradation studies of calcium phosphate glass ceramic in the CaO-P <sub>2</sub> O <sub>5</sub> -MgO-TiO <sub>2</sub> system. <i>Acta Biomaterialia</i> , <b>2007</b> , 3, 263-9	10.8	10
21	Synthesis of Novel High Silicate-Substituted Hydroxyapatite by Co-Substitution Mechanisms. <i>Key Engineering Materials</i> , <b>2007</b> , 330-332, 87-90	0.4	10
20	Novel processing of hydroxyapatite-zirconia composites using nano-sized particles. <i>Journal of Materials Science Letters</i> , <b>2000</b> , 19, 2209-2211		10
19	Preparation and Characterisation of Hydroxyapatite and Carbonate Substituted Hydroxyapatite Granules. <i>Key Engineering Materials</i> , <b>2000</b> , 192-195, 7-10	0.4	7
18	Faster synthesis of A-type carbonated hydroxyapatite powders prepared by high-temperature reaction. <i>Advanced Powder Technology</i> , <b>2020</b> , 31, 3318-3327	4.6	6
17	Sol-Gel Synthesis and In Vitro Cell Compatibility Analysis of Silicate-Containing Biodegradable Hybrid Gels. <i>Key Engineering Materials</i> , <b>2007</b> , 361-363, 447-450	0.4	6
16	Comparison of Carbonate Hydroxyapatite with and without Sodium Co-Substitution. <i>Key Engineering Materials</i> , <b>2007</b> , 330-332, 19-22	0.4	6
15	The In Vivo Response of Phase Pure Hydroxyapatite and Carbonate Substituted Hydroxyapatite Granules of Varying Size Ranges. <i>Key Engineering Materials</i> , <b>2001</b> , 218-220, 383-386	0.4	5
14	Sintering of a plasma derived zirconia powder for solid oxide fuel cell electrolytes. <i>Solid State Ionics</i> , <b>1994</b> , 72, 265-270	3.3	5
13	Synthesis and Characterisation of Strontium and Magnesium Co-Substituted Biphasic Calcium Phosphates. <i>Key Engineering Materials</i> , <b>2012</b> , 529-530, 88-93	0.4	3
12	Bioactivity Assessment of Hydroxyapatite Coatings Produced by Alkali Conversion of Monetite. <i>Key Engineering Materials</i> , <b>2000</b> , 192-195, 59-62	0.4	3

11	Computational Studies of Magnesium and Strontium Substitution in Hydroxyapatite. <i>Key Engineering Materials</i> , <b>2012</b> , 529-530, 123-128	0.4	2
10	Synthesis and Stability of Potassium/Carbonate Co-Substituted Hydroxyapatites. <i>Key Engineering Materials</i> , <b>2007</b> , 361-363, 207-210	0.4	2
9	Optimisation of the Aqueous Precipitation Synthesis of Silicate-Substituted Hydroxyapatite. <i>Key Engineering Materials</i> , <b>2007</b> , 361-363, 55-58	0.4	2
8	Competitive Guidance Cues Affect Fibroblast Cell Alignment: Electric Fields vs. Contact Guidance. <i>Materials Research Society Symposia Proceedings</i> , <b>2004</b> , 845, 41		2
7	Maximising carbonate content in sodium-carbonate Co-substituted hydroxyapatites prepared by aqueous precipitation reaction. <i>Journal of Solid State Chemistry</i> , <b>2021</b> , 297, 122042	3.3	2
6	Natural and Synthetic Hydroxyapatites <b>2020</b> , 307-317		1
5	Simplification of the Synthesis Method for Silicon-Substituted Hydroxyapatite: A Raman Spectroscopy Study. <i>Key Engineering Materials</i> , <b>2012</b> , 529-530, 94-99	0.4	1
4	Comparison between Commercial Calcium Phosphate Bone Cements. <i>Key Engineering Materials</i> , <b>2001</b> , 218-220, 331-334	0.4	1
3	Potassium-carbonate co-substituted hydroxyapatite compositions: maximising the level of carbonate uptake for potential CO <sub>2</sub> utilisation options. <i>Materials Advances</i> , <b>2022</b> , 3, 1713-1728	3.3	1
2	The efficacy of a nanosynthetic bone graft substitute as a bone graft extender in rabbit posterolateral fusion. <i>Spine Journal</i> , <b>2021</b> , 21, 1925-1937	4	0
1	Characterisation of Mono- and Biphasic Calcium Phosphates Granules. <i>Key Engineering Materials</i> , <b>2001</b> , 218-220, 625-628	0.4	