

# Daniel Arcos

## List of Publications by Year in descending order

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92  
papers

8,368  
citations

57631

44  
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45213

90  
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96  
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96  
docs citations

96  
times ranked

9119  
citing authors

#	ARTICLE	IF	CITATIONS
1	Multiscale porosity in mesoporous bioglass 3D-printed scaffolds for bone regeneration. <i>Materials Science and Engineering C</i> , 2021, 120, 111706.	3.8	24
2	Effects of Ipriflavone-Loaded Mesoporous Nanospheres on the Differentiation of Endothelial Progenitor Cells and Their Modulation by Macrophages. <i>Nanomaterials</i> , 2021, 11, 1102.	1.9	12
3	Effective Actions of Ion Release from Mesoporous Bioactive Glass and Macrophage Mediators on the Differentiation of Osteoprogenitor and Endothelial Progenitor Cells. <i>Pharmaceutics</i> , 2021, 13, 1152.	2.0	14
4	The effect of biomimetic mineralization of 3D-printed mesoporous bioglass scaffolds on physical properties and in vitro osteogenicity. <i>Materials Science and Engineering C</i> , 2020, 109, 110572.	3.8	19
5	An Immunological Approach to the Biocompatibility of Mesoporous SiO <sub>2</sub> -CaO Nanospheres. <i>International Journal of Molecular Sciences</i> , 2020, 21, 8291.	1.8	17
6	Ipriflavone-Loaded Mesoporous Nanospheres with Potential Applications for Periodontal Treatment. <i>Nanomaterials</i> , 2020, 10, 2573.	1.9	24
7	Substituted hydroxyapatite coatings of bone implants. <i>Journal of Materials Chemistry B</i> , 2020, 8, 1781-1800.	2.9	252
8	Antibacterial Nanostructured Ti Coatings by Magnetron Sputtering: From Laboratory Scales to Industrial Reactors. <i>Nanomaterials</i> , 2019, 9, 1217.	1.9	30
9	Mesoporous bioactive glass/É-polycaprolactone scaffolds promote bone regeneration in osteoporotic sheep. <i>Acta Biomaterialia</i> , 2019, 90, 393-402.	4.1	66
10	Synergistic effect of Si-hydroxyapatite coating and VEGF adsorption on Ti6Al4V-ELI scaffolds for bone regeneration in an osteoporotic bone environment. <i>Acta Biomaterialia</i> , 2019, 83, 456-466.	4.1	62
11	Incorporation and effects of mesoporous SiO <sub>2</sub> -CaO nanospheres loaded with ipriflavone on osteoblast/osteoclast cocultures. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2018, 133, 258-268.	2.0	23
12	Mesoporous Bioactive Glasses Equipped with Stimuli-Responsive Molecular Gates for Controlled Delivery of Levofloxacin against Bacteria. <i>Chemistry - A European Journal</i> , 2018, 24, 18944-18951.	1.7	19
13	Features of aminopropyl modified mesoporous silica nanoparticles. Implications on the active targeting capability. <i>Materials Chemistry and Physics</i> , 2018, 220, 260-269.	2.0	9
14	The response of pre-osteoblasts and osteoclasts to gallium containing mesoporous bioactive glasses. <i>Acta Biomaterialia</i> , 2018, 76, 333-343.	4.1	49
15	Effects of a mesoporous bioactive glass on osteoblasts, osteoclasts and macrophages. <i>Journal of Colloid and Interface Science</i> , 2018, 528, 309-320.	5.0	38
16	High glucose alters the secretome of mechanically stimulated osteocyte-like cells affecting osteoclast precursor recruitment and differentiation. <i>Journal of Cellular Physiology</i> , 2017, 232, 3611-3621.	2.0	15
17	Proton Environments in Biomimetic Calcium Phosphates Formed from Mesoporous Bioactive CaO-SiO <sub>2</sub> -P <sub>2</sub> O <sub>5</sub> Glasses <i>in Vitro</i> : Insights from Solid-State NMR. <i>Journal of Physical Chemistry C</i> , 2017, 121, 13223-13238.	1.5	36
18	Molecular gates in mesoporous bioactive glasses for the treatment of bone tumors and infection. <i>Acta Biomaterialia</i> , 2017, 50, 114-126.	4.1	54

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19	Novel ion-doped mesoporous glasses for bone tissue engineering: Study of their structural characteristics influenced by the presence of phosphorous oxide. <i>Journal of Non-Crystalline Solids</i> , 2017, 455, 90-97.	1.5	38
20	Tailoring the Structure of Bioactive Glasses: From the Nanoscale to Macroporous Scaffolds. <i>International Journal of Applied Glass Science</i> , 2016, 7, 195-205.	1.0	23
21	Surface Reactions of Mesoporous Bioactive Glasses Monitored by Solid-State NMR: Concentration Effects in Simulated Body Fluid. <i>Journal of Physical Chemistry C</i> , 2016, 120, 4961-4974.	1.5	31
22	Design of thermoresponsive polymeric gates with opposite controlled release behaviors. <i>RSC Advances</i> , 2016, 6, 42510-42516.	1.7	21
23	Nanocrystallinity effects on osteoblast and osteoclast response to silicon substituted hydroxyapatite. <i>Journal of Colloid and Interface Science</i> , 2016, 482, 112-120.	5.0	34
24	In vitro colonization of stratified bioactive scaffolds by pre-osteoblast cells. <i>Acta Biomaterialia</i> , 2016, 44, 73-84.	4.1	20
25	Magnetic-Responsive Release Controlled by Hot Spot Effect. <i>Langmuir</i> , 2015, 31, 12777-12782.	1.6	91
26	A unified in vitro evaluation for apatite-forming ability of bioactive glasses and their variants. <i>Journal of Materials Science: Materials in Medicine</i> , 2015, 26, 115.	1.7	275
27	Nanocolumnar coatings with selective behavior towards osteoblast and <i>Staphylococcus aureus</i> proliferation. <i>Acta Biomaterialia</i> , 2015, 15, 20-28.	4.1	85
28	Response of osteoblasts and preosteoblasts to calcium deficient and Si substituted hydroxyapatites treated at different temperatures. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 133, 304-313.	2.5	21
29	Composition-dependent in vitro apatite formation at mesoporous bioactive glass-surfaces quantified by solid-state NMR and powder XRD. <i>RSC Advances</i> , 2015, 5, 86061-86071.	1.7	25
30	Biomaterials: Towards the Development of Smart 3D "Gated Scaffolds" for On-Command Delivery (Small 23/2014). <i>Small</i> , 2014, 10, 4858-4858.	5.2	0
31	The relevance of biomaterials to the prevention and treatment of osteoporosis. <i>Acta Biomaterialia</i> , 2014, 10, 1793-1805.	4.1	120
32	Early in vitro response of macrophages and T lymphocytes to nanocrystalline hydroxyapatites. <i>Journal of Colloid and Interface Science</i> , 2014, 416, 59-66.	5.0	9
33	Towards the Development of Smart 3D "Gated Scaffolds" for On-Command Delivery. <i>Small</i> , 2014, 10, 4859-4864.	5.2	28
34	Nanocrystalline silicon substituted hydroxyapatite effects on osteoclast differentiation and resorptive activity. <i>Journal of Materials Chemistry B</i> , 2014, 2, 2910.	2.9	34
35	Thermosteeds for interstitial magnetic hyperthermia: from bioceramics to nanoparticles. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 484003.	0.7	33
36	In vivo behavior of Si hydroxyapatite/polycaprolactone/DMB scaffolds fabricated by 3D printing. <i>Journal of Biomedical Materials Research - Part A</i> , 2013, 101A, 2038-2048.	2.1	46

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37	Bioceramics for drug delivery. <i>Acta Materialia</i> , 2013, 61, 890-911.	3.8	238
38	Direct Probing of the Phosphate-Ion Distribution in Bioactive Silicate Glasses by Solid-State NMR: Evidence for Transitions between Random/Clustered Scenarios. <i>Chemistry of Materials</i> , 2013, 25, 1877-1885.	3.2	62
39	Supramolecular mechanisms in the synthesis of mesoporous magnetic nanospheres for hyperthermia. <i>Journal of Materials Chemistry</i> , 2012, 22, 64-72.	6.7	45
40	Quantifying apatite formation and cation leaching from mesoporous bioactive glasses in vitro: a SEM, solid-state NMR and powder XRD study. <i>Journal of Materials Chemistry</i> , 2012, 22, 7214.	6.7	32
41	Local structures of mesoporous bioactive glasses and their surface alterations <i>in vitro</i> : inferences from solid-state nuclear magnetic resonance. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2012, 370, 1376-1399.	1.6	48
42	Signaling Pathways of Immobilized FGF-2 on Silicon-Substituted Hydroxyapatite. <i>Macromolecular Bioscience</i> , 2012, 12, 446-453.	2.1	19
43	<i>In vitro</i> evaluation of glass-glass ceramic thermoseed-induced hyperthermia on human osteosarcoma cell line. <i>Journal of Biomedical Materials Research - Part A</i> , 2012, 100A, 64-71.	2.1	19
44	Covalently bonded dendrimer-maghemite nanosystems: nonviral vectors for in vitro gene magnetofection. <i>Journal of Materials Chemistry</i> , 2011, 21, 4598.	6.7	42
45	Solid-State <sup>31</sup> P and <sup>1</sup> H NMR Investigations of Amorphous and Crystalline Calcium Phosphates Grown Biomimetically From a Mesoporous Bioactive Glass. <i>Journal of Physical Chemistry C</i> , 2011, 115, 20572-20582.	1.5	69
46	Comparison of the osteoblastic activity conferred on Si-doped hydroxyapatite scaffolds by different osteostatin coatings. <i>Acta Biomaterialia</i> , 2011, 7, 3555-3562.	4.1	43
47	Immobilization and bioactivity evaluation of FGF-1 and FGF-2 on powdered silicon-doped hydroxyapatite and their scaffolds for bone tissue engineering. <i>Journal of Materials Science: Materials in Medicine</i> , 2011, 22, 405-416.	1.7	32
48	Mesoporous bioactive glasses: Mechanical reinforcement by means of a biomimetic process. <i>Acta Biomaterialia</i> , 2011, 7, 2952-2959.	4.1	43
49	Functionalizing Mesoporous Bioglasses for Long-Term Anti-Osteoporotic Drug Delivery. <i>Chemistry - A European Journal</i> , 2010, 16, 10879-10886.	1.7	86
50	Interaction of an ordered mesoporous bioactive glass with osteoblasts, fibroblasts and lymphocytes, demonstrating its biocompatibility as a potential bone graft material. <i>Acta Biomaterialia</i> , 2010, 6, 892-899.	4.1	110
51	Sol-gel silica-based biomaterials and bone tissue regeneration. <i>Acta Biomaterialia</i> , 2010, 6, 2874-2888.	4.1	495
52	Magnetic mesoporous silica spheres for hyperthermia therapy. <i>Acta Biomaterialia</i> , 2010, 6, 4522-4531.	4.1	117
53	Multifunctional Nano and Microparticles for Drug Delivery Systems. <i>Key Engineering Materials</i> , 2010, 441, 333-355.	0.4	2
54	Biomimetic Apatite Mineralization Mechanisms of Mesoporous Bioactive Glasses as Probed by Multinuclear <sup>31</sup> P, <sup>29</sup> Si, <sup>23</sup> Na and <sup>13</sup> C Solid-State NMR. <i>Journal of Physical Chemistry C</i> , 2010, 114, 19345-19356.	1.5	79

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55	Bacterial adherence to SiO <sub>2</sub> -based multifunctional bioceramics. Journal of Biomedical Materials Research - Part A, 2009, 89A, 215-223.	2.1	22
56	Promising trends of bioceramics in the biomaterials field. Journal of Materials Science: Materials in Medicine, 2009, 20, 447-455.	1.7	65
57	Essential Role of Calcium Phosphate Heterogeneities in 2D-Hexagonal and 3D-Cubic SiO <sub>2</sub> -CaO-P <sub>2</sub> O <sub>5</sub> Mesoporous Bioactive Glasses. Chemistry of Materials, 2009, 21, 5474-5484.	3.2	95
58	Ordered Mesoporous Microspheres for Bone Grafting and Drug Delivery. Chemistry of Materials, 2009, 21, 1000-1009.	3.2	183
59	Mesoporous Microspheres with Doubly Ordered Core-Shell Structure. Chemistry of Materials, 2009, 21, 18-20.	3.2	36
60	Mesoporous magnetic microspheres for drug targeting. Solid State Sciences, 2008, 10, 421-426.	1.5	51
61	High-Performance Mesoporous Bioceramics Mimicking Bone Mineralization. Chemistry of Materials, 2008, 20, 3191-3198.	3.2	126
62	Multinuclear Solid-State NMR Studies of Ordered Mesoporous Bioactive Glasses. Journal of Physical Chemistry C, 2008, 112, 5552-5562.	1.5	125
63	<i>In Vitro</i> Positive Biocompatibility Evaluation of Glass-Ceramic Thermoseeds for Hyperthermic Treatment of Bone Tumors. Tissue Engineering - Part A, 2008, 14, 617-627.	1.6	26
64	Aerosol-Assisted Synthesis of Magnetic Mesoporous Silica Spheres for Drug Targeting. Chemistry of Materials, 2007, 19, 3455-3463.	3.2	149
65	Mesoporous Materials for Drug Delivery. Angewandte Chemie - International Edition, 2007, 46, 7548-7558.	7.2	2,238
66	Bioactive Star Gels. Chemistry of Materials, 2006, 18, 5696-5703.	3.2	48
67	Ordered Mesoporous Bioactive Glasses for Bone Tissue Regeneration. Chemistry of Materials, 2006, 18, 3137-3144.	3.2	333
68	From the bioactive glasses to the star gels. Journal of Materials Science: Materials in Medicine, 2006, 17, 1011-1017.	1.7	56
69	Crystallochemistry, textural properties, and in vitro biocompatibility of different silicon-doped calcium phosphates. Journal of Biomedical Materials Research - Part A, 2006, 78A, 762-771.	2.1	31
70	Glass-ceramic thermoseeds for hyperthermic treatment of bone tumors. Journal of Biomedical Materials Research - Part A, 2006, 79A, 533-543.	2.1	45
71	A bioactive sol-gel glass implant for in vivo gentamicin release. Experimental model in Rabbit. Journal of Orthopaedic Research, 2006, 24, 454-460.	1.2	46
72	In vitro Evaluation of Potential Calcium Phosphate Scaffolds for Tissue Engineering. Tissue Engineering, 2006, 12, 279-290.	4.9	55

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73	Nanostructured Hybrid Materials for Bone Tissue Regeneration. <i>Current Nanoscience</i> , 2006, 2, 179-189.	0.7	57
74	Crystal-Chemical Characteristics of Silicon <sup>4+</sup> Neodymium Substituted Hydroxyapatites Studied by Combined X-ray and Neutron Powder Diffraction. <i>Chemistry of Materials</i> , 2005, 17, 57-64.	3.2	19
75	Silicon substituted hydroxyapatites. A method to upgrade calcium phosphate based implants. <i>Journal of Materials Chemistry</i> , 2005, 15, 1509-1516.	6.7	232
76	Textural Evolution of a Sol-Gel Glass Surface in SBF. <i>Key Engineering Materials</i> , 2004, 254-256, 27-30.	0.4	4
77	The effect of the silicon incorporation on the hydroxylapatite structure. A neutron diffraction study. <i>Solid State Sciences</i> , 2004, 6, 987-994.	1.5	70
78	Neutron scattering for the study of improved bone implants. <i>Physica B: Condensed Matter</i> , 2004, 350, E607-E610.	1.3	16
79	Calcium sulphate-based cements containing cephalexin. <i>Biomaterials</i> , 2004, 25, 2629-2635.	5.7	76
80	Silicon Incorporation in Hydroxylapatite Obtained by Controlled Crystallization. <i>Chemistry of Materials</i> , 2004, 16, 2300-2308.	3.2	111
81	Influence of a SiO <sub>2</sub> -CaO-P <sub>2</sub> O <sub>5</sub> Sol-Gel Glass on the Bioactivity and Controlled Release of Ceramic/Polymer/Antibiotic Mixed Materials. <i>Chemistry of Materials</i> , 2003, 15, 4132-4138.	3.2	26
82	Implantable Magnetic Glass-Ceramic Based on (Fe,Ca)SiO <sub>3</sub> Solid Solutions. <i>Chemistry of Materials</i> , 2002, 14, 64-70.	3.2	22
83	Influence of the Stabilization Temperature on Textural and Structural Features and Ion Release in SiO <sub>2</sub> -CaO-P <sub>2</sub> O <sub>5</sub> Sol-Gel Glasses. <i>Chemistry of Materials</i> , 2002, 14, 1515-1522.	3.2	129
84	Biocompatibility and in vivo gentamicin release from bioactive sol-gel glass implants. <i>Journal of Biomedical Materials Research Part B</i> , 2002, 61, 458-465.	3.0	59
85	Bioactivity in glass/PMMA composites used as drug delivery system. <i>Biomaterials</i> , 2001, 22, 701-708.	5.7	120
86	Textural properties of SiO <sub>2</sub> -CaO-P <sub>2</sub> O <sub>5</sub> glasses prepared by the sol-gel method. <i>Journal of Materials Research</i> , 2001, 16, 1345-1348.	1.2	63
87	Evolution of porosity during in vitro hydroxycarbonate apatite growth in sol-gel glasses. , 2000, 51, 23-28.		70
88	Improved Mechanical Properties in Nb <sub>2</sub> O <sub>5</sub> /V <sub>2</sub> O <sub>5</sub> Doped Spinel Ferrites. <i>Journal of Solid State Chemistry</i> , 1999, 148, 376-379.	1.4	2
89	Chemical Homogeneity of Nanocrystalline Zn <sup>2+</sup> Mn Spinel Ferrites Obtained by High-Energy Ball Milling. <i>Journal of Solid State Chemistry</i> , 1998, 141, 10-16.	1.4	33
90	Ibuprofen release from hydrophilic ceramic-polymer composites. <i>Biomaterials</i> , 1997, 18, 1235-1242.	5.7	23

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91	Upgrading Calcium Phosphate Scaffolds for Tissue Engineering Applications. Key Engineering Materials, 0, 377, 19-42.	0.4	77
92	Synthesis of Mesoporous Microparticles for Biomedical Applications. Key Engineering Materials, 0, 377, 181-194.	0.4	3