

M A. Lopes

List of Publications by Year in descending order

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118
papers

4,039
citations

109264

35
h-index

143943

57
g-index

118
all docs

118
docs citations

118
times ranked

5174
citing authors

#	ARTICLE	IF	CITATIONS
1	Antimicrobial Approaches for Textiles: From Research to Market. <i>Materials</i> , 2016, 9, 498.	1.3	264
2	In vitro cytocompatibility of MG63 cells on chitosan-organosiloxane hybrid membranes. <i>Biomaterials</i> , 2005, 26, 485-493.	5.7	160
3	Structural analysis of Si-substituted hydroxyapatite: zeta potential and X-ray photoelectron spectroscopy. <i>Journal of Materials Science: Materials in Medicine</i> , 2002, 13, 1123-1127.	1.7	159
4	Ultrastructural comparison of dissolution and apatite precipitation on hydroxyapatite and silicon-substituted hydroxyapatite in vitro and in vivo. <i>Journal of Biomedical Materials Research Part B</i> , 2004, 69A, 670-679.	3.0	137
5	Human osteoblast response to silicon-substituted hydroxyapatite. <i>Journal of Biomedical Materials Research - Part A</i> , 2006, 79A, 723-730.	2.1	134
6	Glass-reinforced hydroxyapatite composites: fracture toughness and hardness dependence on microstructural characteristics. <i>Biomaterials</i> , 1999, 20, 2085-2090.	5.7	120
7	Nanocrystalline diamond: <i>in vitro</i> biocompatibility assessment by MG63 and human bone marrow cells cultures. <i>Journal of Biomedical Materials Research - Part A</i> , 2008, 87A, 91-99.	2.1	120
8	Use of hybrid chitosan membranes and N1E-115 cells for promoting nerve regeneration in an axonotmesis rat model. <i>Biomaterials</i> , 2008, 29, 4409-4419.	5.7	115
9	Hydrophobicity, surface tension, and zeta potential measurements of glass-reinforced hydroxyapatite composites. , 1999, 45, 370-375.		112
10	Physical, chemical and in vitro biological profile of chitosan hybrid membrane as a function of organosiloxane concentration. <i>Acta Biomaterialia</i> , 2009, 5, 346-355.	4.1	99
11	Densification route and mechanical properties of Si ₃ N ₄ bioglass biocomposites. <i>Biomaterials</i> , 2002, 23, 857-862.	5.7	91
12	Biocompatibility and hemocompatibility of polyvinyl alcohol hydrogel used for vascular grafting- <i>in vitro</i> and <i>in vivo</i> studies. <i>Journal of Biomedical Materials Research - Part A</i> , 2014, 102, n/a-n/a.	2.1	84
13	Biocompatibility evaluation of DLC-coated Si ₃ N ₄ substrates for biomedical applications. <i>Diamond and Related Materials</i> , 2008, 17, 878-881.	1.8	73
14	Si ₃ N ₄ -bioglass composites stimulate the proliferation of MG63 osteoblast-like cells and support the osteogenic differentiation of human bone marrow cells. <i>Biomaterials</i> , 2002, 23, 4897-4906.	5.7	67
15	Absorption and Emission Analysis of RE ³⁺ (Sm ³⁺ and Tj ETQq1 1 0.784314 rgBT /Otel Nanotechnology, 2009, 9, 3672-3677.	0.9	67
16	PLGA 90/10 and caprolactone biodegradable nerve guides for the reconstruction of the rat sciatic nerve. <i>Microsurgery</i> , 2007, 27, 125-137.	0.6	66
17	Glass-reinforced hydroxyapatite: A comprehensive study of the effect of glass composition on the crystallography of the composite. , 1998, 39, 244-251.		65
18	Differentiation of mononuclear precursors into osteoclasts on the surface of Si-substituted hydroxyapatite. <i>Journal of Biomedical Materials Research - Part A</i> , 2006, 78A, 709-720.	2.1	65

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19	Hydroxyapatite surface roughness: Complex modulation of the osteoclastogenesis of human precursor cells. <i>Acta Biomaterialia</i> , 2012, 8, 1137-1145.	4.1	65
20	Cytotoxicity evaluation of nanocrystalline diamond coatings by fibroblast cell cultures. <i>Acta Biomaterialia</i> , 2009, 5, 755-763.	4.1	62
21	Microstructural dependence of Young's and shear moduli of P2O5 glass reinforced hydroxyapatite for biomedical applications. <i>Biomaterials</i> , 2000, 21, 749-754.	5.7	60
22	Silicon addition to hydroxyapatite increases nanoscale electrostatic, van der Waals, and adhesive interactions. <i>Journal of Biomedical Materials Research - Part A</i> , 2006, 78A, 352-363.	2.1	58
23	Push-out testing and histological evaluation of glass reinforced hydroxyapatite composites implanted in the tibia of rabbits. <i>Journal of Biomedical Materials Research Part B</i> , 2001, 54, 463-469.	3.0	55
24	Cell Therapy with Human MSCs Isolated from the Umbilical Cord Wharton Jelly Associated to a PVA Membrane in the Treatment of Chronic Skin Wounds. <i>International Journal of Medical Sciences</i> , 2014, 11, 979-987.	1.1	53
25	Antibacterial, physicochemical and mechanical properties of endodontic sealers containing quaternary ammonium polyethylenimine nanoparticles. <i>International Endodontic Journal</i> , 2014, 47, 725-734.	2.3	53
26	Evaluation of human osteoblastic cell response to plasma-sprayed silicon-substituted hydroxyapatite coatings over titanium substrates. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2010, 94B, 337-346.	1.6	51
27	Development and characterization of novel alginate-based hydrogels as vehicles for bone substitutes. <i>Carbohydrate Polymers</i> , 2013, 95, 134-142.	5.1	51
28	In situ thermal and structural characterization of bioactive calcium phosphate glass ceramics containing TiO2 and MgO oxides: High temperature XRD studies. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 810-817.	1.5	50
29	Wettability and surface charge of Si3N4-bioglass composites in contact with simulated physiological liquids. <i>Biomaterials</i> , 2002, 23, 4123-4129.	5.7	47
30	Glass-reinforced hydroxyapatite composites: Secondary phase proportions and densification effects on biaxial bending strength. , 1999, 48, 734-740.		46
31	Antibiofilm Effects of Endodontic Sealers Containing Quaternary Ammonium Polyethylenimine Nanoparticles. <i>Journal of Endodontics</i> , 2014, 40, 1167-1171.	1.4	45
32	Novel cerium doped glass-reinforced hydroxyapatite with antibacterial and osteoconductive properties for bone tissue regeneration. <i>Biomedical Materials (Bristol)</i> , 2015, 10, 055008.	1.7	45
33	Use of PLGA 90:10 Scaffolds Enriched with In Vitro Differentiated Neural Cells for Repairing Rat Sciatic Nerve Defects. <i>Tissue Engineering - Part A</i> , 2008, 14, 979-993.	1.6	44
34	In vitro degradation studies of calcium phosphate glass ceramics prepared by controlled crystallization. <i>Journal of Non-Crystalline Solids</i> , 2003, 330, 81-89.	1.5	42
35	Flow cytometry for assessing biocompatibility. <i>Journal of Biomedical Materials Research Part B</i> , 1998, 41, 649-656.	3.0	40
36	Biological evaluation of alginate-based hydrogels, with antimicrobial features by Ce(III) incorporation, as vehicles for a bone substitute. <i>Journal of Materials Science: Materials in Medicine</i> , 2013, 24, 2145-2155.	1.7	40

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37	Samarium doped glass-reinforced hydroxyapatite with enhanced osteoblastic performance and antibacterial properties for bone tissue regeneration. <i>Journal of Materials Chemistry B</i> , 2014, 2, 5872-5881.	2.9	40
38	Absorption and emission properties of Ho ³⁺ doped lead-zinc borate glasses. <i>Thin Solid Films</i> , 2006, 515, 318-325.	0.8	37
39	Nanocrystalline Diamond as a Coating for Joint Implants: Cytotoxicity and Biocompatibility Assessment. <i>Journal of Nanomaterials</i> , 2008, 2008, 1-9.	1.5	36
40	Direct and indirect effects of P2O5 glass reinforced-hydroxyapatite composites on the growth and function of osteoblast-like cells. <i>Biomaterials</i> , 2000, 21, 1165-1172.	5.7	34
41	Bone ingrowth in macroporous Bonelike [®] for orthopaedic applications. <i>Acta Biomaterialia</i> , 2008, 4, 370-377.	4.1	34
42	Effects of Human Mesenchymal Stem Cells Isolated from Wharton's Jelly of the Umbilical Cord and Conditioned Media on Skeletal Muscle Regeneration Using a Myectomy Model. <i>Stem Cells International</i> , 2014, 2014, 1-16.	1.2	34
43	<i>Equisetum arvense</i> hydromethanolic extracts in bone tissue regeneration: <i>in vitro</i> osteoblastic modulation and antibacterial activity. <i>Cell Proliferation</i> , 2012, 45, 386-396.	2.4	32
44	<i>In vitro</i> and <i>in vivo</i> evaluation of blood coagulation activation of polyvinyl alcohol hydrogel plus dextran-based vascular grafts. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 1366-1379.	2.1	29
45	Preparation and <i>in vitro</i> cytocompatibility of chitosan-siloxane hybrid hydrogels. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 289-299.	2.1	27
46	A Clinical Report of Bone Regeneration in Maxillofacial Surgery using Bonelike [®] Synthetic Bone Graft. <i>Journal of Biomaterials Applications</i> , 2008, 22, 373-385.	1.2	26
47	Perspectives of Employing Mesenchymal Stem Cells from the Wharton's Jelly of the Umbilical Cord for Peripheral Nerve Repair. <i>International Review of Neurobiology</i> , 2013, 108, 79-120.	0.9	26
48	Structural insights of glass-reinforced hydroxyapatite composites by Rietveld refinement. <i>Biomaterials</i> , 2000, 21, 1905-1910.	5.7	25
49	Opening wedge high tibial osteotomy using 3D biomodelling Bonelike [®] macroporous structures: case report. <i>Journal of Materials Science: Materials in Medicine</i> , 2007, 18, 2377-2382.	1.7	25
50	Characterization and preliminary <i>in vivo</i> evaluation of a novel modified hydroxyapatite produced by extrusion and spheronization techniques. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2011, 99B, 170-179.	1.6	25
51	Current Approaches and Future Trends to Promote Tendon Repair. <i>Annals of Biomedical Engineering</i> , 2015, 43, 2025-2035.	1.3	25
52	3-D biomodelling technology for maxillofacial reconstruction. <i>Materials Science and Engineering C</i> , 2008, 28, 1347-1351.	3.8	24
53	<i>In vitro</i> and <i>in vivo</i> chitosan membranes testing for peripheral nerve reconstruction. <i>Acta Medica Portuguesa</i> , 2011, 24, 43-52.	0.2	24
54	A comparative study of CaO-P2O5-SiO2 gels prepared by a sol-gel method. <i>Materials Chemistry and Physics</i> , 2004, 88, 5-8.	2.0	23

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55	Histological and scanning electron microscopy analyses of bone/implant interface using the novel Bonelike® synthetic bone graft. <i>Journal of Orthopaedic Research</i> , 2006, 24, 953-958.	1.2	21
56	Smart electroconductive bioactive ceramics to promote in situ electrostimulation of bone. <i>Journal of Materials Chemistry B</i> , 2015, 3, 1831-1845.	2.9	20
57	Development and characterization of ZnO piezoelectric thin films on polymeric substrates for tissue repair. <i>Journal of Biomedical Materials Research - Part A</i> , 2019, 107, 2150-2159.	2.1	20
58	Evaluation of biodegradable electric conductive tube-guides and mesenchymal stem cells. <i>World Journal of Stem Cells</i> , 2015, 7, 956.	1.3	20
59	Bonelike ^{1/2} /PLGA hybrid materials for bone regeneration: Preparation route and physicochemical characterisation. <i>Journal of Materials Science: Materials in Medicine</i> , 2005, 16, 253-259.	1.7	19
60	A glass-reinforced hydroxyapatite and surgical-grade calcium sulfate for bone regeneration: <i>in vivo</i> biological behavior in a sheep model. <i>Journal of Biomaterials Applications</i> , 2012, 27, 201-217.	1.2	18
61	Response of Human Osteoblastic and Osteoclastic Cells to AH Plus and Pulp Canal Sealer Containing Quaternary Ammonium Polyethylenimine Nanoparticles. <i>Journal of Endodontics</i> , 2014, 40, 1149-1155.	1.4	18
62	Multifunctional Carbon Nanotube/Bioceramics Modulate the Directional Growth and Activity of Osteoblastic Cells. <i>Journal of Biomedical Nanotechnology</i> , 2014, 10, 725-743.	0.5	18
63	In Vitro Analysis of Protein Adhesion to Phase Pure Hydroxyapatite and Silicon Substituted Hydroxyapatite. <i>Key Engineering Materials</i> , 2005, 284-286, 461-464.	0.4	17
64	In vivo Performance of Biodegradable Calcium Phosphate Glass Ceramics using the Rabbit Model: Histological and SEM Observation. <i>Journal of Biomaterials Applications</i> , 2006, 20, 253-266.	1.2	17
65	Synthesis and Characterization of Chitosan-Silicate Hydrogel as Resorbable Vehicle for Bonelike [®] Bone Graft. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 3714-3719.	0.9	17
66	Degradation Studies and Biological Behavior on an Artificial Cornea Material. , 2011, 52, 4274.		17
67	Long term performance evaluation of small-diameter vascular grafts based on polyvinyl alcohol hydrogel and dextran and MSCs-based therapies using the ovine pre-clinical animal model. <i>International Journal of Pharmaceutics</i> , 2017, 523, 515-530.	2.6	17
68	Antibiofilm and Antimicrobial Activity of Polyethylenimine: An Interesting Compound for Endodontic Treatment. <i>Journal of Contemporary Dental Practice</i> , 2015, 16, 427-432.	0.2	17
69	Titanium dental implants coated with Bonelike®: Clinical case report. <i>Thin Solid Films</i> , 2006, 515, 279-284.	0.8	16
70	Challenges for Nerve Repair Using Chitosan-Siloxane Hybrid Porous Scaffolds. <i>BioMed Research International</i> , 2014, 2014, 1-7.	0.9	16
71	New Insight into the Dissolution of Epoxy Resin-based Sealers. <i>Journal of Endodontics</i> , 2017, 43, 1505-1510.	1.4	16
72	Carbon nanotube-based bioceramic grafts for electrotherapy of bone. <i>Materials Science and Engineering C</i> , 2014, 34, 360-368.	3.8	15

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73	Long term performance evaluation of small-diameter vascular grafts based on polyvinyl alcohol hydrogel and dextran and MSCs-based therapies using the ovine pre-clinical animal model. <i>International Journal of Pharmaceutics</i> , 2016, 513, 332-346.	2.6	15
74	In vitro studies of calcium phosphate glass ceramics with different solubility with the use of human bone marrow cells. <i>Journal of Biomedical Materials Research - Part A</i> , 2005, 74A, 347-355.	2.1	14
75	Preparation of chitosan-hydroxyapatite composite mono-fiber using coagulation method and their mechanical properties. <i>Carbohydrate Polymers</i> , 2017, 175, 355-360.	5.1	14
76	Production of Porous Biomaterials Based on Glass-Reinforced Hydroxyapatite Composites. <i>Key Engineering Materials</i> , 2002, 230-232, 483-486.	0.4	13
77	Biological Behaviour of Bonelike [®] Graft Implanted in the Tibia of Humans. <i>Key Engineering Materials</i> , 2005, 284-286, 1041-1044.	0.4	13
78	Bone Marrow Stem Cells Added to a Hydroxyapatite Scaffold Result in Better Outcomes after Surgical Treatment of Intertrochanteric Hip Fractures. <i>BioMed Research International</i> , 2014, 2014, 1-7.	0.9	13
79	Biological and Physical-Chemical Characterization of Phase Pure HA and Si-Substituted Hydroxyapatite by Different Microscopy Techniques. <i>Key Engineering Materials</i> , 2003, 254-256, 845-848.	0.4	12
80	Physicochemical degradation studies of calcium phosphate glass ceramic in the CaO-P ₂ O ₅ -MgO-TiO ₂ system. <i>Acta Biomaterialia</i> , 2007, 3, 263-269.	4.1	12
81	Preparation and characterization of electrical conductive PVA based materials for peripheral nerve tube-guides. <i>Journal of Biomedical Materials Research - Part A</i> , 2016, 104, 1981-1987.	2.1	12
82	Potential of Graphene-Polymer Composites for Ligament and Tendon Repair: A Review. <i>Advanced Engineering Materials</i> , 2020, 22, 2000492.	1.6	12
83	Development and Characterization of Ag ₂ O-Doped ZnO-Hydroxyapatite Composites. <i>Journal of the American Ceramic Society</i> , 2012, 95, 2732-2740.	1.9	10
84	A new sheep model with automatized analysis of biomaterial-induced bone tissue regeneration. <i>Journal of Materials Science: Materials in Medicine</i> , 2014, 25, 1885-1901.	1.7	10
85	Surface functionalization of polypropylene (PP) by chitosan immobilization to enhance human fibroblasts viability. <i>Polymer Testing</i> , 2020, 86, 106507.	2.3	10
86	Mechanical behavior of ropes based on polypropylene (PP) and poly(ethylene terephthalate) (PET) multifilament yarns for Achilles tendon partial substitution. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 106, 103734.	1.5	10
87	Assessment of the Potential of Bonelike [®] Graft for Bone Regeneration by Using an Animal Model. <i>Key Engineering Materials</i> , 2005, 284-286, 877-880.	0.4	9
88	New titanium and titanium/hydroxyapatite coatings on ultra-high-molecular-weight polyethylene in vitro osteoblastic performance. <i>Biomedical Materials (Bristol)</i> , 2010, 5, 035014.	1.7	9
89	Development of asymmetric resorbable membranes for guided bone and surrounding tissue regeneration. <i>Journal of Biomedical Materials Research - Part A</i> , 2018, 106, 2141-2150.	2.1	8
90	Efficacy and Cytotoxicity of Binary Mixtures as Root Canal Filling Solvents. <i>Materials</i> , 2020, 13, 3237.	1.3	7

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91	Improvement of the efficacy of endodontic solvents by ultrasonic agitation. Saudi Dental Journal, 2021, 33, 39-43.	0.5	7
92	In Vitro Biodegradability of Chitosan-Organosiloxane Hybrid Membrane. Key Engineering Materials, 2005, 284-286, 823-826.	0.4	6
93	Processing strategies for smart electroconductive carbon nanotube-based bioceramic bone grafts. Nanotechnology, 2014, 25, 145602.	1.3	6
94	Supplementary solvent irrigation efficacy on filling remnants removal comparing XP-endo Finisher R vs IrriSafe. Scientific Reports, 2021, 11, 12659.	1.6	6
95	Application of Glass Reinforced Hydroxyapatite Composite in the Treatment of Human Intrabony Periodontal Angular Defects – Two Case Reports. Solid State Phenomena, 0, 161, 93-101.	0.3	5
96	Bioactive and biopassive treatment of poly(ethylene terephthalate) multifilament textile yarns to improve/prevent fibroblast viability. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 2213-2226.	1.6	5
97	Determination of the intracellular Ca ²⁺ concentration in the N1E-115 neuronal cell line in perspective of its use for peripheric nerve regeneration. Bio-Medical Materials and Engineering, 2005, 15, 455-65.	0.4	5
98	In Vitro Mineralisation of Human Bone Marrow Cells Cultured on Bonelike [®] . Key Engineering Materials, 2004, 254-256, 821-824.	0.4	4
99	Hybrid Chitosan Membranes Tested in Sheep for Guided Tissue Regeneration. Key Engineering Materials, 2007, 361-363, 1265-1268.	0.4	4
100	Antimicrobial profile of a dental implant abutment coating to prevent adhesion and migration of bacteria and screw loosening. Dental Materials, 2021, 37, e493-e501.	1.6	4
101	Intracellular Ca ²⁺ concentration in the N1E-115 neuronal cell line and its use for peripheric nerve regeneration. Acta Medica Portuguesa, 2005, 18, 323-8.	0.2	4
102	Engineering hybrid textile braids for tendon and ligament repair application. Journal of Applied Polymer Science, 2022, 139, 52013.	1.3	4
103	Effect of Human Serum Proteins on Pure Hydroxyapatite and Silicon Substituted Hydroxyapatite: AFM and SEM Studies. Materials Science Forum, 2004, 455-456, 378-382.	0.3	3
104	Microanalysis of Bioactive Samarium Doped Glass-Reinforced Hydroxyapatite. Microscopy and Microanalysis, 2015, 21, 31-32.	0.2	3
105	The benefit of bone marrow concentrate in addition to a glass-reinforced hydroxyapatite for bone regeneration: An in vivo ovine study. Journal of Orthopaedic Research, 2017, 35, 1176-1182.	1.2	3
106	Biological Activity of Two Glass Ceramics in the Meta- and Pyrophosphate Region: a Comparative Study. Key Engineering Materials, 2003, 254-256, 825-828.	0.4	2
107	Protein Adsorption Effect on In Vitro Acellular Biodegradation of CaO-P ₂ O ₅ ; Glass Ceramics. Materials Science Forum, 2004, 455-456, 398-401.	0.3	2
108	Treatment of a Large Cystic Lesion in Anterior Maxilla Using Glass Reinforced Hydroxyapatite – A Case Report. Solid State Phenomena, 2013, 207, 97-108.	0.3	2

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109	Fibrous structures in augmentation for rotator cuff repair: an experimental comparison. Biomedical Physics and Engineering Express, 2018, 4, 045021.	0.6	2
110	Adjunctive procedure with solvent mixtures in non-surgical endodontic retreatment: does it affect root dentin hardness?. Odontology / the Society of the Nippon Dental University, 2021, 109, 812-818.	0.9	2
111	In Vivo Behaviour of Bonelike [®] /PLGA Hybrid: Histological Analysis and Peripheral Quantitative Computed Tomography (pQ-CT) Evaluation. Key Engineering Materials, 2004, 254-256, 565-568.	0.4	1
112	Bonelike [®] /PLGA Hybrid Materials for Bone Regeneration: In Vivo Evaluation. Materials Science Forum, 2004, 455-456, 374-377.	0.3	1
113	The Influence of Pre-Incubation Treatment in the In Vitro Biological Performance of Degradable CaO-P ₂ O ₅ Glass Ceramics. Key Engineering Materials, 2005, 284-286, 565-568.	0.4	1
114	Guided Bone Regeneration Using Glass-Reinforced Hydroxyapatite and Collagen Membrane in the Treatment of Peri-Implantitis. Solid State Phenomena, 0, 207, 109-119.	0.3	1
115	The Benefit of a Human Bone Marrow Stem Cells Concentrate in addition to an Inorganic Scaffold for Bone Regeneration: An In Vitro Study. BioMed Research International, 2015, 2015, 1-10.	0.9	1
116	Push-out testing and histological evaluation of glass reinforced hydroxyapatite composites implanted in the tibia of rabbits. , 2001, 54, 463.		1
117	Hybrid structures for Achilles' tendon repair. Polymers for Advanced Technologies, 0, , .	1.6	1
118	Assessment of the osteoblastic cell response to a zinc glass reinforced hydroxyapatite composite (Zn-GRHA). International Journal of Nano and Biomaterials, 2009, 2, 100.	0.1	0