Antonio Carlos Guastaldi

List of Publications by Year
in descending order

84 papers	1,992 citations	304368 22 h-index	264894 42 g-index
84 all docs	84 docs citations	84 times ranked	2302 citing authors

#	Article	IF	Citations
1	Electrochemical stability and corrosion resistance of Tiâ€“Mo alloys for biomedical applications. Acta Biomaterialia, 2009, 5, 399-405.	4.1	241
2	Development of Tiâ€“Mo alloys for biomedical applications: Microstructure and electrochemical characterization. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 452-453, 727-731.	2.6	154
3	Electrochemical impedance spectroscopy characterization of passive film formed on implant Tiâ€“6Alâ€“7Nb alloy in Hankâ€™s solution. Journal of Materials Science: Materials in Medicine, 2004, 15, 55-59.	1.7	149
4	Electrochemical behavior of Tiâ€“Mo alloys applied as biomaterial. Corrosion Science, 2008, 50, 938-945.	3.0	123
5	Microstructure and corrosion resistance of inorganicâ€“organic (ZrO2â€“PMMA) hybrid coating on stainless steel. Journal of Non-Crystalline Solids, 1999, 247, 164-170.	1.5	85
6	Surface modification of Ti dental implants by Nd:YVO4 laser irradiation. Applied Surface Science, 2007, 253, 9203-9208.	3.1	84
7	Biological Performance of Chemical Hydroxyapatite Coating Associated With Implant Surface Modification by Laser Beam: Biomechanical Study in Rabbit Tibias. Journal of Oral and Maxillofacial Surgery, 2009, 67, 1706-1715.	0.5	65
8	Evaluation of titanium implants with surface modification by laser beam: biomechanical study in rabbit tibias. Brazilian Oral Research, 2009, 23, 137-143.	0.6	60
9	Natural rubber latex coated with calcium phosphate for biomedical application. Journal of Biomaterials Science, Polymer Edition, 2015, 26, 1256-1268.	1.9	47
10	Natural rubber latex membranes incorporated with three different types of propolis: Physical-chemistry and antimicrobial behaviours. Materials Science and Engineering C, 2019, 97, 576-582.	3.8	42
11	Fosfatos de cÃ¡lcio de interesse biolÃ³gico: importÃ¢ncia como biomateriais, propriedades e mÃ©todos de obtenÃ§Ã£o de recobrimentos. Quimica Nova, 2010, 33, 1352-1358.	0.3	38
12	Electrochemical stability of anodic titanium oxide films grown at potentials higher than 3V in a simulated physiological solution. Corrosion Science, 2007, 49, 1645-1655.	3.0	36
13	Estudo do biomaterial Ti-6Al-4V empregando-se tÃ©cnicas eletroquÃmicas e XPS. Quimica Nova, 2002, 25, 10-14.	0.3	35
14	Effect of surface treatment on the bond strength between yttria partially stabilized zirconia ceramics and resin cement. Journal of Prosthetic Dentistry, 2014, 112, 357-364.	1.1	35
15	Analysis of Failed Commercially Pure Titanium Dental Implants: A Scanning Electron Microscopy and Energy-Dispersive Spectrometer X-Ray Study. Journal of Periodontology, 2005, 76, 1092-1099.	1.7	31
16	Laser ablation in titanium implants followed by biomimetic hydroxyapatite coating: Histomorphometric study in rabbits. Microscopy Research and Technique, 2012, 75, 940-948.	1.2	30
17	Commercially pure titanium implants with surfaces modified by laser beam with and without chemical deposition of apatite. Biomechanical and topographical analysis in rabbits. Clinical Oral Implants Research, 2013, 24, 896-903.	1.9	29
18	Biomimetic apatite formation on Ultra-High Molecular Weight Polyethylene (UHMWPE) using modified biomimetic solution. Journal of Materials Science: Materials in Medicine, 2009, 20, 1215-1222.	1.7	28

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19	Adhesion strength characterization of PVDF/HA coating on cp Ti surface modified by laser beam irradiation. Applied Surface Science, 2012, 258, 10110-10114.	3.1	28
20	Comparative <i>in vivo</i> study of commercially pure Ti implants with surfaces modified by laser with and without silicate deposition: Biomechanical and scanning electron microscopy analysis. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101B, 76-84.	1.6	26
21	Corrosion of dental amalgams: electrochemical study of Agâ€“Hg, Agâ€“Sn and Snâ€“Hg phases. Electrochimica Acta, 2001, 46, 3887-3893.	2.6	25
22	Physical, chemical and antimicrobial implications of the association of propolis with a natural rubber latex membrane. Materials Letters, 2017, 209, 39-42.	1.3	25
23	Laser weld: microstructure and corrosion study of Agâ€“Pdâ€“Auâ€“Cu alloy of the dental application. Materials Letters, 2003, 57, 1888-1893.	1.3	23
24	A comparative study of the corrosion of high copper dental amalgams. Materials Letters, 1998, 36, 148-151.	1.3	22
25	Comparison of crystallinity between natural hydroxyapatite and synthetic cp-Ti /HA coatings. Materials Research, 2005, 8, 207-211.	0.6	22
26	Skeletal stem cell and bone implant interactions are enhanced by LASER titanium modification. Biochemical and Biophysical Research Communications, 2016, 473, 719-725.	1.0	22
27	Surface physical chemistry properties in coated bacterial cellulose membranes with calcium phosphate. Materials Science and Engineering C, 2017, 75, 1359-1365.	3.8	22
28	Novel Chemically Modified Bacterial Cellulose Nanocomposite as Potential Biomaterial for Stem Cell Therapy Applications. Current Stem Cell Research and Therapy, 2014, 9, 117-123.	0.6	22
29	Corrosion behavior of a cobaltchromium-molybdenum alloy. Russian Journal of Electrochemistry, 2000, 36, 1117-1121.	0.3	21
30	In vivo evaluation of cp Ti implants with modified surfaces by laser beam with and without hydroxyapatite chemical deposition and without and with thermal treatment: topographic characterization and histomorphometric analysis in rabbits. Clinical Oral Investigations, 2017, 21, 685-699.	1.4	21
31	Corrosion of the component phases presents in high copper dental amalgams. Application of electrochemical impedance spectroscopy and electrochemical noise analysis. Corrosion Science, 2005, 47, 635-647.	3.0	20
32	Biomedical Tiâ€“Mo Alloys with Surface Machined and Modified by Laser Beam: Biomechanical, Histological, and Histometric Analysis in Rabbits. Clinical Implant Dentistry and Related Research, 2013, 15, 427-437.	1.6	20
33	Surface and Biomechanical Study of Titanium Implants Modified by Laser With and Without Hydroxyapatite Coating, in Rabbits. Journal of Oral Implantology, 2012, 38, 231-237.	0.4	19
34	Novel Antimicrobial Peptides Bacterial Cellulose Obtained by Symbioses Culture Between Polyhexanide Biguanide (PHMB) and Green Tea. Journal of Biomaterials and Tissue Engineering, 2014, 4, 59-64.	0.0	19
35	Laser-modified titanium surfaces enhance the osteogenic differentiation of human mesenchymal stem cells. Stem Cell Research and Therapy, 2017, 8, 269.	2.4	18
36	Bioactive coating on titanium implants modified by Nd:YVO4 laser. Applied Surface Science, 2011, 257, 4575-4580.	3.1	17

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37	Photo-electrochemical investigation of anodic oxide films on cast Tiâ€“Mo alloys. I. Anodic behaviour and effect of alloy composition. Electrochimica Acta, 2009, 54, 1395-1402.	2.6	16
38	Histometric analysis and topographic characterization of <i>cp Ti</i> implants with surfaces modified by laser with and without silica deposition. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 1677-1688.	1.6	16
39	Physicochemical, morphological, and biological analyses of Ti-15Mo alloy surface modified by laser beam irradiation. Lasers in Medical Science, 2019, 34, 537-546.	1.0	15
40	Bacterial Cellulose Biocomposites for Guided Tissue Regeneration. Science of Advanced Materials, 2014, 6, 2673-2678.	0.1	14
41	Nondecalcified Histologic Study of Bone Response to Titanium Implants Topographically Modified by Laser With and Without Hydroxyapatite Coating. International Journal of Periodontics and Restorative Dentistry, 2013, 33, 689-696.	0.4	13
42	Calcium phosphates nanoparticles: The effect of freeze-drying on particle size reduction. Materials Chemistry and Physics, 2020, 239, 122004.	2.0	13
43	Bacterial Cellulose/Chondroitin Sulfate for Dental Materials Scaffolds. Journal of Biomaterials and Tissue Engineering, 2014, 4, 150-154.	0.0	13
44	Physically Modified Bacterial Cellulose Biocomposites for Guided Tissue Regeneration. Science of Advanced Materials, 2015, 7, 1657-1664.	0.1	13
45	Dental Implants: Surface Modification of cp-Ti Using Plasma Spraying and the Deposition of Hydroxyapatite. Materials Science Forum, 2003, 416-418, 669-674.	0.3	12
46	Hydroxyapatite deposition study through polymeric process on commercially pure Ti surfaces modified by laser beam irradiation. Journal of Materials Science, 2009, 44, 4056-4061.	1.7	12
47	Calcium phosphates of biological importance based coatings deposited on Ti-15Mo alloy modified by laser beam irradiation for dental and orthopedic applications. Ceramics International, 2018, 44, 22432-22438.	2.3	12
48	Apatite coatings onto titanium surfaces submitted to laser ablation with different energy densities. Surface and Coatings Technology, 2009, 204, 399-403.	2.2	10
49	Bacterial cellulose for advanced medical materials. , 2016, , 57-82.		10
50	Bacterial Cellulose Nanobiocomposites for Dental Materials Scaffolds. Journal of Biomaterials and Tissue Engineering, 2014, 4, 536-542.	0.0	10
51	Estudo da influÃªncia dos Ãons K+, Mg2+, SO4(2-) e CO3(2-) na cristalizaÃ§Ã£o biomimÃ©tica de fosfato de cÃ¡lcio amorfo (ACP) e conversÃ£o a fosfato octacÃ¡lcico (OCP). Quimica Nova, 2007, 30, 892-896.	0.3	9
52	Desenvolvimento e caracterizaÃ§Ã£o de suportes porosos de polietileno de ultra alto peso molecular (PEUAPM) para utilizaÃ§Ã£o como biomaterial para reposiÃ§Ã£o e regeneraÃ§Ã£o Ã³ssea. Polimeros, 2008, 18, 277-280.	0.2	8
53	Bacterial Cellulose Biocomposites for Periodontology Treatment. Advanced Science, Engineering and Medicine, 2015, 7, 409-414.	0.3	8
54	Bacterial Cellulose Nanobiocomposites for Periodontal Disease. Journal of Bionanoscience, 2014, 8, 319-324.	0.4	7

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55	Analyse titanium surface irradiated with laser, with and without deposited of durapatite. Acta Cirurgica Brasileira, 2006, 21, 57-62.	0.3	7
56	Corrosion of Dental Amalgams: Studies of Individual Phases. Key Engineering Materials, 2002, 230-232, 463-466.	0.4	6
57	Biomechanical Study in Polyurethane Mandibles of Different Metal Plates and Internal Fixation Techniques, Employed in Mandibular Angle Fractures. Journal of Craniofacial Surgery, 2014, 25, 2246-2250.	0.3	6
58	Solâ€"gel based calcium phosphates coatings deposited on binary Tiâ€"Mo alloys modified by laser beam irradiation for biomaterial/clinical applications. Journal of Materials Science: Materials in Medicine, 2018, 29, 82.	1.7	6
59	Lower Susceptibility of Laser-irradiated Ti-15Mo Surface to Methicillin-resistant Staphylococcus aureus Cells Adhesion. Materials Research, 2019, 22, .	0.6	6
60	AplicaÃ§Ã£o de tÃ©cnicas eletroquÃmicas no estudo da dissoluÃ§Ã£o oxidativa da covelita (CuS) por Thiobacillus ferrooxidans. Quimica Nova, 2002, 25, 20-26.	0.3	5
61	Physically Modified Bacterial Cellulose Biocomposites for Dental Materials Scaffolds. Materials Focus, 2015, 4, 111-117.	0.4	5
62	Biomimetic calcium phosphates-based coatings deposited on binary Ti-Mo alloys modified by laser beam irradiation for biomaterial/clinical applications. MRS Advances, 2018, 3, 1711-1718.	0.5	4
63	Biomateriais: deposiÃ§Ã£o de hidroxiapatita sobre superfÃcie de Ti-cp modificada por aspersÃ£o tÃ©rmica. Quimica Nova, 2007, 30, 1129-1232.	0.3	4
64	Microestrutura e resistÃªncia Ã corrosÃ£o do Ti c.p. soldado a laser utilizando em prÃ³tese sobre implantes. Ecletica Quimica, 1999, 24, 113-124.	0.2	4
65	A new multiphase calcium phosphate graft material improves bone healingâ€"An in vitro and in vivo analysis. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2022, 110, 2686-2704.	1.6	4
66	Potentialities and limitations of computer-aided design and manufacturing technology in the nonextraction treatment of Class I malocclusion. American Journal of Orthodontics and Dentofacial Orthopedics, 2021, 159, 86-96.	0.8	3
67	A comparative study of TIG and laser welded joints using commercial purity titanium used in prostheses supported by implants. Welding International, 2008, 22, 834-839.	0.3	2
68	Physical Chemistry Properties Influences in Bacterial Cellulose Biocomposites. Journal of Bionanoscience, 2017, 11, 573-577.	0.4	2
69	Comparative Evaluation of Implants with Different Surface Treatments Placed in Human Edentulous Mandibles: A 1-Year Prospective Study. Journal of Maxillofacial and Oral Surgery, 2022, 21, 815-823.	0.6	2
70	CaracterizaÃ§Ã£o e estudo da corrosÃ£o do amÃ¡lgama dentÃ¡rio Dispersalloy por meio das tÃ©cnicas de polarizaÃ§Ã£o potenciodinÃ¢mica e espectroscopia de impedÃ¢ncia. Ecletica Quimica, 1997, 22, 101-119.	0.2	2
71	Effect of Yd:YAG laser irradiation on the shear bond strength of orthodontic metal brackets. Dental Press Journal of Orthodontics, 2020, 25, 28-35.	0.2	2
72	Investigation of the metal/porcelain interface in LASER-welded Niâ€"Crâ€"Mo alloyArticle based on a version presented at the XXXII CONSOLDA, Belo Horizonte, Minas Gerais, Brazil, 2â€"5 October 2006.. Welding International, 2009, 23, 193-199.	0.3	1

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73	Sol-gel based calcium phosphates coating deposited on Co-Cr-Ni-Mo alloys modified by laser beam irradiation for cardiovascular devices. Materials Today: Proceedings, 2019, 14, 663-670.	0.9	1
74	Synthesis by Wet Chemical Method of Different Phases of Apatites Applying Ultrasound. Journal of Bionanoscience, 2018, 12, 134-141.	0.4	1
75	Influence of the Application of Ultrasound During the Synthesis of Calcium Phosphates. Journal of Bionanoscience, 2018, 12, 733-738.	0.4	1
76	Preparation of Laser-Modified Ti-15Mo Surfaces With Multiphase Calcium Phosphate Coatings. Materials Research, 2020, 23, .	0.6	1
77	ResistÃªncia Ã corrosÃ£o das fases presentes em amÃ¡lgamas dentÃ¡rios. Ecletica Quimica, 2001, 26, 125-142.	0.2	1
78	The Influence of the Heat Treatment Temperatures in Calcium Phosphate Synthesis. Journal of Biomaterials and Tissue Engineering, 2014, 4, 744-748.	0.0	1
79	A Study of the Microstructural Characteristics of Dental Amalgams. Materials Science Forum, 1998, 299-300, 298-299.	0.3	0
80	Evaluation of Procera/Porcelain Interface in Metal-Free Prosthesis. Materials Science Forum, 2005, 498-499, 606-611.	0.3	0
81	Topographic characterization of cp-Ti implants with machined and modified surface by LASER. Research, Society and Development, 2021, 10, e15910212217.	0.0	0
82	Study of Corrosion Resistance of Laser Welded Au-Pd-Ag-In Alloy Using Electrochemical Techniques. Materials Sciences and Applications, 2011, 02, 711-715.	0.3	0
83	ObtenÃ§Ã£o de fosfatos de cÃ¡lcio pelo mÃ©todo biomimÃ©tico sobre a superfÃcie da liga Ti-6Al-4V modificada pelo laser Nd:YAG. Revista Materia, 2013, 18, 1306-1312.	0.1	0
84	Calcium Phosphates of Interest Biological Coatings on Titanium Surfaces Modified by an Yb:YAG Laser Beam Irradiation. Materials Focus, 2015, 4, 129-133.	0.4	0