

Sergio Alexandre Gehrke

List of Publications by Year in descending order

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105
papers

1,472
citations

331538

21
h-index

501076

28
g-index

116
all docs

116
docs citations

116
times ranked

1685
citing authors

#	ARTICLE	IF	CITATIONS
1	Clinical analysis of the stability of dental implants after preparation of the site by conventional drilling or piezosurgery. <i>British Journal of Oral and Maxillofacial Surgery</i> , 2014, 52, 149-153.	0.4	48
2	Radiological evaluation of maxillary sinus anatomy: A cross-sectional study of 300 patients. <i>Annals of Anatomy</i> , 2017, 214, 1-8.	1.0	47
3	Investigation of the effect of movement and irrigation systems on temperature in the conventional drilling of cortical bone. <i>British Journal of Oral and Maxillofacial Surgery</i> , 2013, 51, 953-957.	0.4	45
4	Temperature Changes in Cortical Bone after Implant Site Preparation Using a Single Bur versus Multiple Drilling Steps: An In Vitro Investigation. <i>Clinical Implant Dentistry and Related Research</i> , 2015, 17, 700-707.	1.6	37
5	Oral Streptococci Biofilm Formation on Different Implant Surface Topographies. <i>BioMed Research International</i> , 2015, 2015, 1-6.	0.9	35
6	The effect of cigarette smoking on early osseointegration of dental implants: a prospective controlled study. <i>Clinical Oral Implants Research</i> , 2016, 27, 1123-1128.	1.9	35
7	Does Implant Design Affect Implant Primary Stability? A Resonance Frequency Analysisâ€‘Based Randomized Split-Mouth Clinical Trial. <i>Journal of Oral Implantology</i> , 2015, 41, e281-e286.	0.4	34
8	Changes in the Abutment-Implant Interface in Morse Taper Implant Connections After Mechanical Cycling: A Pilot Study. <i>International Journal of Oral and Maxillofacial Implants</i> , 2014, 29, 791-797.	0.6	29
9	Biomechanical evaluation of dental implants with three different designs: Removal torque and resonance frequency analysis in rabbits. <i>Annals of Anatomy</i> , 2015, 199, 30-35.	1.0	28
10	Evaluation of the insertion torque, implant stability quotient and drilled hole quality for different drill design: an in vitro Investigation. <i>Clinical Oral Implants Research</i> , 2018, 29, 656-662.	1.9	28
11	Mechanical behavior of zirconia and titanium abutments before and after cyclic load application. <i>Journal of Prosthetic Dentistry</i> , 2016, 116, 529-535.	1.1	27
12	Different configuration of socket shield technique in peri-implant bone preservation: An experimental study in dog mandible. <i>Annals of Anatomy</i> , 2016, 208, 109-115.	1.0	26
13	New 3D stratified Si-Ca-P porous scaffolds obtained by sol-gel and polymer replica method: Microstructural, mineralogical and chemical characterization. <i>Ceramics International</i> , 2017, 43, 6548-6553.	2.3	26
14	Misfit of Three Different Implant-Abutment Connections Before and After Cyclic Load Application: An In Vitro Study. <i>International Journal of Oral and Maxillofacial Implants</i> , 2017, 32, 822-829.	0.6	26
15	The influence of drill length and irrigation system on heat production during osteotomy preparation for dental implants: an <i>in vivo</i> study. <i>Clinical Oral Implants Research</i> , 2018, 29, 772-778.	1.9	26
16	Analysis of Implant Strength After Implantoplasty in Three Implant-Abutment Connection Designs: An In Vitro Study. <i>International Journal of Oral and Maxillofacial Implants</i> , 2016, 31, e65-e70.	0.6	25
17	SEM-EDX Study of the Degradation Process of Two Xenograft Materials Used in Sinus Lift Procedures. <i>Materials</i> , 2017, 10, 542.	1.3	25
18	Particulated, Extracted Human Teeth Characterization by SEMâ€‘EDX Evaluation as a Biomaterial for Socket Preservation: An in vitro Study. <i>Materials</i> , 2019, 12, 380.	1.3	25

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19	Impact of Different Titanium Implant Thread Designs on Bone Healing: A Biomechanical and Histometric Study with an Animal Model. <i>Journal of Clinical Medicine</i> , 2019, 8, 777.	1.0	25
20	Importance of Crown Height Ratios in Dental Implants on the Fracture Strength of Different Connection Designs: An In Vitro Study. <i>Clinical Implant Dentistry and Related Research</i> , 2015, 17, 790-797.	1.6	24
21	Histological and Histomorphometric Analyses of Two Bovine Bone Blocks Implanted in Rabbit Calvaria. <i>Symmetry</i> , 2019, 11, 641.	1.1	24
22	The influence of three different apical implant designs at stability and osseointegration process: experimental study in rabbits. <i>Clinical Oral Implants Research</i> , 2017, 28, 355-361.	1.9	21
23	Histological and Histomorphometrical Evaluation of a New Implant Macrogeometry. A Sheep Study. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 3477.	1.2	21
24	Positive Biomechanical Effects of Titanium Oxide for Sandblasting Implant Surface as an Alternative to Aluminium Oxide. <i>Journal of Oral Implantology</i> , 2015, 41, 515-522.	0.4	20
25	Microgrooves and Microrugosities in Titanium Implant Surfaces: An In Vitro and In Vivo Evaluation. <i>Materials</i> , 2019, 12, 1287.	1.3	20
26	Influence of bone insertion level of the implant on the fracture strength of different connection designs: an in vitro study. <i>Clinical Oral Investigations</i> , 2014, 18, 715-720.	1.4	19
27	Comparison of Two Xenograft Materials Used in Sinus Lift Procedures: Material Characterization and In Vivo Behavior. <i>Materials</i> , 2017, 10, 623.	1.3	19
28	Photoelastic Stress Analysis Surrounding Different Implant Designs Under Simulated Static Loading. <i>Journal of Craniofacial Surgery</i> , 2014, 25, 1068-1071.	0.3	18
29	Does the Time of Osseointegration in the Maxilla and Mandible Differ?. <i>Journal of Craniofacial Surgery</i> , 2014, 25, 2117-2120.	0.3	17
30	In Vitro Assessment of the Functional Dynamics of Titanium with Surface Coating of Hydroxyapatite Nanoparticles. <i>Materials</i> , 2019, 12, 840.	1.3	17
31	Effects of a Low-Intensity Laser on Dental Implant Osseointegration: Removal Torque and Resonance Frequency Analysis in Rabbits. <i>Journal of Oral Implantology</i> , 2016, 42, 316-320.	0.4	16
32	In vitro behaviour of sol-gel interconnected porous scaffolds of doped wollastonite. <i>Ceramics International</i> , 2017, 43, 11034-11038.	2.3	16
33	Amorphous calcium phosphate (ACP) in tissue repair process. <i>Microscopy Research and Technique</i> , 2018, 81, 579-589.	1.2	16
34	A comparative evaluation between aluminium and titanium dioxide microparticles for blasting the surface titanium dental implants: an experimental study in rabbits. <i>Clinical Oral Implants Research</i> , 2018, 29, 802-807.	1.9	16
35	The Use of Tooth Particles as a Biomaterial in Post-Extraction Sockets. <i>Experimental Study in Dogs. Dentistry Journal</i> , 2018, 6, 12.	0.9	16
36	Biomechanical Effects of a New Macrogeometry Design of Dental Implants: An In Vitro Experimental Analysis. <i>Journal of Functional Biomaterials</i> , 2019, 10, 47.	1.8	16

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37	Socket-shield technique: the influence of the length of the remaining buccal segment of healthy tooth structure on peri-implant bone and socket preservation. A study in dogs. <i>Annals of Anatomy</i> , 2019, 221, 84-92.	1.0	16
38	A Si-Î±TCP Scaffold for Biomedical Applications: An Experimental Study Using the Rabbit Tibia Model. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 706.	1.3	15
39	A Finite Element Analysis to Compare Stress Distribution on Extra-Short Implants with Two Different Internal Connections. <i>Journal of Clinical Medicine</i> , 2019, 8, 1103.	1.0	15
40	Influence of Implant/Abutment Connection on Stress Distribution to Implantâ€™s Surrounding Bone: A Finite Element Analysis. <i>Journal of Prosthodontics</i> , 2014, 23, 565-571.	1.7	14
41	Effects of different torque levels on the implant-abutment interface in a conical internal connection. <i>Brazilian Oral Research</i> , 2016, 30, .	0.6	14
42	Peri-implant tissue behavior around non-titanium material: Experimental study in dogs. <i>Annals of Anatomy</i> , 2016, 206, 104-109.	1.0	14
43	Influence of hydroxyapatite granule size, porosity, and crystallinity on tissue reaction in vivo. Part B: a comparative study with biphasic synthetic biomaterials. <i>Clinical Oral Implants Research</i> , 2018, 29, 1077-1084.	1.9	14
44	Effects on the osseointegration of titanium implants incorporating calciumâ€™magnesium: a resonance frequency and histomorphometric analysis in rabbit tibia. <i>Clinical Oral Implants Research</i> , 2018, 29, 785-791.	1.9	14
45	Study of Two Bovine Bone Blocks (Sintered and Non-Sintered) Used for Bone Grafts: Physico-Chemical Characterization and In Vitro Bioactivity and Cellular Analysis. <i>Materials</i> , 2019, 12, 452.	1.3	14
46	High Throughput Approaches to Unravel the Mechanism of Action of a New Vanadium-Based Compound against <i>Trypanosoma cruzi</i> . <i>Bioinorganic Chemistry and Applications</i> , 2020, 2020, 1-10.	1.8	14
47	Impact of Different Implant Surfaces Topographies on Peri-Implant Tissues: An Update of Current Available Data on Dental Implants Retrieved from Human Jaws. <i>Current Pharmaceutical Biotechnology</i> , 2017, 18, 76-84.	0.9	14
48	Study of temperature variation in cortical bone during osteotomies with trephine drills. <i>Clinical Oral Investigations</i> , 2014, 18, 1749-1755.	1.4	13
49	Relationship Between the Surface Energy and the Histologic Results of Different Titanium Surfaces. <i>Journal of Craniofacial Surgery</i> , 2014, 25, 863-867.	0.3	13
50	A histological study of non-ceramic hydroxyapatite as a bone graft substitute material in the vertical bone augmentation of the posterior mandible using an interpositional inlay technique: A split mouth evaluation. <i>Annals of Anatomy</i> , 2015, 202, 1-7.	1.0	13
51	Stability of implants placed in fresh sockets versus healed alveolar sites: Early findings. <i>Clinical Oral Implants Research</i> , 2016, 27, 577-582.	1.9	12
52	Effect of platelet-rich plasma in alveolar distraction osteogenesis: a controlled clinical trial. <i>British Journal of Oral and Maxillofacial Surgery</i> , 2016, 54, 83-87.	0.4	12
53	Implant Stability of Biological Hydroxyapatites Used in Dentistry. <i>Materials</i> , 2017, 10, 644.	1.3	12
54	A New Model to Study Fatigue in Dental Implants Based on Probabilistic Finite Elements and Cumulative Damage Model. <i>Applied Bionics and Biomechanics</i> , 2017, 2017, 1-8.	0.5	12

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55	Effect of Different Morphology of Titanium Surface on the Bone Healing in Defects Filled Only with Blood Clot: A New Animal Study Design. <i>BioMed Research International</i> , 2018, 2018, 1-9.	0.9	12
56	New Implant Macrogeometry to Improve and Accelerate the Osseointegration: An In Vivo Experimental Study. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3181.	1.3	12
57	Is There a Need for Standardization of Tightening Force Used to Connect the Transducer for Resonance Frequency Analysis in Determining Implant Stability?. <i>International Journal of Oral and Maxillofacial Implants</i> , 2019, 34, 886-890.	0.6	12
58	Evaluation of the Cortical Bone Reaction Around of Implants Using a Single-Use Final Drill. <i>Journal of Craniofacial Surgery</i> , 2015, 26, 1482-1486.	0.3	11
59	Complete mechanical characterization of an external hexagonal implant connection: in vitro study, 3D FEM, and probabilistic fatigue. <i>Medical and Biological Engineering and Computing</i> , 2018, 56, 2233-2244.	1.6	11
60	Can changes in implant macrogeometry accelerate the osseointegration process?: An in vivo experimental biomechanical and histological evaluations. <i>PLoS ONE</i> , 2020, 15, e0233304.	1.1	11
61	Influence of Implant Design (Cylindrical and Conical) in the Load Transfer Surrounding Long (13mm) and Short (7mm) Length Implants: A Photoelastic Analysis. <i>Open Dentistry Journal</i> , 2016, 10, 522-530.	0.2	11
62	Effects of insertion torque values on the marginal bone loss of dental implants installed in sheep mandibles. <i>Scientific Reports</i> , 2022, 12, 538.	1.6	11
63	Influence of Bone Definition and Finite Element Parameters in Bone and Dental Implants Stress: A Literature Review. <i>Biology</i> , 2020, 9, 224.	1.3	10
64	Comparative analysis of stress distribution in one-piece and two-piece implants with narrow and extra-narrow diameters: A finite element study. <i>PLoS ONE</i> , 2021, 16, e0245800.	1.1	10
65	Evaluation of four designs of short implants placed in atrophic areas with reduced bone height: a three-year, retrospective, clinical and radiographic study. <i>British Journal of Oral and Maxillofacial Surgery</i> , 2017, 55, 703-708.	0.4	9
66	A New Biphasic Dicalcium Silicate Bone Cement Implant. <i>Materials</i> , 2017, 10, 758.	1.3	9
67	Quasi-static strength and fractography analysis of two dental implants manufactured by direct metal laser sintering. <i>Clinical Implant Dentistry and Related Research</i> , 2018, 20, 368-374.	1.6	9
68	Comparison of Different Bone Filling Materials and Resorbable Membranes by Means of Micro-Tomography. A Preliminary Study in Rabbits. <i>Materials</i> , 2019, 12, 1197.	1.3	9
69	Peri-Implant Bone Behavior after Single Drill versus Multiple Sequence for Osteotomy Drill. <i>BioMed Research International</i> , 2018, 2018, 1-8.	0.9	8
70	An alternative to nerve repair using an antioxidant compound: a histological study in rats. <i>Journal of Materials Science: Materials in Medicine</i> , 2015, 26, 5340.	1.7	7
71	Probability of Failure of Internal Hexagon and Morse Taper Implants with Different Bone Levels: A Mechanical Test and Probabilistic Fatigue. <i>International Journal of Oral and Maxillofacial Implants</i> , 2018, 33, 1266-1273.	0.6	7
72	Influence of Implant Neck Design on Peri-Implant Tissue Dimensions: A Comparative Study in Dogs. <i>Materials</i> , 2018, 11, 2007.	1.3	7

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73	Biomechanical and Histological Analysis of Titanium (Machined and Treated Surface) Versus Zirconia Implant Materials: An In Vivo Animal Study. <i>Materials</i> , 2019, 12, 856.	1.3	7
74	Effects of the technique and drill design used during the osteotomy on the thermal and histological stimulation. <i>Scientific Reports</i> , 2020, 10, 20737.	1.6	7
75	Effects of insertion torque on the structure of dental implants with different connections: Experimental pilot study in vitro. <i>PLoS ONE</i> , 2021, 16, e0251904.	1.1	7
76	Evaluating Nuclear Factor NF- κ B Activation following Bone Trauma: A Pilot Study in a Wistar Rats Model. <i>PLoS ONE</i> , 2015, 10, e0140630.	1.1	6
77	Marginal Bone Loss in Implants Placed in the Maxillary Sinus Grafted With Anorganic Bovine Bone: A Prospective Clinical and Radiographic Study. <i>Journal of Periodontology</i> , 2016, 87, 880-887.	1.7	6
78	Stability and Crestal Bone Behavior Following Simultaneous Placement of Multiple Dental Implants (Two or More) with the Bone Splitting Technique: A Clinical and Radiographic Evaluation. <i>Clinical Implant Dentistry and Related Research</i> , 2017, 19, 123-130.	1.6	6
79	Effects of Surface Treatment Modification and Implant Design in Implants Placed Crestal and Subcrestally Applying Delayed Loading Protocol. <i>Journal of Craniofacial Surgery</i> , 2017, 28, 552-558.	0.3	6
80	A Comparative Analysis of Implants Presenting Different Diameters: Extra-Narrow, Narrow and Conventional. <i>Materials</i> , 2020, 13, 1888.	1.3	6
81	Evaluation of the Surface Treatment on Bone Healing in a Transmucosal 1 \times mm Area of Implant Abutment: An Experimental Study in the Rabbit Tibia. <i>Clinical Implant Dentistry and Related Research</i> , 2016, 18, 489-497.	1.6	5
82	Evaluation of dimensional behavior of peri-implant tissues in implants immediately exposed or submerged in fresh extraction and healed sites: a histological study in dogs. <i>International Journal of Implant Dentistry</i> , 2018, 4, 5.	1.1	5
83	A Finite Element Analysis of the Fatigue Behavior and Risk of Failure of Immediate Provisional Implants. <i>Metals</i> , 2019, 9, 535.	1.0	5
84	Effects of different switched or not-switched implant and abutment platform designs and marginal bone loss on fracture strength: An in vitro study. <i>Journal of Prosthetic Dentistry</i> , 2022, 128, 55-62.	1.1	4
85	Analysis of Trauma Intensity during Surgical Bone Procedures Using NF- κ B Expression Levels as a Stress Sensor: An Experimental Study in a Wistar Rat Model. <i>Materials</i> , 2018, 11, 2532.	1.3	3
86	Evaluation of the Surrounding Ring of Two Different Extra-Short Implant Designs in Crestal Bone Maintenance: A Histologic Study in Dogs. <i>Materials</i> , 2018, 11, 1630.	1.3	3
87	Peri-Implant Behavior of Sloped Shoulder Dental Implants Used for All-On-Four Protocols: An Histomorphometric Analysis in Dogs. <i>Materials</i> , 2018, 11, 119.	1.3	3
88	Influence of Mucosal Thickness, Implant Dimensions and Stability in Cone Morse Implant Installed at Subcrestal Bone Level on the Peri-Implant Bone: A Prospective Clinical and Radiographic Study. <i>Symmetry</i> , 2019, 11, 1138.	1.1	3
89	Development of a New Drill Design to Improve the Temperature Control during the Osteotomy for Dental Implants: A Comparative In Vitro Analysis. <i>Biology</i> , 2020, 9, 208.	1.3	3
90	Can the design of the instruments used for undersized osteotomies influence the initial stability of implants installed in low-density bone? An in vitro pilot study. <i>PLoS ONE</i> , 2021, 16, e0257985.	1.1	3

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91	Biomechanical and histological evaluation of four different implant macrogeometries in the early osseointegration process: An in vivo animal study. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022, 125, 104935.	1.5	3
92	Long-Term Fatigue and Its Probability of Failure Applied to Dental Implants. <i>BioMed Research International</i> , 2016, 2016, 1-8.	0.9	2
93	In Vitro Behavior of Osteoblasts on Zirconia After Different Intensities of Erbium, Chromium-Doped. <i>Journal of Craniofacial Surgery</i> , 2016, 27, 784-788.	0.3	2
94	Can the Macrogeometry of Dental Implants Influence Guided Bone Regeneration in Buccal Bone Defects? Histomorphometric and Biomechanical Analysis in Beagle Dogs. <i>Journal of Clinical Medicine</i> , 2019, 8, 618.	1.0	2
95	A new design of a multifunctional abutment to Morse taper implant connection: Experimental mechanical analysis. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 116, 104347.	1.5	2
96	DNA damage in dental pulp mesenchymal stem cells: An study. <i>Veterinary Research Forum</i> , 2018, 9, 293-299.	0.3	2
97	Correction of Esthetic Complications of a Malpositioned Implant: A Case Letter. <i>Journal of Oral Implantology</i> , 2014, 40, 737-743.	0.4	1
98	Reconstructive and Regenerative Therapy of Atrophic Jaws with New Implant Techniques: Preclinical and Clinical Studies. <i>BioMed Research International</i> , 2017, 2017, 1-1.	0.9	1
99	The Effect on Bone Stress in Oral Prosthetic Rehabilitation Supported by Different Number of Dental Implants: A Numerical Analysis. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 4920.	1.3	1
100	Effects of the Healing Chambers in Implant Macrogeometry Design in a Low-Density Bone Using Conventional and Undersized Drilling. <i>Journal of International Society of Preventive and Community Dentistry</i> , 2021, 11, 437-447.	0.4	1
101	Characteristics of Implant Systems That Can Accelerate and Improve the Osseointegration Process. <i>Dentistry</i> , 0, , .	0.0	1
102	Stress distribution around dental implants, generated by six different ceramic materials for unitary restoration: An experimental photoelastic study. <i>Dental and Medical Problems</i> , 2021, 58, 453-461.	0.7	1
103	Peer review report 1 on "Effects of shock wave therapy on glycosaminoglycan expression during bone healing". <i>International Journal of Surgery</i> , 2015, 13, S188.	1.1	0
104	Zirconium Oxide Three-Unit Fixed Partial Denture Frameworks Supported by Dental Implants in Acceptable and Reduced Interocclusal Space Possibilities: Pilot In Vitro Fracture Strength and Fractographic Analyses. <i>International Journal of Oral and Maxillofacial Implants</i> , 2019, 34, 337-342.	0.6	0
105	Correlation of Fracture Resistance of Dental Implants and Bite Force in Dogs described in the literature: An In Vitro Study. <i>Journal of Veterinary Dentistry</i> , 2021, 38, 089875642110449.	0.1	0