

Heng-Li Huang

List of Publications by Year in descending order

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101
papers

2,669
citations

159525

30
h-index

223716

46
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102
all docs

102
docs citations

102
times ranked

2897
citing authors

#	ARTICLE	IF	CITATIONS
1	Bone stress and interfacial sliding analysis of implant designs on an immediately loaded maxillary implant: A non-linear finite element study. <i>Journal of Dentistry</i> , 2008, 36, 409-417.	1.7	143
2	Detection of Permanent Three-rooted Mandibular First Molars by Cone-Beam Computed Tomography Imaging in Taiwanese Individuals. <i>Journal of Endodontics</i> , 2009, 35, 503-507.	1.4	123
3	Antibacterial TaN-Ag coatings on titanium dental implants. <i>Surface and Coatings Technology</i> , 2010, 205, 1636-1641.	2.2	118
4	Variations in bone density at dental implant sites in different regions of the jawbone. <i>Journal of Oral Rehabilitation</i> , 2010, 37, 346-351.	1.3	90
5	The number of screws, bone quality, and friction coefficient affect acetabular cup stability. <i>Medical Engineering and Physics</i> , 2007, 29, 1089-1095.	0.8	86
6	Antibacterial properties and cytocompatibility of tantalum oxide coatings. <i>Surface and Coatings Technology</i> , 2014, 259, 193-198.	2.2	72
7	Bone Strain and Interfacial Sliding Analyses of Platform Switching and Implant Diameter on an Immediately Loaded Implant: Experimental and Three-Dimensional Finite Element Analyses. <i>Journal of Periodontology</i> , 2009, 80, 1125-1132.	1.7	67
8	Bone density changes around teeth during orthodontic treatment. <i>Clinical Oral Investigations</i> , 2011, 15, 511-519.	1.4	57
9	The Effects of Cortical Bone Thickness and Trabecular Bone Strength on Noninvasive Measures of the Implant Primary Stability Using Synthetic Bone Models. <i>Clinical Implant Dentistry and Related Research</i> , 2013, 15, 251-261.	1.6	57
10	Effects of splinted prosthesis supported a wide implant or two implants: a three-dimensional finite element analysis. <i>Clinical Oral Implants Research</i> , 2005, 16, 466-472.	1.9	56
11	Risk Factors related to Late Failure of Dental Implant—A Systematic Review of Recent Studies. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 3931.	1.2	53
12	Effect of Screw Fixation on Temporomandibular Joint Condylar Prosthesis. <i>Journal of Oral and Maxillofacial Surgery</i> , 2011, 69, 1320-1328.	0.5	52
13	Initial stability and bone strain evaluation of the immediately loaded dental implant: an <i>in vitro</i> model study. <i>Clinical Oral Implants Research</i> , 2011, 22, 691-698.	1.9	51
14	Influences of Internal Tapered Abutment Designs on Bone Stresses Around a Dental Implant: Three-Dimensional Finite Element Method With Statistical Evaluation. <i>Journal of Periodontology</i> , 2012, 83, 111-118.	1.7	51
15	In vitro antibacterial activity and cytocompatibility of bismuth doped micro-arc oxidized titanium. <i>Journal of Biomaterials Applications</i> , 2013, 27, 553-563.	1.2	51
16	Anti-bacterial performance of Zirconia coatings on Titanium implants. <i>Thin Solid Films</i> , 2013, 528, 151-156.	0.8	48
17	Effects of orthodontic tooth movement on alveolar bone density. <i>Clinical Oral Investigations</i> , 2012, 16, 679-688.	1.4	46
18	Characterization and antibacterial performance of bioactive Ti-Zn-O coatings deposited on titanium implants. <i>Thin Solid Films</i> , 2013, 528, 143-150.	0.8	46

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19	Antibacterial properties and human gingival fibroblast cell compatibility of TiO ₂ /Ag compound coatings and ZnO films on titanium-based material. <i>Clinical Oral Investigations</i> , 2012, 16, 95-100.	1.4	45
20	Antibacterial properties and cytocompatibility of tantalum oxide coatings with different silver content. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014, 32, .	0.9	43
21	Variations in crestal cortical bone thickness at dental implant sites in different regions of the jawbone. <i>Clinical Implant Dentistry and Related Research</i> , 2017, 19, 440-446.	1.6	43
22	The relation between micromotion and screw fixation in acetabular cup. <i>Computer Methods and Programs in Biomedicine</i> , 2006, 84, 34-41.	2.6	41
23	Biomechanical analysis of a temporomandibular joint condylar prosthesis during various clenching tasks. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2015, 43, 1194-1201.	0.7	41
24	Comparison of implant body designs and threaded designs of dental implants: a 3-dimensional finite element analysis. <i>International Journal of Oral and Maxillofacial Implants</i> , 2007, 22, 551-62.	0.6	41
25	Biomechanical simulation of various surface roughnesses and geometric designs on an immediately loaded dental implant. <i>Computers in Biology and Medicine</i> , 2010, 40, 525-532.	3.9	40
26	The assessment of trabecular bone parameters and cortical bone strength: A comparison of micro-CT and dental cone-beam CT. <i>Journal of Biomechanics</i> , 2013, 46, 2611-2618.	0.9	38
27	Biomechanical evaluation of one-piece and two-piece small-diameter dental implants: In-vitro experimental and three-dimensional finite element analyses. <i>Journal of the Formosan Medical Association</i> , 2016, 115, 794-800.	0.8	38
28	Antibacterial and biological characteristics of tantalum oxide coated titanium pretreated by plasma electrolytic oxidation. <i>Thin Solid Films</i> , 2019, 688, 137268.	0.8	38
29	Relationship of Three-Dimensional Bone-to-Implant Contact to Primary Implant Stability and Peri-implant Bone Strain in Immediate Loading: Microcomputed Tomographic and In Vitro Analyses. <i>International Journal of Oral and Maxillofacial Implants</i> , 2013, 28, 367-374.	0.6	34
30	Biological Characteristics of the MG-63 Human Osteosarcoma Cells on Composite Tantalum Carbide/Amorphous Carbon Films. <i>PLoS ONE</i> , 2014, 9, e95590.	1.1	34
31	A Comparison of Micro-CT and Dental CT in Assessing Cortical Bone Morphology and Trabecular Bone Microarchitecture. <i>PLoS ONE</i> , 2014, 9, e107545.	1.1	33
32	Biomechanical Investigation of Thread Designs and Interface Conditions of Zirconia and Titanium Dental Implants with Bone: Three-Dimensional Numeric Analysis. <i>International Journal of Oral and Maxillofacial Implants</i> , 2013, 28, e64-e71.	0.6	30
33	Characterization and antibacterial performance of ZrCN/amorphous carbon coatings deposited on titanium implants. <i>Thin Solid Films</i> , 2011, 520, 1525-1531.	0.8	29
34	Trabecular bone structural parameters evaluated using dental cone-beam computed tomography: cellular synthetic bones. <i>BioMedical Engineering OnLine</i> , 2013, 12, 115.	1.3	29
35	Biomechanical effects of a maxillary implant in the augmented sinus: a three-dimensional finite element analysis. <i>International Journal of Oral and Maxillofacial Implants</i> , 2009, 24, 455-62.	0.6	29
36	Cytocompatibility and antibacterial properties of zirconia coatings with different silver contents on titanium. <i>Thin Solid Films</i> , 2013, 549, 108-116.	0.8	28

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37	Relation between initial implant stability quotient and bone-implant contact percentage: an in vitro model study. <i>Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology</i> , 2013, 116, e356-e361.	0.2	28
38	The Making of a Flight Feather: Bio-architectural Principles and Adaptation. <i>Cell</i> , 2019, 179, 1409-1423.e17.	13.5	28
39	Biomechanical effect of implant design on four implants supporting mandibular full-arch fixed dentures: In Vitro test and finite element analysis. <i>Journal of the Formosan Medical Association</i> , 2020, 119, 1514-1523.	0.8	28
40	Impacts of 3D bone-to-implant contact and implant diameter on primary stability of dental implant. <i>Journal of the Formosan Medical Association</i> , 2017, 116, 582-590.	0.8	26
41	Does Orthodontic Treatment Affect the Alveolar Bone Density?. <i>Medicine (United States)</i> , 2016, 95, e3080.	0.4	25
42	Stress analysis of implant-supported partial prostheses in anisotropic mandibular bone: in-line versus offset placements of implants. <i>Journal of Oral Rehabilitation</i> , 2006, 33, 501-508.	1.3	23
43	A new method to evaluate the elastic modulus of cortical bone by using a combined computed tomography and finite element approach. <i>Computers in Biology and Medicine</i> , 2010, 40, 464-468.	3.9	22
44	Micro-arc oxidation treatment enhanced the biological performance of human osteosarcoma cell line and human skin fibroblasts cultured on titanium-zirconium films. <i>Surface and Coatings Technology</i> , 2016, 303, 268-276.	2.2	22
45	Relationship between Cortical Bone Thickness and Cancellous Bone Density at Dental Implant Sites in the Jawbone. <i>Diagnostics</i> , 2020, 10, 710.	1.3	22
46	Effects of implant surface roughness and stiffness of grafted bone on an immediately loaded maxillary implant: a 3D numerical analysis. <i>Journal of Oral Rehabilitation</i> , 2008, 35, 283-290.	1.3	21
47	Endodontic Shaping Performance Using Nickel-Titanium Hand and Motor ProTaper Systems by Novice Dental Students. <i>Journal of the Formosan Medical Association</i> , 2008, 107, 381-388.	0.8	21
48	Prevalence of Three-rooted Primary Mandibular First Molars in Taiwan. <i>Journal of the Formosan Medical Association</i> , 2010, 109, 69-74.	0.8	21
49	Title is missing!. <i>Journal of Medical and Biological Engineering</i> , 2011, 31, 367.	1.0	21
50	An intra-oral hydraulic system for controlled loading of dental implants. <i>Journal of Biomechanics</i> , 2002, 35, 863-869.	0.9	19
51	Stress Analysis of Different Angulations of Implant Installation: The Finite Element Method. <i>Kaohsiung Journal of Medical Sciences</i> , 2008, 24, 138-143.	0.8	19
52	The Collum angle of the maxillary central incisors in patients with different types of malocclusion. <i>Journal of Dental Sciences</i> , 2012, 7, 72-76.	1.2	18
53	New quantitative classification of the anatomical relationship between impacted third molars and the inferior alveolar nerve. <i>BMC Medical Imaging</i> , 2015, 15, 59.	1.4	17
54	Clinical assessment of the palatal alveolar bone thickness and its correlation with the buccolingual angulation of maxillary incisors for immediate implant placement. <i>Clinical Implant Dentistry and Related Research</i> , 2019, 21, 1080-1086.	1.6	17

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55	Biomechanical Evaluation of Subcrestal Placement of Dental Implants: In Vitro and Numerical Analyses. <i>Journal of Periodontology</i> , 2011, 82, 302-310.	1.7	16
56	Characterization and antibacterial performance of ZrNO ₂ /Ag coatings. <i>Surface and Coatings Technology</i> , 2013, 231, 224-228.	2.2	16
57	Location of the Mandibular Canal and Thickness of the Occlusal Cortical Bone at Dental Implant Sites in the Lower Second Premolar and First Molar. <i>Computational and Mathematical Methods in Medicine</i> , 2013, 2013, 1-8.	0.7	16
58	Effect of bone quality on the artificial temporomandibular joint condylar prosthesis. <i>Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics</i> , 2010, 109, e1-e5.	1.6	15
59	Relation between insertion torque and bone-implant contact percentage: an artificial bone study. <i>Clinical Oral Investigations</i> , 2012, 16, 1679-1684.	1.4	15
60	Analyses of Antibacterial Activity and Cell Compatibility of Titanium Coated with a Zn-Ca-N Film. <i>PLoS ONE</i> , 2013, 8, e56771.	1.1	15
61	Biomechanical Effects of Bone Atrophy, Implant Design, and Vertical or Tilted of Posterior Implant on All-on-Four Concept Implantation: Finite Element Analysis. <i>Journal of Medical and Biological Engineering</i> , 2022, 42, 488-497.	1.0	15
62	An In Vitro Biomechanical Evaluation of a New Commercial Titanium-Zirconium Alloy Dental Implant. <i>Implant Dentistry</i> , 2014, Publish Ahead of Print, 534-8.	1.7	14
63	Association between Age of Menopause and Thickness of Crestal Cortical Bone at Dental Implant Site: A Cross-Sectional Observational Study. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 5868.	1.2	14
64	Three-dimensional bone structure and bone mineral density evaluations of autogenous bone graft after sinus augmentation: a microcomputed tomography analysis. <i>Clinical Oral Implants Research</i> , 2012, 23, 1098-1103.	1.9	13
65	New fixation approach for transverse metacarpal neck fracture: a biomechanical study. <i>Journal of Orthopaedic Surgery and Research</i> , 2018, 13, 183.	0.9	13
66	Antibacterial activity and cell compatibility of TiZrN, TiZrCN, and TiZr-amorphous carbon coatings. <i>Thin Solid Films</i> , 2015, 596, 111-117.	0.8	12
67	Effects of Laser Texture Oxidation and High-Temperature Annealing of TiV Alloy Thin Films on Mechanical and Antibacterial Properties and Cytotoxicity. <i>Materials</i> , 2018, 11, 2495.	1.3	12
68	Biomechanical effects of the implant material and implant-abutment interface in immediately loaded small-diameter implants. <i>Clinical Oral Investigations</i> , 2014, 18, 1335-1341.	1.4	11
69	Fabrication of a Novel Ta(Zn)O Thin Film on Titanium by Magnetron Sputtering and Plasma Electrolytic Oxidation for Cell Biocompatibilities and Antibacterial Applications. <i>Metals</i> , 2020, 10, 649.	1.0	11
70	Mandible Integrity and Material Properties of the Periodontal Ligament during Orthodontic Tooth Movement: A Finite-Element Study. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2980.	1.3	11
71	Improving the prediction of the trabecular bone microarchitectural parameters using dental cone-beam computed tomography. <i>BMC Medical Imaging</i> , 2019, 19, 10.	1.4	10
72	FRICITION OF STAINLESS STEEL, NICKEL-TITANIUM ALLOY, AND BETA-TITANIUM ALLOY ARCHWIRES IN TWO COMMONLY USED ORTHODONTIC BRACKETS. <i>Journal of Mechanics in Medicine and Biology</i> , 2011, 11, 917-928.	0.3	9

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73	Comparisons of maximum deformation and failure forces at the implantâ€™abutment interface of titanium implants between titanium-alloy and zirconia abutments with two levels of marginal bone loss. <i>BioMedical Engineering OnLine</i> , 2013, 12, 45.	1.3	8
74	Microcomputed tomography analysis of particular autogenous bone graft in sinus augmentation at 5Âmonths: differences on bone mineral density and 3D trabecular structure. <i>Clinical Oral Investigations</i> , 2013, 17, 535-542.	1.4	8
75	Effects of implant length and 3D bone-to-implant contact on initial stabilities of dental implant: a microcomputed tomography study. <i>BMC Oral Health</i> , 2017, 17, 132.	0.8	8
76	Biomechanical Analyses of Porous Designs of 3D-Printed Titanium Implant for Mandibular Segmental Osteotomy Defects. <i>Materials</i> , 2022, 15, 576.	1.3	8
77	Self-assembled micro-computed tomography for dental education. <i>PLoS ONE</i> , 2018, 13, e0209698.	1.1	7
78	Biomechanical Assessment of Design Parameters on a Self-Developed 3D-Printed Titanium-Alloy Reconstruction/Prosthetic Implant for Mandibular Segmental Osteotomy Defect. <i>Metals</i> , 2019, 9, 597.	1.0	7
79	Bone quality affects stability of orthodontic miniscrews. <i>Scientific Reports</i> , 2022, 12, 2849.	1.6	7
80	Biomechanical investigations of the expanded platform-switching concept in immediately loaded small diameter implants. <i>Journal of Prosthetic Dentistry</i> , 2016, 115, 20-25.	1.1	6
81	Biomechanical Evaluation of Bone Atrophy and Implant Length in Four Implants Supporting Mandibular Full-Arch-Fixed Dentures. <i>Materials</i> , 2022, 15, 3295.	1.3	6
82	Effects of Positions and Angulations of Titanium Dental Implants in Biomechanical Performances in the All-on-Four Treatment: 3D Numerical and Strain Gauge Methods. <i>Metals</i> , 2020, 10, 280.	1.0	5
83	Effect of oblique headless compression screw fixation for metacarpal shaft fracture: a biomechanical in vitro study. <i>BMC Musculoskeletal Disorders</i> , 2021, 22, 146.	0.8	5
84	Biomechanical analysis of occlusal modes on the periodontal ligament while orthodontic force applied. <i>Clinical Oral Investigations</i> , 2021, 25, 5661-5670.	1.4	5
85	Biocompatibility and Microstructure-Based Stress Analyses of TiNbZrTa Composite Films. <i>Materials</i> , 2022, 15, 29.	1.3	5
86	Biomechanical Effects of Diameters of Implant Body and Implant Platform in Bone Strain around an Immediately Loaded Dental Implant with Platform Switching Concept. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1998.	1.3	4
87	Intermittent parathyroid hormone improve bone microarchitecture of the mandible and femoral head in ovariectomized rats. <i>BMC Musculoskeletal Disorders</i> , 2017, 18, 171.	0.8	3
88	Effect of Scanning Resolution on the Prediction of Trabecular Bone Microarchitectures Using Dental Cone Beam Computed Tomography. <i>Diagnostics</i> , 2020, 10, 368.	1.3	3
89	Can Male Patientâ€™s Age Affect the Cortical Bone Thickness of Jawbone for Dental Implant Placement? A Cohort Study. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 4284.	1.2	3
90	Biomechanical Evaluation and Factorial Analysis of the 3-Dimensional Printing Self-Designed Metallic Reconstruction Plate for Mandibular Segmental Defect. <i>Journal of Oral and Maxillofacial Surgery</i> , 2022, 80, 775-783.	0.5	3

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91	Effects of short-term acupuncture treatment on occlusal force and mandibular movement in patients with deep-bite malocclusion. <i>Journal of Dental Sciences</i> , 2019, 14, 81-86.	1.2	2
92	Biomechanical Evaluation of Sagittal Split Ramus Osteotomy Fixation Techniques in Mandibular Setback. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 3031.	1.3	2
93	Assessment of the Retromolar Canal in Taiwan Subpopulation: A Cross-Sectional Cone-Beam Computed Tomography Study in a Medical Center. <i>Tomography</i> , 2021, 7, 219-227.	0.8	2
94	RELATIONS OF ANISOTROPIC ELASTIC MODULI TO DENSITY AND CT NUMBER IN BOVINE CORTICAL BONE. <i>Biomedical Engineering - Applications, Basis and Communications</i> , 2008, 20, 139-143.	0.3	1
95	Incisor liability and its effects among East Asian children. <i>Journal of the Formosan Medical Association</i> , 2022, 121, 796-801.	0.8	1
96	Effects of Gender and Age in Mandibular Leeway Space for Taiwanese Children. <i>Children</i> , 2021, 8, 999.	0.6	1
97	The Effects of Insertion Approach on the Stability of Dental Implants. <i>Applied Bionics and Biomechanics</i> , 2022, 2022, 1-7.	0.5	1
98	THE EFFECT OF CYCLIC STRETCHING SPEED ON THE FORCE DEGRADATION OF ORTHODONTIC ELASTIC BANDS. <i>Journal of Mechanics in Medicine and Biology</i> , 2013, 13, 1350017.	0.3	0
99	Two anterior wide-diameter implants using the All-on-4 concept in a predictable maxillary rehabilitation: A clinical report. <i>Journal of Prosthetic Dentistry</i> , 2016, 116, 483-487.	1.1	0
100	Geometrical Calibration of a 2.5D Periapical Radiography System. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 906.	1.3	0
101	Biomechanical Effect of Orthodontic Treatment of Canine Retraction by Using Metallic Orthodontic Mini-Implant (OMI) Covered with Various Angles of Revolving Cap. <i>Applied Bionics and Biomechanics</i> , 2021, 2021, 1-8.	0.5	0