

# Heng-Li Huang

## List of Publications by Year in descending order

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Version: 2024-02-01

101  
papers

2,669  
citations

159585

30  
h-index

223800

46  
g-index

102  
all docs

102  
docs citations

102  
times ranked

2897  
citing authors

#	ARTICLE	IF	CITATIONS
1	Incisor liability and its effects among East Asian children. Journal of the Formosan Medical Association, 2022, 121, 796-801.	1.7	1
2	Biomechanical Evaluation and Factorial Analysis of the 3-Dimensional Printing Self-Designed Metallic Reconstruction Plate for Mandibular Segmental Defect. Journal of Oral and Maxillofacial Surgery, 2022, 80, 775-783.	1.2	3
3	Biomechanical Analyses of Porous Designs of 3D-Printed Titanium Implant for Mandibular Segmental Osteotomy Defects. Materials, 2022, 15, 576.	2.9	8
4	The Effects of Insertion Approach on the Stability of Dental Implants. Applied Bionics and Biomechanics, 2022, 2022, 1-7.	1.1	1
5	Bone quality affects stability of orthodontic miniscrews. Scientific Reports, 2022, 12, 2849.	3.3	7
6	Biocompatibility and Microstructure-Based Stress Analyses of TiNbZrTa Composite Films. Materials, 2022, 15, 29.	2.9	5
7	Biomechanical Evaluation of Bone Atrophy and Implant Length in Four Implants Supporting Mandibular Full-Arch-Fixed Dentures. Materials, 2022, 15, 3295.	2.9	6
8	Biomechanical Effects of Bone Atrophy, Implant Design, and Vertical or Tilted of Posterior Implant on All-on-Four Concept Implantation: Finite Element Analysis. Journal of Medical and Biological Engineering, 2022, 42, 488-497.	1.8	15
9	Effect of oblique headless compression screw fixation for metacarpal shaft fracture: a biomechanical in vitro study. BMC Musculoskeletal Disorders, 2021, 22, 146.	1.9	5
10	Biomechanical analysis of occlusal modes on the periodontal ligament while orthodontic force applied. Clinical Oral Investigations, 2021, 25, 5661-5670.	3.0	5
11	Can Male Patient's Age Affect the Cortical Bone Thickness of Jawbone for Dental Implant Placement? A Cohort Study. International Journal of Environmental Research and Public Health, 2021, 18, 4284.	2.6	3
12	Assessment of the Retromolar Canal in Taiwan Subpopulation: A Cross-Sectional Cone-Beam Computed Tomography Study in a Medical Center. Tomography, 2021, 7, 219-227.	1.8	2
13	Biomechanical Effect of Orthodontic Treatment of Canine Retraction by Using Metallic Orthodontic Mini-Implant (OMI) Covered with Various Angles of Revolving Cap. Applied Bionics and Biomechanics, 2021, 2021, 1-8.	1.1	0
14	Effects of Gender and Age in Mandibular Leeway Space for Taiwanese Children. Children, 2021, 8, 999.	1.5	1
15	Biomechanical effect of implant design on four implants supporting mandibular full-arch fixed dentures: In vitro test and finite element analysis. Journal of the Formosan Medical Association, 2020, 119, 1514-1523.	1.7	28
16	Relationship between Cortical Bone Thickness and Cancellous Bone Density at Dental Implant Sites in the Jawbone. Diagnostics, 2020, 10, 710.	2.6	22
17	Association between Age of Menopause and Thickness of Crestal Cortical Bone at Dental Implant Site: A Cross-Sectional Observational Study. International Journal of Environmental Research and Public Health, 2020, 17, 5868.	2.6	14
18	Fabrication of a Novel Ta(Zn)O Thin Film on Titanium by Magnetron Sputtering and Plasma Electrolytic Oxidation for Cell Biocompatibilities and Antibacterial Applications. Metals, 2020, 10, 649.	2.3	11

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19	Effect of Scanning Resolution on the Prediction of Trabecular Bone Microarchitectures Using Dental Cone Beam Computed Tomography. <i>Diagnosics</i> , 2020, 10, 368.	2.6	3
20	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.	2.6	53
21	Biomechanical Evaluation of Sagittal Split Ramus Osteotomy Fixation Techniques in Mandibular Setback. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 3031.	2.5	2
22	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.	2.3	5
23	Geometrical Calibration of a 2.5D Periapical Radiography System. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 906.	2.5	0
24	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.	2.5	11
25	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.	3.7	17
26	Improving the prediction of the trabecular bone microarchitectural parameters using dental cone-beam computed tomography. <i>BMC Medical Imaging</i> , 2019, 19, 10.	2.7	10
27	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.	2.5	4
28	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.	2.3	7
29	Antibacterial and biological characteristics of tantalum oxide coated titanium pretreated by plasma electrolytic oxidation. <i>Thin Solid Films</i> , 2019, 688, 137268.	1.8	38
30	The Making of a Flight Feather: Bio-architectural Principles and Adaptation. <i>Cell</i> , 2019, 179, 1409-1423.e17.	28.9	28
31	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.	2.5	2
32	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.	2.9	12
33	Self-assembled micro-computed tomography for dental education. <i>PLoS ONE</i> , 2018, 13, e0209698.	2.5	7
34	New fixation approach for transverse metacarpal neck fracture: a biomechanical study. <i>Journal of Orthopaedic Surgery and Research</i> , 2018, 13, 183.	2.3	13
35	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.	3.7	43
36	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.	1.7	26

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37	Intermittent parathyroid hormone improve bone microarchitecture of the mandible and femoral head in ovariectomized rats. BMC Musculoskeletal Disorders, 2017, 18, 171.	1.9	3
38	Effects of implant length and 3D bone-to-implant contact on initial stabilities of dental implant: a microcomputed tomography study. BMC Oral Health, 2017, 17, 132.	2.3	8
39	Does Orthodontic Treatment Affect the Alveolar Bone Density?. Medicine (United States), 2016, 95, e3080.	1.0	25
40	Two anterior wide-diameter implants using the All-on-4 concept in a predictable maxillary rehabilitation: A clinical report. Journal of Prosthetic Dentistry, 2016, 116, 483-487.	2.8	0
41	Biomechanical evaluation of one-piece and two-piece small-diameter dental implants: In-vitro experimental and three-dimensional finite element analyses. Journal of the Formosan Medical Association, 2016, 115, 794-800.	1.7	38
42	Micro-arc oxidation treatment enhanced the biological performance of human osteosarcoma cell line and human skin fibroblasts cultured on titanium-zirconium films. Surface and Coatings Technology, 2016, 303, 268-276.	4.8	22
43	Biomechanical investigations of the expanded platform-switching concept in immediately loaded small diameter implants. Journal of Prosthetic Dentistry, 2016, 115, 20-25.	2.8	6
44	New quantitative classification of the anatomical relationship between impacted third molars and the inferior alveolar nerve. BMC Medical Imaging, 2015, 15, 59.	2.7	17
45	Antibacterial activity and cell compatibility of TiZrN, TiZrCN, and TiZr-amorphous carbon coatings. Thin Solid Films, 2015, 596, 111-117.	1.8	12
46	Biomechanical analysis of a temporomandibular joint condylar prosthesis during various clenching tasks. Journal of Cranio-Maxillo-Facial Surgery, 2015, 43, 1194-1201.	1.7	41
47	A Comparison of Micro-CT and Dental CT in Assessing Cortical Bone Morphology and Trabecular Bone Microarchitecture. PLoS ONE, 2014, 9, e107545.	2.5	33
48	Biological Characteristics of the MG-63 Human Osteosarcoma Cells on Composite Tantalum Carbide/Amorphous Carbon Films. PLoS ONE, 2014, 9, e95590.	2.5	34
49	An In Vitro Biomechanical Evaluation of a New Commercial Titanium-Zirconium Alloy Dental Implant. Implant Dentistry, 2014, Publish Ahead of Print, 534-8.	1.3	14
50	Antibacterial properties and cytocompatibility of tantalum oxide coatings. Surface and Coatings Technology, 2014, 259, 193-198.	4.8	72
51	Antibacterial properties and cytocompatibility of tantalum oxide coatings with different silver content. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	2.1	43
52	Biomechanical effects of the implant material and implant-abutment interface in immediately loaded small-diameter implants. Clinical Oral Investigations, 2014, 18, 1335-1341.	3.0	11
53	The Effects of Cortical Bone Thickness and Trabecular Bone Strength on Noninvasive Measures of the Implant Primary Stability Using Synthetic Bone Models. Clinical Implant Dentistry and Related Research, 2013, 15, 251-261.	3.7	57
54	Comparisons of maximum deformation and failure forces at the implant-abutment interface of titanium implants between titanium-alloy and zirconia abutments with two levels of marginal bone loss. BioMedical Engineering OnLine, 2013, 12, 45.	2.7	8

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55	Anti-bacterial performance of Zirconia coatings on Titanium implants. <i>Thin Solid Films</i> , 2013, 528, 151-156.	1.8	48
56	Characterization and antibacterial performance of ZrNO <sub>2</sub> -Ag coatings. <i>Surface and Coatings Technology</i> , 2013, 231, 224-228.	4.8	16
57	Trabecular bone structural parameters evaluated using dental cone-beam computed tomography: cellular synthetic bones. <i>BioMedical Engineering OnLine</i> , 2013, 12, 115.	2.7	29
58	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.	2.1	38
59	Microcomputed tomography analysis of particulate autogenous bone graft in sinus augmentation at 5 months: differences on bone mineral density and 3D trabecular structure. <i>Clinical Oral Investigations</i> , 2013, 17, 535-542.	3.0	8
60	In vitro antibacterial activity and cytocompatibility of bismuth doped micro-arc oxidized titanium. <i>Journal of Biomaterials Applications</i> , 2013, 27, 553-563.	2.4	51
61	Cytocompatibility and antibacterial properties of zirconia coatings with different silver contents on titanium. <i>Thin Solid Films</i> , 2013, 549, 108-116.	1.8	28
62	Characterization and antibacterial performance of bioactive Ti-Zn-O coatings deposited on titanium implants. <i>Thin Solid Films</i> , 2013, 528, 143-150.	1.8	46
63	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.	0.4	28
64	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.	0.7	0
65	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.	1.4	30
66	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.	1.4	34
67	Analyses of Antibacterial Activity and Cell Compatibility of Titanium Coated with a Zn-Ca-N Film. <i>PLoS ONE</i> , 2013, 8, e56771.	2.5	15
68	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.	1.3	16
69	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.	3.4	51
70	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.	2.5	18
71	Relation between insertion torque and bone-implant contact percentage: an artificial bone study. <i>Clinical Oral Investigations</i> , 2012, 16, 1679-1684.	3.0	15
72	Effects of orthodontic tooth movement on alveolar bone density. <i>Clinical Oral Investigations</i> , 2012, 16, 679-688.	3.0	46

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73	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.	4.5	13
74	Antibacterial properties and human gingival fibroblast cell compatibility of TiO <sub>2</sub> /Ag compound coatings and ZnO films on titanium-based material. <i>Clinical Oral Investigations</i> , 2012, 16, 95-100.	3.0	45
75	Biomechanical Evaluation of Subcrestal Placement of Dental Implants: In Vitro and Numerical Analyses. <i>Journal of Periodontology</i> , 2011, 82, 302-310.	3.4	16
76	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.	4.5	51
77	Characterization and antibacterial performance of ZrCN/amorphous carbon coatings deposited on titanium implants. <i>Thin Solid Films</i> , 2011, 520, 1525-1531.	1.8	29
78	Effect of Screw Fixation on Temporomandibular Joint Condylar Prosthesis. <i>Journal of Oral and Maxillofacial Surgery</i> , 2011, 69, 1320-1328.	1.2	52
79	Bone density changes around teeth during orthodontic treatment. <i>Clinical Oral Investigations</i> , 2011, 15, 511-519.	3.0	57
80	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.	0.7	9
81	Title is missing!. <i>Journal of Medical and Biological Engineering</i> , 2011, 31, 367.	1.8	21
82	Antibacterial TaN-Ag coatings on titanium dental implants. <i>Surface and Coatings Technology</i> , 2010, 205, 1636-1641.	4.8	118
83	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.	7.0	22
84	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.	7.0	40
85	Variations in bone density at dental implant sites in different regions of the jawbone. <i>Journal of Oral Rehabilitation</i> , 2010, 37, 346-351.	3.0	90
86	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.	1.4	15
87	Prevalence of Three-rooted Primary Mandibular First Molars in Taiwan. <i>Journal of the Formosan Medical Association</i> , 2010, 109, 69-74.	1.7	21
88	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.	3.4	67
89	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.	3.1	123
90	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.	1.4	29

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91	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.	3.0	21
92	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.	4.1	143
93	Stress Analysis of Different Angulations of Implant Installation: The Finite Element Method. <i>Kaohsiung Journal of Medical Sciences</i> , 2008, 24, 138-143.	1.9	19
94	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.	1.7	21
95	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.	0.6	1
96	The number of screws, bone quality, and friction coefficient affect acetabular cup stability. <i>Medical Engineering and Physics</i> , 2007, 29, 1089-1095.	1.7	86
97	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.	1.4	41
98	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.	3.0	23
99	The relation between micromotion and screw fixation in acetabular cup. <i>Computer Methods and Programs in Biomedicine</i> , 2006, 84, 34-41.	4.7	41
100	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.	4.5	56
101	An intra-oral hydraulic system for controlled loading of dental implants. <i>Journal of Biomechanics</i> , 2002, 35, 863-869.	2.1	19