

Junning Chen

List of Publications by Year in descending order

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Version: 2024-02-01

45
papers

1,030
citations

361413

20
h-index

434195

31
g-index

46
all docs

46
docs citations

46
times ranked

1184
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Design of transversely-graded foam and wall thickness structures for crashworthiness criteria. Composites Part B: Engineering, 2016, 92, 338-349. | 12.0 | 89 |
| 2 | A periodontal ligament driven remodeling algorithm for orthodontic tooth movement. Journal of Biomechanics, 2014, 47, 1689-1695. | 2.1 | 80 |
| 3 | Biomechanics of oral mucosa. Journal of the Royal Society Interface, 2015, 12, 20150325. | 3.4 | 79 |
| 4 | Multiscale design of surface morphological gradient for osseointegration. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 20, 387-397. | 3.1 | 63 |
| 5 | Biomechanical investigation into the role of the periodontal ligament in optimising orthodontic force: a finite element case study. Archives of Oral Biology, 2016, 66, 98-107. | 1.8 | 59 |
| 6 | A comparative study on complete and implant retained denture treatments – A biomechanics perspective. Journal of Biomechanics, 2015, 48, 512-519. | 2.1 | 50 |
| 7 | Shape Optimization for Additive Manufacturing of Removable Partial Dentures - A New Paradigm for Prosthetic CAD/CAM. PLoS ONE, 2015, 10, e0132552. | 2.5 | 44 |
| 8 | Network architecture strongly influences the fluid flow pattern through the lacunocanalicular network in human osteons. Biomechanics and Modeling in Mechanobiology, 2020, 19, 823-840. | 2.8 | 43 |
| 9 | Bone's responses to different designs of implant-supported fixed partial dentures. Biomechanics and Modeling in Mechanobiology, 2015, 14, 403-411. | 2.8 | 36 |
| 10 | <i>In vivo</i> effects of different orthodontic loading on root resorption and correlation with mechanobiological stimulus in periodontal ligament. Journal of the Royal Society Interface, 2019, 16, 20190108. | 3.4 | 34 |
| 11 | The contribution of the pericanalicular matrix to mineral content in human osteonal bone. Bone, 2019, 123, 76-85. | 2.9 | 33 |
| 12 | Investigation of Mucosa-Induced Residual Ridge Resorption Under Implant-Retained Overdentures and Complete Dentures in the Mandible. International Journal of Oral and Maxillofacial Implants, 2015, 30, 657-666. | 1.4 | 31 |
| 13 | Topological design of all-ceramic dental bridges for enhancing fracture resistance. International Journal for Numerical Methods in Biomedical Engineering, 2016, 32, e02749. | 2.1 | 30 |
| 14 | The mystery of coconut overturns the crashworthiness design of composite materials. International Journal of Mechanical Sciences, 2020, 168, 105244. | 6.7 | 28 |
| 15 | Computational and clinical investigation on the role of mechanical vibration on orthodontic tooth movement. Journal of Biomechanics, 2017, 60, 57-64. | 2.1 | 25 |
| 16 | Biomechanical analysis of bone remodeling following mandibular reconstruction using fibula free flap. Medical Engineering and Physics, 2018, 56, 1-8. | 1.7 | 24 |
| 17 | Mechanical simulation of the human mandible with and without an endosseous implant. Medical Engineering and Physics, 1994, 16, 53-61. | 1.7 | 23 |
| 18 | Bone morphological effects on post-implantation remodeling of maxillary anterior buccal bone: A clinical and biomechanical study. Journal of Prosthodontic Research, 2017, 61, 393-402. | 2.8 | 22 |

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|----|--|-----|-----------|
| 19 | Role of implant configurations supporting three-unit fixed partial denture on mandibular bone response: biological-based finite element study. <i>Journal of Oral Rehabilitation</i> , 2016, 43, 692-701. | 3.0 | 21 |
| 20 | Multiobjective optimization of cartilage stress for non-invasive, patient-specific recommendations of high tibial osteotomy correction angle – a novel method to investigate alignment correction. <i>Medical Engineering and Physics</i> , 2017, 42, 26-34. | 1.7 | 20 |
| 21 | Smoothed finite element method for analysis of multi-layered systems – Applications in biomaterials. <i>Computers and Structures</i> , 2016, 168, 16-29. | 4.4 | 19 |
| 22 | Computational modeling of dynamic behaviors of human teeth. <i>Journal of Biomechanics</i> , 2015, 48, 4214-4220. | 2.1 | 17 |
| 23 | Investigation on masticatory muscular functionality following oral reconstruction – An inverse identification approach. <i>Journal of Biomechanics</i> , 2019, 90, 1-8. | 2.1 | 17 |
| 24 | Mechanobiological Bone Reaction Quantified by Positron Emission Tomography. <i>Journal of Dental Research</i> , 2015, 94, 738-744. | 5.2 | 14 |
| 25 | Determination of oral mucosal Poisson's ratio and coefficient of friction from <i>in-vivo</i> contact pressure measurements. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016, 19, 357-365. | 1.6 | 13 |
| 26 | Multi-scale modeling and mechanical performance characterization of stingray skeleton-inspired tessellations. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 138, 103906. | 4.8 | 13 |
| 27 | Bioinspired lightweight cellular materials - Understanding effects of natural variation on mechanical properties. <i>Materials Science and Engineering C</i> , 2013, 33, 3146-3152. | 7.3 | 12 |
| 28 | Effects of buccal thickness augmentation on bone remodeling after maxillary anterior implantation. <i>Biomechanics and Modeling in Mechanobiology</i> , 2020, 19, 133-145. | 2.8 | 12 |
| 29 | Simulation of multi-stage nonlinear bone remodeling induced by fixed partial dentures of different configurations: a comparative clinical and numerical study. <i>Biomechanics and Modeling in Mechanobiology</i> , 2017, 16, 411-423. | 2.8 | 11 |
| 30 | Effect of different implant configurations on biomechanical behavior of full-arch implant-supported mandibular monolithic zirconia fixed prostheses. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 102, 103490. | 3.1 | 10 |
| 31 | Bone remodeling following mandibular reconstruction using fibula free flap. <i>Journal of Biomechanics</i> , 2022, 133, 110968. | 2.1 | 10 |
| 32 | An In Vivo Study on Load Distribution in Different Implant Configurations for Supporting Fixed Partial Dentures. <i>International Journal of Oral and Maxillofacial Implants</i> , 2016, 31, 1049-1057. | 1.4 | 8 |
| 33 | The Relationship of Mandibular Morphology with Residual Ridge Resorption Associated with Implant-Retained Overdentures. <i>International Journal of Prosthodontics</i> , 2016, 29, 573-580. | 1.7 | 7 |
| 34 | Micro-CT based modelling for characterising injection-moulded porous titanium implants. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2017, 33, e02779. | 2.1 | 7 |
| 35 | Magnetic Resonance Imaging (MRI) Based Finite Element Modeling for Analyzing the Influence of Material Properties on Menisci Responses. <i>Applied Mechanics and Materials</i> , 0, 553, 305-309. | 0.2 | 6 |
| 36 | Microstructural heterogeneity of the collagenous network in the loaded and unloaded periodontal ligament and its biomechanical implications. <i>Journal of Structural Biology</i> , 2021, 213, 107772. | 2.8 | 6 |

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|----|---|-----|-----------|
| 37 | Validate Mandible Finite Element Model under Removable Partial Denture (RPD) with &i>In Vivo&i> Pressure Measurement. Applied Mechanics and Materials, 0, 553, 322-326. | 0.2 | 4 |
| 38 | On design for additive manufacturing (DAM) parameter and its effects on biomechanical properties of 3D printed ceramic scaffolds. Materials Today Communications, 2020, 23, 101065. | 1.9 | 3 |
| 39 | Multiscale Remodelling and Topographical Optimisation for Porous Implant Surface Morphology Design. Springer Series in Biomaterials Science and Engineering, 2017, , 71-105. | 1.0 | 3 |
| 40 | Comparing Contact Pressure Induced by a Conventional Complete Denture and an Implant-Retained Overdenture. Applied Mechanics and Materials, 2014, 553, 384-389. | 0.2 | 2 |
| 41 | Bone metabolism induced by denture insertion in positron emission tomography. Journal of Oral Rehabilitation, 2016, 43, 198-204. | 3.0 | 1 |
| 42 | Role of Mechanical Stimuli in Oral Implantation. Journal of Biosciences and Medicines, 2014, 02, 63-68. | 0.2 | 1 |
| 43 | Impaction Loads Resulting in Intraoperative Periprosthetic Femoral Fracture: A Finite Element Study. Applied Mechanics and Materials, 2014, 553, 299-304. | 0.2 | 0 |
| 44 | Porous Titanium Implant and Micro-CT Based Characterization of Sub-Surface Morphology. , 2013, , 1579-1586. | | 0 |
| 45 | The biomechanics of metaphyseal cone augmentation in revision knee replacement. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 131, 105233. | 3.1 | 0 |