Xiaojun Chen

List of Publications by Year in Descending Order

99 papers	1,143 citations	20 h-index	29 g-index
111 ext. papers	1,653 ext. citations	3.9 avg, IF	4.81 L-index

#	Paper	IF	Citations
99	Massive Hydraulic Fracturing to Control Gas Outbursts in Soft Coal Seams. *Rock Mechanics and Rock Engineering*, **2022**, 55, 1759	5.7	3
98	Molecular Insights into the Enhanced Formation of Halonitrophenols after the UV/Chloramine Process. *ACS ES&T Water*, **2022**, 2, 798-806		0
97	Development and Application of Digital Maxillofacial Surgery System Based on Mixed Reality Technology.. *Frontiers in Surgery*, **2021**, 8, 719985	2.3	1
96	: Database of 500 high-resolution healthy human skulls and 29 craniotomy skulls and implants. *Data in Brief*, **2021**, 39, 107524	1.2	0
95	A 3D segmentation network of mandible from CT scan with combination of multiple convolutional modules and edge supervision in mandibular reconstruction. *Computers in Biology and Medicine*, **2021**, 138, 104925	7	1
94	Long term and robust 6DoF motion tracking for highly dynamic stereo endoscopy videos. *Computerized Medical Imaging and Graphics*, **2021**, 94, 101995	7.6	2
93	LY3023414 inhibits both osteogenesis and osteoclastogenesis through the PI3K/Akt/GSK3 signalling pathway. *Bone and Joint Research*, **2021**, 10, 237-249	4.2	4
92	Whole-Exome Sequencing Reveals Rare Germline Mutations in Patients With Hemifacial Microsomia. *Frontiers in Genetics*, **2021**, 12, 580761	4.5	1
91	Combination of AZD3463 and DZNep Prevents Bone Metastasis of Breast Cancer by Suppressing Akt Signaling. *Frontiers in Pharmacology*, **2021**, 12, 652071	5.6	0
90	A Preliminary Study on Animal Experiments of Robot-Assisted Craniotomy. *World Neurosurgery*, **2021**, 149, e748-e757	2.1	0
89	Automatic Segmentation Method for Cone-Beam Computed Tomography Image of the Bone Graft Region within Maxillary Sinus Based on the Atrous Spatial Pyramid Convolution Network. *Journal of Shanghai Jiaotong University (Science)*, **2021**, 26, 298-305	0.6	0
88	Augmented reality based navigation for distal interlocking of intramedullary nails utilizing Microsoft HoloLens 2. *Computers in Biology and Medicine*, **2021**, 133, 104402	7	6
87	Using orthodontic elastic traction during the active period of distraction osteogenesis to increase the effective vertical extension of hemifacial microsomia patients: A multi-center randomized clinical trial. *Journal of Cranio-Maxillo-Facial Surgery*, **2021**, 49, 1054-1063	3.6	2
86	Real-Time Deformation Simulation of Kidney Surgery Based on Virtual Reality. *Journal of Shanghai Jiaotong University (Science)*, **2021**, 26, 290-297	0.6	
85	A review on the applications of virtual reality, augmented reality and mixed reality in surgical simulation: an extension to different kinds of surgery. *Expert Review of Medical Devices*, **2021**, 18, 47-62	3.5	21
84	An electromagnetic tracking implantation navigation system in dentistry with virtual calibration. *International Journal of Medical Robotics and Computer Assisted Surgery*, **2021**, 17, e2215	2.9	2
83	The development of computer-aided patient-specific template design software for 3D printing in cranio-maxillofacial surgery. *International Journal of Medical Robotics and Computer Assisted Surgery* , **2021**, 17, e2243	2.9	2

82	Automatic mandible segmentation from CT image using 3D fully convolutional neural network based on DenseASPP and attention gates. *International Journal of Computer Assisted Radiology and Surgery*, **2021**, 16, 1785-1794	3.9	3
81	Microstructure Analysis on the Fracture Network in High-Rank Coals. *Earth and Space Science*, **2021**, 8, e2021EA001780	3.1	0
80	An image-guided hybrid robot system for dental implant surgery. *International Journal of Computer Assisted Radiology and Surgery*, **2021**, 1	3.9	2
79	A novel dynamic electromagnetic tracking navigation system for distal locking of intramedullary nails. *Computer Methods and Programs in Biomedicine*, **2021**, 209, 106326	6.9	0
78	AutoImplant 2020-First MICCAI Challenge on Automatic Cranial Implant Design. *IEEE Transactions on Medical Imaging*, **2021**, 40, 2329-2342	11.7	10
77	A review on patient-specific facial and cranial implant design using Artificial Intelligence (AI) techniques. *Expert Review of Medical Devices*, **2021**, 18, 985-994	3.5	1
76	Automatic skull defect restoration and cranial implant generation for cranioplasty. *Medical Image Analysis*, **2021**, 73, 102171	15.4	8
75	Biomechanical comparison of locking and non-locking patient-specific mandibular reconstruction plate using finite element analysis. *Journal of the Mechanical Behavior of Biomedical Materials*, **2021**, 124, 104849	4.1	3
74	A real time image-guided reposition system for the loosed bone graft in orthognathic surgery. *Computer Assisted Surgery*, **2021**, 26, 1-8	1.8	1
73	Computer-aided porous implant design for cranio-maxillofacial defect restoration. *International Journal of Medical Robotics and Computer Assisted Surgery*, **2020**, 16, 1-10	2.9	4
72	Early hemi-mandibular lengthening by distraction osteogenesis contributes to compensatory maxillary growth. *Journal of Cranio-Maxillo-Facial Surgery*, **2020**, 48, 357-364	3.6	2
71	Detection, segmentation, simulation and visualization of aortic dissections: A review. *Medical Image Analysis*, **2020**, 65, 101773	15.4	21
70	A review on computer-aided design and manufacturing of patient-specific maxillofacial implants. *Expert Review of Medical Devices*, **2020**, 17, 345-356	3.5	20
69	Cranial Implant Design Through Multiaxial Slice Inpainting Using Deep Learning. *Lecture Notes in Computer Science*, **2020**, 28-36	0.9	6
68	Pilot study of a surgical robot system for zygomatic implant placement. *Medical Engineering and Physics*, **2020**, 75, 72-78	2.4	18
67	An approach to automated measuring morphological parameters of proximal femora on three-dimensional models. *International Journal of Computer Assisted Radiology and Surgery*, **2020**, 15, 109-118	3.9	1
66	An automatic optimization method for minimizing supporting structures in additive manufacturing. *Advances in Manufacturing*, **2020**, 8, 49-58	2.7	6
65	Novel PGK1 determines SKP2-dependent AR stability and reprograms granular cell glucose metabolism facilitating ovulation dysfunction. *EBioMedicine*, **2020**, 61, 103058	8.8	5

64	Automatic CT image segmentation of maxillary sinus based on VGG network and improved V-Net. *International Journal of Computer Assisted Radiology and Surgery*, **2020**, 15, 1457-1465	3.9	8
63	Automatic robot-world calibration in an optical-navigated surgical robot system and its application for oral implant placement. *International Journal of Computer Assisted Radiology and Surgery*, **2020**, 15, 1685-1692	3.9	3
62	Fast and accurate online calibration of optical see-through head-mounted display for AR-based surgical navigation using Microsoft HoloLens. *International Journal of Computer Assisted Radiology and Surgery*, **2020**, 15, 1907-1919	3.9	15
61	A review of medical image detection for cancers in digestive system based on artificial intelligence. *Expert Review of Medical Devices*, **2019**, 16, 877-889	3.5	10
60	A new method for cranial vault reconstruction: Augmented reality in synostotic plagiocephaly surgery. *Journal of Cranio-Maxillo-Facial Surgery*, **2019**, 47, 1280-1284	3.6	17
59	Capillary Pressure Curve Determination Based on a 2-D Cross-Section Analysis Via Fractal Geometry: A Bridge Between 2-D and 3-D Pore Structure of Porous Media. *Journal of Geophysical Research: Solid Earth*, **2019**, 124, 2352-2367	3.6	10
58	The development of non-contact user interface of a surgical navigation system based on multi-LSTM and a phantom experiment for zygomatic implant placement. *International Journal of Computer Assisted Radiology and Surgery*, **2019**, 14, 2147-2154	3.9	3
57	Red-blue light irradiation in the prevention of surgical wound infection after mandibular distraction using internal distractors in hemifacial microsomia: A randomized trial. *Journal of Cranio-Maxillo-Facial Surgery*, **2019**, 47, 1343-1350	3.6	3
56	Fractal algorithm for 3D-printed continuous porous scaffold design. *Journal of Engineering*, **2019**, 2019, 485-489	0.7	
55	A High Precision Real-time Premature Ventricular Contraction Assessment Method based on the Complex Feature Set. *Journal of Medical Systems*, **2019**, 44, 3	5.1	2
54	An Improved Convolutional Neural Network Based Approach for Automated Heartbeat Classification. *Journal of Medical Systems*, **2019**, 44, 35	5.1	15
53	Facial model collection for medical augmented reality in oncologic cranio-maxillofacial surgery. *Scientific Data*, **2019**, 6, 310	8.2	8
52	Computer-assisted surgery in therapeutic strategy distraction osteogenesis of hemifacial microsomia: Accuracy and predictability. *Journal of Cranio-Maxillo-Facial Surgery*, **2019**, 47, 204-218	3.6	8
51	An oral and maxillofacial navigation system for implant placement with automatic identification of fiducial points. *International Journal of Computer Assisted Radiology and Surgery*, **2019**, 14, 281-289	3.9	14
50	Model eyes with curved multilayer structure for the axial resolution evaluation of an ophthalmic optical coherence tomography device. *Journal of Innovative Optical Health Sciences*, **2018**, 11, 1850013	1.2	1
49	A surface-based approach to determine key spatial parameters of the acetabulum in a standardized pelvic coordinate system. *Medical Engineering and Physics*, **2018**, 52, 22-30	2.4	3
48	Three-dimensional analysis of cranial base morphology in patients with hemifacial microsomia. *Journal of Cranio-Maxillo-Facial Surgery*, **2018**, 46, 362-367	3.6	2
47	Whole-exome sequencing for monozygotic twins discordant for hemifacial microsomia. *Journal of Cranio-Maxillo-Facial Surgery*, **2018**, 46, 802-807	3.6	6

46	Application of Real-Time Surgical Navigation for Zygomatic Implant Insertion in Patients With Severely Atrophic Maxilla. *Journal of Oral and Maxillofacial Surgery*, **2018**, 76, 80-87	1.8	21
45	A patient-specific haptic drilling simulator based on virtual reality for dental implant surgery. *International Journal of Computer Assisted Radiology and Surgery*, **2018**, 13, 1861-1870	3.9	17
44	Clinical evaluation of semi-automatic open-source algorithmic software segmentation of the mandibular bone: Practical feasibility and assessment of a new course of action. *PLoS ONE*, **2018**, 13, e0196378	3.7	21
43	A review of haptic simulator for oral and maxillofacial surgery based on virtual reality. *Expert Review of Medical Devices*, **2018**, 15, 435-444	3.5	24
42	Development of a surgical navigation system based on 3D Slicer for intraoperative implant placement surgery. *Medical Engineering and Physics*, **2017**, 41, 81-89	2.4	24
41	Expansion of CD26 positive fibroblast population promotes keloid progression. *Experimental Cell Research*, **2017**, 356, 104-113	4.2	22
40	Algorithmic evaluation of lower jawbone segmentations **2017**,		2
39	Integration of the HTC Vive into the medical platform MeVisLab **2017**,		3
38	Computer-aided position planning of miniplates to treat facial bone defects. *PLoS ONE*, **2017**, 12, e0182839	3.7	10
37	Vertebral body segmentation with : Initial experience, workflow and practical application. *SAGE Open Medicine*, **2017**, 5, 2050312117740984	2.4	9
36	Computer-aided implant design for the restoration of cranial defects. *Scientific Reports*, **2017**, 7, 4199	4.9	20
35	Interactive Outlining of Pancreatic Cancer Liver Metastases in Ultrasound Images. *Scientific Reports*, **2017**, 7, 892	4.9	3
34	In-depth assessment of an interactive graph-based approach for the segmentation for pancreatic metastasis in ultrasound acquisitions of the liver with two specialists in Internal Medicine **2017**,		1
33	Three-dimensional acetabular orientation measurement in a reliable coordinate system among one hundred Chinese. *PLoS ONE*, **2017**, 12, e0172297	3.7	8
32	Interactive reconstructions of cranial 3D implants under MeVisLab as an alternative to commercial planning software. *PLoS ONE*, **2017**, 12, e0172694	3.7	23
31	HTC Vive MeVisLab integration via OpenVR for medical applications. *PLoS ONE*, **2017**, 12, e0173972	3.7	54
30	Application of an innovative computerized virtual planning system in acetabular fracture surgery: A feasibility study. *Injury*, **2016**, 47, 1698-701	2.5	20
29	Image-guided installation of 3D-printed patient-specific implant and its application in pelvic tumor resection and reconstruction surgery. *Computer Methods and Programs in Biomedicine*, **2016**, 125, 66-78	6.9	55

28	Development of preoperative planning software for transforaminal endoscopic surgery and the guidance for clinical applications. *International Journal of Computer Assisted Radiology and Surgery*, **2016**, 11, 613-20	3.9	9
27	Precision insertion of percutaneous sacroiliac screws using a novel augmented reality-based navigation system: a pilot study. *International Orthopaedics*, **2016**, 40, 1941-7	3.8	45
26	Boolean Combinations of Implicit Functions for Model Clipping in Computer-Assisted Surgical Planning. *PLoS ONE*, **2016**, 11, e0145987	3.7	2
25	Computer-aided planning and reconstruction of cranial 3D implants. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2016**, 2016, 1179-1183	0.9	10
24	Development of a computer-aided design software for dental splint in orthognathic surgery. *Scientific Reports*, **2016**, 6, 38867	4.9	8
23	A semi-automatic computer-aided method for surgical template design. *Scientific Reports*, **2016**, 6, 20280	4.9	18
22	US-Cut: interactive algorithm for rapid detection and segmentation of liver tumors in ultrasound acquisitions **2016**,		5
21	A review of computer-aided oral and maxillofacial surgery: planning, simulation and navigation. *Expert Review of Medical Devices*, **2016**, 13, 1043-1051	3.5	28
20	Computer-aided design and manufacturing of surgical templates and their clinical applications: a review. *Expert Review of Medical Devices*, **2016**, 13, 853-64	3.5	20
19	Development of a surgical navigation system based on augmented reality using an optical see-through head-mounted display. *Journal of Biomedical Informatics*, **2015**, 55, 124-31	10.2	114
18	Interactive Volumetry Of Liver Ablation Zones. *Scientific Reports*, **2015**, 5, 15373	4.9	11
17	RFA-cut: Semi-automatic segmentation of radiofrequency ablation zones with and without needles via optimal s-t-cuts. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 2423-9	0.9	6
16	Development of an open source software module for enhanced visualization during MR-guided interstitial gynecologic brachytherapy. *SpringerPlus*, **2014**, 3, 167		3
15	Development and validation of a surgical training simulator with haptic feedback for learning bone-sawing skill. *Journal of Biomedical Informatics*, **2014**, 48, 122-9	10.2	61
14	Low-dose three-dimensional reconstruction of the femur with unit free-form deformation. *Medical Physics*, **2014**, 41, 081911	4.4	1
13	A virtual training system for maxillofacial surgery using advanced haptic feedback and immersive workbench. *International Journal of Medical Robotics and Computer Assisted Surgery*, **2014**, 10, 78-87	2.9	31
12	A Virtual Training System Using a Force Feedback Haptic Device for Oral Implantology. *Lecture Notes in Computer Science*, **2012**, 232-240	0.9	13
11	Computer-Aided Surgical Simulation and Navigation in Reconstruction of Old Complicated Cranio-maxillofacial Fractures. *Procedia Environmental Sciences*, **2011**, 8, 536-542		4

10	A surgical navigation system for oral and maxillofacial surgery and its application in the treatment of old zygomatic fractures. *International Journal of Medical Robotics and Computer Assisted Surgery*, **2011**, 7, 42-50	2.9	26
9	Application of a surgical navigation system in the rehabilitation of maxillary defects using zygoma implants: report of one case. *International Journal of Oral and Maxillofacial Implants*, **2011**, 26, e29-34	2.8	6
8	Modular preoperative planning software for computer-aided oral implantology and the application of a novel stereolithographic template: a pilot study. *Clinical Implant Dentistry and Related Research* , **2010**, 12, 181-93	3.9	28
7	A novel active contour model for serial image segmentation. *Journal of Medical Engineering and Technology*, **2009**, 33, 303-8	1.8	
6	Image guided oral implantology and its application in the placement of zygoma implants. *Computer Methods and Programs in Biomedicine*, **2009**, 93, 162-73	6.9	33
5	Application of a surgical navigation system for zygoma implant surgery. *IFMBE Proceedings*, **2009**, 940-943	0.2	1
4	Real-time motion tracking in image-guided oral implantology. *International Journal of Medical Robotics and Computer Assisted Surgery*, **2008**, 4, 339-47	2.9	11
3	Computer-aided oral implantology: methods and applications. *Journal of Medical Engineering and Technology*, **2007**, 31, 459-67	1.8	12
2	A mathematical model of mandibular movement on the Hanau articulator and computerized simulation system of dynamic occlusion for complete denture. *Journal of Medical Engineering and Technology*, **2006**, 30, 151-7	1.8	1
1	A novel method in the design and fabrication of dental splints based on 3D simulation and rapid prototyping technology. *International Journal of Advanced Manufacturing Technology*, **2006**, 28, 919-922	3.2	14