

Omid Majdani

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6502665/publications.pdf>

Version: 2024-02-01

97
papers

2,003
citations

257450

24
h-index

265206

42
g-index

99
all docs

99
docs citations

99
times ranked

1225
citing authors

#	ARTICLE	IF	CITATIONS
1	Concept description and accuracy evaluation of a moldable surgical targeting system. <i>Journal of Medical Imaging</i> , 2021, 8, 015003.	1.5	4
2	The Use of Clinically Measurable Cochlear Parameters in Cochlear Implant Surgery as Indicators for Size, Shape, and Orientation of the Scala Tympani. <i>Ear and Hearing</i> , 2021, 42, 1034-1041.	2.1	10
3	Dimensions of artefacts caused by cochlear and auditory brainstem implants in magnetic resonance imaging. <i>Cochlear Implants International</i> , 2020, 21, 67-74.	1.2	5
4	Relations Between Scalar Shift and Insertion Depth in Human Cochlear Implantation. <i>Otology and Neurotology</i> , 2020, 41, 178-185.	1.3	9
5	Common Audiological Functional Parameters (CAFPAs) for single patient cases: deriving statistical models from an expert-labelled data set. <i>International Journal of Audiology</i> , 2020, 59, 534-547.	1.7	7
6	Characterizing the size of the target region for atraumatic opening of the cochlea through the facial recess. <i>Computerized Medical Imaging and Graphics</i> , 2019, 77, 101655.	5.8	10
7	Workflow assessment as a preclinical development tool. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2019, 14, 1389-1401.	2.8	2
8	Common Audiological Functional Parameters (CAFPAs): statistical and compact representation of rehabilitative audiological classification based on expert knowledge. <i>International Journal of Audiology</i> , 2019, 58, 231-245.	1.7	9
9	Reconstruction accuracy of an automated serial cross-sectional preparation technique for morphological human temporal bone imaging. <i>Current Directions in Biomedical Engineering</i> , 2019, 5, 191-194.	0.4	0
10	Cochlear helix and duct length identification – Evaluation of different curve fitting techniques. <i>Cochlear Implants International</i> , 2018, 19, 268-283.	1.2	35
11	On the accuracy of cochlear duct length measurement in computed tomographic images. <i>European Archives of Oto-Rhino-Laryngology</i> , 2018, 275, 1077-1085.	1.6	17
12	Numerical analysis of intracochlear mechanical auditory stimulation using piezoelectric bending actuators. <i>Medical and Biological Engineering and Computing</i> , 2018, 56, 733-747.	2.8	0
13	Histological evaluation of a cochlear implant electrode array with electrically activated shape change for perimodiolar positioning. <i>Current Directions in Biomedical Engineering</i> , 2018, 4, 145-148.	0.4	2
14	Minimally invasive mastoidectomy approach using a mouldable surgical targeting system. <i>Current Directions in Biomedical Engineering</i> , 2018, 4, 403-406.	0.4	2
15	Impact of anatomical variations on insertion forces. <i>Current Directions in Biomedical Engineering</i> , 2018, 4, 509-512.	0.4	5
16	Patient specific selection of lateral wall cochlear implant electrodes based on anatomical indication ranges. <i>PLoS ONE</i> , 2018, 13, e0206435.	2.5	51
17	Investigation of ultra-low insertion speeds in an inelastic artificial cochlear model using custom-made cochlear implant electrodes. <i>European Archives of Oto-Rhino-Laryngology</i> , 2018, 275, 2947-2956.	1.6	27
18	Accuracy Assessment of Different Registration and Imaging Methods on Image-Guided Surgery of Lateral Skull Base. <i>Archives of Neuroscience</i> , 2018, In Press, .	0.3	0

#	ARTICLE	IF	CITATIONS
19	Feasibility Assessment of Optical Coherence Tomography-Guided Laser Labeling in Middle Cranial Fossa Approach. Iranian Journal of Otorhinolaryngology, 2018, 30, 321-327.	0.4	0
20	Increasing the resolution of morphological 3D image data sets through image stitching: application to the temporal bone. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2017, 5, 438-445.	1.9	5
21	Phantom-based evaluation method for surgical assistance devices in minimally invasive cochlear implantation. , 2017, , .		1
22	Insertion forces and intracochlear trauma in temporal bone specimens implanted with a straight atraumatic electrode array. European Archives of Oto-Rhino-Laryngology, 2017, 274, 2131-2140.	1.6	22
23	Workflow and simulation of image-to-physical registration of holes inside spongy bone. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 1425-1437.	2.8	4
24	Impact of the round window membrane accessibility on hearing preservation in adult cochlear implantation. European Archives of Oto-Rhino-Laryngology, 2017, 274, 3049-3056.	1.6	6
25	Synthesis process of a compliant fluidmechanical actuator for use as an adaptive electrode carrier for cochlear implants. Mechanism and Machine Theory, 2017, 112, 155-171.	4.5	5
26	Micro-stereotactic frame utilizing bone cement for individual fabrication: an initial investigation of its accuracy. Proceedings of SPIE, 2017, , .	0.8	3
27	Does severity of cerebral MRI lesions in congenital CMV infection correlates with the outcome of cochlear implantation?. European Archives of Oto-Rhino-Laryngology, 2017, 274, 1397-1403.	1.6	16
28	Session 33: Modelling and simulation II. Biomedizinische Technik, 2017, 62, .	0.8	0
29	Investigation of intracochlear dual actuator stimulation in a scaled test rig. Current Directions in Biomedical Engineering, 2017, 3, 119-122.	0.4	0
30	Toward steerable electrodes. An overview of concepts and current research.. Current Directions in Biomedical Engineering, 2017, 3, 765-769.	0.4	3
31	Investigation of the effect of cochlear implant electrode length on speech comprehension in quiet and noise compared with the results with users of electro-acoustic-stimulation, a retrospective analysis. PLoS ONE, 2017, 12, e0174900.	2.5	101
32	Three-dimensional hard and soft tissue imaging of the human cochlea by scanning laser optical tomography (SLOT). PLoS ONE, 2017, 12, e0184069.	2.5	14
33	Preparation of Human Inner Ear Structures for High Resolution Imaging Studies. Archives of Neuroscience, 2017, In Press, .	0.3	0
34	Experimental Visualization of Labyrinthine Structure with Optical Coherence Tomography. Iranian Journal of Otorhinolaryngology, 2017, 29, 5-9.	0.4	5
35	Stereotactic robotic system for ear surgery. Journal of Laryngology and Otology, 2016, 130, S30-S30.	0.8	0
36	Impact of the surgical wound closure technique on the revision surgery rate after subtotal petrosectomy. European Archives of Oto-Rhino-Laryngology, 2016, 273, 3641-3646.	1.6	15

#	ARTICLE	IF	CITATIONS
37	Determination of optimal excitation patterns for local mechanical inner ear stimulation using a physiologically-based model. <i>Biomedical Microdevices</i> , 2016, 18, 36.	2.8	1
38	Toward automated cochlear implant insertion using tubular manipulators. <i>Proceedings of SPIE</i> , 2016, , .	0.8	3
39	Configuration optimization and experimental accuracy evaluation of a bone-attached, parallel robot for skull surgery. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2016, 11, 421-436.	2.8	26
40	Visualization, measurement and modelling of the cochlea using rotating midmodiolar slice planes. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2016, 11, 1855-1869.	2.8	26
41	Biohybrid cochlear implants in human neurosensory restoration. <i>Stem Cell Research and Therapy</i> , 2016, 7, 148.	5.5	39
42	Three-dimensional modeling of the cochlea by use of an arc fitting approach. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016, 19, 1785-1799.	1.6	16
43	Track P. Medical Implants / Implant Development. <i>Biomedizinische Technik</i> , 2016, 61, 179-199.	0.8	0
44	The Impact of Electrode Array Length on Hearing Preservation in Cochlear Implantation. <i>Otology and Neurotology</i> , 2016, 37, 1006-1015.	1.3	76
45	Nachgiebiger Elektroden-Träger für Cochlea-Implantate mit fluidischer Aktuierung. <i>Forschung Im Ingenieurwesen/Engineering Research</i> , 2016, 80, 57-69.	1.6	1
46	One step geometrical calibration method for optical coherence tomography. <i>Journal of Optics (United Kingdom)</i> , 2016, 18, 015301.	2.2	8
47	Insertion trauma of a cochlear implant electrode array with Nitinol inlay. <i>European Archives of Oto-Rhino-Laryngology</i> , 2016, 273, 3573-3585.	1.6	2
48	Electro-Mechanical Stimulation of the Cochlea by Vibrating Cochlear Implant Electrodes. <i>Otology and Neurotology</i> , 2015, 36, 1753-1758.	1.3	4
49	Individual Optimization of the Insertion of a Preformed Cochlear Implant Electrode Array. <i>International Journal of Otolaryngology</i> , 2015, 2015, 1-22.	0.9	8
50	Cochlear shape description and analyzing via medial models. , 2015, , .		1
51	Tubular manipulators: a new concept for intracochlear positioning of an auditory prosthesis. <i>Current Directions in Biomedical Engineering</i> , 2015, 1, 515-518.	0.4	4
52	An experimental evaluation of loads occurring during guided drilling for cochlear implantation. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2015, 10, 1625-1637.	2.8	6
53	Mechanical characterization of bone anchors used with a bone-attached, parallel robot for skull surgery. <i>Medical Engineering and Physics</i> , 2015, 37, 460-468.	1.7	9
54	Korrektur geometrischer Verzeichnungen zur Kalibrierung von optischen Kohärenztomographiesystemen. <i>Informatik Aktuell</i> , 2015, , 233-238.	0.6	0

#	ARTICLE	IF	CITATIONS
55	Normal distributions transform in multi-modal image registration of optical coherence tomography and computed tomography datasets. , 2014, , .		1
56	Accuracy of optical navigation systems for automatic head surgery: optical tracking versus optical coherence tomography. Proceedings of SPIE, 2014, , .	0.8	0
57	Hearing Preservation Outcomes with Different Cochlear Implant Electrodes: NucleusÂ® Hybridâ„¢-L24 and Nucleus Freedomâ„¢ CI422. Audiology and Neuro-Otology, 2014, 19, 293-309.	1.3	91
58	Temporal bone borehole accuracy for cochlear implantation influenced by drilling strategy: an in vitro study. International Journal of Computer Assisted Radiology and Surgery, 2014, 9, 1033-1043.	2.8	13
59	Design optimization of a bone-attached, redundant and reconfigurable parallel kinematic device for skull surgery. , 2014, , .		6
60	An automated insertion tool for cochlear implants with integrated force sensing capability. International Journal of Computer Assisted Radiology and Surgery, 2014, 9, 481-494.	2.8	23
61	Cochlear length determination using Cone Beam Computed Tomography in a clinical setting. Hearing Research, 2014, 316, 65-72.	2.0	141
62	Localization accuracy of sphere fiducials in computed tomography images. , 2014, , .		7
63	Three-dimensional histological specimen preparation for accurate imaging and spatial reconstruction of the middle and inner ear. International Journal of Computer Assisted Radiology and Surgery, 2013, 8, 481-509.	2.8	37
64	A one step vs. a multi step geometric calibration of an optical coherence tomography. , 2013, , .		3
65	Towards Intra-operative OCT Guidance for Automatic Head Surgery: First Experimental Results. Lecture Notes in Computer Science, 2013, 16, 347-354.	1.3	7
66	Towards a one step geometric calibration of an optical coherence tomography. Proceedings of SPIE, 2012, , .	0.8	2
67	Force measurement at the insertion process of cochlear implant electrodes. Biomedizinische Technik, 2012, 57, .	0.8	1
68	Automatic Segmentation of Intracochlear Anatomy in Conventional CT. IEEE Transactions on Biomedical Engineering, 2011, 58, 2625-2632.	4.2	145
69	Determination of the curling behavior of a preformed cochlear implant electrode array. International Journal of Computer Assisted Radiology and Surgery, 2011, 6, 421-433.	2.8	9
70	Accuracy of computer-aided geometric 3D reconstruction based on histological serial microgrinding preparation. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 581-594.	1.6	8
71	The Value of Digital Volume Tomography in Assessing the Position of Cochlear Implant Arrays in Temporal Bone Specimens. Ear and Hearing, 2010, 31, 413-419.	2.1	42
72	Clinical Validation Study of Percutaneous Cochlear Access Using Patient-Customized Microstereotactic Frames. Otology and Neurotology, 2010, 31, 94-99.	1.3	71

#	ARTICLE	IF	CITATIONS
73	Automated insertion of preformed cochlear implant electrodes: evaluation of curling behaviour and insertion forces on an artificial cochlear model. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2010, 5, 173-181.	2.8	40
74	An automated insertion tool for cochlear implants: another step towards atraumatic cochlear implant surgery. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2010, 5, 163-171.	2.8	47
75	A Step Toward Identification of Surgical Actions in Mastoidectomy. <i>IEEE Transactions on Biomedical Engineering</i> , 2010, 57, 479-487.	4.2	3
76	Automatic determination of optimal linear drilling trajectories for cochlear access accounting for drillâ€positioning error. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2010, 6, 281-290.	2.3	38
77	Percutaneous access to the petrous apex in vitro using customized micro-stereotactic frames based on image-guided surgical technology. <i>Acta Oto-Laryngologica</i> , 2010, 130, 458-463.	0.9	12
78	Modeling and segmentation of intra-cochlear anatomy in conventional CT. <i>Proceedings of SPIE</i> , 2010, , .	0.8	7
79	Force measurement of insertion of cochlear implant electrode arrays in vitro: comparison of surgeon to automated insertion tool. <i>Acta Oto-Laryngologica</i> , 2010, 130, 31-36.	0.9	73
80	Time of cochlear implant surgery in academic settings. <i>Otolaryngology - Head and Neck Surgery</i> , 2010, 142, 254-259.	1.9	24
81	Disablement of a surgical drill via CT guidance to protect vital anatomy. <i>Proceedings of SPIE</i> , 2009, , .	0.8	0
82	Penetration of CO ₂ laser into the otic capsule using a handâ€held, flexibleâ€fiber delivery system. <i>Lasers in Surgery and Medicine</i> , 2009, 41, 509-513.	2.1	3
83	Artifacts caused by cochlear implants with non-removable magnets in 3T MRI: phantom and cadaveric studies. <i>European Archives of Oto-Rhino-Laryngology</i> , 2009, 266, 1885-1890.	1.6	46
84	A robot-guided minimally invasive approach for cochlear implant surgery: preliminary results of a temporal bone study. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2009, 4, 475-486.	2.8	110
85	Bildbasierte Navigationsdatenkorrektur f¼r endoskopische Augmented Reality Anwendungen. <i>Informatik Aktuell</i> , 2009, , 351-355.	0.6	0
86	Percutaneous access to the petrous apex in vitro using customized micro-stereotactic frames based on image-guided surgical technology. <i>Acta Oto-Laryngologica</i> , 2009, , 1-6.	0.9	11
87	Clinical Validation of Percutaneous Cochlear Implant Surgery: Initial Report. <i>Laryngoscope</i> , 2008, 118, 1031-1039.	2.0	82
88	Demagnetization of Cochlear Implants and Temperature Changes in 3.0T MRI Environment. <i>Otolaryngology - Head and Neck Surgery</i> , 2008, 139, 833-839.	1.9	62
89	Conception and design of an automated insertion tool for cochlear implants. , 2008, 2008, 5593-6.		25
90	A True Minimally Invasive Approach for Cochlear Implantation. <i>Otology and Neurotology</i> , 2008, 29, 120-123.	1.3	51

#	ARTICLE	IF	CITATIONS
91	Placement of Intraventricular Catheters Using Flexible Electromagnetic Navigation and a Dynamic Reference Frame: A New Technique. <i>Stereotactic and Functional Neurosurgery</i> , 2007, 85, 243-248.	1.5	21
92	Auditory Midbrain Implant. <i>Otology and Neurotology</i> , 2007, 28, 31-38.	1.3	39
93	Increase of Accuracy in Intraoperative Navigation Through High-Resolution Flat-Panel Volume Computed Tomography. <i>Otology and Neurotology</i> , 2007, 28, 129-134.	1.3	27
94	Image-Guided Technique in Neurotology. <i>Otolaryngologic Clinics of North America</i> , 2007, 40, 611-624.	1.1	30
95	Force measurement of insertion of cochlear implant electrode arrays in vitro: comparison of surgeon to automated insertion tool. <i>Acta Oto-Laryngologica</i> , 0, , 1-6.	0.9	10
96	Percutaneous access to the petrous apex in vitro using customized micro-stereotactic frames based on image-guided surgical technology. <i>Acta Oto-Laryngologica</i> , 0, , 1-6.	0.9	7
97	Toward a cochlear implant electrode array with shape memory effect for postâ€insertion perimodiolar positioning. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 0, , .	3.4	1