Kiyoyuki Chinzei

List of Publications by Year
in descending order

34 papers	2,174 citations	566801 15 h-index	525886 27 g-index
36 all docs	36 docs citations	36 times ranked	1902 citing authors

#	Article	IF	Citations
1	Mechanical properties of brain tissue in tension. Journal of Biomechanics, 2002, 35, 483-490.	0.9	525
2	Mechanical properties of brain tissue in-vivo: experiment and computer simulation. Journal of Biomechanics, 2000, 33, 1369-1376.	0.9	503
3	Constitutive modelling of brain tissue: Experiment and theory. Journal of Biomechanics, 1997, 30, 1115-1121.	0.9	461
4	MR Compatible Surgical Assist Robot: System Integration and Preliminary Feasibility Study. Lecture Notes in Computer Science, 2000, , 921-930.	1.0	102
5	Opportunities and Challenges in MR-Compatible Robotics. IEEE Engineering in Medicine and Biology Magazine, 2008, 27, 15-22.	1.1	60
6	Measurement of the Tip and Friction Force Acting on a Needle during Penetration. Lecture Notes in Computer Science, 2002, , 216-223.	1.0	57
7	MRI-Compatible Robotics. IEEE Engineering in Medicine and Biology Magazine, 2008, 27, 12-14.	1.1	44
8	Coaxial Needle Insertion Assistant With Enhanced Force Feedback. IEEE Transactions on Biomedical Engineering, 2013, 60, 379-389.	2.5	43
9	Subject-specific non-linear biomechanical model of needle insertion into brain. Computer Methods in Biomechanics and Biomedical Engineering, 2008, 11, 135-146.	0.9	37
10	Regulatory Science on AI-based Medical Devices and Systems. Advanced Biomedical Engineering, 2018, 7, 118-123.	0.4	32
11	Robot-assisted needle placement in open MRI: System architecture, integration and validation. Computer Aided Surgery, 2007, 12, 15-24.	1.8	28
12	Endoscope Manipulator for Trans-nasal Neurosurgery, Optimized for and Compatible to Vertical Field Open MRI. Lecture Notes in Computer Science, 2002, , 114-121.	1.0	24
13	Needle Force Sensor, Robust and Sensitive Detection of the Instant of Needle Puncture. Lecture Notes in Computer Science, 2004, , 113-120.	1.0	18
14	Robotic Assist for MR-Guided Surgery Using Leverage and Parallelepiped Mechanism. Lecture Notes in Computer Science, 2000, , 940-948.	1.0	16
15	Experimental evaluation of a coaxial needle insertion assistant with enhanced force feedback. , 2011, 2011, 3447-50.		12
16	Bone enhancement filtering: Application to sinus bone segmentation and simulation of pituitary surgery. Computer Aided Surgery, 2006, 11, 247-255.	1.8	12
17	Surgical bedside master console for neurosurgical robotic system. International Journal of Computer Assisted Radiology and Surgery, 2013, 8, 75-86.	1.7	10
18	Open core control software for surgical robots. International Journal of Computer Assisted Radiology and Surgery, 2010, 5, 211-220.	1.7	9

#	Article	IF	Citations
19	Precise Evaluation of Positioning Repeatability of MR-Compatible Manipulator Inside MRI. Lecture Notes in Computer Science, 2004, , 192-199.	1.0	9
20	MRI-compatible Micromanipulator; Design and Implementation and MRI-compatibility Tests. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 465-8.	0.5	7
21	Evaluation of accuracy of non-linear finite element computations for surgical simulation: study using brain phantom. Computer Methods in Biomechanics and Biomedical Engineering, 2010, 13, 783-794.	0.9	7
22	Coaxial needle insertion assistant for epidural puncture. , 2011, , .		7
23	Planning, simulation and assistance with intraoperative MRI. Minimally Invasive Therapy and Allied Technologies, 2003, 12, 59-64.	0.6	6
24	Towards Patient-Specific Anatomical Model Generation for Finite Element-Based Surgical Simulation. Lecture Notes in Computer Science, 2003, , 340-352.	1.0	6
25	A PC-based system architecture for real-time finite element-based tool-specific surgical simulation. International Congress Series, 2004, 1268, 378-383.	0.2	4
26	Accuracy of Non-linear FE Modelling for Surgical Simulation: Study Using Soft Tissue Phantom. , 2010, , 29-41.		4
27	The Application of Embedded and Tubular Structure to Tissue Identification for the Computation of Patient-Specific Neurosurgical Simulation Models. Lecture Notes in Computer Science, 2004, , 203-210.	1.0	3
28	A topologically faithful, tissue-guided, spatially varying meshing strategy for computing patient-specific head models for endoscopic pituitary surgery simulation. Computer Aided Surgery, 2007, 12, 43-52.	1.8	2
29	<title>Quantitative integration of multimodality medical images</title>. , 1992, , .		1
30	MRI-compatible micromanipulator: Positioning repeatability tests & kinematic calibration. , 2009, 2009, 5118-21.		1
31	Emergence of Medical Robots and Autonomy in Medical Electrical Equipment. Biomedical Instrumentation and Technology, 2018, 52, 156-159.	0.2	1
32	Coaxial needle insertion assistant for epidural puncture effect of lateral force on needle. , 2013, 2013, 6683-6.		0
33	Surgical Simulation in an Anatomical/Functional Atlas with HyperCAS. , 1997, , 105-114.		0
34	3D Slicer Based Surgical Robot Console System. , 2009, , .		0