Mandayam A Srinivasan

List of Publications by Year
in descending order

53 papers	4,368 citations	236925 25 h-index	189892 50 g-index
54 all docs	54 docs citations	54 times ranked	3498 citing authors

#	Article	IF	Citations
1	Data-driven malaria prevalence prediction in large densely populated urban holoendemic sub-Saharan West Africa. Scientific Reports, 2020, 10, 15918.	3.3	16
2	Coding source localization through inter-spike delay: modelling a cluster of Pacinian Corpuscles using time-division multiplexing approach. Somatosensory & Motor Research, 2020, 37, 63-73.	0.9	9
3	Mechanical properties measured by atomic force microscopy define health biomarkers in ageing C. elegans. Nature Communications, 2020, 11, 1043.	12.8	29
4	Expertâ€level automated malaria diagnosis on routine blood films with deep neural networks. American Journal of Hematology, 2020, 95, 883-891.	4.1	30
5	Natural Infection of C.Âelegans by an Oomycete Reveals a New Pathogen-Specific Immune Response. Current Biology, 2018, 28, 640-648.e5.	3.9	48
6	Three-dimensional behavioural phenotyping of freely moving C. elegans using quantitative light field microscopy. PLoS ONE, 2018, 13, e0200108.	2.5	20
7	Determining the biomechanics of touch sensation in C. elegans. Scientific Reports, 2017, 7, 12329.	3.3	14
8	In-vivo high resolution AFM topographic imaging of Caenorhabditis elegans reveals previously unreported surface structures of cuticle mutants. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 183-189.	3.3	28
9	Investigation of mechanosensation in C elegans using light field calcium imaging. Biomedical Optics Express, 2016, 7, 2877.	2.9	6
10	Nano-mechanical single-cell sensing of cellâ€“matrix contacts. Nanoscale, 2016, 8, 18105-18112.	5.6	7
11	Virtual Environments for People who Are Visually Impaired Integrated into an Orientation and Mobility Program. Journal of Visual Impairment and Blindness, 2015, 109, 5-16.	0.7	10
12	Vibrotactile Sensitivity Threshold: Nonlinear Stochastic Mechanotransduction Model of the Pacinian Corpuscle. IEEE Transactions on Haptics, 2015, 8, 102-113.	2.7	29
13	Viscoelastic Characterization of the Primate Finger Pad In Vivo by Microstep Indentation and Three-Dimensional Finite Element Models for Tactile Sensation Studies. Journal of Biomechanical Engineering, 2015, 137, 061002.	1.3	15
14	Multiscale Layered Biomechanical Model of the Pacinian Corpuscle. IEEE Transactions on Haptics, 2015, 8, 31-42.	2.7	29
15	Rehabilitation program integrating virtual environment to improve orientation and mobility skills for people who are blind. Computers and Education, 2015, 80, 1-14.	8.3	28
16	Human haptic perception is interrupted by explorative stops of milliseconds. Frontiers in Psychology, 2014, 5, 292.	2.1	9
17	Virtual Environment System in Support of a Traditional Orientation and Mobility Rehabilitation Program for People Who Are Blind. Presence: Teleoperators and Virtual Environments, 2013, 22, 235-254.	0.6	7
18	wUbi-Pen: Sensory Feedback Stylus Interacting with Graphical User Interface. Presence: Teleoperators and Virtual Environments, 2012, 21, 142-155.	0.6	10

#	Article	IF	Citations
19	Newly blind persons using virtual environment system in a traditional orientation and mobility rehabilitation program: a case study. Disability and Rehabilitation: Assistive Technology, 2012, 7, 420-435.	2.2	25
20	Haptic texture generation using stochastic models and teleoperation. International Journal of Control, Automation and Systems, 2012, 10, 1245-1253.	2.7	1
21	Beaming into the Rat World: Enabling Real-Time Interaction between Rat and Human Each at Their Own Scale. PLoS ONE, 2012, 7, e48331.	2.5	13
22	Flexible membrane tactile sensor for contact traction distribution measurement on a microscale. , 2011, , .		2
23	A Virtual Map to Support People Who are Blind in Navigation through Real Spaces. Journal of Special Education Technology, 2011, 26, 41-57.	2.2	7
24	Developments in brainâ€“machine interfaces from the perspective of robotics. Human Movement Science, 2009, 28, 191-203.	1.4	18
25	An efficient soft tissue characterization algorithm from in vivo indentation experiments for medical simulation. International Journal of Medical Robotics and Computer Assisted Surgery, 2008, 4, 277-285.	2.3	23
26	BlindAid: A learning environment for enabling people who are blind to explore and navigate through unknown real spaces. , 2008, , .		17
27	Synchronization control for physics-based collaborative virtual environments with shared haptics. Advanced Robotics, 2007, 21, 1001-1029.	1.8	9
28	Discrimination and identification of finger joint-angle position using active motion. ACM Transactions on Applied Perception, 2007, 4, 10.	1.9	35
29	Virtual surgery simulation for medical training using multiâ€resolution organ models. International Journal of Medical Robotics and Computer Assisted Surgery, 2007, 3, 149-158.	2.3	24
30	The Muscle Activation Method: An Approach to Impedance Control of Brain-Machine Interfaces Through a Musculoskeletal Model of the Arm. IEEE Transactions on Biomedical Engineering, 2007, 54, 1520-1529.	4.2	36
31	Interactive deformable geometry maps. Visual Computer, 2007, 23, 119-131.	3.5	6
32	A compact planar distributed tactile display and effects of frequency on texture judgment. Advanced Robotics, 2006, 20, 563-580.	1.8	32
33	Continuous Shared Control for Stabilizing Reaching and Grasping With Brain-Machine Interfaces. IEEE Transactions on Biomedical Engineering, 2006, 53, 1164-1173.	4.2	101
34	In Vivo Mechanical Behavior of Intra-abdominal Organs. IEEE Transactions on Biomedical Engineering, 2006, 53, 2129-2138.	4.2	60
35	Physically Realistic Virtual Surgery Using the Point-Associated Finite Field (PAFF) Approach. Presence: Teleoperators and Virtual Environments, 2006, 15, 294-308.	0.6	34
36	The point collocation-based method of finite spheres (PCMFS) for real time surgery simulation. Computers and Structures, 2005, 83, 1515-1525.	4.4	19

#	Article	IF	Citations
37	Virtual-reality-based laparoscopic surgical training: The role of simulation fidelity in haptic feedback. Computer Aided Surgery, 2004, 9, 227-234.	1.8	26
38	Transatlantic Touch: A Study of Haptic Collaboration over Long Distance. Presence: Teleoperators and Virtual Environments, 2004, 13, 328-337.	0.6	110
39	Haptic rendering - beyond visual computing - Haptics in minimally invasive surgical simulation and training. IEEE Computer Graphics and Applications, 2004, 24, 56-64.	1.2	285
40	Quantitative ultrasonic methods for characterization of skin lesions in vivo. Ultrasound in Medicine and Biology, 2003, 29, 825-838.	1.5	60
41	Robust deconvolution of high-frequency ultrasound images using higher-order spectral analysis and wavelets. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2003, 50, 1286-1295.	3.0	30
42	3-D Finite-Element Models of Human and Monkey Fingertips to Investigate the Mechanics of Tactile Sense. Journal of Biomechanical Engineering, 2003, 125, 682-691.	1.3	257
43	Statistics of envelope of high-frequency ultrasonic backscatter from human skin in vivo. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2002, 49, 871-882.	3.0	95
44	High-frequency ultrasonic attenuation and backscatter coefficients of in vivo normal human dermis and subcutaneous fat. Ultrasound in Medicine and Biology, 2001, 27, 1543-1556.	1.5	64
45	Real-time prediction of hand trajectory by ensembles of cortical neurons in primates. Nature, 2000, 408, 361-365.	27.8	1,371
46	An experimental study on the role of touch in shared virtual environments. ACM Transactions on Computer-Human Interaction, 2000, 7, 443-460.	5.7	324
47	Efficient Point-Based Rendering Techniques for Haptic Display of Virtual Objects. Presence: Teleoperators and Virtual Environments, 1999, 8, 477-491.	0.6	141
48	Encoding of Shape and Orientation of Objects Indented Into the Monkey Fingerpad by Populations of Slowly and Rapidly Adapting Mechanoreceptors. Journal of Neurophysiology, 1998, 79, 3238-3251.	1.8	69
49	Haptics in virtual environments: Taxonomy, research status, and challenges. Computers and Graphics, 1997, 21, 393-404.	2.5	410
50	Tactual discrimination of softness: abilities and mechanisms. , 1996, , 123-135.		48
51	Manual discrimination of compliance using active pinch grasp: The roles of force and work cues. Perception & Psychophysics, 1995, 57, 495-510.	2.3	181
52	Responses of cutaneous mechanoreceptors to the shape of objects applied to the primate fingerpad. Acta Psychologica, 1993, 84, 41-51.	1.5	37
53	Encoding of Shape in the Responses of Cutaneous Mechanoreceptors. , 1991, , 59-69.		17