Usha Sinha

List of Publications by Year
in descending order

45 papers	1,794 citations	394421 19 h-index	265206 42 g-index
45 all docs	45 docs citations	45 times ranked	2104 citing authors

#	Article	IF	Citations
1	Relationships between choline magnetic resonance spectroscopy, apparent diffusion coefficient and quantitative histopathology in human glioma. Journal of Neuro-Oncology, 2000, 50, 215-226.	2.9	251
2	In vivo diffusion-weighted MRI of the breast: Potential for lesion characterization. Journal of Magnetic Resonance Imaging, 2002, 15, 693-704.	3.4	244
3	Inverse correlation between choline magnetic resonance spectroscopy signal intensity and the apparent diffusion coefficient in human glioma. Magnetic Resonance in Medicine, 1999, 41, 2-7.	3.0	150
4	In vivo diffusion tensor imaging of the human calf muscle. Journal of Magnetic Resonance Imaging, 2006, 24, 182-190.	3.4	145
5	Exploratory voxel-based analysis of diffusion indices and hemispheric asymmetry in normal aging. Magnetic Resonance Imaging, 2007, 25, 154-167.	1.8	116
6	Age-associated differences in triceps surae muscle composition and strength â€“ an MRI-based cross-sectional comparison of contractile, adipose and connective tissue. BMC Musculoskeletal Disorders, 2014, 15, 209.	1.9	85
7	Geometric distortion correction of highâ€resolution 3 T diffusion tensor brain images. Magnetic Resonance in Medicine, 2005, 54, 1163-1171.	3.0	77
8	Functional Magnetic Resonance of Human Breast Tumors. Annals of the New York Academy of Sciences, 2002, 980, 95-115.	3.8	63
9	Human soleus muscle architecture at different ankle joint angles from magnetic resonance diffusion tensor imaging. Journal of Applied Physiology, 2011, 110, 807-819.	2.5	63
10	In vivo diffusion tensor imaging of human calf muscle. Journal of Magnetic Resonance Imaging, 2002, 15, 87-95.	3.4	60
11	Ageâ€related differences in diffusion tensor indices and fiber architecture in the medial and lateral gastrocnemius. Journal of Magnetic Resonance Imaging, 2015, 41, 941-953.	3.4	44
12	Reproducibility analysis of diffusion tensor indices and fiber architecture of human calf muscles in vivo at 1.5 Tesla in neutral and plantarflexed ankle positions at rest. Journal of Magnetic Resonance Imaging, 2011, 34, 107-119.	3.4	41
13	Age-related differences in strain rate tensor of the medial gastrocnemius muscle during passive plantarflexion and active isometric contraction using velocity encoded MR imaging: Potential index of lateral force transmission. Magnetic Resonance in Medicine, 2015, 73, 1852-1863.	3.0	39
14	Principal Component Analysis for Content-based Image Retrieval. Radiographics, 2002, 22, 1271-1289.	3.3	38
15	Phase imaging on a .2-T MR scanner: Application to temperature monitoring during ablation procedures. Journal of Magnetic Resonance Imaging, 1997, 7, 918-928.	3.4	34
16	A Review of Medical Imaging Informatics. Annals of the New York Academy of Sciences, 2002, 980, 168-197.	3.8	33
17	openSourcePACS: An Extensible Infrastructure for Medical Image Management. IEEE Transactions on Information Technology in Biomedicine, 2007, 11, 94-109.	3.2	24
18	Reduction of Electronic Noise From Radiofrequency Generator During Radiofrequency Ablation in Interventional MRI. Journal of Computer Assisted Tomography, 2002, 26, 308-316.	0.9	20

#	Article	IF	Citations
19	Relationship of changes in strain rate indices estimated from velocityâ€encoded <scp>MR</scp> imaging to loss of muscle force following disuse atrophy. Magnetic Resonance in Medicine, 2018, 79, 912-922.	3.0	20
20	DataServer. Academic Radiology, 2002, 9, 670-678.	2.5	19
21	Black blood dual phase turbo FLASH MR imaging of the heart. Journal of Magnetic Resonance Imaging, 1996, 6, 484-494.	3.4	16
22	Microstructural analysis of skeletal muscle force generation during aging. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e3295.	2.1	16
23	Role of the Extracellular Matrix in Loss of Muscle Force With Age and Unloading Using Magnetic Resonance Imaging, Biochemical Analysis, and Computational Models. Frontiers in Physiology, 2020, 11, 626.	2.8	16
24	Quantitative Metrics for Evaluating Parallel Acquisition Techniques in Diffusion Tensor Imaging at 3 Tesla. Investigative Radiology, 2006, 41, 806-814.	6.2	15
25	Shear strain rate from phase contrast velocity encoded MRI: Application to study effects of aging in the medial gastrocnemius muscle. Journal of Magnetic Resonance Imaging, 2018, 48, 1351-1357.	3.4	15
26	Diffusion tensor imaging and diffusion modeling: Application to monitoring changes in the medial gastrocnemius in disuse atrophy induced by unilateral limb suspension. Journal of Magnetic Resonance Imaging, 2019, 49, 1655-1664.	3.4	15
27	Content Based Image Retrieval for MR Image Studies of Brain Tumors. , 2006, 2006, 3337-40.		14
28	Pixel-based meshfree modelling of skeletal muscles. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2016, 4, 73-85.	1.9	13
29	Teleradiology as a Foundation for an Enterprise-wide Health Care Delivery System. Radiographics, 2000, 20, 1137-1150.	3.3	12
30	Compressed sensing velocity encoded phase contrast imaging: Monitoring skeletal muscle kinematics. Magnetic Resonance in Medicine, 2020, 84, 142-156.	3.0	12
31	Exploration of male urethral sphincter complex using diffusion tensor imaging (DTI)â€based fiberâ€tracking. Journal of Magnetic Resonance Imaging, 2018, 48, 1002-1011.	3.4	11
32	Interactive Software for Generation and Visualization of Structured Findings in Radiology Reports. American Journal of Roentgenology, 2000, 175, 609-612.	2.2	9
33	Mapping of spatial and temporal heterogeneity of plantar flexor muscle activity during isometric contraction: correlation of velocity-encoded MRI with EMG. Journal of Applied Physiology, 2015, 119, 558-568.	2.5	9
34	Physics-constrained local convexity data-driven modeling of anisotropic nonlinear elastic solids. Data-Centric Engineering, 2020, 1, .	2.3	9
35	Image Content Extraction: Application to MR Images of the Brain. Radiographics, 2001, 21, 535-547.	3.3	8
36	Magnetization transfer saturation imaging of human calf muscle: Reproducibility and sensitivity to regional and sex differences. Journal of Magnetic Resonance Imaging, 2019, 50, 1227-1237.	3.4	8

#	Article	IF	Citations
37	3D Muscle Deformation Mapping at Submaximal Isometric Contractions: Applications to Aging Muscle. Frontiers in Physiology, 2020, 11, 600590.	2.8	7
38	Magnetic resonance imaging based muscle strain rate mapping during eccentric contraction to study effects of unloading induced by unilateral limb suspension. European Journal of Translational Myology, 2020, 30, 139-143.	1.7	7
39	3D multimodal spatial fuzzy segmentation of intramuscular connective and adipose tissue from ultrashort TE MR images of calf muscle. Magnetic Resonance in Medicine, 2017, 77, 870-883.	3.0	6
40	Multiscale modeling of passive material influences on deformation and force output of skeletal muscles. International Journal for Numerical Methods in Biomedical Engineering, 2022, 38, e3571.	2.1	4
41	Pixel Based Meshfree Modeling of Skeletal Muscles. Lecture Notes in Computer Science, 2014, , 316-327.	1.3	3
42	Spin Lattice (T1) and Magnetization Transfer Saturation (MTsat) Imaging to Monitor Age-Related Differences in Skeletal Muscle Tissue. Diagnostics, 2022, 12, 584.	2.6	2
43	Designing a Patient Education Framework via Use Case Analysis. Annals of the New York Academy of Sciences, 2002, 980, 225-235.	3.8	1
44	Development of an indexed integrated neuroradiology reports for teaching file creation. , 2007, , .		0
45	Diffusion-Weighted and Diffusion Tensor Imaging: Applications in Skeletal Muscles. Medical Radiology, 2013, , 69-85.	0.1	0