

# Usha Sinha

## List of Publications by Year in descending order

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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	Multiscale modeling of passive material influences on deformation and force output of skeletal muscles. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2022, 38, e3571.	2.1	4
2	Spin Lattice (T1) and Magnetization Transfer Saturation (MTsat) Imaging to Monitor Age-Related Differences in Skeletal Muscle Tissue. <i>Diagnostics</i> , 2022, 12, 584.	2.6	2
3	Compressed sensing velocity encoded phase contrast imaging: Monitoring skeletal muscle kinematics. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 142-156.	3.0	12
4	Microstructural analysis of skeletal muscle force generation during aging. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2020, 36, e3295.	2.1	16
5	3D Muscle Deformation Mapping at Submaximal Isometric Contractions: Applications to Aging Muscle. <i>Frontiers in Physiology</i> , 2020, 11, 600590.	2.8	7
6	Role of the Extracellular Matrix in Loss of Muscle Force With Age and Unloading Using Magnetic Resonance Imaging, Biochemical Analysis, and Computational Models. <i>Frontiers in Physiology</i> , 2020, 11, 626.	2.8	16
7	Magnetic resonance imaging based muscle strain rate mapping during eccentric contraction to study effects of unloading induced by unilateral limb suspension. <i>European Journal of Translational Myology</i> , 2020, 30, 139-143.	1.7	7
8	Physics-constrained local convexity data-driven modeling of anisotropic nonlinear elastic solids. <i>Data-Centric Engineering</i> , 2020, 1, .	2.3	9
9	Magnetization transfer saturation imaging of human calf muscle: Reproducibility and sensitivity to regional and sex differences. <i>Journal of Magnetic Resonance Imaging</i> , 2019, 50, 1227-1237.	3.4	8
10	Diffusion tensor imaging and diffusion modeling: Application to monitoring changes in the medial gastrocnemius in disuse atrophy induced by unilateral limb suspension. <i>Journal of Magnetic Resonance Imaging</i> , 2019, 49, 1655-1664.	3.4	15
11	Exploration of male urethral sphincter complex using diffusion tensor imaging (DTI)-based fiber-tracking. <i>Journal of Magnetic Resonance Imaging</i> , 2018, 48, 1002-1011.	3.4	11
12	Shear strain rate from phase contrast velocity encoded MRI: Application to study effects of aging in the medial gastrocnemius muscle. <i>Journal of Magnetic Resonance Imaging</i> , 2018, 48, 1351-1357.	3.4	15
13	Relationship of changes in strain rate indices estimated from velocity-encoded MRI imaging to loss of muscle force following disuse atrophy. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 912-922.	3.0	20
14	3D multimodal spatial fuzzy segmentation of intramuscular connective and adipose tissue from ultrashort TE MR images of calf muscle. <i>Magnetic Resonance in Medicine</i> , 2017, 77, 870-883.	3.0	6
15	Pixel-based meshfree modelling of skeletal muscles. <i>Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization</i> , 2016, 4, 73-85.	1.9	13
16	Mapping of spatial and temporal heterogeneity of plantar flexor muscle activity during isometric contraction: correlation of velocity-encoded MRI with EMG. <i>Journal of Applied Physiology</i> , 2015, 119, 558-568.	2.5	9
17	Age-related differences in diffusion tensor indices and fiber architecture in the medial and lateral gastrocnemius. <i>Journal of Magnetic Resonance Imaging</i> , 2015, 41, 941-953.	3.4	44
18	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. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 1852-1863.	3.0	39

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19	Age-associated differences in triceps surae muscle composition and strength – an MRI-based cross-sectional comparison of contractile, adipose and connective tissue. BMC Musculoskeletal Disorders, 2014, 15, 209.	1.9	85
20	Pixel Based Meshfree Modeling of Skeletal Muscles. Lecture Notes in Computer Science, 2014, , 316-327.	1.3	3
21	Diffusion-Weighted and Diffusion Tensor Imaging: Applications in Skeletal Muscles. Medical Radiology, 2013, , 69-85.	0.1	0
22	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
23	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
24	Development of an indexed integrated neuroradiology reports for teaching file creation. , 2007, , .		0
25	Exploratory voxel-based analysis of diffusion indices and hemispheric asymmetry in normal aging. Magnetic Resonance Imaging, 2007, 25, 154-167.	1.8	116
26	openSourcePACS: An Extensible Infrastructure for Medical Image Management. IEEE Transactions on Information Technology in Biomedicine, 2007, 11, 94-109.	3.2	24
27	Content Based Image Retrieval for MR Image Studies of Brain Tumors. , 2006, 2006, 3337-40.		14
28	Quantitative Metrics for Evaluating Parallel Acquisition Techniques in Diffusion Tensor Imaging at 3 Tesla. Investigative Radiology, 2006, 41, 806-814.	6.2	15
29	In vivo diffusion tensor imaging of the human calf muscle. Journal of Magnetic Resonance Imaging, 2006, 24, 182-190.	3.4	145
30	Geometric distortion correction of high-resolution 3 T diffusion tensor brain images. Magnetic Resonance in Medicine, 2005, 54, 1163-1171.	3.0	77
31	Principal Component Analysis for Content-based Image Retrieval. Radiographics, 2002, 22, 1271-1289.	3.3	38
32	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
33	DataServer. Academic Radiology, 2002, 9, 670-678.	2.5	19
34	In vivo diffusion tensor imaging of human calf muscle. Journal of Magnetic Resonance Imaging, 2002, 15, 87-95.	3.4	60
35	In vivo diffusion-weighted MRI of the breast: Potential for lesion characterization. Journal of Magnetic Resonance Imaging, 2002, 15, 693-704.	3.4	244
36	Functional Magnetic Resonance of Human Breast Tumors. Annals of the New York Academy of Sciences, 2002, 980, 95-115.	3.8	63

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37	A Review of Medical Imaging Informatics. Annals of the New York Academy of Sciences, 2002, 980, 168-197.	3.8	33
38	Designing a Patient Education Framework via Use Case Analysis. Annals of the New York Academy of Sciences, 2002, 980, 225-235.	3.8	1
39	Image Content Extraction: Application to MR Images of the Brain. Radiographics, 2001, 21, 535-547.	3.3	8
40	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
41	Teleradiology as a Foundation for an Enterprise-wide Health Care Delivery System. Radiographics, 2000, 20, 1137-1150.	3.3	12
42	Interactive Software for Generation and Visualization of Structured Findings in Radiology Reports. American Journal of Roentgenology, 2000, 175, 609-612.	2.2	9
43	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
44	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
45	Black blood dual phase turbo FLASH MR imaging of the heart. Journal of Magnetic Resonance Imaging, 1996, 6, 484-494.	3.4	16