Juan Ren

List of Publications by Citations

32	266	10	14
papers	citations	h-index	g-index
41	369	3.4	4.01
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
32	An Atomic Force Microscope Study Revealed Two Mechanisms in the Effect of Anticancer Drugs on Rate-Dependent Young's Modulus of Human Prostate Cancer Cells. *PLoS ONE*, **2015**, 10, e0126107	3.7	27
31	High-speed adaptive contact-mode atomic force microscopy imaging with near-minimum-force. *Review of Scientific Instruments*, **2014**, 85, 073706	1.7	23
30	Indentation quantification for in-liquid nanomechanical measurement of soft material using an atomic force microscope: rate-dependent elastic modulus of live cells. *Physical Review E*, **2013**, 88, 052711	2.4	21
29	Finite element modeling of living cells for AFM indentation-based biomechanical characterization. *Micron*, **2019**, 116, 108-115	2.3	20
28	Atomic force microscopy study revealed velocity-dependence and nonlinearity of nanoscale poroelasticity of eukaryotic cells. *Journal of the Mechanical Behavior of Biomedical Materials*, **2018**, 78, 65-73	4.1	20
27	A Control-Based Approach to Accurate Nanoindentation Quantification in Broadband Nanomechanical Measurement Using Scanning Probe Microscope. *IEEE Nanotechnology Magazine*, **2014**, 13, 46-54	2.6	17
26	Nonlinear Cellular Mechanical Behavior Adaptation to Substrate Mechanics Identified by Atomic Force Microscope. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	15
25	High-speed AFM imaging via iterative learning-based model predictive control. *Mechatronics*, **2019**, 57, 86-94	3	13
24	High-speed atomic force microscope imaging: adaptive multiloop mode. *Physical Review E*, **2014**, 90, 012405	2.4	11
23	Recurrent-Neural-Network-Based Predictive Control of Piezo Actuators for Trajectory Tracking. *IEEE/ASME Transactions on Mechatronics*, **2019**, 24, 2885-2896	5.5	11
22	Enhanced measurement of broadband nanomechanical property of polymers using atomic force microscope. *Applied Physics Letters*, **2013**, 102, 183116	3.4	10
21	Effect of F-actin and Microtubules on Cellular Mechanical Behavior Studied Using Atomic Force Microscope and an Image Recognition-Based Cytoskeleton Quantification Approach. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	9
20	Adaptive-scanning, near-minimum-deformation atomic force microscope imaging of soft sample in liquid: Live mammalian cell example. *Ultramicroscopy*, **2018**, 186, 150-157	3.1	9
19	Receptor-mediated endocytosis generates nanomechanical force reflective of ligand identity and cellular property. *Journal of Cellular Physiology*, **2018**, 233, 5908-5919	7	7
18	An Image Recognition-Based Approach to Actin Cytoskeleton Quantification. *Electronics (Switzerland)*, **2018**, 7, 443	2.6	7
17	Study of Cholesterol Repletion Effect on Nanomechanical Properties of Human Umbilical Vein Endothelial Cell Via Rapid Broadband Atomic Force Microscopy. *Journal of Biomechanical Engineering*, **2017**, 139,	2.1	6
16	Note: Precision control of nano-positioning stage: An iterative learning-based model predictive control approach. *Review of Scientific Instruments*, **2018**, 89, 076103	1.7	6

List of Publications

15	Investigation of the effect of substrate morphology on MDCK cell mechanical behavior using atomic force microscopy. *Applied Physics Letters*, **2019**, 115, 063701	3.4	6
14	An experimental study of rain erosion effects on a hydro-/ice-phobic coating pertinent to Unmanned-Arial-System (UAS) inflight icing mitigation. *Cold Regions Science and Technology*, **2021**, 181, 103196	3.8	6
13	Unique Orientation of the Solid-Solid Interface at the Janus Particle Boundary Induced by Ionic Liquids. *Journal of Physical Chemistry Letters*, **2020**, 11, 9834-9841	6.4	5
12	Linearization of Recurrent-Neural-Network- Based Models for Predictive Control of Nano-Positioning Systems Using Data-Driven Koopman Operators. *IEEE Access*, **2020**, 8, 147077-147088	3.5	5
11	High-speed broadband monitoring of cell viscoelasticity in real time shows myosin-dependent oscillations. *Biomechanics and Modeling in Mechanobiology*, **2017**, 16, 1857-1868	3.8	3
10	Recurrent-neural-network-based Predictive Control of Piezo Actuators for Precision Trajectory Tracking **2019**,		2
9	Tracking Control Using Recurrent-Neural-Network-Based Inversion Model: A Case Study on a Piezo Actuator. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 11409-11419	8.9	2
8	High-speed dynamic-mode atomic force microscopy imaging of polymers: an adaptive multiloop-mode approach. *Beilstein Journal of Nanotechnology*, **2017**, 8, 1563-1570	3	1
7	Actin Cytoskeleton Morphology Modeling Using Graph Embedding and Classification in Machine Learning. *IFAC-PapersOnLine*, **2021**, 54, 328-333	0.7	1
6	Soft Ferrofluid Actuator Based on 3D-Printed Scaffold Removal. *3D Printing and Additive Manufacturing*, **2021**, 8, 126-135	4	1
5	Iterative Learning-based Model Predictive Control for Precise Trajectory Tracking of Piezo Nanopositioning Stage **2018**,		1
4	AI Guided Measurement of Live Cells Using AFM. *IFAC-PapersOnLine*, **2021**, 54, 316-321	0.7	0
3	Biobased superhydrophobic coating enabled by nanoparticle assembly. *Nanoscale Advances*, **2021**, 3, 4037-4047	5.1	0
2	Long Short-term Memory Neural Network-based System Identification and Augmented Predictive Control of Piezoelectric Actuators for Precise Trajectory Tracking. *IFAC-PapersOnLine*, **2021**, 54, 38-45	0.7	
1	Modeling of Soft Sample Deformation in Atomic Force Microscope Imaging: Live Mammalian Cell Example. *Advanced Theory and Simulations*, **2019**, 2, 1800036	3.5	