

Shukei Sugita

List of Publications by Year in descending order

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papers

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1040056

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citing authors

#	ARTICLE	IF	CITATIONS
1	Multiphoton microscopy observations of 3D elastin and collagen fiber microstructure changes during pressurization in aortic media. <i>Biomechanics and Modeling in Mechanobiology</i> , 2017, 16, 763-773.	2.8	48
2	A Novel Method for Measuring Tension Generated in Stress Fibers by Applying External Forces. <i>Biophysical Journal</i> , 2011, 101, 53-60.	0.5	22
3	Quantitative measurement of the distribution and alignment of collagen fibers in unfixed aortic tissues. <i>Journal of Biomechanics</i> , 2013, 46, 1403-1407.	2.1	21
4	Evaluation of Rupture Properties of Thoracic Aortic Aneurysms in a Pressure-Imposed Test for Rupture Risk Estimation. <i>Cardiovascular Engineering and Technology</i> , 2012, 3, 41-51.	1.6	18
5	Local distribution of collagen fibers determines crack initiation site and its propagation direction during aortic rupture. <i>Biomechanics and Modeling in Mechanobiology</i> , 2018, 17, 577-587.	2.8	15
6	Photoelasticity-based evaluation of cellular contractile force for phenotypic discrimination of vascular smooth muscle cells. <i>Scientific Reports</i> , 2019, 9, 3960.	3.3	14
7	Mechanophenotyping of B16 Melanoma Cell Variants for the Assessment of the Efficacy of (-)-Epigallocatechin Gallate Treatment Using a Tapered Microfluidic Device. <i>Micromachines</i> , 2019, 10, 207.	2.9	12
8	Three-dimensional analysis of the thoracic aorta microscopic deformation during intraluminal pressurization. <i>Biomechanics and Modeling in Mechanobiology</i> , 2020, 19, 147-157.	2.8	10
9	Second harmonic generation light quantifies the ratio of type III to total (I+II) collagen in a bundle of collagen fiber. <i>Scientific Reports</i> , 2021, 11, 11874.	3.3	9
10	Heterogeneity of deformation of aortic wall at the microscopic level: Contribution of heterogeneous distribution of collagen fibers in the wall. <i>Bio-Medical Materials and Engineering</i> , 2013, 23, 447-461.	0.6	8
11	Yielding Phenomena of Aortic Wall and Intramural Collagen Fiber Alignment: Possible Link to Rupture Mechanism of Aortic Aneurysms. <i>Journal of Biomechanical Science and Engineering</i> , 2013, 8, 104-113.	0.3	8
12	Characterization of Motility Properties of Kinesin-Driven Microtubules Towards Nano-Scale Transporter: Focusing on Length of Microtubules and Kinesin Density. <i>Journal of Biomechanical Science and Engineering</i> , 2008, 3, 510-519.	0.3	7
13	Size sorting of kinesin-driven microtubules with topographical grooves on a chip. <i>Lab on A Chip</i> , 2010, 10, 755.	6.0	7
14	Novel biaxial tensile test for studying aortic failure phenomena at a microscopic level. <i>BioMedical Engineering OnLine</i> , 2013, 12, 3.	2.7	7
15	Direct application of mechanical stimulation to cell adhesion sites using a novel magnetic-driven micropillar substrate. <i>Biomedical Microdevices</i> , 2018, 20, 85.	2.8	7
16	Local Strain Measurement of Arterial Wall Based on Longitudinal Observation.. <i>Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A</i> , 2003, 69, 43-48.	0.2	6
17	B16 Melanoma Cancer Cells with Higher Metastatic Potential are More Deformable at a Whole-Cell Level. <i>Cellular and Molecular Bioengineering</i> , 2021, 14, 309-320.	2.1	4
18	Dynamics of actin filaments of MC3T3-E1 cells during adhesion process to substrate. <i>Journal of Biomechanical Science and Engineering</i> , 2016, 11, 15-00637-15-00637.	0.3	3

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19	Observations of intracellular tension dynamics of MC3T3-E1 cells during substrate adhesion using a FRET-based actinin tension sensor. <i>Journal of Biomechanical Science and Engineering</i> , 2016, 11, 16-00504-16-00504.	0.3	3
20	Multinucleation of Incubated Cells and Their Morphological Differences Compared to Mononuclear Cells. <i>Micromachines</i> , 2019, 10, 156.	2.9	3
21	Stress fibers of the aortic smooth muscle cells in tissues do not align with the principal strain direction during intraluminal pressurization. <i>Biomechanics and Modeling in Mechanobiology</i> , 2021, 20, 1003-1011.	2.8	3
22	Decoding the Effect of Hydrostatic Pressure on TRPV1 Lower-Gate Conformation by Molecular-Dynamics Simulation. <i>International Journal of Molecular Sciences</i> , 2022, 23, 7366.	4.1	3
23	Comparison of the histology and stiffness of ventricles in Anura of different habitats. <i>Journal of Biological Physics</i> , 2021, 47, 287-300.	1.5	2
24	Decrease in Ca ²⁺ Concentration in Quail Cardiomyocytes Is Faster than That in Rat Cardiomyocytes. <i>Processes</i> , 2022, 10, 508.	2.8	2
25	Measurement of surface topography and stiffness distribution on cross-section of <i>Xenopus laevis</i> tailbud for estimation of mechanical environment in embryo. <i>Development Growth and Differentiation</i> , 2017, 59, 434-443.	1.5	1
26	A Novel Apparatus for the Multifaceted Evaluation of Arterial Function Through Transmural Pressure Manipulation. <i>Annals of Biomedical Engineering</i> , 2017, 45, 1487-1495.	2.5	1
27	Morphometrical and biomechanical analyses of a stentless bioprosthetic valve: an implication to avoid potential primary tissue failure. <i>General Thoracic and Cardiovascular Surgery</i> , 2018, 66, 523-528.	0.9	1
28	A novel FRET analysis method for tension dynamics in a single actin stress fiber: Application to MC3T3-E1 cells during movement on a substrate. <i>Journal of Biorheology</i> , 2019, 33, 21-26.	0.5	1
29	GS1-15 Difference in mechanical properties of collagen fibers in the media and the adventitia of the porcine thoracic aorta(GS1: Cell and Tissue Biomechanics III). <i>The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics</i> , 2015, 2015.8, 129.	0.0	0
30	OS18-9 Microscopic Deformation of Porcine Thoracic Aortas until Failure during Biaxial Stretch as a Model of Aortic Rupture(Cell and Tissue mechanics 3,OS18 Cell and tissue mechanics,BIOMECHANICS). <i>The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics</i> , 2015, 2015.14, 243.	0.0	0
31	1D21 A research on estimation of cell traction forces from measurement of retardance. <i>The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSM</i> , 2016, 2016.28, _1D21-1_-_1D21-5_.	0.0	0
32	Direct visualization of interstitial flow distribution in aortic walls. <i>Scientific Reports</i> , 2022, 12, 5381.	3.3	0
33	Polarized light retardation analysis allows for the evaluation of tension in individual stress fibers. <i>Biochemical and Biophysical Research Communications</i> , 2022, 620, 49-55.	2.1	0