

# Taiji Adachi

## List of Publications by Citations

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302  
papers

4,832  
citations

32  
h-index

66  
g-index

347  
ext. papers

5,628  
ext. citations

3.4  
avg, IF

5.55  
L-index

#	Paper	IF	Citations
302	Self-organizing optic-cup morphogenesis in three-dimensional culture. <i>Nature</i> , <b>2011</b> , 472, 51-6	50.4	1328
301	Framework for optimal design of porous scaffold microstructure by computational simulation of bone regeneration. <i>Biomaterials</i> , <b>2006</b> , 27, 3964-72	15.6	236
300	Modes I and II interlaminar fracture toughness and fatigue delamination of CF/epoxy laminates with self-same epoxy interleaf. <i>International Journal of Fatigue</i> , <b>2006</b> , 28, 1154-1165	5	186
299	Trabecular surface remodeling simulation for cancellous bone using microstructural voxel finite element models. <i>Journal of Biomechanical Engineering</i> , <b>2001</b> , 123, 403-9	2.1	128
298	Evaluation of interfacial strength in CF/epoxies using FEM and in-situ experiments. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2006</b> , 37, 2248-2256	8.4	113
297	Computer simulation of trabecular remodeling in human proximal femur using large-scale voxel FE models: Approach to understanding Wolff's law. <i>Journal of Biomechanics</i> , <b>2009</b> , 42, 1088-94	2.9	104
296	Calcium response in single osteocytes to locally applied mechanical stimulus: differences in cell process and cell body. <i>Journal of Biomechanics</i> , <b>2009</b> , 42, 1989-95	2.9	103
295	Functional adaptation of cancellous bone in human proximal femur predicted by trabecular surface remodeling simulation toward uniform stress state. <i>Journal of Biomechanics</i> , <b>2002</b> , 35, 1541-51	2.9	100
294	External mechanical cues trigger the establishment of the anterior-posterior axis in early mouse embryos. <i>Developmental Cell</i> , <b>2013</b> , 27, 131-144	10.2	98
293	Effect of fiber array irregularities on microscopic interfacial normal stress states of transversely loaded UD-CFRP from viewpoint of failure initiation. <i>Composites Science and Technology</i> , <b>2009</b> , 69, 1726-1734	8.6	83
292	Inhibition of protein kinase CK2 prevents the progression of glomerulonephritis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 7736-41	11.5	74
291	TAG-1-assisted progenitor elongation streamlines nuclear migration to optimize subapical crowding. <i>Nature Neuroscience</i> , <b>2013</b> , 16, 1556-66	25.5	69
290	Microscale fluid flow analysis in a human osteocyte canaliculus using a realistic high-resolution image-based three-dimensional model. <i>Integrative Biology (United Kingdom)</i> , <b>2012</b> , 4, 1198-206	3.7	65
289	Relaxation-expansion model for self-driven retinal morphogenesis: a hypothesis from the perspective of biosystems dynamics at the multi-cellular level. <i>BioEssays</i> , <b>2012</b> , 34, 17-25	4.1	62
288	Osteocyte calcium signaling response to bone matrix deformation. <i>Journal of Biomechanics</i> , <b>2009</b> , 42, 2507-12	2.9	60
287	Quantitative evaluation of threshold fiber strain that induces reorganization of cytoskeletal actin fiber structure in osteoblastic cells. <i>Journal of Biomechanics</i> , <b>2005</b> , 38, 1895-901	2.9	60
286	Vertex dynamics simulations of viscosity-dependent deformation during tissue morphogenesis. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2015</b> , 14, 413-25	3.8	51

285	Trabecular bone remodelling simulation considering osteocytic response to fluid-induced shear stress. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2010</b> , 368, 2669-82	3	49
284	Simulation of Trabecular Surface Remodeling based on Local Stress Nonuniformity.. <i>JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing</i> , <b>1997</b> , 40, 782-792		46
283	Topography design concept of a tissue engineering scaffold for controlling cell function and fate through actin cytoskeletal modulation. <i>Tissue Engineering - Part B: Reviews</i> , <b>2014</b> , 20, 609-27	7.9	43
282	Transient response of fluid pressure in a poroelastic material under uniaxial cyclic loading. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2008</b> , 56, 1794-1805	5	42
281	Reversible network reconnection model for simulating large deformation in dynamic tissue morphogenesis. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2013</b> , 12, 627-44	3.8	41
280	Actomyosin contractility spatiotemporally regulates actin network dynamics in migrating cells. <i>Journal of Biomechanics</i> , <b>2009</b> , 42, 2540-8	2.9	41
279	Functional Investigation of a Non-coding Variant Associated with Adolescent Idiopathic Scoliosis in Zebrafish: Elevated Expression of the Ladybird Homeobox Gene Causes Body Axis Deformation. <i>PLoS Genetics</i> , <b>2016</b> , 12, e1005802	6	39
278	Mechano-adaptive sensory mechanism of E-catenin under tension. <i>Scientific Reports</i> , <b>2016</b> , 6, 24878	4.9	39
277	Strain-triggered mechanical feedback in self-organizing optic-cup morphogenesis. <i>Science Advances</i> , <b>2018</b> , 4, eaau1354	14.3	39
276	Measurement of local strain on cell membrane at initiation point of calcium signaling response to applied mechanical stimulus in osteoblastic cells. <i>Journal of Biomechanics</i> , <b>2007</b> , 40, 1246-55	2.9	38
275	Effect of tensile force on the mechanical behavior of actin filaments. <i>Journal of Biomechanics</i> , <b>2011</b> , 44, 1776-81	2.9	37
274	Mode I fatigue delamination of Zanchor-reinforced CF/epoxy laminates. <i>International Journal of Fatigue</i> , <b>2010</b> , 32, 37-45	5	36
273	Three-dimensional vertex model for simulating multicellular morphogenesis. <i>Biophysics and Physicobiology</i> , <b>2015</b> , 12, 13-20	1.4	34
272	Directional dependence of osteoblastic calcium response to mechanical stimuli. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2003</b> , 2, 73-82	3.8	34
271	In vitro bone-like nodules generated from patient-derived iPSCs recapitulate pathological bone phenotypes. <i>Nature Biomedical Engineering</i> , <b>2019</b> , 3, 558-570	19	32
270	Modeling cell proliferation for simulating three-dimensional tissue morphogenesis based on a reversible network reconnection framework. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2013</b> , 12, 987-96	3.8	32
269	Global distribution of intense lightning discharges and their seasonal variations. <i>Journal Physics D: Applied Physics</i> , <b>2008</b> , 41, 234011	3	32
268	Control of highly migratory cells by microstructured surface based on transient change in cell behavior. <i>Biomaterials</i> , <b>2010</b> , 31, 8539-45	15.6	31

267	Effects of loading frequency on the functional adaptation of trabeculae predicted by bone remodeling simulation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2011</b> , 4, 900-8	4.1	30
266	Fluid pressure response in poroelastic materials subjected to cyclic loading. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2009</b> , 57, 1815-1827	5	30
265	Estimation of bone permeability considering the morphology of lacuno-canalicular porosity. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2010</b> , 3, 240-8	4.1	30
264	Mode I type delamination fracture toughness of YBCO coated conductor with additional Cu layer. <i>Physica C: Superconductivity and Its Applications</i> , <b>2011</b> , 471, 1071-1074	1.3	29
263	Roles of heparan sulfate sulfation in dentinogenesis. <i>Journal of Biological Chemistry</i> , <b>2012</b> , 287, 12217-29	3.4	29
262	Evaluation of extensional and torsional stiffness of single actin filaments by molecular dynamics analysis. <i>Journal of Biomechanics</i> , <b>2010</b> , 43, 3162-7	2.9	29
261	Strain field in actin filament network in lamellipodia of migrating cells: implication for network reorganization. <i>Journal of Biomechanics</i> , <b>2009</b> , 42, 297-302	2.9	28
260	Asymmetric intercellular communication between bone cells: propagation of the calcium signaling. <i>Biochemical and Biophysical Research Communications</i> , <b>2009</b> , 389, 495-500	3.4	28
259	Mechanical roles of apical constriction, cell elongation, and cell migration during neural tube formation in <i>Xenopus</i> . <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2016</b> , 15, 1733-1746	3.8	28
258	Apical contractility in growing epithelium supports robust maintenance of smooth curvatures against cell-division-induced mechanical disturbance. <i>Journal of Biomechanics</i> , <b>2013</b> , 46, 1705-13	2.9	27
257	Spatial and temporal regulation of cancellous bone structure: characterization of a rate equation of trabecular surface remodeling. <i>Medical Engineering and Physics</i> , <b>2005</b> , 27, 305-11	2.4	27
256	Mechanotransduction via the Piezo1-Akt pathway underlies Sost suppression in osteocytes. <i>Biochemical and Biophysical Research Communications</i> , <b>2020</b> , 521, 806-813	3.4	27
255	Uniform stress state in bone structure with residual stress. <i>Journal of Biomechanical Engineering</i> , <b>1998</b> , 120, 342-7	2.1	25
254	Multiscale modeling and mechanics of filamentous actin cytoskeleton. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2012</b> , 11, 291-302	3.8	24
253	Effects of a fixation screw on trabecular structural changes in a vertebral body predicted by remodeling simulation. <i>Annals of Biomedical Engineering</i> , <b>2003</b> , 31, 733-40	4.7	24
252	Computational simulation of deformation behavior of 2D-lattice continuum. <i>International Journal of Mechanical Sciences</i> , <b>1998</b> , 40, 857-866	5.5	23
251	Electron energy loss spectroscopy studies of the Si-SiO <sub>2</sub> interface. <i>Applied Physics Letters</i> , <b>1979</b> , 35, 199-201	3.1	23
250	Combining Turing and 3D vertex models reproduces autonomous multicellular morphogenesis with undulation, tubulation, and branching. <i>Scientific Reports</i> , <b>2018</b> , 8, 2386	4.9	22

249	Two-Dimensional Quantitative Analysis of Preferential Alignment of BAp c-axis for Isolated Human Trabecular Bone Using Microbeam X-ray Diffractometer with a Transmission Optical System. <i>Materials Transactions</i> , <b>2007</b> , 48, 343-347	1.3	22
248	Interstitial fluid flow in canaliculi as a mechanical stimulus for cancellous bone remodeling: in silico validation. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2014</b> , 13, 851-60	3.8	21
247	Effectiveness of scaffolds with pre-seeded mesenchymal stem cells in bone regeneration--assessment of osteogenic ability of scaffolds implanted under the periosteum of the cranial bone of rats. <i>Dental Materials Journal</i> , <b>2010</b> , 29, 673-81	2.5	21
246	Synergistic acceleration of experimental tooth movement by supplementary high-frequency vibration applied with a static force in rats. <i>Scientific Reports</i> , <b>2017</b> , 7, 13969	4.9	20
245	Characteristics of motility-based filtering of adherent cells on microgrooved surfaces. <i>Biomaterials</i> , <b>2012</b> , 33, 395-401	15.6	20
244	Procedures for the quantification of whole-tissue immunofluorescence images obtained at single-cell resolution during murine tubular organ development. <i>PLoS ONE</i> , <b>2015</b> , 10, e0135343	3.7	20
243	Local Disassembly of Actin Stress Fibers Induced by Selected Release of Intracellular Tension in Osteoblastic Cell. <i>Journal of Biomechanical Science and Engineering</i> , <b>2006</b> , 1, 204-214	0.8	19
242	In silico experiments of bone remodeling explore metabolic diseases and their drug treatment. <i>Science Advances</i> , <b>2020</b> , 6, eaax0938	14.3	18
241	Modeling cell apoptosis for simulating three-dimensional multicellular morphogenesis based on a reversible network reconnection framework. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2016</b> , 15, 805-16	3.8	18
240	Computational simulation of three-dimensional neck propagation in polymeric specimens under tension and hybrid identification of constitutive equation. <i>International Journal of Mechanical Sciences</i> , <b>1997</b> , 39, 913-923	5.5	18
239	Analysis of mesoscopic stress states with delamination and their relation to critical current under bending deformation in Bi2223/Ag superconducting composite tapes. <i>Superconductor Science and Technology</i> , <b>2005</b> , 18, S356-S363	3.1	18
238	A novel method for measuring tension generated in stress fibers by applying external forces. <i>Biophysical Journal</i> , <b>2011</b> , 101, 53-60	2.9	17
237	Coupling intercellular molecular signalling with multicellular deformation for simulating three-dimensional tissue morphogenesis. <i>Interface Focus</i> , <b>2015</b> , 5, 20140095	3.9	15
236	Simulation Study on Local and Integral Mechanical Quantities at Single Trabecular Level as Candidates of Remodeling Stimuli. <i>Journal of Biomechanical Science and Engineering</i> , <b>2006</b> , 1, 124-135	0.8	15
235	Changes in the fabric and compliance tensors of cancellous bone due to trabecular surface remodeling, predicted by a digital image-based model. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , <b>2004</b> , 7, 187-92	2.1	15
234	Polarized cellular mechano-response system for maintaining radial size in developing epithelial tubes. <i>Development (Cambridge)</i> , <b>2019</b> , 146,	6.6	14
233	Cell Condensation Triggers the Differentiation of Osteoblast Precursor Cells to Osteocyte-Like Cells. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2019</b> , 7, 288	5.8	14
232	Modeling myosin-dependent rearrangement and force generation in an actomyosin network. <i>Journal of Theoretical Biology</i> , <b>2011</b> , 281, 65-73	2.3	14

231	Electrical Conductivity of Molten Charge-Asymmetric Salts: , , and Systems. <i>Journal of the Electrochemical Society</i> , <b>1986</b> , 133, 1162-1166	3.9	14
230	Forceful mastication activates osteocytes and builds a stout jawbone. <i>Scientific Reports</i> , <b>2019</b> , 9, 4404	4.9	13
229	Advances in Experiments and Modeling in Micro- and Nano-Biomechanics: A Mini Review. <i>Cellular and Molecular Bioengineering</i> , <b>2011</b> , 4, 327-339	3.9	13
228	Real-time TIRF observation of vinculin recruitment to stretched Eatenin by AFM. <i>Scientific Reports</i> , <b>2018</b> , 8, 1575	4.9	12
227	Quantitative analysis of extension-torsion coupling of actin filaments. <i>Biochemical and Biophysical Research Communications</i> , <b>2012</b> , 420, 710-3	3.4	12
226	Three-Dimensional Lattice Continuum Model of Cancellous Bone for Structural and Remodeling Simulation.. <i>JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing</i> , <b>1999</b> , 42, 470-480		12
225	Elasticity-based boosting of neuroepithelial nucleokinesis via indirect energy transfer from mother to daughter. <i>PLoS Biology</i> , <b>2018</b> , 16, e2004426	9.7	11
224	Spatiotemporal coordinated hierarchical properties of cellular protrusion revealed by multiscale analysis. <i>Integrative Biology (United Kingdom)</i> , <b>2012</b> , 4, 875-88	3.7	11
223	Regulatory relationship between tactile sensation at the vermilion of the lips and lip-closing force. <i>Journal of Oral Rehabilitation</i> , <b>2011</b> , 38, 579-87	3.4	11
222	Coupling between axial stretch and bending/twisting deformation of actin filaments caused by a mismatched centroid from the center axis. <i>International Journal of Mechanical Sciences</i> , <b>2010</b> , 52, 329-333	5.5	11
221	Simultaneous observation of calcium signaling response and membrane deformation due to localized mechanical stimulus in single osteoblast-like cells. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2008</b> , 1, 43-50	4.1	11
220	Single-cell manipulation and DNA delivery technology using atomic force microscopy and nanoneedle. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2014</b> , 14, 57-70	1.3	10
219	Effect of fatigue loading on critical current in stainless steel laminated DI-BSCCO superconducting composite tape. <i>Physica C: Superconductivity and Its Applications</i> , <b>2010</b> , 470, 1373-1376	1.3	10
218	Modeling trabecular bone adaptation to local bending load regulated by mechanosensing osteocytes. <i>Acta Mechanica</i> , <b>2014</b> , 225, 2833-2840	2.1	9
217	Mechanical Regulation of Actin Network Dynamics in Migrating Cells. <i>Journal of Biomechanical Science and Engineering</i> , <b>2010</b> , 5, 186-207	0.8	9
216	Computer simulation of orthodontic tooth movement using CT image-based voxel finite element models with the level set method. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , <b>2016</b> , 19, 474-83	2.1	8
215	Application of explainable ensemble artificial intelligence model to categorization of hemodialysis-patient and treatment using nationwide-real-world data in Japan. <i>PLoS ONE</i> , <b>2020</b> , 15, e0233491	3.7	8
214	Three-dimensional modulation of cortical plasticity during pseudopodial protrusion of mouse leukocytes. <i>Biochemical and Biophysical Research Communications</i> , <b>2013</b> , 438, 594-9	3.4	8

213	Asymmetric lip-closing forces in children with repaired unilateral cleft lip and/or palate. <i>Journal of Oral Rehabilitation</i> , <b>2011</b> , 38, 921-8	3.4	8
212	Coarse-grained Brownian ratchet model of membrane protrusion on cellular scale. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2011</b> , 10, 495-503	3.8	8
211	Intrauterine Pressures Adjusted by Reichert's Membrane Are Crucial for Early Mouse Morphogenesis. <i>Cell Reports</i> , <b>2020</b> , 31, 107637	10.6	8
210	Spontaneous anterior arch fracture of the atlas following C1 laminectomy without fusion: A report of three cases and finite element analysis. <i>Journal of Orthopaedic Science</i> , <b>2016</b> , 21, 306-15	1.6	7
209	Mechanical role of the spatial patterns of contractile cells in invagination of growing epithelial tissue. <i>Development Growth and Differentiation</i> , <b>2017</b> , 59, 444-454	3	7
208	Interfacial fatigue crack propagation in microscopic model composite using bifiber shear specimens. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2012</b> , 43, 239-246	8.4	7
207	Dynamic coupling between actin network flow and turnover revealed by flow mapping in the lamella of crawling fragments. <i>Biochemical and Biophysical Research Communications</i> , <b>2009</b> , 390, 797-802 <sup>3,4</sup>	7	7
206	Simulations of dynamics of actin filaments by remodeling them in shear flows. <i>Computers in Biology and Medicine</i> , <b>2010</b> , 40, 876-82	7	7
205	In situ observation of interfacial crack propagation in GF/epoxy model composite using bifiber specimens in mode I and mode II loading. <i>Composites Science and Technology</i> , <b>2008</b> , 68, 2678-2689	8.6	7
204	Nano-mechanical characterization of tension-sensitive helix bundles in talin rod. <i>Biochemical and Biophysical Research Communications</i> , <b>2017</b> , 484, 372-377	3.4	6
203	Capturing microscopic features of bone remodeling into a macroscopic model based on biological rationales of bone adaptation. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2017</b> , 16, 1697-1708	3.8	6
202	In vitro tubulogenesis of Madin-Darby canine kidney (MDCK) spheroids occurs depending on constituent cell number and scaffold gel concentration. <i>Journal of Theoretical Biology</i> , <b>2017</b> , 435, 110-115 <sup>2,3</sup>	1.3	6
201	Investigation of mechanical behavior of copper in Nb3Sn superconducting composite wire. <i>Physica C: Superconductivity and Its Applications</i> , <b>2004</b> , 412-414, 1261-1266	1.3	6
200	Epithelial tissue folding pattern in confined geometry. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2020</b> , 19, 815-822	3.8	6
199	Cell-fate decision of mesenchymal stem cells toward osteocyte differentiation is committed by spheroid culture. <i>Scientific Reports</i> , <b>2021</b> , 11, 13204	4.9	6
198	Coarse-grained modeling and simulation of actin filament behavior based on Brownian dynamics method. <i>MCB Molecular and Cellular Biomechanics</i> , <b>2009</b> , 6, 161-73	1.2	6
197	New simulation model for bone formation markers in osteoporosis patients treated with once-weekly teriparatide. <i>Bone Research</i> , <b>2014</b> , 2, 14043	13.3	5
196	Computational prediction of instability propagation in glassy polymers. <i>Archives of Computational Methods in Engineering</i> , <b>1998</b> , 5, 167-198	7.8	5

195	Mechanics-based Simulations for Understanding Multicellular Tissue Morphogenesis. <i>Seibutsu Butsuri</i> , <b>2014</b> , 54, 031-034	0	5
194	High-resolution image-based simulation reveals membrane strain concentration on osteocyte processes caused by tethering elements. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2021</b> , 20, 2353-2360	3.8	5
193	Talin is required to increase stiffness of focal molecular complex in its early formation process. <i>Biochemical and Biophysical Research Communications</i> , <b>2019</b> , 518, 579-583	3.4	4
192	Breeding of four-leaf white clover ( <i>Trifolium repens</i> L.) through <sup>60</sup> Co gamma-ray irradiation. <i>Plant Biotechnology Reports</i> , <b>2009</b> , 3, 191-197	2.5	4
191	Change in fatigue property and its relation to critical current for YBCO coated conductor with additional Cu layer. <i>Physica C: Superconductivity and Its Applications</i> , <b>2009</b> , 469, 1476-1479	1.3	4
190	Quantitative evaluation of strain field in the lamella region of cellular fragments from fish keratocytes. <i>Journal of Biomechanics</i> , <b>2006</b> , 39, S244	2.9	4
189	Effect of Actin Filament on Deformation-Induced Ca <sup>2+</sup> Response in Osteoblast-Like Cells. <i>JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing</i> , <b>2001</b> , 44, 914-919		4
188	An energy landscape approach to understanding variety and robustness in tissue morphogenesis. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2020</b> , 19, 471-479	3.8	4
187	Mobility of Molecular Motors Regulates Contractile Behaviors of Actin Networks. <i>Biophysical Journal</i> , <b>2019</b> , 116, 2161-2171	2.9	3
186	Modulation of adhesion microenvironment using mesh substrates triggers self-organization and primordial germ cell-like differentiation in mouse ES cells. <i>APL Bioengineering</i> , <b>2019</b> , 3, 016102	6.6	3
185	Mechanosensitive kinetic preference of actin-binding protein to actin filament. <i>Physical Review E</i> , <b>2016</b> , 93, 042403	2.4	3
184	Numerical analysis of arterial contraction regulated by smooth muscle stretch and intracellular calcium ion concentration. <i>Journal of Biomechanical Science and Engineering</i> , <b>2014</b> , 9, JBSE0002-JBSE0002	0.8	3
183	Effect of Actomyosin Contractility on Lamellipodial Protrusion Dynamics on a Micropatterned Substrate. <i>Cellular and Molecular Bioengineering</i> , <b>2011</b> , 4, 389-398	3.9	3
182	Observation of chondrocyte aggregate formation and internal structure on micropatterned fibroin-coated surface. <i>Bio-Medical Materials and Engineering</i> , <b>2010</b> , 20, 55-63	1	3
181	Modulation of Gene Expression Under Hypoxia in Three-Dimensional Scaffold-Free Osteocytic Tissue. <i>Tissue Engineering - Part A</i> , <b>2021</b> , 27, 1037-1043	3.9	3
180	Uniaxially fixed mechanical boundary condition elicits cellular alignment in collagen matrix with induction of osteogenesis. <i>Scientific Reports</i> , <b>2021</b> , 11, 9009	4.9	3
179	Electrochemical Polymerization of PEDOT/Biomolecule Composite Films on Microelectrodes for the Measurement of Extracellular Field Potential. <i>Electrochemistry</i> , <b>2016</b> , 84, 354-357	1.2	3
178	Efficacy of the Wolverine cutting balloon on a circumferential calcified coronary lesion: Bench test using a three-dimensional printer and computer simulation with the finite element method. <i>Cardiovascular Intervention and Therapeutics</i> , <b>2021</b> , 1	2.5	3



177	Hyaluronic acid selective anchoring to the cytoskeleton: An atomic force microscopy study. <i>PLoS ONE</i> , <b>2018</b> , 13, e0206056	3.7	3
176	Computational Design and Simulation of Tissue Engineering Scaffolds <b>2008</b> , 113-127		3
175	ECatenin as a Tension Transmitter Revealed by AFM Nanomechanical Testing. <i>Cellular and Molecular Bioengineering</i> , <b>2015</b> , 8, 14-21	3.9	2
174	Finite element formulation and analysis for an arterial wall with residual and active stresses. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , <b>2015</b> , 18, 1143-1159	2.1	2
173	Theoretical concept of cortical to cancellous bone transformation. <i>Bone Reports</i> , <b>2020</b> , 12, 100260	2.6	2
172	Brownian dynamics simulation study on force-velocity relation in actin-based membrane protrusion. <i>Computational Particle Mechanics</i> , <b>2015</b> , 2, 329-337	3	2
171	Continuum dynamics on a vector bundle for a directed medium. <i>Journal of Physics A: Mathematical and Theoretical</i> , <b>2010</b> , 43, 325209	2	2
170	Direct measurement of mechanical properties of Bi2223 filament using Ag alloy removed tape. <i>Physica C: Superconductivity and Its Applications</i> , <b>2007</b> , 463-465, 863-866	1.3	2
169	Shape Optimization Based on Traction Method Using voxel-FEM. <i>Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A</i> , <b>2004</b> , 70, 426-433		2
168	Influence of delamination location on mesoscopic stress state and critical current under bending deformation in Bi2223/Ag superconducting composite tapes. <i>Physica C: Superconductivity and Its Applications</i> , <b>2005</b> , 426-431, 1205-1210	1.3	2
167	Characterization of self-organized osteocytic spheroids using mouse osteoblast-like cells. <i>Journal of Biomechanical Science and Engineering</i> , <b>2020</b> , 15, 20-00227-20-00227	0.8	2
166	Computational framework for analyzing flow-induced strain on osteocyte as modulated by microenvironment.. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2021</b> , 126, 105027	4.1	2
165	Role of the Actin-Myosin Catch Bond on Actomyosin Aggregate Formation. <i>Cellular and Molecular Bioengineering</i> , <b>2013</b> , 6, 3-12	3.9	1
164	Geometrical range of microscopic stress distribution change due to fibre array irregularities for thermally and transversely loaded CF/epoxy composites. <i>Plastics, Rubber and Composites</i> , <b>2010</b> , 39, 99-106	1.5	1
163	Approach Behavior of Binding Proteins Toward Actin Filament : Brownian Dynamics Simulation. <i>Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A</i> , <b>2010</b> , 76, 1119-1127		1
162	Lattice Continuum Model for Bone Remodeling Considering Microstructural Optimality of Trabecular Architecture <b>1999</b> , 43-54		1
161	Preliminary Study on Mechanical Bone Remodeling Permitting Residual Stress. <i>JSME International Journal Series A-Solid Mechanics and Material Engineering</i> , <b>1994</b> , 37, 87-95		1
160	Model and Simulation of Bone Remodeling Considering Residual Stress <b>1996</b> , 3-21		1

159	Design Concept of Topographical and Mechanical Properties of Synthetic Extracellular Matrix to Control Cell Functions and Fates Through Actin Cytoskeletal Modulation. <i>Frontiers of Biomechanics</i> , <b>2015</b> , 159-186	0.2	1
158	Birth of Earth Pressure Balanced shield method and its applications in Japan <b>2013</b> , 1235-1242		1
157	Functional Adaptation of the Fibrocartilage and Bony Trabeculae at the Attachment Sites of the Anterior Cruciate Ligament. <i>Clinical Anatomy</i> , <b>2020</b> , 33, 988-996	2.5	1
156	Large magnitude of force leads to NO-mediated cell shrinkage in single osteocytes implying an initial apoptotic response. <i>Journal of Biomechanics</i> , <b>2021</b> , 117, 110245	2.9	1
155	Edge-localized alteration in pluripotency state of mouse ES cells forming topography-confined layers on designed mesh substrates. <i>Stem Cell Research</i> , <b>2021</b> , 53, 102352	1.6	1
154	A Perturbation Analysis to Understand the Mechanism How Migrating Cells Sense and Respond to a Topography in the Extracellular Environment. <i>Analytical Sciences</i> , <b>2016</b> , 32, 1207-1211	1.7	1
153	Continuum modeling for neuronal lamination during cerebral morphogenesis considering cell migration and tissue growth. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , <b>2020</b> , 1-7	2.1	0
152	Real-time monitoring of changes in microtubule mechanical properties in response to microtubule-destabilizing drug treatment. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2013</b> , 13, 2087-90 <sup>1-3</sup>		0
151	Controlling macroscale cell alignment in self-organized cell sheets by tuning the microstructure of adhesion-limiting micromesh scaffolds. <i>Materials Today Advances</i> , <b>2021</b> , 12, 100194	7.4	0
150	Computational Biomechanics of Bone Adaptation by Remodeling. <i>CISM International Centre for Mechanical Sciences, Courses and Lectures</i> , <b>2018</b> , 231-257	0.6	0
149	Comparative gene expression analysis for pre-osteoblast MC3T3-E1 cells under non-adhesive culture toward osteocyte differentiation. <i>Journal of Bioscience and Bioengineering</i> , <b>2021</b> , 132, 651-656	3.3	0
148	Local Stiffness of Osteocyte Using Atomic Force Microscopy. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2017</b> , 17, 5755-5758	1.3	
147	Overview: In Silico Approaches to Understand Bone Adaptation. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 1-11	0.2	
146	Comparison of Mechanical Quantities as Bone Remodeling Stimuli. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 131-144		
145	Trabecular Surface Remodeling Simulation of Cancellous Bone Using Image-Based Voxel Finite Element Models. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 145-161	0.2	
144	Functional Adaptation of Cancellous Bone in Human Proximal Femur. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 163-175	0.2	
143	3D Trabecular Remodeling in Human Proximal Femur: Approach to Understanding Wolff's Law. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 177-185	0.2	
142	Trabecular Structural Changes in a Vertebral Body with a Fixation Screw. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 187-203	0.2	

141	Microscopic Fluid Flow Analysis in an Osteocyte Canaliculus. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 13-24	0.2
140	Macroscopic Fluid Flow Analysis in a Poroelastic Trabecula. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 25-44	0.2
139	Estimation of Bone Permeability for Poroelastic Analysis. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 45-63	0.2
138	Modeling Trabecular Bone Adaptation Induced by Flow Stimuli to Osteocytes. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 65-81	0.2
137	Effects of Local Bending Load on Trabecular Bone Adaptation. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 83-90	0.2
136	Cancellous Bone Adaptation Predicted by Remodeling Simulations. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 91-101	0.2
135	Trabecular Surface Remodeling Toward Uniform Local Stress State. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 103-119	0.2
134	Spatial and Temporal Regulation of Cancellous Bone Structure by Trabecular Surface Remodeling. <i>Frontiers of Biomechanics</i> , <b>2018</b> , 121-129	0.2
133	Cytokine expression in gingival hyperplasia induced by cyclosporine A in mice. <i>Journal of Oral and Maxillofacial Surgery</i> , <b>2014</b> , 72, e97-e98	1.8
132	2SEA-04 Computational biophysics on epithelial tissue deformation : from molecular to tissue scale(2SEA Biophysical views in structural cell biology,Symposium,The 51th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , <b>2013</b> , 53, S96	0
131	3D1558 Extension-torsion coupling behavior of single actin filament(3D Protein: Structure & Function 3,The 49th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , <b>2011</b> , 51, S121	0
130	1PT148 Analysis of the mechanical behavior of Ecatenin using AFM(The 50th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , <b>2012</b> , 52, S94	0
129	2P-009 Effects of tensile force on mechanical properties of actin filament(Protein:Structure,The 47th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , <b>2009</b> , 49, S107	0
128	1P-156 Perturbation of Actomyosin Interaction Modulates Actin Network Dynamics in Migrating Cells(Cell biology, The 47th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , <b>2009</b> , 49, S87	0
127	1P221 Modeling and simulation of dynamic reconstructing network of stress fibers with mechanical sensing through focal adhesions(Cell biology,The 48th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , <b>2010</b> , 50, S58	0
126	1P200 Spatial scale-dependent correlations between cell peripheral activity and shape(Cell biology,The 48th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , <b>2010</b> , 50, S54	0
125	3P035 Tensile Force Suppresses Torsional Motions of Individual Actin Subunits(Protein: Structure & Function,The 48th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , <b>2010</b> , 50, S151	0
124	Application of Bioimaging to Osteocyte Biology. <i>Clinical Reviews in Bone and Mineral Metabolism</i> , <b>2010</b> , 8, 170-178	2.5

- 123 Two-Dimensional Quantitative Analysis of Preferential Alignment of Biological Apatite c-axis for Isolated Human Trabecular Bone Using Microbeam X-ray Diffractometer with a Transmission Optical System. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2008**, 72, 57-62 0.4
- 122 2P-045 Stiffness Evaluation of Actin Filament by Molecular Dynamics Analysis(The 46th Annual Meeting of the Biophysical Society of Japan). *Seibutsu Butsuri*, **2008**, 48, S82 0
- 121 1P-177 Thermodynamics study on torsion induced inhibition of cofilin binding to actin filament(The 46th Annual Meeting of the Biophysical Society of Japan). *Seibutsu Butsuri*, **2008**, 48, S48 0
- 120 Effects of Spatial Distribution of Defects on Bending Deformation and Critical Current in Bi2223/Ag Superconducting Composite Tapes. *Materials Science Forum*, **2007**, 539-543, 919-924 0.4
- 119 S15A3 Multiscale Modeling and Simulation of Actin Filament Dynamics(Mutli-scale simulations for understanding biological phenomena). *Seibutsu Butsuri*, **2007**, 47, S21 0
- 118 Change in Mechanical Properties of Bone-Scaffold Structure Predicted by 3D Computational Simulation for Bone Regeneration. *The Proceedings of the JSME Conference on Frontiers in Bioengineering*, **2003**, 2003.14, 67-68 0
- 117 Design Method of Porous Scaffold Using Computational Simulation for Bone Regeneration. *Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A*, **2004**, 70, 1201-1207 0
- 116 Surface Remodeling Simulation of Trabecular Bone Using Microstructural Finite Element Models **1999**, 309-320 0
- 115 Mechanical Remodeling of Bone Structure Considering Residual Stress. *JSME International Journal Series A-Solid Mechanics and Material Engineering*, **1996**, 39, 297-305 0
- 114 Pluripotency state of mouse ES cells determines their contribution to self-organized layer formation by mesh closure on microstructured adhesion-limiting substrates.. *Biochemical and Biophysical Research Communications*, **2021**, 590, 97-102 3.4
- 113 Site-Dependence of Mechanosensitivity in Isolated Osteocytes. *IFMBE Proceedings*, **2009**, 2000-2004 0.2
- 112 112 Simulation Study on Stem Shape Design of a Hip Joint Based on Uniform Surface Stress Criterion. *Proceedings of the 1992 Annual Meeting of JSME/MMD*, **2001**, 2001, 31-32 0
- 111 1A42 Stem Design of Artificial Hip Joint Based on Stress Uniformity at Bone-Stem Interface. *Proceedings of the JSME Bioengineering Conference and Seminar*, **2001**, 2001.12, 27-28 0
- 110 Computational Prediction of Change in Stiffness of Bone-Scaffold Structure in Regeneration Process. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2001**, 2001.13, 112-113 0
- 109 Application of traction method to design of artificial hip joint stem using the voxel based FEM. *The Proceedings of the Computational Mechanics Conference*, **2002**, 2002.15, 37-38 0
- 108 Stem Shape Design of Artificial Hip Joint Using the Voxel Based FEM. *Proceedings of the 1992 Annual Meeting of JSME/MMD*, **2002**, 2002, 441-442 0
- 107 Shape optimization based on traction method using Voxel-FEM. *The Proceedings of the JSME Annual Meeting*, **2003**, 2003.7, 1-2 0
- 106 Three-dimensional computational simulation of trabecular pattern formation in cancellous bone using reaction-diffusion system. *The Proceedings of the JSME Annual Meeting*, **2003**, 2003.7, 153-154 0

105 ??????????????. *Journal of the Society of Biomechanisms*, **2003**, 27, 173-179 ○

104 Effect of internal structural size of scaffold on regenerated trabecular structure evaluated by bone regeneration simulation. *The Proceedings of the Computational Mechanics Conference*, **2003**, 2003.16, 315-316 ○

103 OS7(3)-9(OS07W0402) Elastic Properties of Single Trabeculae Measured by Micro-Three-Point Bending Test. *The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics*, **2003**, 2003, 37 ○

102 OS07W0402 Elastic properties of single trabeculae measured by micro-three-point bending test. *The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics*, **2003**, 2003.2, \_OS07W0402-\_OS07W0402 ○

101 Optimum Design of 3D Porous Scaffold Microstructure by Computational Simulation of Bone Regeneration. *The Proceedings of the JSME Annual Meeting*, **2003**, 2003.7, 165-166

100 Simulation study on change in mechanical property of cancellous bone due to trabecular microstructural changes **2003**, 1833-1835

99 Modeling of Mechanosensory System in Osteocyte Network. *The Proceedings of the Computational Mechanics Conference*, **2004**, 2004.17, 185-186 ○

98 Evaluation of Axial Strain in Stress Fibers Inducing Cytoskeletal Reorganization in Osteoblastic Cells(Micro- and Nano-biomechanics). *The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics*, **2004**, 2004.1, 227-228

97 443 Computational simulation for optimal design of porous scaffold microstructure for cancellous bone regeneration. *Proceedings of the JSME Bioengineering Conference and Seminar*, **2005**, 2004.17, 385-386

96 1224 Observation of cancellous bone microstructure in regeneration process. *The Proceedings of the JSME Annual Meeting*, **2005**, 2005.5, 189-190

95 A214 Manufacturing of Porous Scaffold for Bone Regeneration using X-ray CT Images. *The Proceedings of the JSME Conference on Frontiers in Bioengineering*, **2005**, 2005.16, 115-116 ○

94 Computational simulation of trabecular surface remodeling using voxel finite element method. *WIT Transactions on State-of-the-art in Science and Engineering*, **2005**, 39-62

93 410 Computational Simulation for Trabecular Remodeling Considering Morphological Characteristics of Lacuno-Canalicular System. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2006**, 2005.18, 239-240 ○

92 209 Influence of mechanical factors on bone matrix fiber alignment in cancellous bone regeneration process. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2006**, 2005.18, 77-78 ○

91 1007 Calcium Response and Actin Structure Dynamics in Keratocytes Crawling on a Micropatterned Substrate. *The Proceedings of the JSME Annual Meeting*, **2007**, 2007.5, 215-216

90 2203 Multiscale Modeling and Simulation of Trabecular Bone Remodeling. *The Proceedings of the Computational Mechanics Conference*, **2007**, 2007.20, 411-412 ○

89 ROLE OF MECHANICAL STRAIN IN THE MODULATION OF ACTIN STRUCTURE DYNAMICS IN MOTILE CELLS(1A3 Micro & Nano Biomechanics III). *The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics*, **2007**, 2007.3, S19

88 0941 Theoretical Analysis of Interstitial Fluid Flow in Trabecula as Poroelastic Materials. *The Proceedings of the JSME Annual Meeting*, **2007**, 2007.5, 183-184

- 87 A STUDY ON MECHANICAL BEHAVIOR OF SINGLE ACTIN FILAMENT THROUGH CONTINUUM MODELING(1A3 Micro & Nano Biomechanics III). *The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics*, **2007**, 2007.3, S18
- 86 Construction of 3D Morphology Model Based on CT-images and Mechanical Analysis Based on Elastic Anisotropy Caused by Crystallographic Orientation of Biological Apatite in Trabecular Bone. *Materia Japan*, **2007**, 46, 834-834 0.1
- 85 442 Dual Observation and Analysis of Actin Dynamics and Calcium Oscillation in Crawling Fish Keratocytes. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2007**, 2006.19, 384-385 0
- 84 234 Simulation of three-dimensional trabecular bone remodeling considering osteocytic responses to interstitial fluid-induced shear stresses. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2008**, 2007.20, 305-306 0
- 83 338 Change in crawling direction of fish keratocytes induced by substrate deformation. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2008**, 2007.20, 339-340 0
- 82 422 Mechanical analysis of trabecula considering lacuna-canalicular network. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2008**, 2007.20, 343-344 0
- 81 Evaluation of Mechanical and Biodegradable Properties on Composite Scaffolds Composed of Three-Dimensional Fabric Structure. *Zairyo/Journal of the Society of Materials Science, Japan*, **2008**, 57, 868-874 0.1
- 80 744 Computational statistical mechanics of cooperative actin-cofilin binding induced by torsion of actin filament. *The Proceedings of the Computational Mechanics Conference*, **2008**, 2008.21, 854-855 0
- 79 OS0616 Poroelastic Analysis of Interstitial Fluid Flow in Trabecula under Cyclic Bending Loading. *The Proceedings of the Materials and Mechanics Conference*, **2008**, 2008, \_OS0616-1\_-\_OS0616-2\_ 0
- 78 Fabrication of orientated myoblast cell sheets by modulating cell-substrate adhesion. *The Proceedings of Mechanical Engineering Congress Japan*, **2018**, 2018, J0220102 0
- 77 Facilitated osteogenic differentiation of mouse pre-osteoblast cells in three-dimensional tissue engineered constructs. *The Proceedings of the JSME Conference on Frontiers in Bioengineering*, **2019**, 2019.30, 2A24 0
- 76 Pre-osteoblast cells in three-dimensional spheroids evoke in vitro osteocytogenesis. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2019**, 2019.32, 1A21 0
- 75 Induction of cell orientation in cell sheets using adhesion limiting substrates.. *The Proceedings of Mechanical Engineering Congress Japan*, **2019**, 2019, J02802 0
- 74 NETWORK MODELS FOR GLASSY POLYMER AND PREDICTION OF INSTABILITY PROPAGATION. *Zairyo/Journal of the Society of Materials Science, Japan*, **1997**, 46, 125-136 0.1
- 73 Multiscale Analysis of Cell Peripheral Motility. *Frontiers of Biomechanics*, **2015**, 73-86 0.2
- 72 Introduction to Actin-Based Cell Migration. *Frontiers of Biomechanics*, **2015**, 1-10 0.2
- 71 Multiscale Mechanochemical Interactions Between Cell Membrane and Actin Filaments. *Frontiers of Biomechanics*, **2015**, 87-105 0.2
- 70 Regulation of Actin Network Dynamics by Actomyosin Contractility. *Frontiers of Biomechanics*, **2015**, 57-72 0.2

- 69 Actin Network Flow and Turnover Are Coupled in Migrating Cells. *Frontiers of Biomechanics*, **2015**, 27-39 0.2
- 68 Actomyosin Contractility Modulates Lamellipodial Protrusion Dynamics on a Micropatterned Substrate. *Frontiers of Biomechanics*, **2015**, 107-121 0.2
- 67 Regulation of Actin Cytoskeleton Dynamics in Migrating Cells. *Frontiers of Biomechanics*, **2015**, 11-25 0.2
- 66 Cell Migration in Engineered Microstructured Surfaces. *Frontiers of Biomechanics*, **2015**, 139-158 0.2
- 65 Cell Migration on Engineered Microstructured Surfaces. *Frontiers of Biomechanics*, **2015**, 123-138 0.2
- 64 Involvement of Mechanical Strain in Actin Network Reorganization. *Frontiers of Biomechanics*, **2015**, 41-56.2
- 63 1C11 Unfolding of  $\beta$ -catenin depending on mechanical stability of structural domains. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2015**, 2015.27, 97-98 0
- 62 J0220202 AFM interaction measurement for AJ components molecules involving conformational changes. *The Proceedings of Mechanical Engineering Congress Japan*, **2015**, 2015, \_J0220202--\_J0220202-0
- 61 1C41 Influence of spatially patterned mechanical cell activities on the tissue invagination. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2015**, 2015.27, 125-126 0
- 60 M710 Force curve analysis method for AFM molecular interaction measurement. *The Proceedings of Conference of Kansai Branch*, **2015**, 2015.90, 358 0
- 59 1C12 Interaction analysis between Wnt antagonists and its receptor by using AFM. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2015**, 2015.27, 99-100 0
- 58 2A44 Contribution of Focal Adhesion in Cell Migration on Microstructured Surfaces. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2015**, 2015.27, 337-338 0
- 57 J0220201 Fluorescence imaging and morphometry of osteocytes within tissue. *The Proceedings of Mechanical Engineering Congress Japan*, **2015**, 2015, \_J0220201--\_J0220201-
- 56 GS4-3 Mechanical roles of  $\beta$ -catenin for AJ-mediated force transmission(GS4: Molecular Biomechanics). *The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics*, **2015**, 2015.8, 164
- 55 M304 Observation of cellular behaviors in morphogenesis of optic vesicle derived from mES cells. *The Proceedings of Conference of Kansai Branch*, **2015**, 2015.90, 298 0
- 54 OS5-8 AFM INTERACTION MEASUREMENT BETWEEN WNT SIGNALING MOLECULES AND THEIR RECEPTOR(OS5: Mechanobiology and Tissue Engineering for Disease and Regeneration II). *The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics*, **2015**, 2015.8, 201
- 53 J0210204 Influence of the balance between RANKL and OPG expression rates on the functional adaptation capacity of trabeculae. *The Proceedings of Mechanical Engineering Congress Japan*, **2015**, 2015, \_J0210204--\_J0210204-0
- 52 GS1-11 THE EFFECTS OF DISTRIBUTION OF ADHESION PROTEINS ON SENSING MICROGROOVED STRUCTURE IN MIGRATING CELLS(GS1: Cell and Tissue Biomechanics II). *The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics*, **2015**, 2015.8, 125

- 51 J0210105 Mathematical modeling of apical constriction adjustment for maintaining smooth surface of growing epithelial tissue. *The Proceedings of Mechanical Engineering Congress Japan, 2015*, 2015, J0210105--J0210105
- 50 2H14 Effects of remodeling signals on bone functional adaptation. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2016*, 2016.28, 2H14-1\_-2H14-4\_ ○
- 49 Consideration of the experimental approach to elucidate the morphological change of osteocytes in bone tissue. *The Proceedings of Mechanical Engineering Congress Japan, 2016*, 2016, J0280102 ○
- 48 2D42 AFM molecular imaging of vinculin-binding to  $\beta$ -catenin. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2016*, 2016.28, 2D42-1\_-2D42-5\_ ○
- 47 Imaging analysis of formation for epithelial cell aggregates due to mechanical environment. *The Proceedings of Mechanical Engineering Congress Japan, 2016*, 2016, S0210102 ○
- 46 2D21 Simulation of morphological change in epithelial tissue considering feedback between constriction force and shape at cell level. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2016*, 2016.28, 2D21-1\_-2D21-5\_ ○
- 45 2D41 Mechano-adaptive mechanism of  $\beta$ -catenin as a tension-sensory molecule. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2016*, 2016.28, 2D41-1\_-2D41-4\_ ○
- 44 Nanofishing and structural imaging of tension-sensor protein employing atomic force microscopy. *The Proceedings of the JSME Conference on Frontiers in Bioengineering, 2016*, 2016.27, A204 ○
- 43 Mechanical Effects of Cellular Activities During Optic-cup Morphogenesis. *The Proceedings of Mechanical Engineering Congress Japan, 2017*, 2017, J0230104 ○
- 42 The analysis of nitric oxide production behavior in mouse isolated osteocytes. *The Proceedings of Mechanical Engineering Congress Japan, 2017*, 2017, S0210206 ○
- 41 Bone Metabolism and Remodeling Simulation at Cancellous Bone Scale. *The Proceedings of Mechanical Engineering Congress Japan, 2017*, 2017, J0230102 ○
- 40 2014 Modeling of actin filament branching for analysis of actin network dynamics. *The Proceedings of the Computational Mechanics Conference, 2009*, 2009.22, 769-770 ○
- 39 124 Computer simulation of orthodontic tooth movement using image-based model of jaw bone. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2009*, 2008.21, 47-48 ○
- 38 OS1014 Estimation of Trabecular Bone Permeability Based on Observation of Lacuno-canalicular Morphology. *The Proceedings of the Materials and Mechanics Conference, 2009*, 2009, 788-789 ○
- 37 321 Dependence of Actin Network Dynamics on Actomyosin Interaction in Migrating Cells. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2009*, 2008.21, 133-134 ○
- 36 S0201-3-5 Evaluation of Cell Protrusion Dynamics Using Micropatterning Technique. *The Proceedings of the JSME Annual Meeting, 2009*, 2009.5, 33-34 ○
- 35 J0206-1-2 Simulation of dynamic rearrangements of actomyosin network. *The Proceedings of the JSME Annual Meeting, 2010*, 2010.6, 77-78 ○
- 34 0903 Simulation of Cancellous Bone Remodeling Considering Osteocytic Responses to Interstitial Fluid Flow. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2010*, 2009.22, 145 ○



- 33 105 Analysis of Resin Flows around Filaments using Diffuse Interface Method combined with Immersed Boundary Method. *The Proceedings of the Computational Mechanics Conference, 2010*, 2010.23, 35-36 ○
- 32 0614 Effects of Modulating Actomyosin Contractility on Cytoskeletal Actin Structure Dynamics and Cell Migration Behavior. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2010*, 2009.22, 99 ○
- 31 1114 Thermodynamic relation of binding affinity of actin-regulatory protein with mechanical stress of actin filament. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2010*, 2009.22, 200 ○
- 30 2112 Repairing simulation of damaged trabecula with osteocytes apoptosis. *The Proceedings of the Computational Mechanics Conference, 2010*, 2010.23, 286-287 ○
- 29 Simulation Study on Dynamics of Resin-Air Interface during Resin-Air Flows between Filaments Using Phase-Field Navier-Stokes Model. *Journal of the Japan Society for Composite Materials, 2010*, 36, 94-103 ○.1
- 28 8E-10 Evaluation of changes in mechanical properties of trabecular bone by bone remodeling simulation. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2011*, 2010.23, 93-94 ○
- 27 A201 Equilibration of cofilin-decorated actin filament using molecular dynamics simulation. *The Proceedings of the JSME Conference on Frontiers in Bioengineering, 2012*, 2012.23, 95-96 ○
- 26 A202 Single-molecule force spectroscopy of Ecatenin using AFM. *The Proceedings of the JSME Conference on Frontiers in Bioengineering, 2012*, 2012.23, 97-98 ○
- 25 2409 Multiscale Mechanical Simulation of Trabecular Bone Considering its Morphological Change and Material Anisotropy. *The Proceedings of the Computational Mechanics Conference, 2012*, 2012.25, 528-529 ○
- 24 OS1-1-3 Multiscale computational mechanobiology on tissue morphogenesis. *The Proceedings of the Symposium on Micro-Nano Science and Technology, 2012*, 2012.4, 123-124 ○
- 23 7B43 Evaluation of morphological changes and anisotropic load-supporting function in osteoporotic trabecular bone by bone remodeling simulation. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2012*, 2012.24, \_7B43-1\_-\_7B43-2\_ ○
- 22 1E07 Study on mechanical behaviors of amino residues in actin filament as a mechano-sensor using molecular dynamics simulation. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2013*, 2013.25, 155-156 ○
- 21 J021013 BMU movement analyzed by trabecular and osteonal remodeling simulation. *The Proceedings of Mechanical Engineering Congress Japan, 2013*, 2013, \_J021013-1-\_J021013-3 ○
- 20 3D07 In vitro experimental system for observation of cell cycles in optic-cup morphogenesis. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2013*, 2013.25, 565-566 ○
- 19 J021011 Energy landscape between adjacent subunits in cofilin-decorated actin filament. *The Proceedings of Mechanical Engineering Congress Japan, 2013*, 2013, \_J021011-1-\_J021011-3 ○
- 18 OS0713 Finite element analysis for the morphological change of a vascular sheet induced by its growth. *The Proceedings of the Materials and Mechanics Conference, 2013*, 2013, \_OS0713-1\_-\_OS0713-3\_ ○
- 17 1E11 Energy between cofilin and actin in cofilin-decorated actin filament under tensile force. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014*, 2014.26, 123-124 ○
- 16 1E12 Influence of mechanical stimulus on mouse ES cell differentiation : Investigation based on mRNA expression levels. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014*, 2014.26, 125-126 ○

- 15 S0210101 Contribution of Cell Proliferation and Apical Contraction on Epithelial Tissue Deformation Examined by Using a Multi-cellular Dynamics Simulation. *The Proceedings of Mechanical Engineering Congress Japan, 2014*, 2014, \_S0210101--\_S0210101- ○
- 14 J0270101 Interaction measurement of Wnt signal receptor and its regulators using AFM. *The Proceedings of Mechanical Engineering Congress Japan, 2014*, 2014, \_J0270101--\_J0270101- ○
- 13 2E24 Mechanical properties of cell cortex in mouse leukocyte migration. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014*, 2014.26, 449-450 ○
- 12 J0240102 Investigation of conditions of SMD simulation for alpha-helical proteins. *The Proceedings of Mechanical Engineering Congress Japan, 2014*, 2014, \_J0240102--\_J0240102- ○
- 11 Spatiotemporal Properties of a Cell Shape Change Revealed by Multiscale Analysis. *Seibutsu Butsuri*, **2014**, 54, 221-225 ○
- 10 1E21 Analysis of the nanomechanical behaviors of E-catenin under tensile loads. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014*, 2014.26, 135-136 ○
- 9 S0210102 Observation of invagination process in multicellular tissue morphogenesis from mES cells. *The Proceedings of Mechanical Engineering Congress Japan, 2014*, 2014, \_S0210102--\_S0210102- ○
- 8 21am2-E3 Role of spatial patterns of apical constricted cells in epithelial tissue deformations. *The Proceedings of the Symposium on Micro-Nano Science and Technology, 2014*, 2014.6, \_21am2-E3--\_21am2-E3- ○
- 7 1F33 Cortical Bone Remodeling Simulation Considering Signaling Systems. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014*, 2014.26, 191-192 ○
- 6 In Silico Experiments to Explore Metabolic Bone Diseases and Their Drug Treatment. *Seibutsu Butsuri*, **2021**, 61, 174-176 ○
- 5 Wolverine cutting balloon in the treatment of stent underexpansion in heavy coronary calcification: bench test using a three-dimensional printer and computer simulation with the finite-element method. *Cardiovascular Intervention and Therapeutics*, **2021**, 1 2.5
- 4 Application of explainable ensemble artificial intelligence model to categorization of hemodialysis-patient and treatment using nationwide-real-world data in Japan **2020**, 15, e0233491
- 3 Application of explainable ensemble artificial intelligence model to categorization of hemodialysis-patient and treatment using nationwide-real-world data in Japan **2020**, 15, e0233491
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