

# Hiroshi Yamada

## List of Publications by Year in descending order

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papers

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citations

1162367

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87  
all docs

87  
docs citations

87  
times ranked

311  
citing authors

#	ARTICLE	IF	CITATIONS
1	A nonlinear finite element simulation of balloon expandable stent for assessment of plaque vulnerability inside a stenotic artery. <i>Medical and Biological Engineering and Computing</i> , 2014, 52, 589-599.	1.6	53
2	An inelastic constitutive model of blood vessels. <i>Acta Mechanica</i> , 1990, 82, 21-30.	1.1	31
3	Stereospecific polymerization of benzyl $\alpha$ -(alkoxymethyl) acrylates. <i>Journal of Polymer Science Part A</i> , 1997, 35, 721-726.	2.5	30
4	Age-related distensibility and histology of the ascending aorta in elderly patients with acute aortic dissection. <i>Journal of Biomechanics</i> , 2015, 48, 3267-3273.	0.9	27
5	Theoretical study of intracellular stress fiber orientation under cyclic deformation. <i>Journal of Biomechanics</i> , 2000, 33, 1501-1505.	0.9	23
6	High Salt Intake Worsens Aortic Dissection in Mice. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2020, 40, 189-205.	1.1	22
7	Finite Element Modeling and Numerical Simulation of the Artery in Active State.. <i>JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing</i> , 1999, 42, 501-507.	0.3	9
8	Cyclic Creep, Mechanical Ratchetting and Amplitude History Dependence of Modified 9Cr-1Mo Steel and Evaluation of Unified Constitutive Models.. <i>Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A</i> , 1993, 59, 2837-2843.	0.2	8
9	Skin stiffness determined from occlusion of a horizontally running microvessel in response to skin surface pressure: a finite element study of sacral pressure ulcers. <i>Medical and Biological Engineering and Computing</i> , 2017, 55, 79-88.	1.6	8
10	The effects of left ventricular stretch versus cavity pressure on intramyocardial pressure. <i>Cardiovascular Research</i> , 1997, 34, 299-305.	1.8	7
11	Finite element modelling of the common carotid artery in the elderly with physiological intimal thickening using layer-specific stress-released geometries and nonlinear elastic properties. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> . 2016, 19, 1286-1296.	0.9	7
12	Inelastic Constitutive Modeling of Arterial and Ventricular Walls. , 1996, , 137-163.		7
13	Orientation of apical and basal actin stress fibers in isolated and subconfluent endothelial cells as an early response to cyclic stretching. <i>MCB Molecular and Cellular Biomechanics</i> , 2007, 4, 1-12.	0.3	7
14	Nitrile hydrogenation to secondary amines under ambient conditions over palladium-platinum random alloy nanoparticles. <i>Catalysis Science and Technology</i> , 2022, 12, 4128-4137.	2.1	7
15	A Mathematical Model of Skeletal Muscle and Numerical Simulations of Its Response under Stretching.. <i>JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing</i> , 1999, 42, 508-513.	0.3	6
16	Coronary artery resistance changes depend on how surrounding myocardial tissue is stretched. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1996, 270, H924-H934.	1.5	5
17	Analytical Chemistry represented by "super" and "ultra". Simultaneous determinations of Cu, Cd and Pb in river-water samples by multielement isotope dilution/ICP-MS with the aid of chelating resin preconcentration.. <i>Bunseki Kagaku</i> , 2001, 50, 433-439.	0.1	5
18	Correlation between Stress/Strain and the Retention of Lipoproteins and Rupture in Atheromatous Plaque of the Human Carotid Artery: A Finite Element Study. <i>Journal of Biomechanical Science and Engineering</i> , 2010, 5, 291-302.	0.1	5

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19	Three-Dimensional Morphometry of Single Endothelial Cells with Substrate Stretching and Image-Based Finite Element Modeling. <i>Eurasip Journal on Advances in Signal Processing</i> , 2009, 2010, .	1.0	4
20	Operation Optimization of Lipase-Catalyzed Biodiesel Production. <i>Journal of Chemical Engineering of Japan</i> , 2007, 40, 571-574.	0.3	4
21	Mechanical characterization of dissected and dilated human ascending aorta using Fung-type hyperelastic models with pre-identified initial tangent moduli for low-stress distensibility. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022, 125, 104959.	1.5	4
22	Mechanical Effect of Surrounding Lipid Layer and Myocardial Tissue on Hydraulic Resistance of Canine Coronary Artery.. <i>Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A</i> , 1996, 62, 2838-2845.	0.2	3
23	A Mathematical Model of Arteries in the Active State. Incorporation of Active Stress and Activation Parameter.. <i>Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A</i> , 1997, 63, 2257-2262.	0.2	3
24	Numerical Simulation of Stress Fiber Orientation in Cultured Endothelial Cells under Biaxial Cyclic Deformation Using the Strain Limit Hypothesis.. <i>JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing</i> , 2002, 45, 880-888.	0.3	3
25	Finite Element Analysis of the Mechanical Behavior of a Vascular Endothelial Cell in Culture under Substrate Stretch. <i>Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A</i> , 2004, 70, 710-716.	0.2	3
26	A simple method of estimating the stress acting on a bilaterally symmetric abdominal aortic aneurysm. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2007, 10, 53-61.	0.9	3
27	A constitutive model of blood vessels in state of smooth muscle activation.. <i>Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A</i> , 1989, 55, 1022-1027.	0.2	2
28	A transversely isotropic inelastic constitutive model of blood vessels.. <i>Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A</i> , 1990, 56, 107-112.	0.2	2
29	The improvement of an inelastic constitutive model for blood vessels.. <i>Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A</i> , 1991, 57, 454-458.	0.2	2
30	A Mathematical Model of Arteries in the Active State. Incorporation of Active Stress and Activation Parameter.. <i>JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing</i> , 1999, 42, 545-551.	0.3	2
31	Low pressure condition of a lipid core in an eccentrically developed carotid atheromatous plaque: a static finite element analysis. <i>Journal of Biorheology</i> , 2013, 27, 9-17.	0.2	2
32	IDENTIFICATION OF UNIAXIAL DEFORMATION BEHAVIOR AND ITS INITIAL TANGENT MODULUS FOR ATHEROMATOUS INTIMA IN THE HUMAN CAROTID ARTERY AND THORACIC AORTA USING THREE-PARAMETER ISOTROPIC HYPERELASTIC MODELS. <i>Journal of Mechanics in Medicine and Biology</i> , 2020, 20, 2050014.	0.3	2
33	STUDIES ON PITCH TROUBLE CONTROL OF SULFITE PULP WITH SURFACTANTS. <i>Journal of Fiber Science and Technology</i> , 1962, 18, 431-435,422.	0.0	2
34	Investigation of Pressure Redistribution for Bony Protrusions in Polyurethane Foam Mattresses by Mechanical Tests and Hyperelastic Modeling. <i>Biomechanisms</i> , 2016, 23, 233-242.	0.1	2
35	An inelastic constitutive model of blood vessels.. <i>Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A</i> , 1988, 54, 1670-1676.	0.2	1
36	Mechanical Evaluation for the Growth and Rupture of Aneurysm in Abdominal Aorta.. <i>Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A</i> , 1992, 58, 1087-1092.	0.2	1

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37	Mechanical Evaluation of Growth and Rupture of Aneurysm in Abdominal Aorta. JSME International Journal Series A-Solid Mechanics and Material Engineering, 1994, 37, 181-187.	0.1	1
38	Fundamentals of Vascular Bio-fluid and Solid Mechanics. , 2016, , 13-45.		1
39	Pyrolysis of Waste Plastics for Heavy Oil Production. Kagaku Kogaku Ronbunshu, 2018, 44, 197-200.	0.1	1
40	Evaluation of Possible Stress Distributions in Abdominal Aorta on the Basis of Physiologically Loading Data. , 2004, , .		1
41	0931 Comparisons of the finite element analysis solutions and the analytical ones for various opening-angled arterial walls. The Proceedings of the JSME Annual Meeting, 2007, 2007.5, 163-164.	0.0	1
42	STUDIES ON PITCH TROUBLE CONTROL OF SULFITE PULP WITH SURFACTANTS. Journal of Fiber Science and Technology, 1962, 18, 130-141.	0.0	1
43	STUDIES ON PITCH TROUBLE CONTROL OF SULFITE PULP WITH SURFACTANTS. Journal of Fiber Science and Technology, 1962, 18, 266-270.	0.0	1
44	STUDIES ON PITCH TROUBLE CONTROL OF SULFITE PULP WITH SURFACTANTS. Journal of Fiber Science and Technology, 1962, 18, 345-348.	0.0	1
45	STUDIES ON PITCH TROUBLE CONTROL OF SULFITE PULP WITH SURFACTANTS. Journal of Fiber Science and Technology, 1962, 18, 348-352,345.	0.0	1
46	STUDIES ON PITCH TROUBLE CONTROL OF SULFITE PULP WITH SURFACTANTS. Journal of Fiber Science and Technology, 1962, 18, 352-355,346.	0.0	1
47	STUDIES ON PITCH TROUBLE CONTROL OF SULFITE PULP WITH SURFACTANTS. Journal of Fiber Science and Technology, 1962, 18, 421-426.	0.0	1
48	STUDIES ON PITCH TROUBLE CONTROL OF SULFITE PULP WITH SURFACTANTS. Journal of Fiber Science and Technology, 1962, 18, 426-431,421.	0.0	1
49	DERESINATION OF HARDWOOD SULFATE PULP WITH SURFACTANTS. Journal of Fiber Science and Technology, 1962, 18, 490-492.	0.0	1
50	NUMERICAL ANALYSES OF THE DEFORMATION OF VASCULAR ENDOTHELIAL CELLS AND THE ORIENTATION OF STRESS FIBERS. Biomechanisms, 2004, 17, 173-184.	0.1	1
51	ULQ experiments in TORIUT-6; Results of ramp-up discharge and effects of carbonization on the plasma behavior.. KakyÅ«gÅ«KenkyÅ«, 1988, 59, 20-29.	0.1	1
52	Deformation Measurement of Double Layer Mattress for Cylindrical Protrusion and Theoretical Prediction of Pressure Distribution Based on Compressive Characteristics of Polyurethane Foams. The Proceedings of the Materials and Mechanics Conference, 2016, 2016, OS08-04.	0.0	1
53	Stress analysis of blood vessels by a viscoplastic constitutive model based on the internal variable theory.. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 1990, 56, 2011-2015.	0.2	0
54	Formulation of a Mathematical Model for Mechanical Bone Remodeling Process.. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2000, 66, 191-197.	0.2	0

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55	Active Stress Models of Cardiac Muscle, Smooth Muscle and Skeletal Muscle. , 2000, , 161-166.		0
56	The effect of temperature on the morphology of fibroblasts in a collagen gel in nutrient-free medium. , 2008, , .		0
57	Hardening of the Porcine Thoracic Aorta Subjected to Freezing and Thawing: Experimental Evaluation and Mathematical Modeling. , 2008, , .		0
58	Phenol Transfer through Third Phase for Phenyl Benzoate Formation in Modified Parallel Flow Micro Reactor. Journal of the Japan Petroleum Institute, 2016, 59, 204-210.	0.4	0
59	Assessment of the relationship between deformation characteristics and the presence of calcification in human atheromatous plaques using uniaxial stretching evaluations with digital image correlation, CT scanning and histological examination. Journal of Biomechanical Science and Engineering, 2016, 11, 15-00611-15-00611.	0.1	0
60	Finite element analysis of a rupture-induced deformation of a carotid atherosclerotic plaque with intraplaque hemorrhage. Journal of Biomechanical Science and Engineering, 2018, 13, 17-00436-17-00436.	0.1	0
61	Application of finite element analysis on balloon expandable coronary stents: A review. International Journal of Engineering and Technology(UAE), 2018, 7, 1640.	0.2	0
62	MEASUREMENT AND FINITE ELEMENT ANALYSIS OF THE LOAD-DEPENDENT PRESSURE REDISTRIBUTION BEHAVIOR OF VARIOUS TYPES OF MATTRESSES. Journal of Mechanics in Medicine and Biology, 2020, 20, 2050031.	0.3	0
63	Title is missing!. Journal of Life Support Engineering, 2000, 12, 125-130.	0.1	0
64	Inelastic Constitutive Models of Blood Vessels in Physiological Conditions. , 2000, , 19-28.		0
65	Stress and Strain Analyses of Blood Vessels in Physiological and Pathological Conditions. , 2000, , 29-38.		0
66	Geometry-Dependent Deformations of the Vascular Endothelial Cell : Investigation of Intracellular Behavior with Finite Element Analysis(Micro- and Nano-biomechanics). The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics, 2004, 2004.1, 233-234.	0.0	0
67	332 Numerical Analysis of Compressive Behavior of Tissue-Engineered Cartilage by Fibril Reinforced Poroelastic Model. The Proceedings of the Bioengineering Conference Annual Meeting of BED/J SME, 2006, 2005.18, 201-202.	0.0	0
68	P-21 EFFECT OF THE NUCLEAR ELASTICITY ON THE MECHANICAL BEHAVIOR OF AN IMAGE-BASED SINGLE ENDOTHELIAL CELL MODEL : FINITE ELEMENT MODELING AND ANALYSIS. The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics, 2007, 2007.3, S109.	0.0	0
69	1310 Numerical analysis of the microvascular deformation at a bone prominence with a consideration of elasticity of skin and mattress. The Proceedings of the Materials and Mechanics Conference, 2010, 2010, 390-392.	0.0	0
70	OS1102 Identification of Elasticity for Human Atherosclerotic Carotid Artery through Uniaxial Stretching Test and Finite Element Analysis. The Proceedings of the Materials and Mechanics Conference, 2011, 2011, _OS1102-1_-_OS1102-3_.	0.0	0
71	8D44 Finite element analysis of uniaxial vascular wall stretching after a single radial cut of a ring specimen. The Proceedings of the Bioengineering Conference Annual Meeting of BED/J SME, 2012, 2012.24, _8D44-1_-_8D44-2_.	0.0	0
72	OS0710 Deformation Analysis and Evaluation of Mechanical Characteristics for Aortic Fibrous Caps under Uniaxial Stretch. The Proceedings of the Materials and Mechanics Conference, 2013, 2013, _OS0710-1_-_OS0710-2_.	0.0	0

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73	J021014 Finite Element Analysis on the Fracture Condition of a Premolar Restored with a Fiber Post. The Proceedings of Mechanical Engineering Congress Japan, 2013, 2013, _J021014-1-_J021014-2.	0.0	0
74	4F4 Measurement of strain distribution on human aortic wall surface with a plaque under uniaxial stretch. The Proceedings of Conference of Kyushu Branch, 2014, 2014, _4F4-1_-_4F4-2_.	0.0	0
75	OS0609 Evaluation of Uniaxial Stretching Behavior of Fibrous Caps in Atherosclerotic Plaques using Hyperelastic Ogden Model. The Proceedings of the Materials and Mechanics Conference, 2014, 2014, _OS0609-1_-_OS0609-2_.	0.0	0
76	2D42 Evaluation of the extensibility and histological characteristics of the atherosclerotic and normal regions in the intimal layer of carotid arteries in autopsy. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JJSM, 2014, 2014.26, 423-424.	0.0	0
77	STUDIES ON PITCH TROUBLE CONTROL OF SULFITE PULP WITH SURFACTANTS. Journal of Fiber Science and Technology, 1962, 18, 270-274,266.	0.0	0
78	STUDIES ON PITCH TROUBLE CONTROL OF SULFITE PULP WITH SURFACTANTS. Journal of Fiber Science and Technology, 1962, 18, 274-276,267.	0.0	0
79	Measurement of Intramyocardial Pressure in the Left Ventricular Wall of Isolated Rabbit Heart.. Zairyo/Journal of the Society of Materials Science, Japan, 1996, 45, 235-240.	0.1	0
80	2G34 Loading test of pressure redistribution mattress and evaluation of its effect. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JJSM, 2015, 2015.27, 581-582.	0.0	0
81	OS0710-403 Theoretical Analysis of the Effect of Shear to the Body Surface on the Deformation of Skin around Microvessels. The Proceedings of the Materials and Mechanics Conference, 2015, 2015, _OS0710-40-_OS0710-40.	0.0	0
82	OS20-2 Mechanical Characterization of the Elastic Properties of Atheromatous Plaques in the Human Carotid Artery and Thoracic Aorta(Experimental biomechanics and bioengineering 1,OS20 Experimental) Tj ETQq0 0 0 rgBT /Overlock 10	0.0	0
83	Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2015, 2015.14, 251. Scanning of Aortic Calcified Plaque and Strain Measurement of Luminal Surface near Calcification under Uniaxial Stretch(Experimental biomechanics and bioengineering 1,OS20) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.0	0
84	2F34 Finite element modeling of a ruptured plaque in human carotid artery. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JJSM, 2016, 2016.28, _2F34-1_-_2F34-3_.	0.0	0
85	Measurement and Viscoelastic Modeling of Simple Shear Deformation of the Subcutaneous Tissue Layer in the Porcine Hind Foot. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2019, 2019, 1008D1045.	0.0	0