

George A Truskey

List of Publications by Year in descending order

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170
papers

8,115
citations

41258

49
h-index

60497

81
g-index

239
all docs

239
docs citations

239
times ranked

8796
citing authors

#	ARTICLE	IF	CITATIONS
1	Endothelial, cardiac muscle and skeletal muscle exhibit different viscous and elastic properties as determined by atomic force microscopy. <i>Journal of Biomechanics</i> , 2001, 34, 1545-1553.	0.9	527
2	Apparent elastic modulus and hysteresis of skeletal muscle cells throughout differentiation. <i>American Journal of Physiology - Cell Physiology</i> , 2002, 283, C1219-C1227.	2.1	293
3	Atomic Force and Total Internal Reflection Fluorescence Microscopy for the Study of Force Transmission in Endothelial Cells. <i>Biophysical Journal</i> , 2000, 78, 1725-1735.	0.2	269
4	Bioengineered human myobundles mimic clinical responses of skeletal muscle to drugs. <i>ELife</i> , 2015, 4, e04885.	2.8	258
5	Effect of the conformation and orientation of adsorbed fibronectin on endothelial cell spreading and the strength of adhesion. <i>Journal of Biomedical Materials Research Part B</i> , 1993, 27, 1103-1113.	3.0	217
6	Engineering the tissue which encapsulates subcutaneous implants. I. Diffusion properties. , 1997, 37, 401-412.		212
7	Functional Coupling of Human Microphysiology Systems: Intestine, Liver, Kidney Proximal Tubule, Blood-Brain Barrier and Skeletal Muscle. <i>Scientific Reports</i> , 2017, 7, 42296.	1.6	193
8	Basal cell adhesion molecule/lutheran protein. The receptor critical for sickle cell adhesion to laminin.. <i>Journal of Clinical Investigation</i> , 1998, 101, 2550-2558.	3.9	184
9	Hemodynamic Parameters and Early Intimal Thickening in Branching Blood Vessels. <i>Critical Reviews in Biomedical Engineering</i> , 2001, 29, 1-64.	0.5	184
10	Shear Stress Induces ATP-Independent Transient Nitric Oxide Release From Vascular Endothelial Cells, Measured Directly With a Porphyrinic Microsensor. <i>Circulation Research</i> , 1995, 77, 284-293.	2.0	176
11	Effect of receptor-ligand affinity on the strength of endothelial cell adhesion. <i>Biophysical Journal</i> , 1996, 71, 2869-2884.	0.2	154
12	Quantitative microscopy and nanoscopy of sickle red blood cells performed by wide field digital interferometry. <i>Journal of Biomedical Optics</i> , 2011, 16, 1.	1.4	137
13	The effect of fluid shear stress upon cell adhesion to fibronectin-treated surfaces. <i>Journal of Biomedical Materials Research Part B</i> , 1990, 24, 1333-1353.	3.0	130
14	Engineering the tissue which encapsulates subcutaneous implants. II. Plasma-tissue exchange properties. , 1998, 40, 586-597.		130
15	Relation between non-uniform hemodynamics and sites of altered permeability and lesion growth at the rabbit aorto-celiac junction. <i>Atherosclerosis</i> , 1999, 143, 27-40.	0.4	128
16	Application of total internal reflection fluorescence microscopy to study cell adhesion to biomaterials. <i>Biomaterials</i> , 1998, 19, 307-325.	5.7	117
17	Numerical Investigation and Prediction of Atherogenic Sites in Branching Arteries. <i>Journal of Biomechanical Engineering</i> , 1995, 117, 350-357.	0.6	109
18	Three-dimensional numerical simulation of receptor-mediated leukocyte adhesion to surfaces: Effects of cell deformability and viscoelasticity. <i>Physics of Fluids</i> , 2005, 17, 031505.	1.6	102

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19	Hemodynamics simulation and identification of susceptible sites of atherosclerotic lesion formation in a model abdominal aorta. <i>Journal of Biomechanics</i> , 2003, 36, 1185-1196.	0.9	100
20	Engineering the tissue which encapsulates subcutaneous implants. III. Effective tissue response times. , 1998, 40, 598-605.		99
21	Orientation and length of mammalian skeletal myocytes in response to a unidirectional stretch. <i>Cell and Tissue Research</i> , 2000, 302, 243-251.	1.5	99
22	Effects of titanium particle size on osteoblast functions in vitro and in vivo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 4578-4583.	3.3	99
23	Mice Lacking Homer 1 Exhibit a Skeletal Myopathy Characterized by Abnormal Transient Receptor Potential Channel Activity. <i>Molecular and Cellular Biology</i> , 2008, 28, 2637-2647.	1.1	92
24	Relationship between 3T3 cell spreading and the strength of adhesion on glass and silane surfaces. <i>Biomaterials</i> , 1993, 14, 243-254.	5.7	87
25	The use of mild trypsinization conditions in the detachment of endothelial cells to promote subsequent endothelialization on synthetic surfaces. <i>Biomaterials</i> , 2007, 28, 3928-3935.	5.7	86
26	Effect of Fluid Shear Stress on the Permeability of the Arterial Endothelium. <i>Annals of Biomedical Engineering</i> , 2002, 30, 430-446.	1.3	85
27	Scaffold-free, Human Mesenchymal Stem Cell-Based Tissue Engineered Blood Vessels. <i>Scientific Reports</i> , 2015, 5, 15116.	1.6	84
28	A Tissue Engineered Blood Vessel Model of Hutchinson-Gilford Progeria Syndrome Using Human iPSC-derived Smooth Muscle Cells. <i>Scientific Reports</i> , 2017, 7, 8168.	1.6	84
29	The NIH Somatic Cell Genome Editing program. <i>Nature</i> , 2021, 592, 195-204.	13.7	84
30	Critical Factors in Basal Cell Adhesion Molecule/Lutheran-mediated Adhesion to Laminin. <i>Journal of Biological Chemistry</i> , 1999, 274, 728-734.	1.6	80
31	Human Vascular Microphysiological System for in vitro Drug Screening. <i>Scientific Reports</i> , 2016, 6, 21579.	1.6	78
32	Metabolic cooperation between vascular endothelial cells and smooth muscle cells in co-culture: changes in low density lipoprotein metabolism.. <i>Journal of Cell Biology</i> , 1985, 101, 871-879.	2.3	77
33	The biocompatibility of titanium cardiovascular devices seeded with autologous blood-derived endothelial progenitor cells. <i>Biomaterials</i> , 2011, 32, 10-18.	5.7	77
34	Effect of Contact Time and Force on Monocyte Adhesion to Vascular Endothelium. <i>Biophysical Journal</i> , 2001, 80, 1722-1732.	0.2	73
35	Quantitative analysis of variable-angle total internal reflection fluorescence microscopy (VA-TIRFM) of cell/substrate contacts. <i>Journal of Microscopy</i> , 1994, 173, 39-51.	0.8	72
36	Effect of cyclic stretch on β 1-integrin expression and activation of FAK and RhoA. <i>American Journal of Physiology - Cell Physiology</i> , 2007, 292, C2057-C2069.	2.1	72

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37	A system for the direct co-culture of endothelium on smooth muscle cells. <i>Biomaterials</i> , 2005, 26, 4642-4653.	5.7	71
38	Improving endothelial cell adhesion to vascular graft surfaces: Clinical need and strategies. <i>Journal of Biomaterials Science, Polymer Edition</i> , 1998, 9, 1117-1135.	1.9	70
39	A numerical analysis of forces exerted by laminar flow on spreading cells in a parallel plate flow chamber assay. <i>Biotechnology and Bioengineering</i> , 1993, 42, 963-973.	1.7	69
40	Characterization of Umbilical Cord Blood-Derived Late Outgrowth Endothelial Progenitor Cells Exposed to Laminar Shear Stress. <i>Tissue Engineering - Part A</i> , 2009, 15, 3575-3587.	1.6	69
41	Effect of fibronectin amount and conformation on the strength of endothelial cell adhesion to HEMA/EMA copolymers. , 1996, 30, 13-22.		67
42	Poly(Ethylene Glycol) Hydrogel Scaffolds Containing Cell-Adhesive and Protease-Sensitive Peptides Support Microvessel Formation by Endothelial Progenitor Cells. <i>Cellular and Molecular Bioengineering</i> , 2016, 9, 38-54.	1.0	67
43	A focal stress gradient-dependent mass transfer mechanism for atherogenesis in branching arteries. <i>Medical Engineering and Physics</i> , 1996, 18, 326-332.	0.8	65
44	Morphology and ultrastructure of differentiating three-dimensional mammalian skeletal muscle in a collagen gel. <i>Muscle and Nerve</i> , 2007, 36, 71-80.	1.0	65
45	A 3D numerical study of the effect of channel height on leukocyte deformation and adhesion in parallel-plate flow chambers. <i>Microvascular Research</i> , 2004, 68, 188-202.	1.1	63
46	Comparison of Endothelial Cell Phenotypic Markers of Late-Outgrowth Endothelial Progenitor Cells Isolated from Patients with Coronary Artery Disease and Healthy Volunteers. <i>Tissue Engineering - Part A</i> , 2009, 15, 3473-3486.	1.6	63
47	Measurement of endothelial permeability to 125I-low density lipoproteins in rabbit arteries by use of en face preparations.. <i>Circulation Research</i> , 1992, 71, 883-897.	2.0	60
48	Characterization of sites with elevated LDL permeability at intercostal, celiac, and iliac branches of the normal rabbit aorta.. <i>Arteriosclerosis and Thrombosis: A Journal of Vascular Biology</i> , 1994, 14, 313-323.	3.8	56
49	Endothelial vascular smooth muscle cell coculture assay for high throughput screening assays to identify antiangiogenic and other therapeutic molecules. <i>International Journal of High Throughput Screening</i> , 2010, 2010, 171.	0.5	55
50	Conditions that promote primary human skeletal myoblast culture and muscle differentiation in vitro. <i>American Journal of Physiology - Cell Physiology</i> , 2014, 306, C385-C395.	2.1	55
51	The distribution of intimal white blood cells in the normal rabbit aorta. <i>Atherosclerosis</i> , 1995, 115, 147-163.	0.4	54
52	Stretch-induced nitric oxide modulates mechanical properties of skeletal muscle cells. <i>American Journal of Physiology - Cell Physiology</i> , 2004, 287, C292-C299.	2.1	54
53	iPSC-Derived Endothelial Cells Affect Vascular Function in a Tissue-Engineered Blood Vessel Model of Hutchinson-Gilford Progeria Syndrome. <i>Stem Cell Reports</i> , 2020, 14, 325-337.	2.3	54
54	A cardiac patch from aligned microvessel and cardiomyocyte patches. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018, 12, 546-556.	1.3	50

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55	Fibronectin and avidin-biotin as a heterogeneous ligand system for enhanced endothelial cell adhesion. , 1998, 41, 377-385.		48
56	Mylar [®] and Teflon-AF [®] as cell culture substrates for studying endothelial cell adhesion. Biomaterials, 2005, 26, 6887-6896.	5.7	47
57	Physiology and metabolism of tissue-engineered skeletal muscle. Experimental Biology and Medicine, 2014, 239, 1203-1214.	1.1	47
58	Peptide Interfacial Biomaterials Improve Endothelial Cell Adhesion and Spreading on Synthetic Polyglycolic Acid Materials. Annals of Biomedical Engineering, 2010, 38, 1965-1976.	1.3	46
59	Characterization of a Sudden Expansion Flow Chamber to Study the Response of Endothelium to Flow Recirculation. Journal of Biomechanical Engineering, 1995, 117, 203-210.	0.6	45
60	Adhesion and Function of Human Endothelial Cells Co-cultured on Smooth Muscle Cells. Annals of Biomedical Engineering, 2007, 35, 375-386.	1.3	45
61	Human Microphysiological Systems and Organoids as in Vitro Models for Toxicological Studies. Frontiers in Public Health, 2018, 6, 185.	1.3	45
62	Circulating mitochondria in organ donors promote allograft rejection. American Journal of Transplantation, 2019, 19, 1917-1929.	2.6	44
63	Leukocyte Rolling on P-Selectin: A Three-Dimensional Numerical Study of the Effect of Cytoplasmic Viscosity. Biophysical Journal, 2012, 102, 1757-1766.	0.2	43
64	Direct-contact co-culture between smooth muscle and endothelial cells inhibits TNF α -mediated endothelial cell activation. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 299, H338-H346.	1.5	40
65	Biological and engineering design considerations for vascular tissue engineered blood vessels (TEBVs). Current Opinion in Chemical Engineering, 2014, 3, 83-90.	3.8	40
66	Transdifferentiation of human endothelial progenitors into smooth muscle cells. Biomaterials, 2016, 85, 180-194.	5.7	39
67	An equilibrium model of endothelial cell adhesion via integrin-dependent and integrin-independent ligands. Biomaterials, 1999, 20, 2395-2403.	5.7	38
68	Modeling early stage atherosclerosis in a primary human vascular microphysiological system. Nature Communications, 2020, 11, 5426.	5.8	38
69	Effect of MicroRNA Modulation on Bioartificial Muscle Function. Tissue Engineering - Part A, 2010, 16, 3589-3597.	1.6	35
70	Parallel-plate Flow Chamber and Continuous Flow Circuit to Evaluate Endothelial Progenitor Cells under Laminar Flow Shear Stress. Journal of Visualized Experiments, 2012, , .	0.2	31
71	Human Umbilical Cord Blood-Derived Endothelial Cells Reendothelialize Vein Grafts and Prevent Thrombosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2010, 30, 2150-2155.	1.1	29
72	Dynamic Adhesion of Umbilical Cord Blood Endothelial Progenitor Cells under Laminar Shear Stress. Biophysical Journal, 2010, 99, 3545-3554.	0.2	29

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73	Computational Fluid Dynamics Analysis to Determine Shear Stresses and Rates in a Centrifugal Left Ventricular Assist Device. <i>Artificial Organs</i> , 2012, 36, E89-96.	1.0	29
74	Cell Density and Joint microRNA-133a and microRNA-696 Inhibition Enhance Differentiation and Contractile Function of Engineered Human Skeletal Muscle Tissues. <i>Tissue Engineering - Part A</i> , 2016, 22, 573-583.	1.6	29
75	Focal Increases in Vascular Cell Adhesion Molecule-1 and Intimal Macrophages at Atherosclerosis-Susceptible Sites in the Rabbit Aorta After Short-Term Cholesterol Feeding. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 1999, 19, 393-401.	1.1	28
76	Smooth muscle cell rigidity and extracellular matrix organization influence endothelial cell spreading and adhesion formation in coculture. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007, 293, H1978-H1986.	1.5	28
77	Real-time observation of leukocyte-endothelium interactions in tissue-engineered blood vessel. <i>Lab on A Chip</i> , 2018, 18, 2047-2054.	3.1	28
78	Magnetoactive sponges for dynamic control of microfluidic flow patterns in microphysiological systems. <i>Lab on A Chip</i> , 2014, 14, 514-521.	3.1	27
79	Kinetic studies and unstructured models of lymphocyte metabolism in fed-batch culture. <i>Biotechnology and Bioengineering</i> , 1990, 36, 797-807.	1.7	26
80	Postadsorption changes in the emission maximum of acrylodan-labeled bovine serum albumin using total internal reflection fluorescence. <i>Journal of Colloid and Interface Science</i> , 1992, 148, 415-424.	5.0	25
81	EFFECTS OF CHRONIC EXPOSURE TO SIMULATED MICROGRAVITY ON SKELETAL MUSCLE CELL PROLIFERATION AND DIFFERENTIATION. <i>In Vitro Cellular and Developmental Biology - Animal</i> , 2001, 37, 148.	0.7	25
82	Biomechanical effects of flow and coculture on human aortic and cord blood-derived endothelial cells. <i>Journal of Biomechanics</i> , 2011, 44, 2150-2157.	0.9	25
83	Design considerations for an integrated microphysiological muscle tissue for drug and tissue toxicity testing. <i>Stem Cell Research and Therapy</i> , 2013, 4, S10.	2.4	25
84	Differentiation of mammalian skeletal muscle cells cultured on microcarrier beads in a rotating cell culture system. <i>Medical and Biological Engineering and Computing</i> , 2000, 38, 583-590.	1.6	24
85	Use of autologous blood-derived endothelial progenitor cells at point-of-care to protect against implant thrombosis in a large animal model. <i>Biomaterials</i> , 2011, 32, 8356-8363.	5.7	24
86	Normal and shear stresses influence the spatial distribution of intracellular adhesion molecule-1 expression in human umbilical vein endothelial cells exposed to sudden expansion flow. <i>Journal of Biomechanics</i> , 2006, 39, 806-817.	0.9	23
87	Flow and High Affinity Binding Affect the Elastic Modulus of the Nucleus, Cell Body and the Stress Fibers of Endothelial Cells. <i>Annals of Biomedical Engineering</i> , 2007, 35, 1120-1130.	1.3	23
88	Efficient transdifferentiation of human dermal fibroblasts into skeletal muscle. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018, 12, e918-e936.	1.3	23
89	Total Internal Reflection Microscopy and Atomic Force Microscopy (TIRFM-AFM) to Study Stress Transduction Mechanisms in Endothelial Cells. <i>Critical Reviews in Biomedical Engineering</i> , 2000, 28, 197-202.	0.5	22
90	Tissue-engineered blood vessels as promising tools for testing drug toxicity. <i>Expert Opinion on Drug Metabolism and Toxicology</i> , 2015, 11, 1021-1024.	1.5	20

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91	Effects of recirculating flow on U-937 cell adhesion to human umbilical vein endothelial cells. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1998, 275, H591-H599.	1.5	19
92	High-affinity augmentation of endothelial cell attachment: Long-term effects on focal contact and actin filament formation. <i>Journal of Biomedical Materials Research Part B</i> , 2003, 66A, 729-737.	3.0	19
93	Endothelial Cell Senescence Increases Traction Forces due to Age-Associated Changes in the Glycocalyx and SIRT1. <i>Cellular and Molecular Bioengineering</i> , 2015, 8, 63-75.	1.0	19
94	Advancing cardiovascular tissue engineering. <i>F1000Research</i> , 2016, 5, 1045.	0.8	19
95	Biofabrication of tissue engineering vascular systems. <i>APL Bioengineering</i> , 2021, 5, 021507.	3.3	19
96	Short-Term Cell/Substrate Contact Dynamics of Subconfluent Endothelial Cells following Exposure to Laminar Flow. <i>Biotechnology Progress</i> , 1999, 15, 33-42.	1.3	18
97	Human, Tissue-Engineered, Skeletal Muscle Myobundles to Measure Oxygen Uptake and Assess Mitochondrial Toxicity. <i>Tissue Engineering - Part C: Methods</i> , 2017, 23, 189-199.	1.1	18
98	Development and application of human skeletal muscle microphysiological systems. <i>Lab on A Chip</i> , 2018, 18, 3061-3073.	3.1	18
99	Development and Application of Endothelial Cells Derived From Pluripotent Stem Cells in Microphysiological Systems Models. <i>Frontiers in Cardiovascular Medicine</i> , 2021, 8, 625016.	1.1	18
100	Association between secondary flow in models of the aorto-celiac junction and subendothelial macrophages in the normal rabbit. <i>Atherosclerosis</i> , 1998, 140, 121-134.	0.4	17
101	Streptavidin Binding and Endothelial Cell Adhesion to Biotinylated Fibronectin. <i>Langmuir</i> , 2007, 23, 12583-12588.	1.6	17
102	Effect of Streptavidin RGD Mutant on the Adhesion of Endothelial Cells. <i>Biotechnology Progress</i> , 2008, 20, 566-575.	1.3	17
103	Isolation of Functional Human Endothelial Cells from Small Volumes of Umbilical Cord Blood. <i>Annals of Biomedical Engineering</i> , 2013, 41, 2181-2192.	1.3	17
104	A system to monitor statin-induced myopathy in individual engineered skeletal muscle myobundles. <i>Lab on A Chip</i> , 2018, 18, 2787-2796.	3.1	17
105	Principles for the design of multicellular engineered living systems. <i>APL Bioengineering</i> , 2022, 6, 010903.	3.3	17
106	Quantitation of cell area on glass and fibronectin-coated surfaces by digital image analysis. <i>Biotechnology Progress</i> , 1990, 6, 513-519.	1.3	16
107	Relation Between Near-Wall Residence Times of Monocytes and Early Lesion Growth in the Rabbit Aorto-celiac Junction. <i>Annals of Biomedical Engineering</i> , 2003, 31, 53-64.	1.3	16
108	Umbilical Cord Blood-Derived Mononuclear Cells Exhibit Pericyte-Like Phenotype and Support Network Formation of Endothelial Progenitor Cells In Vitro. <i>Annals of Biomedical Engineering</i> , 2015, 43, 2552-2568.	1.3	16

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109	Linoleic acid increases monocyte deformation and adhesion to endothelium. <i>Atherosclerosis</i> , 2004, 177, 275-285.	0.4	15
110	Effect of cellular senescence on the albumin permeability of blood-derived endothelial cells. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2012, 303, H1374-H1383.	1.5	15
111	Gleevec, an Abl Family Inhibitor, Produces a Profound Change in Cell Shape and Migration. <i>PLoS ONE</i> , 2013, 8, e52233.	1.1	15
112	Synergistic effect of high-affinity binding and flow preconditioning on endothelial cell adhesion. <i>Journal of Biomedical Materials Research Part B</i> , 2003, 64A, 155-163.	3.0	14
113	Endothelial Colony Forming Cells (ECFCs) As a Model for Studying Effects of Low-Dose Ionizing Radiation: Growth Inhibition by a Single Dose. <i>Cancer Investigation</i> , 2013, 31, 359-364.	0.6	14
114	Emulating Early Atherosclerosis in a Vascular Microphysiological System Using Branched Tissue-Engineered Blood Vessels. <i>Advanced Biology</i> , 2021, 5, e2000428.	1.4	14
115	Effect of streptavidin affinity mutants on the integrin-independent adhesion of biotinylated endothelial cells. <i>Biomaterials</i> , 2003, 24, 559-570.	5.7	13
116	Effect of streptavidin-biotin on endothelial vasoregulation and leukocyte adhesion. <i>Biomaterials</i> , 2004, 25, 3951-3961.	5.7	13
117	Role of endothelial cell-substrate contact area and fibronectin-receptor affinity in cell adhesion to HEMA/EMA copolymers. , 1999, 47, 577-584.		12
118	Oxygen consumption in human, tissue-engineered myobundles during basal and electrical stimulation conditions. <i>APL Bioengineering</i> , 2019, 3, 026103.	3.3	12
119	Application of Oxidative Stress to a Tissue-Engineered Vascular Aging Model Induces Endothelial Cell Senescence and Activation. <i>Cells</i> , 2020, 9, 1292.	1.8	12
120	Hemodynamic Parameters and Early Intimal Thickening in Branching Blood Vessels. <i>Critical Reviews in Biomedical Engineering</i> , 2017, 45, 319-382.	0.5	12
121	CD45+ Cells Present Within Mesenchymal Stem Cell Populations Affect Network Formation of Blood-Derived Endothelial Outgrowth Cells. <i>BioResearch Open Access</i> , 2015, 4, 75-88.	2.6	11
122	Glucose Uptake and Insulin Response in Tissue-engineered Human Skeletal Muscle. <i>Tissue Engineering and Regenerative Medicine</i> , 2020, 17, 801-813.	1.6	11
123	Late-outgrowth endothelial progenitors from patients with coronary artery disease: Endothelialization of confluent stromal cell layers. <i>Acta Biomaterialia</i> , 2014, 10, 893-900.	4.1	10
124	Increased yield of endothelial cells from peripheral blood for cell therapies and tissue engineering. <i>Regenerative Medicine</i> , 2015, 10, 447-460.	0.8	10
125	Comparison of Mixed and Lamellar Coculture Spatial Arrangements for Tissue Engineering Capillary Networks<i>In Vitro</i>. <i>Tissue Engineering - Part A</i> , 2013, 19, 697-706.	1.6	9
126	Point-of-Care Rapid-Seeding Ventricular Assist Device with Blood-Derived Endothelial Cells to Create a Living Antithrombotic Coating. <i>ASAIO Journal</i> , 2016, 62, 447-453.	0.9	9

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127	Differentiation and characterization of human iPSC-derived vascular endothelial cells under physiological shear stress. STAR Protocols, 2021, 2, 100394.	0.5	9
128	Imaging of cell/substrate contacts on polymers by total internal reflection fluorescence microscopy. Biotechnology Progress, 1994, 10, 26-31.	1.3	8
129	In vivo performance of dual ligand augmented endothelialized expanded polytetrafluoroethylene vascular grafts. Journal of Biomedical Materials Research Part B, 2005, 72B, 52-63.	3.0	8
130	Autologous Endothelial Progenitor Cell-Seeding Technology and Biocompatibility Testing For Cardiovascular Devices in Large Animal Model. Journal of Visualized Experiments, 2011, , .	0.2	8
131	Human iPSCs Stretch to Improve Tissue-Engineered Vascular Grafts. Cell Stem Cell, 2020, 26, 136-137.	5.2	8
132	Local Conformational Changes of Vitronectin upon Adsorption on Glass and Silane Surfaces. Journal of Colloid and Interface Science, 1994, 165, 31-40.	5.0	7
133	Point-of-care seeding of nitinol stents with blood-derived endothelial cells. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 1658-1665.	1.6	7
134	Porcine Endothelial Cells Cocultured with Smooth Muscle Cells Became Procoagulant <i>In Vitro</i> . Tissue Engineering - Part A, 2010, 16, 1835-1844.	1.6	6
135	Modeling the Effect of TNF- α upon Drug-Induced Toxicity in Human, Tissue-Engineered Myobundles. Annals of Biomedical Engineering, 2019, 47, 1596-1610.	1.3	6
136	Tissue engineered skeletal muscle model of rheumatoid arthritis using human primary skeletal muscle cells. Journal of Tissue Engineering and Regenerative Medicine, 2022, 16, 128-139.	1.3	6
137	Effects of ammonium ion derived from bovine endothelial cells upon low density lipoprotein degradation in cultured vascular smooth muscle cells. Cell Biology International Reports, 1985, 9, 323-330.	0.7	5
138	Altered Distribution of Mitochondria and Actin Fibers in 3T3 Cells Cultured on Microcarriers. Biotechnology Progress, 1992, 8, 572-575.	1.3	5
139	Synergistic effect of shear stress and streptavidin-biotin on the expression of endothelial vasodilator and cytoskeleton genes. Biotechnology and Bioengineering, 2004, 88, 750-758.	1.7	5
140	Computational Analysis of Particle-Hemodynamics and Prediction of the Onset of Arterial Diseases. , 2000, , .		5
141	Kinetic Analysis of Receptor-Mediated Endocytosis and Lysosomal Degradation in Cultured Cells. Annals of the New York Academy of Sciences, 1984, 435, 349-351.	1.8	4
142	Engineering the tissue which encapsulates subcutaneous implants. II. Plasma-tissue exchange properties. , 1998, 40, 586.		4
143	Modeling statin myopathy in a human skeletal muscle microphysiological system. PLoS ONE, 2020, 15, e0242422.	1.1	4
144	The Effect of Stress-Induced Senescence on Aging Human Cord Blood-Derived Endothelial Cells. Cardiovascular Engineering and Technology, 2013, 4, 220-230.	0.7	3

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145	Surface projections of titanium substrates increase antithrombotic endothelial function in response to shear stress. <i>Journal of Biomedical Materials Research - Part A</i> , 2013, 101, 3181-3191.	2.1	3
146	In Situ Fabrication and Perfusion of Tissue-Engineered Blood Vessel Microphysiological System. <i>Methods in Molecular Biology</i> , 2022, 2375, 77-90.	0.4	3
147	Vascular microphysiological systems to model diseases. <i>Cell & Gene Therapy Insights</i> , 2020, 6, 93-102.	0.1	3
148	Engineering the tissue which encapsulates subcutaneous implants. III. Effective tissue response times. , 1998, 40, 598.		2
149	Dynamic quantitative microscopy and nanoscopy of red blood cells in sickle cell disease. <i>Proceedings of SPIE</i> , 2012, , .	0.8	1
150	Engineering the tissue which encapsulates subcutaneous implants. I. Diffusion properties. , 1997, 37, 401.		1
151	Using avidin-mediated binding to enhance initial endothelial cell attachment and spreading. , 1998, 40, 57.		1
152	Biomechanical effects on microRNA expression in skeletal muscle differentiation. <i>AIMS Bioengineering</i> , 2020, 7, 147-164.	0.6	1
153	Factors influencing the nonuniform localization of monocytes in the arterial wall. <i>Biorheology</i> , 2002, 39, 325-9.	1.2	1
154	Effect of fluid viscosity and erythrocytes on monocyte adhesion. , 0, , .		0
155	Increased numbers of bonds stabilize adhesion with multiple tethers between endothelium and monocytes. , 0, , .		0
156	The effects of the actin cytoskeleton on the transverse mechanical properties of skeletal muscle cells. , 0, , .		0
157	The effects of streptavidin-biotin exogenous ligands on the endothelium-derived nitric oxide synthase activity. , 0, , .		0
158	Real-time theoretical compartmental model of blood-brain barrier drug delivery. , 2004, 2006, 790-6.		0
159	Minimally Invasive Iliac Crest Bone Graft Harvesting: A Design and Business Method Overview. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2011, 5, .	0.4	0
160	Viscoelastic Cell Adhesion Model (VECAM). <i>Biophysical Journal</i> , 2013, 104, 319a-320a.	0.2	0
161	Aging Endothelial Cells Exhibit Decreased Response to Atheroprotective Shear Stress. , 2013, , .		0
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