John Kolega

List of Publications by Year
in descending order

63	3,058	218592 26	197736 49
papers	citations	h-index	g-index

64	64	64	3276
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Complex Hemodynamics at the Apex of an Arterial Bifurcation Induces Vascular Remodeling Resembling Cerebral Aneurysm Initiation. Stroke, 2007, 38, 1924-1931.	1.0	504
2	High Wall Shear Stress and Spatial Gradients in Vascular Pathology: A Review. Annals of Biomedical Engineering, 2013, 41, 1411-1427.	1.3	275
3	Phototoxicity and photoinactivation of blebbistatin in UV and visible light. Biochemical and Biophysical Research Communications, 2004, 320, 1020-1025.	1.0	165
4	Effects of Direct Current Electric Fields on Cell Migration and Actin Filament Distribution in Bovine Vascular Endothelial Cells. Journal of Vascular Research, 2002, 39, 391-404.	0.6	159
5	Characterization of Critical Hemodynamics Contributing to Aneurysmal Remodeling at the Basilar Terminus in a Rabbit Model. Stroke, 2010, 41, 1774-1782.	1.0	151
6	High Fluid Shear Stress and Spatial Shear Stress Gradients Affect Endothelial Proliferation, Survival, and Alignment. Annals of Biomedical Engineering, 2011, 39, 1620-1631.	1.3	132
7	Asymmetric Distribution of Myosin IIB in Migrating Endothelial Cells Is Regulated by a rho-dependent Kinase and Contributes to Tail Retraction. Molecular Biology of the Cell, 2003, 14, 4745-4757.	0.9	111
8	Nascent Aneurysm Formation at the Basilar Terminus Induced by Hemodynamics. Stroke, 2008, 39, 2085-2090.	1.0	108
9	Newtonian viscosity model could overestimate wall shear stress in intracranial aneurysm domes and underestimate rupture risk. Journal of NeuroInterventional Surgery, 2012, 4, 351-357.	2.0	98
10	MOLECULAR ALTERATIONS ASSOCIATED WITH ANEURYSMAL REMODELING ARE LOCALIZED IN THE HIGH HEMODYNAMIC STRESS REGION OF A CREATED CAROTID BIFURCATION. Neurosurgery, 2009, 65, 169-178.	0.6	93
11	Basement membrane heterogeneity and variation in corneal epithelial differentiation. Differentiation, 1989, 42, 54-63.	1.0	92
12	Cellular and Molecular Responses of the Basilar Terminus to Hemodynamics during Intracranial Aneurysm Initiation in a Rabbit Model. Journal of Vascular Research, 2011, 48, 429-442.	0.6	91
13	Intracranial Aneurysms Occur More Frequently at Bifurcation Sites That Typically Experience Higher Hemodynamic Stresses. Neurosurgery, 2013, 73, 497-505.	0.6	76
14	Endothelial Cell Layer Subjected to Impinging Flow Mimicking the Apex of an Arterial Bifurcation. Annals of Biomedical Engineering, 2008, 36, 1681-1689.	1.3	74
15	The Role of Myosin II Motor Activity in Distributing Myosin Asymmetrically and Coupling Protrusive Activity to Cell Translocation. Molecular Biology of the Cell, 2006, 17, 4435-4445.	0.9	73
16	A MODEL SYSTEM FORMAPPING VASCULARRESPONSES TO COMPLEX HEMODYNAMICS AT ARTERIAL BIFURCATIONS IN VIVO. Neurosurgery, 2006, 59, 1094-1101.	0.6	72
17	Progressive aneurysm development following hemodynamic insult. Journal of Neurosurgery, 2011, 114, 1095-1103.	0.9	67
18	Endothelial cells express a unique transcriptional profile under very high wall shear stress known to induce expansive arterial remodeling. American Journal of Physiology - Cell Physiology, 2012, 302, C1109-C1118.	2.1	65

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19	Nitric oxide-dependent stimulation of endothelial cell proliferation by sustained high flow. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 295, H736-H742.	1.5	61
20	Differential gene expression by endothelial cells under positive and negative streamwise gradients of high wall shear stress. American Journal of Physiology - Cell Physiology, 2013, 305, C854-C866.	2.1	48
21	Endothelial cell protrusion and migration in three-dimensional collagen matrices. Cytoskeleton, 2006, 63, 101-115.	4.4	46
22	The Asymmetric Vascular Stent. Stroke, 2009, 40, 959-965.	1.0	38
23	Increased Perviousness on CT for Acute Ischemic Stroke is Associated with Fibrin/Platelet-Rich Clots. American Journal of Neuroradiology, 2021, 42, 57-64.	1.2	36
24	A Critical Role for Proinflammatory Behavior of Smooth Muscle Cells in Hemodynamic Initiation of Intracranial Aneurysm. PLoS ONE, 2013, 8, e74357.	1.1	31
25	Biomarkers from circulating neutrophil transcriptomes have potential to detect unruptured intracranial aneurysms. Journal of Translational Medicine, 2018, 16, 373.	1.8	30
26	Asymmetric Vascular Stent. Stroke, 2008, 39, 2105-2113.	1.0	29
27	Aneurysmal Remodeling in the Circle of Willis after Carotid Occlusion in an Experimental Model. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 415-424.	2.4	28
28	Circulating neutrophil transcriptome may reveal intracranial aneurysm signature. PLoS ONE, 2018, 13, e0191407.	1.1	28
29	Potential of Machine-Vision Light Microscopy in Toxicologic Pathology. Toxicologic Pathology, 1994, 22, 145-159.	0.9	25
30	Mapping vascular response to in vivo Hemodynamics: application to increased flow at the basilar terminus. Biomechanics and Modeling in Mechanobiology, 2010, 9, 421-434.	1.4	25
31	Regulatory light chain phosphorylation and the assembly of myosin II into the cytoskeleton of microcapillary endothelial cells. Cytoskeleton, 1999, 43, 255-268.	4.4	24
32	Endothelial Nitric Oxide Synthase and Superoxide Mediate Hemodynamic Initiation of Intracranial Aneurysms. PLoS ONE, 2014, 9, e101721.	1.1	21
33	Asymmetry in the Distribution of Free versus Cytoskeletal Myosin II in Locomoting Microcapillary Endothelial Cells. Experimental Cell Research, 1997, 231, 66-82.	1.2	20
34	Fluorescent analogues of myosin II for tracking the behavior of different myosin isoforms in living cells. , 1998, 68, 389-401.		18
35	Hypertension and Estrogen Deficiency Augment Aneurysmal Remodeling in the Rabbit Circle of Willis in Response to Carotid Ligation. Anatomical Record, 2015, 298, 1903-1910.	0.8	15
36	Whole blood transcriptome biomarkers of unruptured intracranial aneurysm. PLoS ONE, 2020, 15, e0241838.	1.1	15

#	Article	IF	Citations
37	Assessment of Vascular Geometry for Bilateral Carotid Artery Ligation to Induce Early Basilar Terminus Aneurysmal Remodeling in Rats. Current Neurovascular Research, 2016, 13, 82-92.	0.4	13
38	Classification models using circulating neutrophil transcripts can detect unruptured intracranial aneurysm. Journal of Translational Medicine, 2020, 18, 392.	1.8	13
39	A role for microtubules in endothelial cell protrusion in threeâ€dimensional matrices. Biology of the Cell, 2012, 104, 271-286.	0.7	11
40	Epigenetic landscapes suggest that genetic risk for intracranial aneurysm operates on the endothelium. BMC Medical Genomics, 2019, 12, 149.	0.7	11
41	Endogenous animal models of intracranial aneurysm development: a review. Neurosurgical Review, 2021, 44, 2545-2570.	1.2	11
42	A machine learning pipeline revealing heterogeneous responses to drug perturbations on vascular smooth muscle cell spheroid morphology and formation. Scientific Reports, 2021, 11, 23285.	1.6	11
43	High Wall Shear Stress and Positive Wall Shear Stress Gradient Trigger the Initiation of Intracranial Aneurysms. , 2009, , .		6
44	RNA Sequencing Data from Human Intracranial Aneurysm Tissue Reveals a Complex Inflammatory Environment Associated with Rupture. Molecular Diagnosis and Therapy, 2021, 25, 775-790.	1.6	6
45	9.4T Magnetic Resonance Imaging of the Mouse Circle of Willis Enables Serial Characterization of Flow-Induced Vascular Remodeling by Computational Fluid Dynamics. Current Neurovascular Research, 2019, 15, 312-325.	0.4	6
46	Turnover rates at regulatory phosphorylation sites on myosin II in endothelial cells. , 1999, 75, 629-639.		5
47	The association between hemodynamics and wall characteristics in human intracranial aneurysms: a review. Neurosurgical Review, 2022, 45, 49-61.	1.2	5
48	Aneurysmal Changes at the Basilar Terminus in the Rabbit Elastase Aneurysm Model. American Journal of Neuroradiology, 2010, 31, E35-E36.	1.2	4
49	Identification of intima-to-media signals for flow-induced vascular remodeling using correlative gene expression analysis. Scientific Reports, 2021, 11, 16142.	1.6	4
50	Chapter 11 Regulation of Actin and Myosin II Dynamics in Living Cells. Current Topics in Membranes, 1991, 38, 187-206.	0.5	3
51	Inhibition of stretch-activated ion channels on endothelial cells disrupts nitric oxide-mediated arterial outward remodeling. Journal of Biorheology, 2010, 24, 77-83.	0.2	3
52	Tissue-specific distribution of a novel component of epithelial basement membranes. Experimental Cell Research, 1990, 189, 213-221.	1.2	2
53	Early Cellular and Molecular Changes During Hemodynamic Initiation of Intracranial Aneurysms in a Rabbit Model. , 2010, , .		0
54	Positive and Negative Wall Shear Stress Gradients Have Different Effects on Endothelial Phenotype Under High Wall Shear Stress. , 2011, , .		0

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55	Differential Gene Expression of Endothelial Cells Under High Wall Shear Stress and Spatial Gradients. , 2010, , .		0
56	Role of Hemodynamics in Initiation of Aneurysmal Remodeling. , 2010, , .		0
57	Differential Responses of Endothelial Cells to Positive and Negative Wall Shear Stress Gradients. , 2010, , .		0
58	Cellular and Molecular Control of Direct Cell Interactions. Proceedings of Lectures Held September 10-12, 1984, in Banyuls-sur-Mer, France.H.-J. Marthy. Quarterly Review of Biology, 1987, 62, 76-77.	0.0	0
59	The Cell in Contact. Adhesions and Junctions as Morphogenetic Determinants.Gerald M. Edelman , Jean-Paul Thiery. Quarterly Review of Biology, 1987, 62, 77-77.	0.0	0
60	Whole blood transcriptome biomarkers of unruptured intracranial aneurysm. , 2020, 15, e0241838.		0
61	Whole blood transcriptome biomarkers of unruptured intracranial aneurysm. , 2020, 15, e0241838.		0
62	Whole blood transcriptome biomarkers of unruptured intracranial aneurysm. , 2020, 15, e0241838.		0
63	Whole blood transcriptome biomarkers of unruptured intracranial aneurysm. , 2020, 15, e0241838.		0