John Kolega

List of Publications by Year
in descending order

63 papers	3,058 citations	218592 26 h-index	197736 49 g-index
64 all docs	64 docs citations	64 times ranked	3276 citing authors

#	Article	IF	Citations
1	The association between hemodynamics and wall characteristics in human intracranial aneurysms: a review. Neurosurgical Review, 2022, 45, 49-61.	1.2	5
2	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
3	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
4	Identification of intima-to-media signals for flow-induced vascular remodeling using correlative gene expression analysis. Scientific Reports, 2021, 11, 16142.	1.6	4
5	Endogenous animal models of intracranial aneurysm development: a review. Neurosurgical Review, 2021, 44, 2545-2570.	1.2	11
6	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
7	Classification models using circulating neutrophil transcripts can detect unruptured intracranial aneurysm. Journal of Translational Medicine, 2020, 18, 392.	1.8	13
8	Whole blood transcriptome biomarkers of unruptured intracranial aneurysm. PLoS ONE, 2020, 15, e0241838.	1.1	15
9	Whole blood transcriptome biomarkers of unruptured intracranial aneurysm. , 2020, 15, e0241838.		0
10	Whole blood transcriptome biomarkers of unruptured intracranial aneurysm. , 2020, 15, e0241838.		0
11	Whole blood transcriptome biomarkers of unruptured intracranial aneurysm. , 2020, 15, e0241838.		0
12	Whole blood transcriptome biomarkers of unruptured intracranial aneurysm. , 2020, 15, e0241838.		0
13	Epigenetic landscapes suggest that genetic risk for intracranial aneurysm operates on the endothelium. BMC Medical Genomics, 2019, 12, 149.	0.7	11
14	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
15	Biomarkers from circulating neutrophil transcriptomes have potential to detect unruptured intracranial aneurysms. Journal of Translational Medicine, 2018, 16, 373.	1.8	30
16	Circulating neutrophil transcriptome may reveal intracranial aneurysm signature. PLoS ONE, 2018, 13, e0191407.	1.1	28
17	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
18	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

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19	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
20	Endothelial Nitric Oxide Synthase and Superoxide Mediate Hemodynamic Initiation of Intracranial Aneurysms. PLoS ONE, 2014, 9, e101721.	1.1	21
21	High Wall Shear Stress and Spatial Gradients in Vascular Pathology: A Review. Annals of Biomedical Engineering, 2013, 41, 1411-1427.	1.3	275
22	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
23	Intracranial Aneurysms Occur More Frequently at Bifurcation Sites That Typically Experience Higher Hemodynamic Stresses. Neurosurgery, 2013, 73, 497-505.	0.6	76
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	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
26	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
27	A role for microtubules in endothelial cell protrusion in threeâ€dimensional matrices. Biology of the Cell, 2012, 104, 271-286.	0.7	11
28	Progressive aneurysm development following hemodynamic insult. Journal of Neurosurgery, 2011, 114, 1095-1103.	0.9	67
29	Positive and Negative Wall Shear Stress Gradients Have Different Effects on Endothelial Phenotype Under High Wall Shear Stress. , 2011, , .		0
30	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
31	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
32	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
33	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
34	Aneurysmal Changes at the Basilar Terminus in the Rabbit Elastase Aneurysm Model. American Journal of Neuroradiology, 2010, 31, E35-E36.	1.2	4
35	Early Cellular and Molecular Changes During Hemodynamic Initiation of Intracranial Aneurysms in a Rabbit Model. , 2010, , .		0
36	Characterization of Critical Hemodynamics Contributing to Aneurysmal Remodeling at the Basilar Terminus in a Rabbit Model. Stroke, 2010, 41, 1774-1782.	1.0	151

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37	Differential Gene Expression of Endothelial Cells Under High Wall Shear Stress and Spatial Gradients. , 2010, , .		0
38	Role of Hemodynamics in Initiation of Aneurysmal Remodeling. , 2010, , .		0
39	Differential Responses of Endothelial Cells to Positive and Negative Wall Shear Stress Gradients. , 2010, , .		0
40	The Asymmetric Vascular Stent. Stroke, 2009, 40, 959-965.	1.0	38
41	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
42	High Wall Shear Stress and Positive Wall Shear Stress Gradient Trigger the Initiation of Intracranial Aneurysms. , 2009, , .		6
43	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
44	Asymmetric Vascular Stent. Stroke, 2008, 39, 2105-2113.	1.0	29
45	Nascent Aneurysm Formation at the Basilar Terminus Induced by Hemodynamics. Stroke, 2008, 39, 2085-2090.	1.0	108
46	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
47	Complex Hemodynamics at the Apex of an Arterial Bifurcation Induces Vascular Remodeling Resembling Cerebral Aneurysm Initiation. Stroke, 2007, 38, 1924-1931.	1.0	504
48	A MODEL SYSTEM FORMAPPING VASCULARRESPONSES TO COMPLEX HEMODYNAMICS AT ARTERIAL BIFURCATIONS IN VIVO. Neurosurgery, 2006, 59, 1094-1101.	0.6	72
49	Endothelial cell protrusion and migration in three-dimensional collagen matrices. Cytoskeleton, 2006, 63, 101-115.	4.4	46
50	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
51	Phototoxicity and photoinactivation of blebbistatin in UV and visible light. Biochemical and Biophysical Research Communications, 2004, 320, 1020-1025.	1.0	165
52	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
53	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
54	Turnover rates at regulatory phosphorylation sites on myosin II in endothelial cells. , 1999, 75, 629-639.		5

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55	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
56	Fluorescent analogues of myosin II for tracking the behavior of different myosin isoforms in living cells. , 1998, 68, 389-401.		18
57	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
58	Potential of Machine-Vision Light Microscopy in Toxicologic Pathology. Toxicologic Pathology, 1994, 22, 145-159.	0.9	25
59	Chapter 11 Regulation of Actin and Myosin II Dynamics in Living Cells. Current Topics in Membranes, 1991, 38, 187-206.	0.5	3
60	Tissue-specific distribution of a novel component of epithelial basement membranes. Experimental Cell Research, 1990, 189, 213-221.	1.2	2
61	Basement membrane heterogeneity and variation in corneal epithelial differentiation. Differentiation, 1989, 42, 54-63.	1.0	92
62	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
63	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