

Richard J Price

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

96
papers

3,331
citations

31
h-index

56
g-index

104
ext. papers

3,833
ext. citations

6.6
avg, IF

5.36
L-index

#	Paper	IF	Citations
96	Direct in vivo visualization of intravascular destruction of microbubbles by ultrasound and its local effects on tissue. <i>Circulation</i> , 1998 , 98, 290-3	16.7	403
95	Delivery of colloidal particles and red blood cells to tissue through microvessel ruptures created by targeted microbubble destruction with ultrasound. <i>Circulation</i> , 1998 , 98, 1264-7	16.7	338
94	Non-invasive delivery of stealth, brain-penetrating nanoparticles across the blood-brain barrier using MRI-guided focused ultrasound. <i>Journal of Controlled Release</i> , 2014 , 189, 123-132	11.7	177
93	The role of mechanical stresses in microvascular remodeling. <i>Microcirculation</i> , 1996 , 3, 143-65	2.9	162
92	Drug and gene delivery across the blood-brain barrier with focused ultrasound. <i>Journal of Controlled Release</i> , 2015 , 219, 61-75	11.7	115
91	Targeted gene transfer to the brain via the delivery of brain-penetrating DNA nanoparticles with focused ultrasound. <i>Journal of Controlled Release</i> , 2016 , 223, 109-117	11.7	104
90	Influence of injection site, microvascular pressure and ultrasound variables on microbubble-mediated delivery of microspheres to muscle. <i>Journal of the American College of Cardiology</i> , 2002 , 39, 726-31	15.1	98
89	Immunohistochemical identification of arteriolar development using markers of smooth muscle differentiation. Evidence that capillary arterialization proceeds from terminal arterioles. <i>Circulation Research</i> , 1994 , 75, 520-7	15.7	97
88	Novel Focused Ultrasound Gene Therapy Approach Noninvasively Restores Dopaminergic Neuron Function in a Rat Parkinson's Disease Model. <i>Nano Letters</i> , 2017 , 17, 3533-3542	11.5	87
87	Stimulation of arteriogenesis in skeletal muscle by microbubble destruction with ultrasound. <i>Circulation</i> , 2002 , 106, 1550-5	16.7	78
86	A circumferential stress-growth rule predicts arcade arteriole formation in a network model. <i>Microcirculation</i> , 1995 , 2, 41-51	2.9	75
85	Targeted delivery of nanoparticles bearing fibroblast growth factor-2 by ultrasonic microbubble destruction for therapeutic arteriogenesis. <i>Small</i> , 2008 , 4, 1769-77	11	72
84	MR image-guided delivery of cisplatin-loaded brain-penetrating nanoparticles to invasive glioma with focused ultrasound. <i>Journal of Controlled Release</i> , 2017 , 263, 120-131	11.7	70
83	Immunohistochemical identification of an extracellular matrix scaffold that microguides capillary sprouting in vivo. <i>Journal of Histochemistry and Cytochemistry</i> , 2004 , 52, 1063-72	3.4	69
82	MicroRNA-146a Regulates Perfusion Recovery in Response to Arterial Occlusion Arteriogenesis. <i>Frontiers in Bioengineering and Biotechnology</i> , 2018 , 6, 1	5.8	61
81	Enhanced smooth muscle cell coverage of microvessels exposed to increased hemodynamic stresses in vivo. <i>Circulation Research</i> , 2003 , 92, 929-36	15.7	57
80	High-intensity focused ultrasound ablation enhancement in vivo via phase-shift nanodroplets compared to microbubbles. <i>Journal of Therapeutic Ultrasound</i> , 2015 , 3, 7		56

79	Focused Ultrasound Immunotherapy for Central Nervous System Pathologies: Challenges and Opportunities. <i>Theranostics</i> , 2017 , 7, 3608-3623	12.1	53
78	Ultrasound-activated agents comprised of 5FU-bearing nanoparticles bonded to microbubbles inhibit solid tumor growth and improve survival. <i>Molecular Therapy</i> , 2014 , 22, 321-328	11.7	53
77	Contrast ultrasound targeted drug and gene delivery: an update on a new therapeutic modality. <i>Journal of Cardiovascular Pharmacology and Therapeutics</i> , 2002 , 7, 171-80	2.6	51
76	Circumferential wall stress as a mechanism for arteriolar rarefaction and proliferation in a network model. <i>Microvascular Research</i> , 1994 , 47, 188-202	3.7	51
75	Augmentation of brain tumor interstitial flow via focused ultrasound promotes brain-penetrating nanoparticle dispersion and transfection. <i>Science Advances</i> , 2020 , 6, eaay1344	14.3	43
74	Spatial and temporal coordination of bone marrow-derived cell activity during arteriogenesis: regulation of the endogenous response and therapeutic implications. <i>Microcirculation</i> , 2010 , 17, 583-99	2.9	43
73	Microvascular remodeling and accelerated hyperemia blood flow restoration in arterially occluded skeletal muscle exposed to ultrasonic microbubble destruction. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2004 , 287, H2754-61	5.2	41
72	Small molecule inducers of angiogenesis for tissue engineering. <i>Tissue Engineering</i> , 2006 , 12, 1903-13		40
71	Inhibition of glioma growth by microbubble activation in a subcutaneous model using low duty cycle ultrasound without significant heating. <i>Journal of Neurosurgery</i> , 2011 , 114, 1654-61	3.2	39
70	Angiogenic stimulus determines the positioning of pericytes within capillary sprouts in vivo. <i>Microvascular Research</i> , 2003 , 65, 45-8	3.7	37
69	Covalently linking poly(lactic-co-glycolic acid) nanoparticles to microbubbles before intravenous injection improves their ultrasound-targeted delivery to skeletal muscle. <i>Small</i> , 2011 , 7, 1227-35	11	36
68	Markedly enhanced skeletal muscle transfection achieved by the ultrasound-targeted delivery of non-viral gene nanocarriers with microbubbles. <i>Journal of Controlled Release</i> , 2012 , 162, 414-21	11.7	33
67	Where Do New Arterioles Come From? Mechanical Forces and Microvessel Adaptation. <i>Microcirculation</i> , 1998 , 5, 91-94	2.9	32
66	Ultrasound-microbubble-induced neovascularization in mouse skeletal muscle. <i>Ultrasound in Medicine and Biology</i> , 2005 , 31, 1411-22	3.5	32
65	Mitochondrial dysfunction in neurological disorders: Exploring mitochondrial transplantation. <i>Npj Regenerative Medicine</i> , 2020 , 5, 22	15.8	30
64	Recent Advances in the Use of Focused Ultrasound for Magnetic Resonance Image-Guided Therapeutic Nanoparticle Delivery to the Central Nervous System. <i>Frontiers in Pharmacology</i> , 2019 , 10, 1348	5.6	30
63	Monocytes are recruited from venules during arteriogenesis in the murine spinotrapezius ligation model. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2014 , 34, 2012-22	9.4	26
62	Capillary sprout endothelial cells exhibit a CD36 low phenotype: regulation by shear stress and vascular endothelial growth factor-induced mechanism for attenuating anti-proliferative thrombospondin-1 signaling. <i>American Journal of Pathology</i> , 2008 , 173, 1220-8	5.8	26

61	Ultrasonic microbubble destruction stimulates therapeutic arteriogenesis via the CD18-dependent recruitment of bone marrow-derived cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2008 , 28, 1117-22	9.4	25
60	Sonoselective transfection of cerebral vasculature without blood-brain barrier disruption. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 5644-5654	11.5	24
59	Targeted therapeutic applications of acoustically active microspheres in the microcirculation. <i>Microcirculation</i> , 2006 , 13, 57-70	2.9	24
58	Computational network model prediction of hemodynamic alterations due to arteriolar remodeling in interval sprint trained skeletal muscle. <i>Microcirculation</i> , 2007 , 14, 181-92	2.9	22
57	Arteriolar remodeling in skeletal muscle of rats exposed to chronic hypoxia. <i>Journal of Vascular Research</i> , 1998 , 35, 238-44	1.9	22
56	Mechanisms of Amplified Arteriogenesis in Collateral Artery Segments Exposed to Reversed Flow Direction. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2015 , 35, 2354-65	9.4	21
55	Chronic alpha 1-adrenergic blockade stimulates terminal and arcade arteriolar development. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1996 , 271, H752-9	5.2	20
54	Capillary arterialization requires the bone-marrow-derived cell (BMC)-specific expression of chemokine (C-C motif) receptor-2, but BMCs do not transdifferentiate into microvascular smooth muscle. <i>Angiogenesis</i> , 2009 , 12, 355-63	10.6	19
53	Perspectives on Recent Progress in Focused Ultrasound Immunotherapy. <i>Theranostics</i> , 2019 , 9, 7749-7758	12.1	18
52	Laser speckle flowmetry method for measuring spatial and temporal hemodynamic alterations throughout large microvascular networks. <i>Microcirculation</i> , 2012 , 19, 619-31	2.9	17
51	Despite normal arteriogenic and angiogenic responses, hind limb perfusion recovery and necrotic and fibroadipose tissue clearance are impaired in matrix metalloproteinase 9-deficient mice. <i>Journal of Vascular Surgery</i> , 2015 , 61, 1583-94.e1-10	3.5	16
50	In vivo chemotactic properties and spatial expression of PDGF in developing mesenteric microvascular networks. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2001 , 280, H2116-25	5.2	16
49	Focused Ultrasound Hyperthermia Augments Release of Glioma-derived Extracellular Vesicles with Differential Immunomodulatory Capacity. <i>Theranostics</i> , 2020 , 10, 7436-7447	12.1	15
48	Bone marrow-derived cell-specific chemokine (C-C motif) receptor-2 expression is required for arteriolar remodeling. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2009 , 29, 1794-801	9.4	15
47	DNA Methyltransferase 1-Dependent DNA Hypermethylation Constrains Arteriogenesis by Augmenting Shear Stress Set Point. <i>Journal of the American Heart Association</i> , 2017 , 6,	6	13
46	Absence of OX-43 antigen expression in invasive capillary sprouts: identification of a capillary sprout-specific endothelial phenotype. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2004 , 286, H346-53	5.2	13
45	Hemodynamic stresses and structural remodeling of anastomosing arteriolar networks: design principles of collateral arterioles. <i>Microcirculation</i> , 2002 , 9, 111-24	2.9	13
44	Myoglobin overexpression inhibits reperfusion in the ischemic mouse hindlimb through impaired angiogenesis but not arteriogenesis. <i>American Journal of Pathology</i> , 2013 , 183, 1710-1718	5.8	12

43	Computational Network Model Prediction of Hemodynamic Alterations Due to Arteriolar Rarefaction and Estimation of Skeletal Muscle Perfusion in Peripheral Arterial Disease. <i>Microcirculation</i> , 2015 , 22, 360-9	2.9	12
42	Prazosin administration enhances proliferation of arteriolar adventitial fibroblasts. <i>Microvascular Research</i> , 1998 , 55, 138-45	3.7	12
41	Immunomodulation of intracranial melanoma in response to blood-tumor barrier opening with focused ultrasound. <i>Theranostics</i> , 2020 , 10, 8821-8833	12.1	12
40	ImmunoPET-informed sequence for focused ultrasound-targeted mCD47 blockade controls glioma. <i>Journal of Controlled Release</i> , 2021 , 331, 19-29	11.7	11
39	Parkinson's disease gene therapy: Will focused ultrasound and nanovectors be the next frontier?. <i>Movement Disorders</i> , 2019 , 34, 1279-1282	7	10
38	Exposure of Endothelium to Biomimetic Flow Waveforms Yields Identification of miR-199a-5p as a Potent Regulator of Arteriogenesis. <i>Molecular Therapy - Nucleic Acids</i> , 2018 , 12, 829-844	10.7	10
37	Trans-illuminated laser speckle imaging of collateral artery blood flow in ischemic mouse hindlimb. <i>Journal of Biomedical Optics</i> , 2013 , 18, 096011	3.5	10
36	Focused Ultrasound Preconditioning for Augmented Nanoparticle Penetration and Efficacy in the Central Nervous System. <i>Small</i> , 2019 , 15, e1903460	11	8
35	Contrast ultrasound targeted treatment of gliomas in mice via drug-bearing nanoparticle delivery and microvascular ablation. <i>Journal of Visualized Experiments</i> , 2010 ,	1.6	8
34	Acoustic attenuation by contrast agent microbubbles in superficial tissue markedly diminishes petechiae bioeffects in deep tissue. <i>Investigative Radiology</i> , 2008 , 43, 322-9	10.1	7
33	Epigenetic regulators of the revascularization response to chronic arterial occlusion. <i>Cardiovascular Research</i> , 2019 , 115, 701-712	9.9	6
32	Distribution of Cellular Proliferation in Skeletal Muscle Transverse Arterioles During Maturation. <i>Microcirculation</i> , 1998 , 5, 39-47	2.9	6
31	Vascular growth responses to chronic arterial occlusion are unaffected by myeloid specific focal adhesion kinase (FAK) deletion. <i>Scientific Reports</i> , 2016 , 6, 27029	4.9	6
30	Transcriptomic response of brain tissue to focused ultrasound-mediated blood-brain barrier disruption depends strongly on anesthesia. <i>Bioengineering and Translational Medicine</i> , 2021 , 6, e10198	14.8	6
29	Applications of Ultrasound to Stimulate Therapeutic Revascularization. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	5
28	Arteriolar and venular remodeling are differentially regulated by bone marrow-derived cell-specific CX3CR1 and CCR2 expression. <i>PLoS ONE</i> , 2012 , 7, e46312	3.7	5
27	Influence of poly(D,L-lactic-co-glycolic acid) microsphere degradation on arteriolar remodeling in the mouse dorsal skinfold window chamber. <i>Journal of Biomedical Materials Research - Part A</i> , 2009 , 91, 317-23	5.4	4
26	Combination of thermally ablative focused ultrasound with gemcitabine controls breast cancer via adaptive immunity 2020 , 8,		4

25	Single-cell mapping of focused ultrasound-transfected brain. <i>Gene Therapy</i> , 2021 ,	4	4
24	Deconvolution of the immunological contexture of mouse tumors with multiplexed immunohistochemistry. <i>Methods in Enzymology</i> , 2020 , 635, 81-93	1.7	3
23	Computational model of brain endothelial cell signaling pathways predicts therapeutic targets for cerebral pathologies. <i>Journal of Molecular and Cellular Cardiology</i> , 2021 , 164, 17-28	5.8	3
22	Multiple regression analysis of a comprehensive transcriptomic data assembly elucidates mechanically- and biochemically-driven responses to focused ultrasound blood-brain barrier disruption. <i>Theranostics</i> , 2021 , 11, 9847-9858	12.1	3
21	Functional intersections between extracellular vesicles and oncolytic therapies. <i>Trends in Pharmacological Sciences</i> , 2021 , 42, 883-896	13.2	3
20	Microvascular volume contribution to hemorrhage compensation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1993 , 264, H2085-93	5.2	2
19	Sonodynamic therapy: Rapid progress and new opportunities for non-invasive tumor cell killing with sound.. <i>Cancer Letters</i> , 2022 , 532, 215592	9.9	2
18	The partitioning of nanoparticles to endothelium or interstitium during ultrasound-microbubble-targeted delivery depends on peak-negative pressure. <i>Journal of Nanoparticle Research</i> , 2015 , 17, 1	2.3	1
17	Profiling of the immune landscape in murine glioblastoma following blood brain/tumor barrier disruption with MR image-guided focused ultrasound. <i>Journal of Neuro-Oncology</i> , 2021 , 1	4.8	1
16	Ultrasound-targeted nucleic acid delivery for solid tumor therapy. <i>Journal of Controlled Release</i> , 2021 , 339, 531-546	11.7	1
15	CCR2+ and CX3CR1+ Bone Marrow-Derived Cells Differentially Regulate Microvascular Remodeling in an Inflammation/Injury Model Without Transdifferentiating into Smooth Muscle. <i>FASEB Journal</i> , 2009 , 23, 9.1	0.9	1
14	Bioengineering Angiogenesis: Novel Approaches to Stimulating Microvessel Growth and Remodeling 2006 , 125-157		
13	Microvascular Diameter Responses to the Controlled Release of Platelet Derived Growth Factor-BB (PDGF-BB) and Transforming Growth Factor- β (TGF- β). <i>FASEB Journal</i> , 2006 , 20, A709	0.9	
12	Small Molecule Inducers of Angiogenesis for Tissue Engineering. <i>Tissue Engineering</i> , 2006 , 060706073730072		
11	Small Molecule Inducers of Angiogenesis for Tissue Engineering. <i>Tissue Engineering</i> , 2006 , 060802052515050		
10	CD36 is Downregulated by VEGF-A and the Removal of Wall Shear Stress: Implications for the Regulation of a CD36- Capillary Sprout Specific Endothelial Phenotype.. <i>FASEB Journal</i> , 2007 , 21, A1216	0.9	
9	VEGF-A Induces a CD36 ^{low} Endothelial Cell Phenotype by Activating a MAPK-Dependent Pathway: Novel Mechanism for Sustaining Proliferation in the Presence of TSP-1. <i>FASEB Journal</i> , 2008 , 22, 49.5	0.9	
8	A Platform for Enhanced Contrast Ultrasound Targeted Delivery of Therapeutics. <i>FASEB Journal</i> , 2009 , 23, 594.2	0.9	

- 7 Perfusion Restoration Following Femoral Artery Occlusion is Markedly Inhibited in Mice with MMP9 Deficient Bone-Marrow Derived Cells. *FASEB Journal*, **2010**, 24, 774.8 0.9
- 6 An Experimental and Computational Systems Approach for Studying How Hemodynamics and Bone Marrow-Derived Cells Coordinate to Regulate Microvascular Remodeling. *FASEB Journal*, **2010**, 24, 974.4^{0.9}
- 5 Accelerated Arteriogenesis In Collateral Arterial Segments Exposed To Flow Reversal After Femoral Arterial Ligation. *FASEB Journal*, **2012**, 26, 682.8 0.9
- 4 Collateral Artery Blood Flow Measurements Made in the Mouse Ischemic Hindlimb Model Using Deep Laser Speckle Imaging. *FASEB Journal*, **2012**, 26, 679.2 0.9
- 3 Monocyte Recruitment during Microvascular Arteriogenesis is Induced by Altered Flow and Influenced by Proximity of Venules to Collateral Arterioles. *FASEB Journal*, **2013**, 27, 685.8 0.9
- 2 Shear stress reversal amplifies arteriogenesis in the mouse ischemic hindlimb model and augments a pro-arteriogenic ICAM-1^{hi}/KLF2^{hi} endothelial phenotype. *FASEB Journal*, **2013**, 27, 527.2 0.9
- 1 Distribution of cellular proliferation in skeletal muscle transverse arterioles during maturation. *Microcirculation*, **1998**, 5, 39-47 2.9