Richard J Price

List of Publications by Year in Descending Order

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	Sonodynamic therapy: Rapid progress and new opportunities for non-invasive tumor cell killing with sound.. *Cancer Letters*, **2022**, 532, 215592	9.9	2
95	Profiling of the immune landscape in murine glioblastoma following blood brain/tumor barrier disruption with MR image-guided focused ultrasound. *Journal of Neuro-Oncology*, **2021**, 1	4.8	1
94	Computational model of brain endothelial cell signaling pathways predicts therapeutic targets for cerebral pathologies. *Journal of Molecular and Cellular Cardiology*, **2021**, 164, 17-28	5.8	3
93	Multiple regression analysis of a comprehensive transcriptomic data assembly elucidates mechanically- and biochemically-driven responses to focused ultrasound blood-brain barrier disruption. *Theranostics*, **2021**, 11, 9847-9858	12.1	3
92	Ultrasound-targeted nucleic acid delivery for solid tumor therapy. *Journal of Controlled Release*, **2021**, 339, 531-546	11.7	1
91	Transcriptomic response of brain tissue to focused ultrasound-mediated blood-brain barrier disruption depends strongly on anesthesia. *Bioengineering and Translational Medicine*, **2021**, 6, e10198	14.8	6
90	Single-cell mapping of focused ultrasound-transfected brain. *Gene Therapy*, **2021**,	4	4
89	ImmunoPET-informed sequence for focused ultrasound-targeted mCD47 blockade controls glioma. *Journal of Controlled Release*, **2021**, 331, 19-29	11.7	11
88	Functional intersections between extracellular vesicles and oncolytic therapies. *Trends in Pharmacological Sciences*, **2021**, 42, 883-896	13.2	3
87	Mitochondrial dysfunction in neurological disorders: Exploring mitochondrial transplantation. *Npj Regenerative Medicine*, **2020**, 5, 22	15.8	30
86	Augmentation of brain tumor interstitial flow via focused ultrasound promotes brain-penetrating nanoparticle dispersion and transfection. *Science Advances*, **2020**, 6, eaay1344	14.3	43
85	Sonoselective transfection of cerebral vasculature without blood-brain barrier disruption. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 5644-5654	11.5	24
84	Focused Ultrasound Hyperthermia Augments Release of Glioma-derived Extracellular Vesicles with Differential Immunomodulatory Capacity. *Theranostics*, **2020**, 10, 7436-7447	12.1	15
83	Deconvolution of the immunological contexture of mouse tumors with multiplexed immunohistochemistry. *Methods in Enzymology*, **2020**, 635, 81-93	1.7	3
82	Immunomodulation of intracranial melanoma in response to blood-tumor barrier opening with focused ultrasound. *Theranostics*, **2020**, 10, 8821-8833	12.1	12
81	Combination of thermally ablative focused ultrasound with gemcitabine controls breast cancer via adaptive immunity **2020**, 8,		4
80	Epigenetic regulators of the revascularization response to chronic arterial occlusion. *Cardiovascular Research*, **2019**, 115, 701-712	9.9	6

79	Parkinson's disease gene therapy: Will focused ultrasound and nanovectors be the next frontier?. *Movement Disorders*, **2019**, 34, 1279-1282	7	10
78	Applications of Ultrasound to Stimulate Therapeutic Revascularization. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	5
77	Recent Advances in the Use of Focused Ultrasound for Magnetic Resonance Image-Guided Therapeutic Nanoparticle Delivery to the Central Nervous System. *Frontiers in Pharmacology*, **2019**, 10, 1348	5.6	30
76	Perspectives on Recent Progress in Focused Ultrasound Immunotherapy. *Theranostics*, **2019**, 9, 7749-7758	12.1	18
75	Focused Ultrasound Preconditioning for Augmented Nanoparticle Penetration and Efficacy in the Central Nervous System. *Small*, **2019**, 15, e1903460	11	8
74	MicroRNA-146a Regulates Perfusion Recovery in Response to Arterial Occlusion Arteriogenesis. *Frontiers in Bioengineering and Biotechnology*, **2018**, 6, 1	5.8	61
73	Exposure of Endothelium to Biomimetic Flow Waveforms Yields Identification of miR-199a-5p as a Potent Regulator of Arteriogenesis. *Molecular Therapy - Nucleic Acids*, **2018**, 12, 829-844	10.7	10
72	Novel Focused Ultrasound Gene Therapy Approach Noninvasively Restores Dopaminergic Neuron Function in a Rat Parkinson's Disease Model. *Nano Letters*, **2017**, 17, 3533-3542	11.5	87
71	MR image-guided delivery of cisplatin-loaded brain-penetrating nanoparticles to invasive glioma with focused ultrasound. *Journal of Controlled Release*, **2017**, 263, 120-131	11.7	70
70	DNA Methyltransferase 1-Dependent DNA Hypermethylation Constrains Arteriogenesis by Augmenting Shear Stress Set Point. *Journal of the American Heart Association*, **2017**, 6,	6	13
69	Focused Ultrasound Immunotherapy for Central Nervous System Pathologies: Challenges and Opportunities. *Theranostics*, **2017**, 7, 3608-3623	12.1	53
68	Targeted gene transfer to the brain via the delivery of brain-penetrating DNA nanoparticles with focused ultrasound. *Journal of Controlled Release*, **2016**, 223, 109-117	11.7	104
67	Vascular growth responses to chronic arterial occlusion are unaffected by myeloid specific focal adhesion kinase (FAK) deletion. *Scientific Reports*, **2016**, 6, 27029	4.9	6
66	Drug and gene delivery across the blood-brain barrier with focused ultrasound. *Journal of Controlled Release*, **2015**, 219, 61-75	11.7	115
65	Mechanisms of Amplified Arteriogenesis in Collateral Artery Segments Exposed to Reversed Flow Direction. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2015**, 35, 2354-65	9.4	21
64	The partitioning of nanoparticles to endothelium or interstitium during ultrasound-microbubble-targeted delivery depends on peak-negative pressure. *Journal of Nanoparticle Research*, **2015**, 17, 1	2.3	1
63	Despite normal arteriogenic and angiogenic responses, hind limb perfusion recovery and necrotic and fibroadipose tissue clearance are impaired in matrix metalloproteinase 9-deficient mice. *Journal of Vascular Surgery*, **2015**, 61, 1583-94.e1-10	3.5	16
62	High-intensity focused ultrasound ablation enhancement in vivo via phase-shift nanodroplets compared to microbubbles. *Journal of Therapeutic Ultrasound*, **2015**, 3, 7		56

61	Computational Network Model Prediction of Hemodynamic Alterations Due to Arteriolar Rarefaction and Estimation of Skeletal Muscle Perfusion in Peripheral Arterial Disease. *Microcirculation*, **2015**, 22, 360-9	2.9	12
60	Non-invasive delivery of stealth, brain-penetrating nanoparticles across the blood-brain barrier using MRI-guided focused ultrasound. *Journal of Controlled Release*, **2014**, 189, 123-132	11.7	177
59	Ultrasound-activated agents comprised of 5FU-bearing nanoparticles bonded to microbubbles inhibit solid tumor growth and improve survival. *Molecular Therapy*, **2014**, 22, 321-328	11.7	53
58	Monocytes are recruited from venules during arteriogenesis in the murine spinotrapezius ligation model. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2014**, 34, 2012-22	9.4	26
57	Myoglobin overexpression inhibits reperfusion in the ischemic mouse hindlimb through impaired angiogenesis but not arteriogenesis. *American Journal of Pathology*, **2013**, 183, 1710-1718	5.8	12
56	Trans-illuminated laser speckle imaging of collateral artery blood flow in ischemic mouse hindlimb. *Journal of Biomedical Optics*, **2013**, 18, 096011	3.5	10
55	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	
54	Shear stress reversal amplifies arteriogenesis in the mouse ischemic hindlimb model and augments a pro-arteriogenic ICAM-1hi/KLF2hi endothelial phenotype. *FASEB Journal*, **2013**, 27, 527.2	0.9	
53	Laser speckle flowmetry method for measuring spatial and temporal hemodynamic alterations throughout large microvascular networks. *Microcirculation*, **2012**, 19, 619-31	2.9	17
52	Markedly enhanced skeletal muscle transfection achieved by the ultrasound-targeted delivery of non-viral gene nanocarriers with microbubbles. *Journal of Controlled Release*, **2012**, 162, 414-21	11.7	33
51	Arteriolar and venular remodeling are differentially regulated by bone marrow-derived cell-specific CX3CR1 and CCR2 expression. *PLoS ONE*, **2012**, 7, e46312	3.7	5
50	Accelerated Arteriogenesis In Collateral Arterial Segments Exposed To Flow Reversal After Femoral Arterial Ligation. *FASEB Journal*, **2012**, 26, 682.8	0.9	
49	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	
48	Covalently linking poly(lactic-co-glycolic acid) nanoparticles to microbubbles before intravenous injection improves their ultrasound-targeted delivery to skeletal muscle. *Small*, **2011**, 7, 1227-35	11	36
47	Inhibition of glioma growth by microbubble activation in a subcutaneous model using low duty cycle ultrasound without significant heating. *Journal of Neurosurgery*, **2011**, 114, 1654-61	3.2	39
46	Spatial and temporal coordination of bone marrow-derived cell activity during arteriogenesis: regulation of the endogenous response and therapeutic implications. *Microcirculation*, **2010**, 17, 583-99	2.9	43
45	Contrast ultrasound targeted treatment of gliomas in mice via drug-bearing nanoparticle delivery and microvascular ablation. *Journal of Visualized Experiments*, **2010**,	1.6	8
44	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	

43	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	
42	Bone marrow-derived cell-specific chemokine (C-C motif) receptor-2 expression is required for arteriolar remodeling. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2009**, 29, 1794-801	9.4	15
41	Influence of poly(D,L-lactic-co-glycolic acid) microsphere degradation on arteriolar remodeling in the mouse dorsal skinfold window chamber. *Journal of Biomedical Materials Research - Part A*, **2009**, 91, 317-23	5.4	4
40	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. *Angiogenesis*, **2009**, 12, 355-63	10.6	19
39	CCR2+ and CX3CR1+ Bone Marrow-Derived Cells Differentially Regulate Microvascular Remodeling in an Inflammation/Injury Model Without Transdifferentiating into Smooth Muscle. *FASEB Journal*, **2009**, 23, 9.1	0.9	1
38	A Platform for Enhanced Contrast Ultrasound Targeted Delivery of Therapeutics. *FASEB Journal*, **2009**, 23, 594.2	0.9	
37	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. *American Journal of Pathology*, **2008**, 173, 1220-8	5.8	26
36	Ultrasonic microbubble destruction stimulates therapeutic arteriogenesis via the CD18-dependent recruitment of bone marrow-derived cells. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2008**, 28, 1117-22	9.4	25
35	Acoustic attenuation by contrast agent microbubbles in superficial tissue markedly diminishes petechiae bioeffects in deep tissue. *Investigative Radiology*, **2008**, 43, 322-9	10.1	7
34	Targeted delivery of nanoparticles bearing fibroblast growth factor-2 by ultrasonic microbubble destruction for therapeutic arteriogenesis. *Small*, **2008**, 4, 1769-77	11	72
33	VEGF-A Induces a CD36low Endothelial Cell Phenotype by Activating a MAPK-Dependent Pathway: Novel Mechanism for Sustaining Proliferation in the Presence of TSP-1. *FASEB Journal*, **2008**, 22, 49.5	0.9	
32	Computational network model prediction of hemodynamic alterations due to arteriolar remodeling in interval sprint trained skeletal muscle. *Microcirculation*, **2007**, 14, 181-92	2.9	22
31	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.. *FASEB Journal*, **2007**, 21, A1216	0.9	
30	Small molecule inducers of angiogenesis for tissue engineering. *Tissue Engineering*, **2006**, 12, 1903-13		40
29	Bioengineering Angiogenesis: Novel Approaches to Stimulating Microvessel Growth and Remodeling **2006**, 125-157		
28	Targeted therapeutic applications of acoustically active microspheres in the microcirculation. *Microcirculation*, **2006**, 13, 57-70	2.9	24
27	Microvascular Diameter Responses to the Controlled Release of Platelet Derived Growth Factor-BB (PDGF-BB) and Transforming Growth Factor-β1 (TGF-β1). *FASEB Journal*, **2006**, 20, A709	0.9	
26	Small Molecule Inducers of Angiogenesis for Tissue Engineering. *Tissue Engineering*, **2006**, 060706073730072		

25	Small Molecule Inducers of Angiogenesis for Tissue Engineering. *Tissue Engineering*, **2006**, 060802052515050		
24	Ultrasound-microbubble-induced neovascularization in mouse skeletal muscle. *Ultrasound in Medicine and Biology*, **2005**, 31, 1411-22	3.5	32
23	Absence of OX-43 antigen expression in invasive capillary sprouts: identification of a capillary sprout-specific endothelial phenotype. *American Journal of Physiology - Heart and Circulatory Physiology*, **2004**, 286, H346-53	5.2	13
22	Immunohistochemical identification of an extracellular matrix scaffold that microguides capillary sprouting in vivo. *Journal of Histochemistry and Cytochemistry*, **2004**, 52, 1063-72	3.4	69
21	Microvascular remodeling and accelerated hyperemia blood flow restoration in arterially occluded skeletal muscle exposed to ultrasonic microbubble destruction. *American Journal of Physiology - Heart and Circulatory Physiology*, **2004**, 287, H2754-61	5.2	41
20	Angiogenic stimulus determines the positioning of pericytes within capillary sprouts in vivo. *Microvascular Research*, **2003**, 65, 45-8	3.7	37
19	Enhanced smooth muscle cell coverage of microvessels exposed to increased hemodynamic stresses in vivo. *Circulation Research*, **2003**, 92, 929-36	15.7	57
18	Stimulation of arteriogenesis in skeletal muscle by microbubble destruction with ultrasound. *Circulation*, **2002**, 106, 1550-5	16.7	78
17	Contrast ultrasound targeted drug and gene delivery: an update on a new therapeutic modality. *Journal of Cardiovascular Pharmacology and Therapeutics*, **2002**, 7, 171-80	2.6	51
16	Influence of injection site, microvascular pressure and ultrasound variables on microbubble-mediated delivery of microspheres to muscle. *Journal of the American College of Cardiology*, **2002**, 39, 726-31	15.1	98
15	Hemodynamic stresses and structural remodeling of anastomosing arteriolar networks: design principles of collateral arterioles. *Microcirculation*, **2002**, 9, 111-24	2.9	13
14	In vivo chemotactic properties and spatial expression of PDGF in developing mesenteric microvascular networks. *American Journal of Physiology - Heart and Circulatory Physiology*, **2001**, 280, H2116-25	5.2	16
13	Distribution of Cellular Proliferation in Skeletal Muscle Transverse Arterioles During Maturation. *Microcirculation*, **1998**, 5, 39-47	2.9	6
12	Where Do New Arterioles Come From? Mechanical Forces and Microvessel Adaptation. *Microcirculation*, **1998**, 5, 91-94	2.9	32
11	Prazosin administration enhances proliferation of arteriolar adventitial fibroblasts. *Microvascular Research*, **1998**, 55, 138-45	3.7	12
10	Delivery of colloidal particles and red blood cells to tissue through microvessel ruptures created by targeted microbubble destruction with ultrasound. *Circulation*, **1998**, 98, 1264-7	16.7	338
9	Direct in vivo visualization of intravascular destruction of microbubbles by ultrasound and its local effects on tissue. *Circulation*, **1998**, 98, 290-3	16.7	403
8	Arteriolar remodeling in skeletal muscle of rats exposed to chronic hypoxia. *Journal of Vascular Research*, **1998**, 35, 238-44	1.9	22

7	Distribution of cellular proliferation in skeletal muscle transverse arterioles during maturation. *Microcirculation*, **1998**, 5, 39-47	2.9	
6	Chronic alpha 1-adrenergic blockade stimulates terminal and arcade arteriolar development. *American Journal of Physiology - Heart and Circulatory Physiology*, **1996**, 271, H752-9	5.2	20
5	The role of mechanical stresses in microvascular remodeling. *Microcirculation*, **1996**, 3, 143-65	2.9	162
4	A circumferential stress-growth rule predicts arcade arteriole formation in a network model. *Microcirculation*, **1995**, 2, 41-51	2.9	75
3	Immunohistochemical identification of arteriolar development using markers of smooth muscle differentiation. Evidence that capillary arterialization proceeds from terminal arterioles. *Circulation Research*, **1994**, 75, 520-7	15.7	97
2	Circumferential wall stress as a mechanism for arteriolar rarefaction and proliferation in a network model. *Microvascular Research*, **1994**, 47, 188-202	3.7	51
1	Microvascular volume contribution to hemorrhage compensation. *American Journal of Physiology - Heart and Circulatory Physiology*, **1993**, 264, H2085-93	5.2	2