

# Zoltán Benyó<sup>3</sup>

## List of Publications by Year in descending order

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Version: 2024-02-01

84  
papers

2,522  
citations

331259

21  
h-index

214527

47  
g-index

88  
all docs

88  
docs citations

88  
times ranked

3601  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | G12-G13 $\beta$ "LARG $\beta$ " mediated signaling in vascular smooth muscle is required for salt-induced hypertension. <i>Nature Medicine</i> , 2008, 14, 64-68.  | 15.2 | 584       |
| 2  | GPR109A (PUMA-G/HM74A) mediates nicotinic acid $\beta$ induced flushing. <i>Journal of Clinical Investigation</i> , 2005, 115, 3634-3640.  | 3.9  | 297       |
| 3  | Nicotinic Acid-Induced Flushing Is Mediated by Activation of Epidermal Langerhans Cells. <i>Molecular Pharmacology</i> , 2006, 70, 1844-1849.  | 1.0  | 194       |
| 4  | Microglia modulate blood flow, neurovascular coupling, and hypoperfusion via purinergic actions. <i>Journal of Experimental Medicine</i> , 2022, 219, .  | 4.2  | 94        |
| 5  | Treatment with the poly(ADP-ribose) polymerase inhibitor PJ-34 improves cerebrovascular endothelial function, neurovascular coupling responses and cognitive performance in aged mice, supporting the NAD $^{+}$ depletion hypothesis of neurovascular aging. <i>GeroScience</i> , 2019, 41, 533-542.  | 2.1  | 84        |
| 6  | Nrf2 dysfunction and impaired cellular resilience to oxidative stressors in the aged vasculature: from increased cellular senescence to the pathogenesis of age-related vascular diseases. <i>GeroScience</i> , 2019, 41, 727-738.   | 2.1  | 80        |
| 7  | Urothelial cells produce hydrogen peroxide through the activation of Duox1. <i>Free Radical Biology and Medicine</i> , 2010, 49, 2040-2048.  | 1.3  | 78        |
| 8  | Endocannabinoids in cerebrovascular regulation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016, 310, H785-H801.   | 1.5  | 70        |
| 9  | Activation of the miR-17 Family and miR-21 During Murine Kidney Ischemia-Reperfusion Injury. <i>Nucleic Acid Therapeutics</i> , 2013, 23, 344-354.   | 2.0  | 52        |
| 10 | Elevated systemic TGF- $\beta$ 2 impairs aortic vasomotor function through activation of NADPH oxidase-driven superoxide production and leads to hypertension, myocardial remodeling, and increased plaque formation in apoE $^{-/-}$ mice. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2010, 299, H386-H395. | 1.5  | 51        |
| 11 | Modulated electro-hyperthermia induced loco-regional and systemic tumor destruction in colorectal cancer allografts. <i>Journal of Cancer</i> , 2018, 9, 41-53.  | 1.2  | 51        |
| 12 | Treatment with the BCL-2/BCL-xL inhibitor senolytic drug ABT263/Navitoclax improves functional hyperemia in aged mice. <i>GeroScience</i> , 2021, 43, 2427-2440.   | 2.1  | 40        |
| 13 | IGF1R signaling regulates astrocyte-mediated neurovascular coupling in mice: implications for brain aging. <i>GeroScience</i> , 2021, 43, 901-911.   | 2.1  | 35        |
| 14 | Endocannabinoid-mediated modulation of Gq/11 protein-coupled receptor signaling-induced vasoconstriction and hypertension. <i>Molecular and Cellular Endocrinology</i> , 2015, 403, 46-56.   | 1.6  | 31        |
| 15 | Endothelial deficiency of insulin-like growth factor-1 receptor (IGF1R) impairs neurovascular coupling responses in mice, mimicking aspects of the brain aging phenotype. <i>GeroScience</i> , 2021, 43, 2387-2394.  | 2.1  | 31        |
| 16 | Involvement of Thromboxane A2 in the Mediation of the Contractile Effect Induced by Inhibition of Nitric Oxide Synthesis in Isolated Rat Middle Cerebral Arteries. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1998, 18, 616-618.   | 2.4  | 30        |
| 17 | Evaluation of Laser Speckle Contrast Imaging for the Assessment of Oral Mucosal Blood Flow following Periodontal Plastic Surgery: An Exploratory Study. <i>BioMed Research International</i> , 2017, 2017, 1-11.   | 0.9  | 29        |
| 18 | Exhaustion of Protective Heat Shock Response Induces Significant Tumor Damage by Apoptosis after Modulated Electro-Hyperthermia Treatment of Triple Negative Breast Cancer Isografts in Mice. <i>Cancers</i> , 2020, 12, 2581.   | 1.7  | 27        |

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|----|--|-----|-----------|
| 19 | Functional importance of neuronal nitric oxide synthase in the endothelium of rat basilar arteries. <i>Brain Research</i> , 2000, 877, 79-84.  | 1.1 | 25        |
| 20 | Role of Endocannabinoids and Cannabinoid-1 Receptors in Cerebrocortical Blood Flow Regulation. <i>PLoS ONE</i> , 2013, 8, e53390.  | 1.1 | 25        |
| 21 | Insulin resistance in an animal model of polycystic ovary disease is aggravated by vitamin D deficiency: Vascular consequences. <i>Diabetes and Vascular Disease Research</i> , 2018, 15, 294-301.   | 0.9 | 24        |
| 22 | Endothelial NOS-Mediated Relaxations of Isolated Thoracic Aorta of the C57BL/6J Mouse. <i>Journal of Cardiovascular Pharmacology</i> , 2005, 45, 225-231.  | 0.8 | 22        |
| 23 | Lysophosphatidic acid induces vasodilation mediated by LPA <sub>1</sub> receptors, phospholipase C, and endothelial nitric oxide synthase. <i>FASEB Journal</i> , 2014, 28, 880-890.   | 0.2 | 20        |
| 24 | LPA <sub>1</sub> receptor-mediated thromboxane A <sub>2</sub> release is responsible for lysophosphatidic acid-induced vascular smooth muscle contraction. <i>FASEB Journal</i> , 2017, 31, 1547-1555.   | 0.2 | 20        |
| 25 | Nicotinic acid suppresses sebaceous lipogenesis of human sebocytes via activating hydroxycarboxylic acid receptor 2 (HCA <sub>2</sub> ). <i>Journal of Cellular and Molecular Medicine</i> , 2019, 23, 6203-6214.  | 1.6 | 20        |
| 26 | Reduced Estradiol-Induced Vasodilation and Poly-(ADP-Ribose) Polymerase (PARP) Activity in the Aortas of Rats with Experimental Polycystic Ovary Syndrome (PCOS). <i>PLoS ONE</i> , 2013, 8, e55589.   | 1.1 | 19        |
| 27 | Vitamin D deficiency causes inward hypertrophic remodeling and alters vascular reactivity of rat cerebral arterioles. <i>PLoS ONE</i> , 2018, 13, e0192480.  | 1.1 | 19        |
| 28 | Activated neutrophils inhibit cerebrovascular endothelium-dependent relaxations. <i>Life Sciences</i> , 1991, 49, 1087-1094.   | 2.0 | 18        |
| 29 | Adaptation of the hypothalamic blood flow to chronic nitric oxide deficiency is independent of vasodilator prostanoids. <i>Brain Research</i> , 2007, 1131, 129-137.   | 1.1 | 18        |
| 30 | Gender, hyperandrogenism and vitamin D deficiency related functional and morphological alterations of rat cerebral arteries. <i>PLoS ONE</i> , 2019, 14, e0216951.   | 1.1 | 17        |
| 31 | Adaptation of the cerebrocortical circulation to carotid artery occlusion involves blood flow redistribution between cortical regions and is independent of eNOS. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016, 311, H972-H980. | 1.5 | 16        |
| 32 | Stress-Induced, p53-Mediated Tumor Growth Inhibition of Melanoma by Modulated Electrohyperthermia in Mouse Models without Major Immunogenic Effects. <i>International Journal of Molecular Sciences</i> , 2019, 20, 4019.  | 1.8 | 16        |
| 33 | Role of platelet-activating factor in the development of endothelial dysfunction in hemorrhagic hypotension and retransfusion. <i>Thrombosis Research</i> , 1992, 66, 23-31.   | 0.8 | 15        |
| 34 | Hypothalamic blood flow remains unaltered following chronic nitric oxide synthase blockade in rats. <i>Neuroscience Letters</i> , 1995, 198, 127-130.  | 1.0 | 15        |
| 35 | Contribution of the Heme Oxygenase Pathway to the Maintenance of the Hypothalamic Blood Flow during Diminished Nitric Oxide Synthesis. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2003, 23, 653-657.   | 2.4 | 15        |
| 36 | Old blood from heterochronic parabionts accelerates vascular aging in young mice: transcriptomic signature of pathologic smooth muscle remodeling. <i>GeroScience</i> , 2022, 44, 953-981.   | 2.1 | 15        |

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|----|---|-----|-----------|
| 37 | Nimodipine prevents early loss of hippocampal CA1 parvalbumin immunoreactivity after focal cerebral ischemia in the rat. <i>Brain Research Bulletin</i> , 1995, 36, 569-572.                                      | 1.4 | 13        |
| 38 | The cerebrocortical microcirculatory effect of nitric oxide synthase blockade is dependent upon baseline red blood cell flow in the rat. <i>Neuroscience Letters</i> , 2000, 291, 65-68.                          | 1.0 | 13        |
| 39 | Hypersensitivity to Thromboxane Receptor Mediated Cerebral Vasomotion and CBF Oscillations during Acute NO-Deficiency in Rats. <i>PLoS ONE</i> , 2010, 5, e14477.   | 1.1 | 13        |
| 40 | Effects of vitamin D3 derivative " calcitriol on pharmacological reactivity of aortic rings in a rodent PCOS model. <i>Pharmacological Reports</i> , 2013, 65, 476-483.   | 1.5 | 13        |
| 41 | Endothelial relaxation mechanisms and nitrative stress are partly restored by Vitamin D3 therapy in a rat model of polycystic ovary syndrome. <i>Life Sciences</i> , 2013, 93, 133-138.                           | 2.0 | 13        |
| 42 | Modulated Electro-Hyperthermia Induces a Prominent Local Stress Response and Growth Inhibition in Mouse Breast Cancer Isografts. <i>Cancers</i> , 2021, 13, 1744.   | 1.7 | 13        |
| 43 | Role of nitric oxide and thromboxane in the maintenance of cerebrovascular tone. <i>Kidney International</i> , 1998, 54, S218-S220.   | 2.6 | 12        |
| 44 | Modulated Electro-Hyperthermia Resolves Radioresistance of Panc1 Pancreas Adenocarcinoma and Promotes DNA Damage and Apoptosis In Vitro. <i>International Journal of Molecular Sciences</i> , 2020, 21, 5100.     | 1.8 | 12        |
| 45 | Ablation of Vitamin D Signaling Compromises Cerebrovascular Adaptation to Carotid Artery Occlusion in Mice. <i>Cells</i> , 2020, 9, 1457.   | 1.8 | 11        |
| 46 | Involvement of P2Y <sub>12</sub> receptors in a nitroglycerin-induced model of migraine in male mice. <i>British Journal of Pharmacology</i> , 2021, 178, 4626-4645.  | 2.7 | 11        |
| 47 | CB1 receptor-mediated respiratory depression by endocannabinoids. <i>Respiratory Physiology and Neurobiology</i> , 2017, 240, 48-52.  | 0.7 | 10        |
| 48 | Modulated Electro-Hyperthermia Facilitates NK-Cell Infiltration and Growth Arrest of Human A2058 Melanoma in a Xenograft Model. <i>Frontiers in Oncology</i> , 2021, 11, 590764.                                  | 1.3 | 10        |
| 49 | Inhibition of endothelin-1 by the competitive ET A receptor antagonist Ro 61-1790 reduces lesion volume after cold injury in the rat. <i>Pflugers Archiv European Journal of Physiology</i> , 2001, 441, 844-849. | 1.3 | 9         |
| 50 | Prostacyclin-mediated compensatory mechanism in the coronary circulation during acute NO synthase blockade. <i>Life Sciences</i> , 2003, 73, 1141-1149.   | 2.0 | 9         |
| 51 | Altered insulin-induced relaxation of aortic rings in a dihydrotestosterone-induced rodent model of polycystic ovary syndrome. <i>Fertility and Sterility</i> , 2013, 99, 573-578.                                | 0.5 | 9         |
| 52 | Anti-cancer strategies targeting the autotaxin-lysophosphatidic acid receptor axis: is there a path forward?. <i>Cancer and Metastasis Reviews</i> , 2021, 40, 3-5.   | 2.7 | 9         |
| 53 | Angiotensin II-Induced Cardiac Effects Are Modulated by Endocannabinoid-Mediated CB1 Receptor Activation. <i>Cells</i> , 2021, 10, 724.   | 1.8 | 9         |
| 54 | Involvement of prostanoid release in the mediation of UTP-induced cerebrovascular contraction in the rat. <i>Brain Research</i> , 2001, 896, 169-174.   | 1.1 | 8         |

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|----|--|-----|-----------|
| 55 | Geometric, elastic and contractile-relaxation changes in coronary arterioles induced by Vitamin D deficiency in normal and hyperandrogenic female rats. <i>Microvascular Research</i> , 2019, 122, 78-84.  | 1.1 | 8         |
| 56 | Vitamin D Deficiency Induces Elevated Oxidative and Biomechanical Damage in Coronary Arterioles in Male Rats. <i>Antioxidants</i> , 2020, 9, 997.  | 2.2 | 8         |
| 57 | Perivascular Expression and Potent Vasoconstrictor Effect of Dynorphin A in Cerebral Arteries. <i>PLoS ONE</i> , 2012, 7, e37798.  | 1.1 | 8         |
| 58 | Suppression of Metastatic Melanoma Growth in Lung by Modulated Electro-Hyperthermia Monitored by a Minimally Invasive Heat Stress Testing Approach in Mice. <i>Cancers</i> , 2020, 12, 3872.   | 1.7 | 8         |
| 59 | Vitamin D deficiency and androgen excess result eutrophic remodeling and reduced myogenic adaptation in small cerebral arterioles in female rats. <i>Gynecological Endocrinology</i> , 2019, 35, 529-534.  | 0.7 | 7         |
| 60 | Carbon monoxideâ€™prostaglandin E2 interaction in the hypothalamic circulation. <i>NeuroReport</i> , 2008, 19, 1601-1604.  | 0.6 | 6         |
| 61 | NK2 receptor-mediated detrusor muscle contraction involves Gq/11-dependent activation of voltage-dependent Ca <sup>2+</sup> channels and the RhoA-Rho kinase pathway. <i>American Journal of Physiology - Renal Physiology</i> , 2019, 317, F1154-F1163. | 1.3 | 6         |
| 62 | Sphingosine-1-Phosphate Enhances Î±1-Adrenergic Vasoconstriction via S1P2â€™G12/13â€™ROCK Mediated Signaling. <i>International Journal of Molecular Sciences</i> , 2019, 20, 6361.   | 1.8 | 6         |
| 63 | Dysregulation of lysophospholipid signaling by p53 in malignant cells and the tumor microenvironment. <i>Cellular Signalling</i> , 2021, 78, 109850.   | 1.7 | 6         |
| 64 | Isoprostanes evoke contraction of the murine and human detrusor muscle via activation of the thromboxane prostanoid TP receptor and Rho kinase. <i>American Journal of Physiology - Renal Physiology</i> , 2021, 320, F537-F547.                         | 1.3 | 6         |
| 65 | Interaction between Nitric Oxide and Thromboxane A2 in the Regulation of the Resting Cerebrovascular Tone. <i>Advances in Experimental Medicine and Biology</i> , 1999, 471, 373-379.  | 0.8 | 6         |
| 66 | Prometastatic Effect of ATX Derived from Alveolar Type II Pneumocytes and B16-F10 Melanoma Cells. <i>Cancers</i> , 2022, 14, 1586.   | 1.7 | 6         |
| 67 | Influence of the heme-oxygenase pathway on cerebrocortical blood flow. <i>NeuroReport</i> , 2007, 18, 1193-1197.   | 0.6 | 5         |
| 68 | Additive effect of cyclooxygenase and nitric oxide synthase blockade on the cerebrocortical microcirculation. <i>NeuroReport</i> , 2009, 20, 1027-1031.  | 0.6 | 5         |
| 69 | Vitamin D Deficiency Reduces Vascular Reactivity of Coronary Arterioles in Male Rats. <i>Current Issues in Molecular Biology</i> , 2021, 43, 79-92.  | 1.0 | 5         |
| 70 | Overview of Tissue Engineering Patent Strategies and Patents from 2010 to 2020, Including Outcomes. <i>Tissue Engineering - Part B: Reviews</i> , 2022, 28, 626-632.   | 2.5 | 5         |
| 71 | Signaling Pathways Mediating Bradykinin-Induced Contraction in Murine and Human Detrusor Muscle. <i>Frontiers in Medicine</i> , 2021, 8, 745638.   | 1.2 | 5         |
| 72 | Intravenous Î²-endorphin administration fails to alter hypothalamic blood flow in rats expressing normal or reduced nitric oxide synthase activity. <i>Peptides</i> , 1996, 17, 733-736.   | 1.2 | 4         |

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|----|--|-----|-----------|
| 73 | Opposing Roles of S1P3 Receptors in Myocardial Function. <i>Cells</i> , 2020, 9, 1770.   | 1.8 | 4         |
| 74 | Influence of Vitamin D on the Vasoactive Effect of Estradiol in a Rat Model of Polycystic Ovary Syndrome. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9404.   | 1.8 | 3         |
| 75 | CHARACTERIZATION OF CEREBRAL BLOOD FLOW OSCILLATIONS USING DIFFERENT CLASSIFICATION METHODS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 214-219.   | 0.4 | 2         |
| 76 | Neuronal nitric oxide synthase in the cerebrovascular endothelium. <i>International Congress Series</i> , 2002, 1235, 369-377.   | 0.2 | 0         |
| 77 | Model based analysis of cerebrovascular oscillation using the system Circle of Willis. , 2012, , .   |     | 0         |
| 78 | Interactions between the heme oxygenase, cyclooxygenase and nitric oxide synthase pathways in the regulation of the resting hypothalamic blood flow. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2005, 25, S187-S187.   | 2.4 | 0         |
| 79 | Inhibition of the cannabinoid-1 receptor enhances the cerebrocortical hyperemic response to hypoxia/hypercapnia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2005, 25, S189-S189.   | 2.4 | 0         |
| 80 | Adaptation of the hypothalamic blood flow to chronic nitric oxide synthase blockade. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2005, 25, S206-S206.   | 2.4 | 0         |
| 81 | Isometric force measurement in mouse cerebral arteries: Establishing reference values and characterizing functional consequences of endothelial nitric oxide synthase knock-out in the basilar artery. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2005, 25, S546-S546. | 2.4 | 0         |
| 82 | Vitamin D Receptor Deficiency Impairs Pial Collateral Circulation in Mice. <i>FASEB Journal</i> , 2020, 34, 1-1.   | 0.2 | 0         |
| 83 | Signal transduction pathways of detrusor smooth muscle contraction evoked by prostanoids and isoprostanes in murine urinary bladder. <i>FASEB Journal</i> , 2020, 34, 1-1.   | 0.2 | 0         |
| 84 | Roles of Nitric Oxide and Prostanoid Mediators in the Adaptation of the Cerebrocortical Blood Flow to Carotid Artery Occlusion. <i>FASEB Journal</i> , 2020, 34, 1-1.  | 0.2 | 0         |