Richard Schulz

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188 11,458 105 51 h-index g-index citations papers 6.07 12,215 197 5.7 L-index avg, IF ext. papers ext. citations

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 188 | Characterization of three inhibitors of endothelial nitric oxide synthase in vitro and in vivo. <i>British Journal of Pharmacology</i> , 1990 , 101, 746-52 | 8.6 | 1516 |
| 187 | Induction and potential biological relevance of a Ca(2+)-independent nitric oxide synthase in the myocardium. <i>British Journal of Pharmacology</i> , 1992 , 105, 575-80 | 8.6 | 499 |
| 186 | Development and mechanism of a specific supersensitivity to nitrovasodilators after inhibition of vascular nitric oxide synthesis in vivo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1991 , 88, 2166-70 | 11.5 | 431 |
| 185 | Matrix metalloproteinase-2 contributes to ischemia-reperfusion injury in the heart. <i>Circulation</i> , 2000 , 101, 1833-9 | 16.7 | 378 |
| 184 | Peroxynitrite is a major contributor to cytokine-induced myocardial contractile failure. <i>Circulation Research</i> , 2000 , 87, 241-7 | 15.7 | 377 |
| 183 | Intracellular action of matrix metalloproteinase-2 accounts for acute myocardial ischemia and reperfusion injury. <i>Circulation</i> , 2002 , 106, 1543-9 | 16.7 | 372 |
| 182 | Nitric oxide, superoxide, and peroxynitrite in myocardial ischaemia-reperfusion injury and preconditioning. <i>British Journal of Pharmacology</i> , 2003 , 138, 532-43 | 8.6 | 331 |
| 181 | Generation of peroxynitrite contributes to ischemia-reperfusion injury in isolated rat hearts. <i>Cardiovascular Research</i> , 1997 , 33, 422-32 | 9.9 | 255 |
| 180 | Intracellular targets of matrix metalloproteinase-2 in cardiac disease: rationale and therapeutic approaches. <i>Annual Review of Pharmacology and Toxicology</i> , 2007 , 47, 211-42 | 17.9 | 243 |
| 179 | Degradation of myosin light chain in isolated rat hearts subjected to ischemia-reperfusion injury: a new intracellular target for matrix metalloproteinase-2. <i>Circulation</i> , 2005 , 112, 544-52 | 16.7 | 232 |
| 178 | Isolated heart perfusion according to Langendorffstill viable in the new millennium. <i>Journal of Pharmacological and Toxicological Methods</i> , 2007 , 55, 113-26 | 1.7 | 228 |
| 177 | Cardiomyocyte overexpression of iNOS in mice results in peroxynitrite generation, heart block, and sudden death. <i>Journal of Clinical Investigation</i> , 2002 , 109, 735-743 | 15.9 | 206 |
| 176 | Characterization of 5PAMP-activated protein kinase activity in the heart and its role in inhibiting acetyl-CoA carboxylase during reperfusion following ischemia. <i>Lipids and Lipid Metabolism</i> , 1996 , 1301, 67-75 | | 204 |
| 175 | Matrix metalloproteinase-2 (MMP-2) is present in the nucleus of cardiac myocytes and is capable of cleaving poly (ADP-ribose) polymerase (PARP) in vitro. <i>FASEB Journal</i> , 2004 , 18, 690-2 | 0.9 | 201 |
| 174 | Nitrosative stress and pharmacological modulation of heart failure. <i>Trends in Pharmacological Sciences</i> , 2005 , 26, 302-10 | 13.2 | 193 |
| 173 | Matrix metalloproteinase-2 and myocardial oxidative stress injury: beyond the matrix. <i>Cardiovascular Research</i> , 2010 , 85, 413-23 | 9.9 | 192 |
| 172 | The role of nitric oxide in cardiac depression induced by interleukin-1 beta and tumour necrosis factor-alpha. <i>British Journal of Pharmacology</i> , 1995 , 114, 27-34 | 8.6 | 176 |

(2015-2009)

| 171 | Activation and modulation of 72kDa matrix metalloproteinase-2 by peroxynitrite and glutathione. <i>Biochemical Pharmacology</i> , 2009 , 77, 826-34 | 6 | 160 |
|-----|---|-------------------|-----|
| 170 | Cardiac efficiency is improved after ischemia by altering both the source and fate of protons. <i>Circulation Research</i> , 1996 , 79, 940-8 | 15.7 | 156 |
| 169 | Acute actions and novel targets of matrix metalloproteinases in the heart and vasculature. <i>British Journal of Pharmacology</i> , 2007 , 152, 189-205 | 8.6 | 153 |
| 168 | Poly(ADP-Ribose) polymerase inhibition reduces reperfusion injury after heart transplantation. <i>Circulation Research</i> , 2002 , 90, 100-6 | 15.7 | 152 |
| 167 | Peroxynitrite-induced myocardial injury is mediated through matrix metalloproteinase-2. <i>Cardiovascular Research</i> , 2002 , 53, 165-74 | 9.9 | 150 |
| 166 | Titin is a target of matrix metalloproteinase-2: implications in myocardial ischemia/reperfusion injury. <i>Circulation</i> , 2010 , 122, 2039-47 | 16.7 | 140 |
| 165 | Matrix metalloproteinase-2 degrades the cytoskeletal protein alpha-actinin in peroxynitrite mediated myocardial injury. <i>Journal of Molecular and Cellular Cardiology</i> , 2007 , 43, 429-36 | 5.8 | 123 |
| 164 | Nitric oxide synthase in cultured endocardial cells of the pig. <i>British Journal of Pharmacology</i> , 1991 , 104, 21-4 | 8.6 | 122 |
| 163 | Regulation of matrix metalloproteinase-2 (MMP-2) activity by phosphorylation. <i>FASEB Journal</i> , 2007 , 21, 2486-95 | 0.9 | 120 |
| 162 | The mechanisms of platelet dysfunction during extracorporeal membrane oxygenation in critically ill neonates. <i>Critical Care Medicine</i> , 2000 , 28, 2584-90 | 1.4 | 116 |
| 161 | Classic preconditioning decreases the harmful accumulation of nitric oxide during ischemia and reperfusion in rat hearts. <i>Circulation</i> , 1999 , 100, 2260-6 | 16.7 | 112 |
| 160 | Enhanced NO and superoxide generation in dysfunctional hearts from endotoxemic rats. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2002 , 283, H1108-15 | 5.2 | 108 |
| 159 | Matrix metalloproteinase-2 mediates cytokine-induced myocardial contractile dysfunction. <i>Cardiovascular Research</i> , 2003 , 57, 426-33 | 9.9 | 106 |
| 158 | Ischaemia-reperfusion injury activates matrix metalloproteinases in the human heart. <i>European Heart Journal</i> , 2005 , 26, 27-35 | 9.5 | 103 |
| 157 | Imbalance between tissue inhibitor of metalloproteinase-4 and matrix metalloproteinases during acute myocardial [correction of myoctardial] ischemia-reperfusion injury. <i>Circulation</i> , 2003 , 107, 2487-9 | 2 ^{16.7} | 101 |
| 156 | Cardiomyocyte overexpression of iNOS in mice results in peroxynitrite generation, heart block, and sudden death. <i>Journal of Clinical Investigation</i> , 2002 , 109, 735-43 | 15.9 | 96 |
| 155 | Role of nitric oxide and cGMP in human septic serum-induced depression of cardiac myocyte contractility. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 1999 , 276, R265-76 | 3.2 | 92 |
| 154 | Sequential fractionation and isolation of subcellular proteins from tissue or cultured cells. <i>MethodsX</i> , 2015 , 2, 440-5 | 1.9 | 89 |

| 153 | Hyperlipidemia attenuates the infarct size-limiting effect of ischemic preconditioning: role of matrix metalloproteinase-2 inhibition. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2006 , 316, 154-61 | 4.7 | 89 |
|-----|---|------|----|
| 152 | Role of NO in vascular smooth muscle and cardiac muscle function. <i>Trends in Pharmacological Sciences</i> , 1994 , 15, 255-9 | 13.2 | 80 |
| 151 | Increased activities of cardiac matrix metalloproteinases matrix metalloproteinase (MMP)-2 and MMP-9 are associated with mortality during the acute phase of experimental Trypanosoma cruzi infection. <i>Journal of Infectious Diseases</i> , 2008 , 197, 1468-76 | 7 | 75 |
| 150 | Inhaled nitric oxide and inhibition of platelet aggregation in critically ill neonates. <i>Lancet, The</i> , 1998 , 351, 1181-2 | 40 | 70 |
| 149 | Human pancreatic islet beta-cell destruction by cytokines is independent of nitric oxide production. Journal of Clinical Endocrinology and Metabolism, 1994 , 79, 1058-1062 | 5.6 | 70 |
| 148 | The l-Arginine. <i>Journal of Cardiovascular Pharmacology</i> , 1991 , 17, S1-S9 | 3.1 | 69 |
| 147 | Matrix metalloproteinase inhibitor properties of tetracyclines: therapeutic potential in cardiovascular diseases. <i>Pharmacological Research</i> , 2011 , 64, 551-60 | 10.2 | 66 |
| 146 | Myocardial matrix metalloproteinase-2: inside out and upside down. <i>Journal of Molecular and Cellular Cardiology</i> , 2014 , 77, 64-72 | 5.8 | 63 |
| 145 | Caveolin-1 inhibits matrix metalloproteinase-2 activity in the heart. <i>Journal of Molecular and Cellular Cardiology</i> , 2007 , 42, 896-901 | 5.8 | 63 |
| 144 | Matrix metalloproteinase-7 and ADAM-12 (a disintegrin and metalloproteinase-12) define a signaling axis in agonist-induced hypertension and cardiac hypertrophy. <i>Circulation</i> , 2009 , 119, 2480-9 | 16.7 | 62 |
| 143 | Nitric oxide and platelet function: implications for neonatology. Seminars in Perinatology, 1997, 21, 409 | -373 | 62 |
| 142 | Mechanisms of cytosolic targeting of matrix metalloproteinase-2. <i>Journal of Cellular Physiology</i> , 2012 , 227, 3397-404 | 7 | 57 |
| 141 | MMP-2 and MMP-9 and their tissue inhibitors in the plasma of preterm and term neonates. <i>Pediatric Research</i> , 2004 , 55, 794-801 | 3.2 | 53 |
| 140 | Protective action of doxycycline against diabetic cardiomyopathy in rats. <i>British Journal of Pharmacology</i> , 2008 , 155, 1174-84 | 8.6 | 52 |
| 139 | Preconditioning decreases ischemia/reperfusion-induced release and activation of matrix metalloproteinase-2. <i>Biochemical and Biophysical Research Communications</i> , 2002 , 296, 937-41 | 3.4 | 52 |
| 138 | Glutathione protects against myocardial ischemia-reperfusion injury by detoxifying peroxynitrite. Journal of Molecular and Cellular Cardiology, 2000 , 32, 1669-78 | 5.8 | 52 |
| 137 | Inhibition of matrix metalloproteinase activity in vivo protects against vascular hyporeactivity in endotoxemia. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2010 , 298, H45-51 | 5.2 | 51 |
| 136 | The involvement of superoxide and iNOS-derived NO in cardiac dysfunction induced by pro-inflammatory cytokines. <i>Journal of Molecular and Cellular Cardiology</i> , 2005 , 39, 833-40 | 5.8 | 50 |

(2000-1998)

| 135 | Thiols protect the inhibition of myocardial aconitase by peroxynitrite. <i>Archives of Biochemistry and Biophysics</i> , 1998 , 350, 104-8 | 4.1 | 50 |
|-----|--|-------------------|----------------|
| 134 | Targeting MMP-2 to treat ischemic heart injury. <i>Basic Research in Cardiology</i> , 2014 , 109, 424 | 11.8 | 48 |
| 133 | Peroxynitrite impairs cardiac contractile function by decreasing cardiac efficiency. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1997 , 272, H1212-9 | 5.2 | 45 |
| 132 | Inhibiting matrix metalloproteinase-2 reduces protein release into coronary effluent from isolated rat hearts during ischemia-reperfusion. <i>Basic Research in Cardiology</i> , 2008 , 103, 431-43 | 11.8 | 45 |
| 131 | Release of leukotrienes into the perfusate of calcium-ionophore stimulated rabbit lungs. Influence of 5-lipoxygenase inhibitors. <i>Biochemical Pharmacology</i> , 1986 , 35, 183-93 | 6 | 45 |
| 130 | Physiological levels of amyloid peptides stimulate the angiogenic response through FGF-2. <i>FASEB Journal</i> , 2004 , 18, 1943-5 | 0.9 | 44 |
| 129 | Porcine ventricular endocardial cells in culture express the inducible form of nitric oxide synthase. <i>British Journal of Pharmacology</i> , 1993 , 108, 1107-10 | 8.6 | 44 |
| 128 | Cardiac sarcomeric proteins: novel intracellular targets of matrix metalloproteinase-2 in heart disease. <i>Trends in Cardiovascular Medicine</i> , 2011 , 21, 112-8 | 6.9 | 43 |
| 127 | Effects of Vasospasm on Levels of Prostacyclin and Thromboxane A2 in Cerebral Arteries of the Monkey. <i>Neurosurgery</i> , 1988 , 22, 45-50 | 3.2 | 43 |
| 126 | Peroxynitrite inactivates human-tissue inhibitor of metalloproteinase-4. <i>FEBS Letters</i> , 2008 , 582, 1135 | -40 .8 | 42 |
| 125 | Matrix metalloproteinases contribute to endotoxin and interleukin-1beta induced vascular dysfunction. <i>British Journal of Pharmacology</i> , 2006 , 149, 31-42 | 8.6 | 40 |
| 124 | Inhibition of matrix metalloproteinase-2 by PARP inhibitors. <i>Biochemical and Biophysical Research</i> | | 20 |
| | Communications, 2009 , 387, 646-50 | 3.4 | 39 |
| 123 | Antioxidant treatment protects diabetic rats from cardiac dysfunction by preserving contractile protein targets of oxidative stress. <i>Journal of Nutritional Biochemistry</i> , 2010 , 21, 827-33 | 6.3 | 39 |
| 123 | Antioxidant treatment protects diabetic rats from cardiac dysfunction by preserving contractile | | |
| | Antioxidant treatment protects diabetic rats from cardiac dysfunction by preserving contractile protein targets of oxidative stress. <i>Journal of Nutritional Biochemistry</i> , 2010 , 21, 827-33 The role of matrix metalloproteinase inhibitors in ischemia-reperfusion injury in the liver. <i>Current</i> | 6.3 | 39 |
| 122 | Antioxidant treatment protects diabetic rats from cardiac dysfunction by preserving contractile protein targets of oxidative stress. <i>Journal of Nutritional Biochemistry</i> , 2010 , 21, 827-33 The role of matrix metalloproteinase inhibitors in ischemia-reperfusion injury in the liver. <i>Current Pharmaceutical Design</i> , 2006 , 12, 2923-34 Activation of intracellular matrix metalloproteinase-2 by reactive oxygen-nitrogen species: Consequences and therapeutic strategies in the heart. <i>Archives of Biochemistry and Biophysics</i> , 2013 | 6.3 3.3 | 39 |
| 122 | Antioxidant treatment protects diabetic rats from cardiac dysfunction by preserving contractile protein targets of oxidative stress. <i>Journal of Nutritional Biochemistry</i> , 2010 , 21, 827-33 The role of matrix metalloproteinase inhibitors in ischemia-reperfusion injury in the liver. <i>Current Pharmaceutical Design</i> , 2006 , 12, 2923-34 Activation of intracellular matrix metalloproteinase-2 by reactive oxygen-nitrogen species: Consequences and therapeutic strategies in the heart. <i>Archives of Biochemistry and Biophysics</i> , 2013 , 540, 82-93 Matrix metalloproteinases 2 and 9 as diagnostic markers in the progression to Chagas | 6.3 3.3 4.1 | 39 39 38 |

| 117 | Matrix metalloproteinase-2 proteolysis of calponin-1 contributes to vascular hypocontractility in endotoxemic rats. <i>Arteriosclerosis, Thrombosis, and Vascular Biology,</i> 2012 , 32, 662-8 | 9.4 | 35 |
|-----|--|------|----|
| 116 | MMP-2 is localized to the mitochondria-associated membrane of the heart. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2014 , 306, H764-70 | 5.2 | 34 |
| 115 | Peroxynitrite in myocardial ischemia-reperfusion injury. Heart Failure Reviews, 2002, 7, 359-69 | 5 | 33 |
| 114 | Multifunctional intracellular matrix metalloproteinases: implications in disease. FEBS Journal, 2021, | 5.7 | 33 |
| 113 | Calpain inhibitors exhibit matrix metalloproteinase-2 inhibitory activity. <i>Biochemical and Biophysical Research Communications</i> , 2012 , 423, 1-5 | 3.4 | 32 |
| 112 | Matrix metalloproteinase activities are altered in the heart and plasma during endotoxemia. <i>Critical Care Medicine</i> , 2004 , 32, 1332-7 | 1.4 | 32 |
| 111 | Glycogen synthase kinase-3beta is activated by matrix metalloproteinase-2 mediated proteolysis in cardiomyoblasts. <i>Cardiovascular Research</i> , 2009 , 83, 698-706 | 9.9 | 31 |
| 110 | Inhibition of matrix metalloproteinases prevents peroxynitrite-induced contractile dysfunction in the isolated cardiac myocyte. <i>British Journal of Pharmacology</i> , 2008 , 153, 676-83 | 8.6 | 30 |
| 109 | Ischemia/reperfusion-induced myosin light chain 1 phosphorylation increases its degradation by matrix metalloproteinase 2. <i>FEBS Journal</i> , 2012 , 279, 2444-54 | 5.7 | 29 |
| 108 | Matrix metalloproteinase-2, caveolins, focal adhesion kinase and c-Kit in cells of the mouse myocardium. <i>Journal of Cellular and Molecular Medicine</i> , 2007 , 11, 1069-86 | 5.6 | 29 |
| 107 | Immunomodulation by lipid emulsions in pulmonary inflammation: a randomized controlled trial. <i>Critical Care</i> , 2015 , 19, 226 | 10.8 | 28 |
| 106 | Peroxynitrite contributes to spontaneous loss of cardiac efficiency in isolated working rat hearts. American Journal of Physiology - Heart and Circulatory Physiology, 1999 , 276, H1861-7 | 5.2 | 27 |
| 105 | Role of oxidative stress in multiparity-induced endothelial dysfunction. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2008 , 295, H1736-42 | 5.2 | 26 |
| 104 | Calcium extrusion by plasma membrane calcium pump is impaired in caveolin-1 knockout mouse small intestine. <i>European Journal of Pharmacology</i> , 2008 , 591, 80-7 | 5.3 | 25 |
| 103 | Peroxynitrite: toxic or protective in the heart?. Circulation Research, 2001, 88, E12-3 | 15.7 | 25 |
| 102 | Morus nigra leaf extract improves glycemic response and redox profile in the liver of diabetic rats. <i>Food and Function</i> , 2015 , 6, 3490-9 | 6.1 | 24 |
| 101 | Inhibition of endogenous nitric oxide in the heart enhances matrix metalloproteinase-2 release. British Journal of Pharmacology, 2005 , 145, 43-9 | 8.6 | 24 |
| 100 | Phosphorylation status of 72 kDa MMP-2 determines its structure and activity in response to peroxynitrite. <i>PLoS ONE</i> , 2013 , 8, e71794 | 3.7 | 24 |

(2008-2000)

| 99 | newborn piglets during infusion of heat-killed group B streptococci. <i>Critical Care Medicine</i> , 2000 , 28, 800-8 | 1.4 | 23 |
|----|--|------|----|
| 98 | Proinflammatory cytokines depress cardiac efficiency by a nitric oxide-dependent mechanism. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1998 , 275, H1016-23 | 5.2 | 23 |
| 97 | Lysoplasmenylethanolamine accumulation in ischemic/reperfused isolated fatty acid-perfused hearts. <i>Circulation Research</i> , 1992 , 70, 1161-8 | 15.7 | 23 |
| 96 | Nuclear matrix metalloproteinase-2 in the cardiomyocyte and the ischemic-reperfused heart. <i>Journal of Molecular and Cellular Cardiology</i> , 2016 , 94, 153-161 | 5.8 | 23 |
| 95 | The Alberta Heart Failure Etiology and Analysis Research Team (HEART) study. <i>BMC Cardiovascular Disorders</i> , 2014 , 14, 91 | 2.3 | 22 |
| 94 | Doxycycline reduces cardiac matrix metalloproteinase-2 activity but does not ameliorate myocardial dysfunction during reperfusion in coronary artery bypass patients undergoing cardiopulmonary bypass. <i>Critical Care Medicine</i> , 2013 , 41, 2512-20 | 1.4 | 22 |
| 93 | Inhibition of inducible nitric oxide synthase and superoxide production reduces matrix metalloproteinase-9 activity and restores coronary vasomotor function in rat cardiac allografts. <i>European Journal of Cardio-thoracic Surgery</i> , 2004 , 26, 262-9 | 3 | 22 |
| 92 | Nitrate tolerance does not increase production of peroxynitrite in the heart. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2002 , 283, H69-76 | 5.2 | 22 |
| 91 | Rapid increase in inducible nitric oxide synthase gene expression in the heart during endotoxemia. <i>European Journal of Pharmacology</i> , 1996 , 303, 141-4 | 5.3 | 22 |
| 90 | MMP inhibitors attenuate doxorubicin cardiotoxicity by preventing intracellular and extracellular matrix remodelling. <i>Cardiovascular Research</i> , 2021 , 117, 188-200 | 9.9 | 22 |
| 89 | Pyruvate prevents cardiac dysfunction and AMP-activated protein kinase activation by hydrogen peroxide in isolated rat hearts. <i>Canadian Journal of Physiology and Pharmacology</i> , 2004 , 82, 409-16 | 2.4 | 21 |
| 88 | Matrix metalloproteinases and their tissue inhibitor after reperfused ST-elevation myocardial infarction treated with doxycycline. Insights from the TIPTOP trial. <i>International Journal of Cardiology</i> , 2015 , 197, 147-53 | 3.2 | 20 |
| 87 | Hydrogen peroxide-induced necrotic cell death in cardiomyocytes is independent of matrix metalloproteinase-2. <i>Toxicology in Vitro</i> , 2013 , 27, 1686-92 | 3.6 | 19 |
| 86 | Mechanisms of arachidonic acid-induced contractions of canine cerebral arteries. <i>European Journal of Pharmacology</i> , 1987 , 136, 345-52 | 5.3 | 19 |
| 85 | Caveolin-1 exists and may function in cardiomyocytes. <i>Canadian Journal of Physiology and Pharmacology</i> , 2010 , 88, 73-6 | 2.4 | 18 |
| 84 | Activation of MMP-2 as a key event in oxidative stress injury to the heart. <i>Frontiers in Bioscience - Landmark</i> , 2009 , 14, 699-716 | 2.8 | 18 |
| 83 | Remodeling of aorta extracellular matrix as a result of transient high oxygen exposure in newborn rats: implication for arterial rigidity and hypertension risk. <i>PLoS ONE</i> , 2014 , 9, e92287 | 3.7 | 18 |
| 82 | Smooth muscle NOS, colocalized with caveolin-1, modulates contraction in mouse small intestine. Journal of Cellular and Molecular Medicine, 2008, 12, 1404-15 | 5.6 | 17 |

| 81 | Cerebral arteries can generate 5- and 15-hydroxyeicosatetraenoic acid from arachidonic acid. <i>Canadian Journal of Physiology and Pharmacology</i> , 1990 , 68, 807-13 | 2.4 | 15 |
|----|--|----------------|----|
| 80 | Junctophilin-2 is a target of matrix metalloproteinase-2 in myocardial ischemia-reperfusion injury. <i>Basic Research in Cardiology</i> , 2019 , 114, 42 | 11.8 | 14 |
| 79 | TIMP1 and MMP9 are predictors of mortality in septic patients in the emergency department and intensive care unit unlike MMP9/TIMP1 ratio: Multivariate model. <i>PLoS ONE</i> , 2017 , 12, e0171191 | 3.7 | 14 |
| 78 | Dynamic Alterations to Actinin Accompanying Sarcomere Disassembly and Reassembly during Cardiomyocyte Mitosis. <i>PLoS ONE</i> , 2015 , 10, e0129176 | 3.7 | 14 |
| 77 | Matrix metalloproteinase-2 in oncostatin M-induced sarcomere degeneration in cardiomyocytes. American Journal of Physiology - Heart and Circulatory Physiology, 2016 , 311, H183-9 | 5.2 | 14 |
| 76 | Matrix metalloproteinase inhibitors attenuate endotoxemia induced cardiac dysfunction: a potential role for MMP-9. <i>Molecular and Cellular Biochemistry</i> , 2003 , 251, 61-6 | 4.2 | 14 |
| 75 | Phosphorylation status of matrix metalloproteinase 2 in myocardial ischaemia-reperfusion injury. Heart, 2012 , 98, 656-62 | 5.1 | 13 |
| 74 | Response of fetal rabbit ductus arteriosus to bradykinin: role of nitric oxide, prostaglandins, and bradykinin receptors. <i>Pediatric Research</i> , 1999 , 45, 568-74 | 3.2 | 13 |
| 73 | Matrix metalloproteinase (MMP)-2 activation by oxidative stress decreases aortic calponin-1 levels during hypertrophic remodeling in early hypertension. <i>Vascular Pharmacology</i> , 2019 , 116, 36-44 | 5.9 | 13 |
| 72 | Doxycycline attenuates renal injury in a swine model of neonatal hypoxia-reoxygenation. <i>Shock</i> , 2015 , 43, 99-105 | 3.4 | 12 |
| 71 | Proteolytic Digestion of Serum Cardiac Troponin I as Marker of Ischemic Severity. <i>journal of applied laboratory medicine, The</i> , 2018 , 3, 450-455 | 2 | 12 |
| 70 | Matrix metalloproteinase inhibitors prevent sepsis-induced refractoriness to vasoconstrictors in the cecal ligation and puncture model in rats. <i>European Journal of Pharmacology</i> , 2015 , 765, 164-70 | 5.3 | 11 |
| 69 | Cardiac function is not significantly diminished in hearts isolated from young caveolin-1 knockout mice. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2010 , 299, H1183-9 | 5.2 | 11 |
| 68 | Endothelial dependence of matrix metalloproteinase-mediated vascular hyporeactivity caused by lipopolysaccharide. <i>European Journal of Pharmacology</i> , 2008 , 582, 116-22 | 5.3 | 11 |
| 67 | Impact of caveolin-1 knockout on NANC relaxation in circular muscles of the mouse small intestine compared with longitudinal muscles. <i>American Journal of Physiology - Renal Physiology</i> , 2006 , 290, G394 | 4- ā d3 | 11 |
| 66 | Caveolin-1 knockout alters beta-adrenoceptors function in mouse small intestine. <i>American Journal of Physiology - Renal Physiology</i> , 2006 , 291, G1020-30 | 5.1 | 11 |
| 65 | Inhibition of peroxynitrite-induced dityrosine formation with oxidized and reduced thiols, nitric oxide donors, and purine derivatives. <i>Antioxidants and Redox Signaling</i> , 2001 , 3, 165-71 | 8.4 | 11 |
| 64 | Endothelial nitric oxide synthase increases in left atria of dogs with pacing-induced heart failure. American Journal of Physiology - Heart and Circulatory Physiology, 1998, 275, H1971-8 | 5.2 | 11 |

(2018-2013)

| 63 | Matrix metalloproteinase inhibition attenuates right ventricular dysfunction and improves responses to dobutamine during acute pulmonary thromboembolism. <i>Journal of Cellular and Molecular Medicine</i> , 2013 , 17, 1588-97 | 5.6 | 10 |
|----|---|-----|----|
| 62 | Differential inhibitory control of circular and longitudinal smooth muscle layers of Balb/C mouse small intestine. <i>Autonomic Neuroscience: Basic and Clinical</i> , 2007 , 131, 36-44 | 2.4 | 10 |
| 61 | Mmp25lfacilitates elongation of sensory neurons during zebrafish development. <i>Genesis</i> , 2014 , 52, 833-48 | 1.9 | 9 |
| 60 | Inhibitory effects of caspase inhibitors on the activity of matrix metalloproteinase-2. <i>Biochemical Pharmacology</i> , 2013 , 86, 469-75 | 6 | 9 |
| 59 | Proteomics analysis of changes in myocardial proteins during endotoxemia. <i>Journal of Proteomics</i> , 2009 , 72, 648-55 | 3.9 | 9 |
| 58 | Production of 15-HETE by cultured smooth muscle cells from cerebral artery. <i>Pharmacology</i> , 1993 , 46, 211-23 | 2.3 | 9 |
| 57 | Analysis of myocardial plasmalogen and diacyl phospholipids and their arachidonic acid content using high-performance liquid chromatography. <i>Analytical Biochemistry</i> , 1993 , 213, 140-6 | 3.1 | 9 |
| 56 | An efficient and highly flexible synthesis of (Hunsaturated Exoesters. <i>Tetrahedron Letters</i> , 1982 , 23, 2013-2016 | 2 | 9 |
| 55 | Doxycycline and Benznidazole Reduce the Profile of Th1, Th2, and Th17 Chemokines and Chemokine Receptors in Cardiac Tissue from Chronic -Infected Dogs. <i>Mediators of Inflammation</i> , 2016 , 2016, 3694714 | 4.3 | 9 |
| 54 | K(ATP)-channel activation: effects on myocardial recovery from ischaemia and role in the cardioprotective response to adenosine A1-receptor stimulation. <i>British Journal of Pharmacology</i> , 1998 , 124, 639-46 | 8.6 | 8 |
| 53 | Hydrogen peroxide causes cardiac dysfunction independent from its effects on matrix metalloproteinase-2 activation. <i>Canadian Journal of Physiology and Pharmacology</i> , 2007 , 85, 341-8 | 2.4 | 8 |
| 52 | Myocardial MMP-2 contributes to SERCA2a proteolysis during cardiac ischaemia-reperfusion injury. <i>Cardiovascular Research</i> , 2020 , 116, 1021-1031 | 9.9 | 7 |
| 51 | Postresuscitation administration of doxycycline preserves cardiac contractile function in hypoxia-reoxygenation injury of newborn piglets*. <i>Critical Care Medicine</i> , 2014 , 42, e260-9 | 1.4 | 6 |
| 50 | Inhaled nitric oxide inhibits the release of matrix metalloproteinase-2, but not platelet activation, during extracorporeal membrane oxygenation in adult rabbits. <i>Journal of Pediatric Surgery</i> , 2003 , 38, 534-8 | 2.6 | 6 |
| 49 | Inhibition of nitric oxide synthesis protects the isolated working rabbit heart from ischaemia-reperfusion injury. <i>Cardiovascular Research</i> , 1995 , 30, 432-439 | 9.9 | 5 |
| 48 | Structure and proteolytic susceptibility of the inhibitory C-terminal tail of cardiac troponin I. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2019 , 1863, 661-671 | 4 | 5 |
| 47 | Predictive Value of Matrix Metalloproteinases and Their Inhibitors for Mortality in Septic Patients: A Cohort Study. <i>Journal of Intensive Care Medicine</i> , 2020 , 35, 95-103 | 3.3 | 5 |
| 46 | Doxorubicin induces de novo expression of N-terminal-truncated matrix metalloproteinase-2 in cardiac myocytes. <i>Canadian Journal of Physiology and Pharmacology</i> , 2018 , 96, 1238-1245 | 2.4 | 5 |

| 45 | High fat diet modulates inflammatory parameters in the heart and liver during acute Trypanosoma cruzi infection. <i>International Immunopharmacology</i> , 2018 , 64, 192-200 | 5.8 | 5 |
|----|--|--------------------|---|
| 44 | Prognostic Value of MMP-9 -1562 C/T Gene Polymorphism in Patients With Sepsis. <i>Biomarker Insights</i> , 2019 , 14, 1177271919847951 | 3.5 | 4 |
| 43 | Intrinsic ANG II type 1 receptor stimulation contributes to recovery of postischemic mechanical function. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1998 , 274, H1524-31 | 5.2 | 4 |
| 42 | MMP inhibition attenuates hypertensive eccentric cardiac hypertrophy and dysfunction by preserving troponin I and dystrophin. <i>Biochemical Pharmacology</i> , 2021 , 193, 114744 | 6 | 4 |
| 41 | Matrix metalloproteinases 2 and 9 as diagnostic tools in Chagas cardiomyopathy. <i>International Journal of Cardiology</i> , 2014 , 177, 46-7 | 3.2 | 3 |
| 40 | PPARalpha: essential component to prevent myocardial oxidative stress?. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007 , 293, H11-2 | 5.2 | 2 |
| 39 | Roles of nitric oxide, superoxide, and peroxynitrite in myocardial ischemia-reperfusion injury and ischemic preconditioning 2001 , 191-206 | | 2 |
| 38 | Smoothelin-B is not a target of matrix metalloproteinase (MMP)-2 in the vasculature of endotoxemic rats. <i>Canadian Journal of Physiology and Pharmacology</i> , 2014 , 92, 887-91 | 2.4 | 1 |
| 37 | Plasma matrix metalloproteinases in neonates having surgery for congenital heart disease. <i>Heart International</i> , 2009 , 4, e4 | 0.3 | 1 |
| 36 | Post-resuscitation NOS inhibition does not improve hemodynamic recovery of hypoxic newborn pigs. <i>Intensive Care Medicine</i> , 2009 , 35, 1628-35 | 14.5 | 1 |
| 35 | Peroxynitrite in Myocardial Ischemia-Reperfusion Injury 2004 , 201-211 | | 1 |
| 34 | Influence of beta-adrenoceptor tone on the cardioprotective efficacy of adenosine A(1) receptor activation in isolated working rat hearts. <i>British Journal of Pharmacology</i> , 2000 , 131, 537-45 | 8.6 | 1 |
| 33 | Matrix metalloproteinase inhibitors attenuate endotoxemia induced cardiac dysfunction: A potential role for MMP-9 2003 , 61-66 | | 1 |
| 32 | Calcium extrusion by plasma membrane calcium pump is impaired in absence of intact caveolae. <i>FASEB Journal</i> , 2008 , 22, 916.8 | 0.9 | 1 |
| 31 | Matrix metalloproteinase-2 mediates ribosomal RNA transcription by cleaving nucleolar histones | | 1 |
| 30 | Matrix metalloproteinase-2 mediates ribosomal RNA transcription by cleaving nucleolar histones. <i>FEBS Journal</i> , 2021 , 288, 6736-6751 | 5.7 | 1 |
| 29 | Letter by Hwang et al Regarding Article, "Temporal Release of High-Sensitivity Cardiac Troponin T and I and Copeptin After Brief Induced Coronary Artery Balloon Occlusion in Humans". <i>Circulation</i> , 2021 , 144, e166-e167 | 16.7 | 1 |
| 28 | ISDN2014_0147: The use of broccoli sprouts as a neuropreventative agent in a neonatal rat model of the fetal inflammatory response. <i>International Journal of Developmental Neuroscience</i> , 2015 , 47, 43 | -43 ^{2.7} | |

27 Intracellular MMP-2: Role in Normal and Diseased Hearts **2011**, 17-28

| 26 | Nitric oxide, peroxynitrite and matrix metalloproteinases: Insight into the pathogenesis of sepsis. <i>Advances in Experimental Biology</i> , 2007 , 367-396 | |
|----|---|-----|
| 25 | Turmoil in the Cardiac Myocyte: Acute Intracellular Activation of Matrix Metalloproteinases 2005, 213- | 237 |
| 24 | Smooth muscle nitric oxide synthase, co-localized with caveolin-1, modulates contraction in mouse small intestine. <i>FASEB Journal</i> , 2007 , 21, A808 | 0.9 |
| 23 | Inhibiting matrix metalloproteinase-2 (MMP-2 reduces endothelial damage in isolated rat hearts during ischemia-reperfusion. <i>FASEB Journal</i> , 2008 , 22, 914.1 | 0.9 |
| 22 | Post-translational modification of matrix metalloproteinase-2 by peroxynitrite. <i>FASEB Journal</i> , 2008 , 22, 750.20 | 0.9 |
| 21 | Matrix Metalloproteinase-2 2018, 2996-3005 | |
| 20 | Nucleolar Matrix Metalloproteinase-2 Regulates rRNA Transcription. FASEB Journal, 2018, 32, lb416 | 0.9 |
| 19 | Matrix Metalloproteinase Inhibitors Attenuate Doxorubicin-Induced Heart Failure by Preventing Cardiac Titin Proteolysis. <i>FASEB Journal</i> , 2018 , 32, 864.10 | 0.9 |
| 18 | Matrix metalloproteinase-2 is localized to the mitochondria-associated membrane in the heart (1154.4). <i>FASEB Journal</i> , 2014 , 28, 1154.4 | 0.9 |
| 17 | Matrix metalloproteinase-2 mediate oncostatin-M induced cardiomyocyte dedifferentiation (1151.2). <i>FASEB Journal</i> , 2014 , 28, 1151.2 | 0.9 |
| 16 | Nuclear Localization and Biological Function of Matrix Metalloproteinase-2. <i>FASEB Journal</i> , 2015 , 29, 979.6 | 0.9 |
| 15 | The Activation of Matrix Metalloproteinease-2 by Mitochondrially-Generated Reactive Oxygen/Nitrogen Species. <i>FASEB Journal</i> , 2015 , 29, 955.2 | 0.9 |
| 14 | Cleavage of glycogen synthase kinase-3beta by matrix metalloproteinase-2 enhances its kinase activity. <i>FASEB Journal</i> , 2009 , 23, 577.6 | 0.9 |
| 13 | Does caveolin-1 knockout affect matrix metalloproteinase-2 activity and contractile function in the isolated working mouse heart?. <i>FASEB Journal</i> , 2009 , 23, 812.3 | 0.9 |
| 12 | Effect of Multiparity on Vascular Compliance and Collagen Content. <i>FASEB Journal</i> , 2009 , 23, 951.7 | 0.9 |
| 11 | Matrix metalloproteinase-2 co-localizes with titin in cardiac myocytes and contributes to its proteolysis in ischemia-reperfusion injury. <i>FASEB Journal</i> , 2009 , 23, 812.11 | 0.9 |
| 10 | Smoothelin-B: a potential target of matrix metalloproteinase (MMP)-2 in the vasculature of endotoxemic rats. <i>FASEB Journal</i> , 2011 , 25, 1115.19 | 0.9 |

| 9 | Peroxynitrite-induced changes in 72kDa matrix metalloproteinase-2 activity are further regulated by its phosphorylation status. <i>FASEB Journal</i> , 2011 , 25, 1096.2 | 0.9 |
|---|--|-----|
| 8 | Inhibitory effects of caspase inhibitors on the activity of matrix metalloproteinase (MMP)-2. <i>FASEB Journal</i> , 2012 , 26, lb657 | 0.9 |
| 7 | Intracellular Matrix Remodeling and Cardiac Function in IschemiaReperfusion Injury 2013, 467-485 | |
| 6 | Doxycycline Attenuates Cardiac Injury and Improves Cardiac Function with Inhibition of Myocardial Matrix Metalloproteinase (MMP)-2 in a Swine Model of Hypoxia- Reoxygenation (H-R). <i>FASEB Journal</i> , 2013 , 27, 1129.9 | 0.9 |
| 5 | Role of MMP-2 activation in oncostatin-M induced cardiomyocyte dedifferentiation. <i>FASEB Journal</i> , 2013 , 27, 1146.4 | 0.9 |
| 4 | Analysis of mitochondrial MMP-2 and MMP-9 in the heart. FASEB Journal, 2013, 27, 1129.10 | 0.9 |
| 3 | Intracellular proteases and sarcomere disassembly in neonatal cardiomyocytes. <i>FASEB Journal</i> , 2013 , 27, 1217.33 | 0.9 |
| 2 | Nuclear MMP-2: presence and activity in cardiac myocytes. FASEB Journal, 2013, 27, 995.4 | 0.9 |

Implications of Intracellular Proteolytic Activation of MMP-2 in the Heart **2014**, 335-349