Joseph M Miano

List of Publications by Year
in descending order

130 papers	10,989 citations	34016 52 h-index	30848 102 g-index
134 all docs	134 docs citations	134 times ranked	12079 citing authors

#	Article	IF	Citations
1	miR-145 and miR-143 regulate smooth muscle cell fate and plasticity. Nature, 2009, 460, 705-710.	13.7	1,412
2	Serum response factor: toggling between disparate programs of gene expression. Journal of Molecular and Cellular Cardiology, 2003, 35, 577-593.	0.9	527
3	Serum response factor: master regulator of the actin cytoskeleton and contractile apparatus. American Journal of Physiology - Cell Physiology, 2007, 292, C70-C81.	2.1	411
4	Myocardin: A Component of a Molecular Switch for Smooth Muscle Differentiation. Journal of Molecular and Cellular Cardiology, 2002, 34, 1345-1356.	0.9	359
5	Smooth muscle myosin heavy chain exclusively marks the smooth muscle lineage during mouse embryogenesis.. Circulation Research, 1994, 75, 803-812.	2.0	352
6	SM22Î±, a Marker of Adult Smooth Muscle, Is Expressed in Multiple Myogenic Lineages During Embryogenesis. Circulation Research, 1996, 78, 188-195.	2.0	346
7	Expression of the SM22alpha promoter in transgenic mice provides evidence for distinct transcriptional regulatory programs in vascular and visceral smooth muscle cells.. Journal of Cell Biology, 1996, 132, 849-859.	2.3	313
8	Cholesterol Loading Reprograms the MicroRNA-143/145â€“Myocardin Axis to Convert Aortic Smooth Muscle Cells to a Dysfunctional Macrophage-Like Phenotype. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 535-546.	1.1	261
9	Defining the mammalian CArGome. Genome Research, 2005, 16, 197-207.	2.4	255
10	Identification and Initial Functional Characterization of a Human Vascular Cellâ€“Enriched Long Noncoding RNA. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, 1249-1259.	1.1	247
11	MicroRNAs Are Necessary for Vascular Smooth Muscle Growth, Differentiation, and Function. Arteriosclerosis, Thrombosis, and Vascular Biology, 2010, 30, 1118-1126.	1.1	238
12	SRF and myocardin regulate LRP-mediated amyloid-Î² clearance in brain vascular cells. Nature Cell Biology, 2009, 11, 143-153.	4.6	237
13	Thioredoxin-2 Inhibits Mitochondria-Located ASK1-Mediated Apoptosis in a JNK-Independent Manner. Circulation Research, 2004, 94, 1483-1491.	2.0	234
14	Restricted inactivation of serum response factor to the cardiovascular system. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 17132-17137.	3.3	231
15	Serum response factor and myocardin mediate arterial hypercontractility and cerebral blood flow dysregulation in Alzheimer's phenotype. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 823-828.	3.3	189
16	Smooth Muscle Enriched Long Noncoding RNA (<i>SMILR</i>) Regulates Cell Proliferation. Circulation, 2016, 133, 2050-2065.	1.6	182
17	Smooth Muscle Cell Plasticity. Circulation Research, 2013, 112, 17-22.	2.0	146
18	A Role for the Long Noncoding RNA SENCR in Commitment and Function of Endothelial Cells. Molecular Therapy, 2016, 24, 978-990.	3.7	133

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19	Fate and State of Vascular Smooth Muscle Cells in Atherosclerosis. Circulation, 2021, 143, 2110-2116.	1.6	130
20	Myocardin Enhances Smad3-Mediated Transforming Growth Factor-Î² 1 Signaling in a CArG Box-Independent Manner. Circulation Research, 2005, 97, 983-991.	2.0	129
21	Transforming Growth Factor-Î²1 (TGF-Î²1) Utilizes Distinct Pathways for the Transcriptional Activation of MicroRNA 143/145 in Human Coronary Artery Smooth Muscle Cells. Journal of Biological Chemistry, 2011, 286, 30119-30129.	1.6	126
22	Expression of the Smooth Muscle Cell Calponin Gene Marks the Early Cardiac and Smooth Muscle Cell Lineages during Mouse Embryogenesis. Journal of Biological Chemistry, 1996, 271, 7095-7103.	1.6	122
23	Role of Phosphodiesterase 3 in NO/cGMP-Mediated Antiinflammatory Effects in Vascular Smooth Muscle Cells. Circulation Research, 2003, 93, 406-413.	2.0	121
24	Role of Nuclear Ca 2+ /Calmodulin-Stimulated Phosphodiesterase 1A in Vascular Smooth Muscle Cell Growth and Survival. Circulation Research, 2006, 98, 777-784.	2.0	121
25	Myocardin in biology and disease. Journal of Biomedical Research, 2015, 29, 3-19.	0.7	120
26	Smooth muscle cell immediate-early gene and growth factor activation follows vascular injury. A putative in vivo mechanism for autocrine growth.. Arteriosclerosis and Thrombosis: A Journal of Vascular Biology, 1993, 13, 211-219.	3.8	119
27	Smooth Muscle miRNAs Are Critical for Post-Natal Regulation of Blood Pressure and Vascular Function. PLoS ONE, 2011, 6, e18869.	1.1	116
28	Role of serum response factor in the pathogenesis of disease. Laboratory Investigation, 2010, 90, 1274-1284.	1.7	113
29	EVEC, a Novel Epidermal Growth Factorâ€"Like Repeat-Containing Protein Upregulated in Embryonic and Diseased Adult Vasculature. Circulation Research, 1999, 84, 1166-1176.	2.0	112
30	Myocardin Is Sufficient for a Smooth Muscle-Like Contractile Phenotype. Arteriosclerosis, Thrombosis, and Vascular Biology, 2008, 28, 1505-1510.	1.1	112
31	Direct Activation of a GATA6 Cardiac Enhancer by Nkx2.5: Evidence for a Reinforcing Regulatory Network of Nkx2.5 and GATA Transcription Factors in the Developing Heart. Developmental Biology, 2000, 217, 301-309.	0.9	110
32	Serum Response Factor-dependent Regulation of the Smooth Muscle Calponin Gene. Journal of Biological Chemistry, 2000, 275, 9814-9822.	1.6	105
33	Physiological Control of Smooth Muscle-specific Gene Expression through Regulated Nuclear Translocation of Serum Response Factor. Journal of Biological Chemistry, 2000, 275, 30387-30393.	1.6	104
34	Loss of LMOD1 impairs smooth muscle cytocontractility and causes megacystis microcolon intestinal hypoperistalsis syndrome in humans and mice. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2739-E2747.	3.3	97
35	Neurovascular Pathways and Alzheimer Amyloid Î²-peptide. Brain Pathology, 2005, 15, 78-83.	2.1	95
36	all- <i>Trans</i> -Retinoic Acid Reduces Neointimal Formation and Promotes Favorable Geometric Remodeling of the Rat Carotid Artery After Balloon Withdrawal Injury. Circulation, 1998, 98, 1219-1227.	1.6	93

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37	<i>MYOSLID</i> Is a Novel Serum Response Factorâ€"Dependent Long Noncoding RNA That Amplifies the Vascular Smooth Muscle Differentiation Program. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, 2088-2099.	1.1	93
38	Lost in Transgenesis. Circulation Research, 2012, 111, 761-777.	2.0	92
39	Myocardin Regulates Vascular Smooth Muscle Cell Inflammatory Activation and Disease. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 817-828.	1.1	92
40	Retinoid Receptor Expression and all- <i>trans</i> Retinoic Acidâ€"Mediated Growth Inhibition in Vascular Smooth Muscle Cells. Circulation, 1996, 93, 1886-1895.	1.6	92
41	<i>SENCR</i>stabilizes vascular endothelial cell adherens junctions through interaction with CKAP4. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 546-555.	3.3	88
42	Myocyte Enhancer Binding Factor-2 Expression and Activity in Vascular Smooth Muscle Cells. Circulation Research, 1996, 78, 196-204.	2.0	88
43	Testosterone and 17Î²-Estradiol Induce Glandular Prostatic Growth, Bladder Outlet Obstruction, and Voiding Dysfunction in Male Mice. Endocrinology, 2012, 153, 5556-5565.	1.4	86
44	Myocardin is a bifunctional switch for smooth versus skeletal muscle differentiation. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 16570-16575.	3.3	84
45	A comparative molecular analysis of four rat smooth muscle cell lines. In Vitro Cellular and Developmental Biology - Animal, 1998, 34, 217-226.	0.7	76
46	Leiomodin 1, a New Serum Response Factor-dependent Target Gene Expressed Preferentially in Differentiated Smooth Muscle Cells. Journal of Biological Chemistry, 2012, 287, 2459-2467.	1.6	73
47	Reproducibility of CRISPR-Cas9 methods for generation of conditional mouse alleles: a multi-center evaluation. Genome Biology, 2019, 20, 171.	3.8	69
48	Coronary Disease-Associated Gene <i>TCF21</i> Inhibits Smooth Muscle Cell Differentiation by Blocking the Myocardin-Serum Response Factor Pathway. Circulation Research, 2020, 126, 517-529.	2.0	67
49	Prime editing in mice reveals the essentiality of a single base in driving tissue-specific gene expression. Genome Biology, 2021, 22, 83.	3.8	62
50	Smooth Muscleâ€"Specific Expression of CYP4A1 Induces Endothelial Sprouting in Renal Arterial Microvessels. Circulation Research, 2004, 94, 167-174.	2.0	61
51	Retinoids. Circulation Research, 2000, 87, 355-362.	2.0	56
52	Serum Response Factor Utilizes Distinct Promoter- and Enhancer-Based Mechanisms To Regulate Cytoskeletal Gene Expression in Macrophages. Molecular and Cellular Biology, 2011, 31, 861-875.	1.1	56
53	The Smooth Muscle Cell-restricted KCNMB1 Ion Channel Subunit Is a Direct Transcriptional Target of Serum Response Factor and Myocardin. Journal of Biological Chemistry, 2009, 284, 33671-33682.	1.6	55
54	Retinoic Acidâ€"Induced Tissue Transglutaminase and Apoptosis in Vascular Smooth Muscle Cells. Circulation Research, 2000, 87, 881-887.	2.0	54

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55	Platelet factor 4 mediates vascular smooth muscle cell injury responses. Blood, 2013, 121, 4417-4427.	0.6	53
56	Serum Response Factorâ€"Dependent MicroRNAs Regulate Gastrointestinal Smooth Muscle Cell Phenotypes. Gastroenterology, 2011, 141, 164-175.	0.6	50
57	CRISPR-Cas9 Genome Editing of a Single Regulatory Element Nearly Abolishes Target Gene Expression in Miceâ€"Brief Report. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 312-315.	1.1	48
58	Smooth Muscle Cell Genome Browser: Enabling the Identification of Novel Serum Response Factor Target Genes. PLoS ONE, 2015, 10, e0133751.	1.1	48
59	Multiple Promoters Direct Expression of Three AKAP12 Isoforms with Distinct Subcellular and Tissue Distribution Profiles. Journal of Biological Chemistry, 2004, 279, 56014-56023.	1.6	46
60	Identifying functional single nucleotide polymorphisms in the human CArGome. Physiological Genomics, 2011, 43, 1038-1048.	1.0	44
61	A CRISPR Path to Engineering New Genetic Mouse Models for Cardiovascular Research. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, 1058-1075.	1.1	44
62	Smad3-mediated Myocardin Silencing. Journal of Biological Chemistry, 2011, 286, 15050-15057.	1.6	43
63	Functional significance of protein kinase A activation by endothelin-1 and ATP: negative regulation of SRF-dependent gene expression by PKA. Cellular Signalling, 2003, 15, 597-604.	1.7	41
64	Challenges and Opportunities in Linking Long Noncoding RNAs to Cardiovascular, Lung, and Blood Diseases. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, 21-25.	1.1	39
65	Dual role of PKA in phenotypic modulation of vascular smooth muscle cells by extracellular ATP. American Journal of Physiology - Cell Physiology, 2004, 287, C449-C456.	2.1	38
66	Serum response factor regulates bone formation via IGF-1 and Runx2 signals. Journal of Bone and Mineral Research, 2012, 27, 1659-1668.	3.1	38
67	The short and long of noncoding sequences in the control of vascular cell phenotypes. Cellular and Molecular Life Sciences, 2015, 72, 3457-3488.	2.4	34
68	Myocardin-dependent Activation of the CArG Box-rich Smooth Muscle Î³-Actin Gene. Journal of Biological Chemistry, 2009, 284, 32582-32590.	1.6	33
69	Expression and functional activity of four myocardin isoforms. Gene, 2010, 464, 1-10.	1.0	33
70	Contribution of serum response factor and myocardin to transcriptional regulation of smoothelins. Cardiovascular Research, 2006, 70, 136-145.	1.8	32
71	Myocardin Family Members Drive Formation of Caveolae. PLoS ONE, 2015, 10, e0133931.	1.1	32
72	Mammalian Smooth Muscle Differentiation: Origins, Markers and Transcriptional Control. Results and Problems in Cell Differentiation, 2002, 38, 39-59.	0.2	30

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73	Cloning of a Novel Retinoid-inducible Serine Carboxypeptidase from Vascular Smooth Muscle Cells. Journal of Biological Chemistry, 2001, 276, 34175-34181.	1.6	29
74	Remote Control of Gene Expression. Journal of Biological Chemistry, 2007, 282, 15941-15945.	1.6	29
75	MKL1 cooperates with p38MAPK to promote vascular senescence, inflammation, and abdominal aortic aneurysm. Redox Biology, 2021, 41, 101903.	3.9	29
76	Smooth Muscle Calponin. Arteriosclerosis, Thrombosis, and Vascular Biology, 2011, 31, 2172-2180.	1.1	28
77	Tumor suppressor MDA-7/IL-24 selectively inhibits vascular smooth muscle cell growth and migration. Molecular Therapy, 2003, 8, 220-229.	3.7	27
78	Expression and promoter analysis of a highly restricted integrin alpha gene in vascular smooth muscle. Gene, 2013, 513, 82-89.	1.0	26
79	A Novel Retinoid-Response Gene Set in Vascular Smooth Muscle Cells. Biochemical and Biophysical Research Communications, 2001, 281, 475-482.	1.0	25
80	Expression, genomic structure and high resolution mapping to 19p13.2 of the human smooth muscle cell calponin gene. Gene, 1997, 197, 215-224.	1.0	24
81	Retinoids: Pleiotropic Agents of Therapy for Vascular Diseases?. Current Drug Targets Cardiovascular & Haematological Disorders, 2003, 3, 31-57.	2.0	24
82	Myocardin and microRNAâ€1 modulate bladder activity through connexin 43 expression during postâ€natal development. Journal of Cellular Physiology, 2013, 228, 1819-1826.	2.0	24
83	Novel Thrombotic Function of a Human SNP in <i>STXBP5</i> Revealed by CRISPR/Cas9 Gene Editing in Mice. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, 264-270.	1.1	24
84	CRISPR-Cas9â€"Mediated Epitope Tagging Provides Accurate and Versatile Assessment of Myocardinâ€"Brief Report. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 2184-2190.	1.1	24
85	AKAP12Î±, an Atypical Serum Response Factor-dependent Target Gene. Journal of Biological Chemistry, 2005, 280, 4125-4134.	1.6	22
86	Mitogen-Activated Protein Kinase 14 Is a Novel Negative Regulatory Switch for the Vascular Smooth Muscle Cell Contractile Gene Program. Arteriosclerosis, Thrombosis, and Vascular Biology, 2013, 33, 378-386.	1.1	22
87	Fibronectin Matrix Polymerization Regulates Smooth Muscle Cell Phenotype through a Rac1 Dependent Mechanism. PLoS ONE, 2014, 9, e94988.	1.1	22
88	Vascular smooth muscle cell contractile protein expression is increased through protein kinase G-dependent and -independent pathways by glucose-6-phosphate dehydrogenase inhibition and deficiency. American Journal of Physiology - Heart and Circulatory Physiology, 2016, 311, H904-H912.	1.5	22
89	Cross-species Sequence Analysis Reveals Multiple Charged Residue-rich Domains That Regulate Nuclear/Cytoplasmic Partitioning and Membrane Localization of A Kinase Anchoring Protein 12 (SSeCKS/Gravin). Journal of Biological Chemistry, 2005, 280, 28007-28014.	1.6	21
90	Ultrastructure of Zebrafish Dorsal Aortic Cells. Zebrafish, 2006, 3, 455-463.	0.5	20

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91	Serum response factor regulates smooth muscle contractility via myotonic dystrophy protein kinases and L-type calcium channels. PLoS ONE, 2017, 12, e0171262.	1.1	20
92	Serum Response Factor Is Essential for Maintenance of Podocyte Structure and Function. Journal of the American Society of Nephrology: JASN, 2018, 29, 416-422.	3.0	20
93	Retinoids: New Insight Into Smooth Muscle Cell Growth Inhibition. Arteriosclerosis, Thrombosis, and Vascular Biology, 2001, 21, 724-726.	1.1	18
94	Vascular smooth muscle cell differentiation â€“ 2010. Journal of Biomedical Research, 2010, 24, 169-180.	0.7	18
95	Channeling to Myocardin. Circulation Research, 2004, 95, 340-342.	2.0	15
96	Maternal deprivation alters expression of neural maturation gene <i>tbr1</i> in the amygdala paralaminar nucleus in infant female macaques. Developmental Psychobiology, 2017, 59, 235-249.	0.9	15
97	CRISPR-Mediated Single Nucleotide Polymorphism Modeling in Rats Reveals Insight Into Reduced Cardiovascular Risk Associated With Mediterranean<i>G6PD</i>Variant. Hypertension, 2020, 76, 523-532.	1.3	15
98	NAB2: A Transcriptional Brake for Activated Gene Expression in the Vessel Wall?. American Journal of Pathology, 1999, 155, 1009-1012.	1.9	14
99	G-protein-coupled-receptor activation of the smooth muscle calponin gene. Biochemical Journal, 2001, 357, 587-592.	1.7	14
100	Functional Characterization of a Putative Serine Carboxypeptidase in Vascular Smooth Muscle Cells. Circulation Research, 2009, 105, 271-278.	2.0	13
101	Expression of human smooth muscle calponin in transgenic mice revealed with a bacterial artificial chromosome. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 282, H1793-H1803.	1.5	12
102	Tissue Expression of the Novel Serine Carboxypeptidase Scpep1. Journal of Histochemistry and Cytochemistry, 2006, 54, 701-711.	1.3	12
103	Serum Response Factor Is Essential for Prenatal Gastrointestinal Smooth Muscle Development and Maintenance of Differentiated Phenotype. Journal of Neurogastroenterology and Motility, 2015, 21, 589-602.	0.8	12
104	Donâ€™t Judge Books by Their Covers. Circulation, 2014, 129, 1545-1547.	1.6	11
105	G-protein-coupled-receptor activation of the smooth muscle calponin gene. Biochemical Journal, 2001, 357, 587.	1.7	10
106	Retinoid-Induced Expression and Activity of an Immediate Early Tumor Suppressor Gene in Vascular Smooth Muscle Cells. PLoS ONE, 2011, 6, e18538.	1.1	10
107	Mapping of the rat SM22 gene to Chromosome 8q24: a candidate for high blood pressure and cardiac hypertrophy. Mammalian Genome, 1998, 9, 76-77.	1.0	9
108	CRISPR links to long noncoding RNA function in mice: A practical approach. Vascular Pharmacology, 2019, 114, 1-12.	1.0	9

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109	Expression and chromosomal mapping of the mouse smooth muscle calponin gene. Mammalian Genome, 2001, 12, 187-191.	1.0	8
110	What is Truth? Standards of Scientific Integrity in American Heart Association Journals. Arteriosclerosis, Thrombosis, and Vascular Biology, 2010, 30, 1-4.	1.1	8
111	Testosterone Rescues the Deâ€Differentiation of Smooth Muscle Cells Through Serum Response Factor/Myocardin. Journal of Cellular Physiology, 2017, 232, 2806-2817.	2.0	8
112	Deck of CArGs. Circulation Research, 2008, 103, 13-15.	2.0	7
113	Expression and comparative genomics of two serum response factor genes in zebrafish. International Journal of Developmental Biology, 2008, 52, 389-396.	0.3	7
114	Of mice and human-specific long noncoding RNAs. Mammalian Genome, 2022, 33, 281-292.	1.0	6
115	Localized Adenovirusâ€Mediated Gene Transfer Into Vascular Smooth Muscle in the Hamster Cheek Pouch. Microcirculation, 2001, 8, 403-413.	1.0	5
116	Angiotensin II: A Devious Activator of Mineralocorticoid Receptor-Dependent Gene Expression. Circulation Research, 2005, 96, 610-611.	2.0	5
117	MicroRNA133a: A New Variable in Vascular Smooth Muscle Cell Phenotypic Switching. Circulation Research, 2011, 109, 825-827.	2.0	5
118	Gene structure and chromosomal mapping of the rat smooth muscle calponin gene. Mammalian Genome, 2000, 11, 115-119.	1.0	4
119	HDAC7 supports vascular integrity. Nature Medicine, 2006, 12, 997-998.	15.2	4
120	SRF'ing the actin cytoskeleton with no destrin. Physiological Genomics, 2008, 34, 6-8.	1.0	4
121	Myocardin. Arteriosclerosis, Thrombosis, and Vascular Biology, 2013, 33, 2284-2285.	1.1	4
122	Response to correspondence on â€œReproducibility of CRISPR-Cas9 methods for generation of conditional mouse alleles: a multi-center evaluationâ€• Genome Biology, 2021, 22, 99.	3.8	4
123	Retinoids and Interferons as Antiangiogenic Cancer Drugs. , 1999, , 355-370.		3
124	Mediterranean G6PD variant rats are protected from Angiotensin II-induced hypertension and kidney damage, but not from inflammation and arterial stiffness. Vascular Pharmacology, 2022, , 107002.	1.0	3
125	Fishing for Function in Zebrafish. Circulation Research, 2006, 98, 723-726.	2.0	2
126	Generating a CRISPR knockout mouse through a strong premature termination codon: a cautionary tale. Journal of Biomedical Research, 2021, 35, 174.	0.7	2

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127	Radiation Hybrid (RH) Mapping of Human Smooth Muscle-Restricted Genes. , 1999, 30, 25-36.		1
128	Dicing Up MicroRNA Gene Expression Profiles in Normal and Neoplastic Smooth Muscle Cells. American Journal of Pathology, 2010, 177, 541-543.	1.9	1
129	Vascular Smooth Muscle Cell Phenotypic Adaptation. , 2012, , 1269-1278.		1
130	CRISPR-tagging mice in aging research. Aging, 2018, 10, 2226-2227.	1.4	0