

# Michael P Simons

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/7347609/michael-p-simons-publications-by-citations.pdf>

**Version:** 2024-04-24

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

359  
papers

31,261  
citations

92  
h-index

167  
g-index

431  
ext. papers

34,544  
ext. citations

10.4  
avg, IF

7.12  
L-index

#	Paper	IF	Citations
359	Mosaic organization of DNA nucleotides. <i>Physical Review E</i> , <b>1994</b> , 49, 1685-9	2.4	3261
358	Long-range correlations in nucleotide sequences. <i>Nature</i> , <b>1992</b> , 356, 168-70	50.4	1119
357	Mechanisms and regulation of endothelial VEGF receptor signalling. <i>Nature Reviews Molecular Cell Biology</i> , <b>2016</b> , 17, 611-25	48.7	698
356	Antisense c-myc oligonucleotides inhibit intimal arterial smooth muscle cell accumulation in vivo. <i>Nature</i> , <b>1992</b> , 359, 67-70	50.4	691
355	Heterozygous deficiency of PHD2 restores tumor oxygenation and inhibits metastasis via endothelial normalization. <i>Cell</i> , <b>2009</b> , 136, 839-851	56.2	642
354	Pharmacological treatment of coronary artery disease with recombinant fibroblast growth factor-2: double-blind, randomized, controlled clinical trial. <i>Circulation</i> , <b>2002</b> , 105, 788-93	16.7	567
353	Long-range correlation properties of coding and noncoding DNA sequences: GenBank analysis. <i>Physical Review E</i> , <b>1995</b> , 51, 5084-91	2.4	458
352	Loss of SR-BI expression leads to the early onset of occlusive atherosclerotic coronary artery disease, spontaneous myocardial infarctions, severe cardiac dysfunction, and premature death in apolipoprotein E-deficient mice. <i>Circulation Research</i> , <b>2002</b> , 90, 270-6	15.7	400
351	Divergent angiocrine signals from vascular niche balance liver regeneration and fibrosis. <i>Nature</i> , <b>2014</b> , 505, 97-102	50.4	387
350	Local perivascular delivery of basic fibroblast growth factor in patients undergoing coronary bypass surgery: results of a phase I randomized, double-blind, placebo-controlled trial. <i>Circulation</i> , <b>1999</b> , 100, 1865-71	16.7	364
349	Angiogenesis: where do we stand now?. <i>Circulation</i> , <b>2005</b> , 111, 1556-66	16.7	354
348	Role of angiogenesis in cardiovascular disease: a critical appraisal. <i>Circulation</i> , <b>2005</b> , 112, 1813-24	16.7	347
347	Syndecans: new kids on the signaling block. <i>Circulation Research</i> , <b>2005</b> , 96, 488-500	15.7	343
346	Endothelial-derived angiocrine signals induce and sustain regenerative lung alveolarization. <i>Cell</i> , <b>2011</b> , 147, 539-53	56.2	341
345	Endothelial cell metabolism in normal and diseased vasculature. <i>Circulation Research</i> , <b>2015</b> , 116, 1231-44	15.7	337
344	Clinical trials in coronary angiogenesis: issues, problems, consensus: An expert panel summary. <i>Circulation</i> , <b>2000</b> , 102, E73-86	16.7	327
343	PR39, a peptide regulator of angiogenesis. <i>Nature Medicine</i> , <b>2000</b> , 6, 49-55	50.5	324

342	Magnetic resonance mapping demonstrates benefits of VEGF-induced myocardial angiogenesis. <i>Nature Medicine</i> , <b>1995</b> , 1, 1085-9	50.5	295
341	Anti-angiogenic cues from vascular basement membrane collagen. <i>Cancer Research</i> , <b>2000</b> , 60, 2520-6	10.1	295
340	Angiogenesis in ischemic heart disease. <i>Nature Medicine</i> , <b>1997</b> , 3, 158-64	50.5	272
339	ALK1 signaling inhibits angiogenesis by cooperating with the Notch pathway. <i>Developmental Cell</i> , <b>2012</b> , 22, 489-500	10.2	267
338	Endothelial-to-mesenchymal transition drives atherosclerosis progression. <i>Journal of Clinical Investigation</i> , <b>2015</b> , 125, 4514-28	15.9	258
337	Effect of intracoronary recombinant human vascular endothelial growth factor on myocardial perfusion: evidence for a dose-dependent effect. <i>Circulation</i> , <b>2000</b> , 101, 118-21	16.7	256
336	Basic fibroblast growth factor improves myocardial function in chronically ischemic porcine hearts. <i>Journal of Clinical Investigation</i> , <b>1994</b> , 94, 623-30	15.9	248
335	Human nonmuscle myosin heavy chains are encoded by two genes located on different chromosomes. <i>Circulation Research</i> , <b>1991</b> , 69, 530-9	15.7	244
334	Results of a double-blind, placebo-controlled study to assess the safety of intramuscular injection of hepatocyte growth factor plasmid to improve limb perfusion in patients with critical limb ischemia. <i>Circulation</i> , <b>2008</b> , 118, 58-65	16.7	242
333	Therapeutic angiogenesis in cardiovascular disease. <i>Nature Reviews Drug Discovery</i> , <b>2003</b> , 2, 863-71	64.1	242
332	Macrophage skewing by Phd2 haplodeficiency prevents ischaemia by inducing arteriogenesis. <i>Nature</i> , <b>2011</b> , 479, 122-6	50.4	237
331	The FGF system has a key role in regulating vascular integrity. <i>Journal of Clinical Investigation</i> , <b>2008</b> , 118, 3355-66	15.9	230
330	FGF regulates TGF- $\beta$ signaling and endothelial-to-mesenchymal transition via control of let-7 miRNA expression. <i>Cell Reports</i> , <b>2012</b> , 2, 1684-96	10.6	219
329	Fibroblast growth factor regulation of neovascularization. <i>Current Opinion in Hematology</i> , <b>2008</b> , 15, 215-20	3.9	210
328	The molecular basis of endothelial cell plasticity. <i>Nature Communications</i> , <b>2017</b> , 8, 14361	17.4	208
327	Linguistic features of noncoding DNA sequences. <i>Physical Review Letters</i> , <b>1994</b> , 73, 3169-72	7.4	205
326	Finite-size effects on long-range correlations: implications for analyzing DNA sequences. <i>Physical Review E</i> , <b>1993</b> , 47, 3730-3	2.4	202
325	Therapeutic angiogenesis with basic fibroblast growth factor: technique and early results. <i>Annals of Thoracic Surgery</i> , <b>1998</b> , 65, 1540-4	2.7	197

324	Intracoronary basic fibroblast growth factor (FGF-2) in patients with severe ischemic heart disease: results of a phase I open-label dose escalation study. <i>Journal of the American College of Cardiology</i> , <b>2000</b> , 36, 2132-9	15.1	193
323	Thrombospondin type 1 repeats interact with matrix metalloproteinase 2. Regulation of metalloproteinase activity. <i>Journal of Biological Chemistry</i> , <b>2000</b> , 275, 32167-73	5.4	192
322	VEGF receptor 2 endocytic trafficking regulates arterial morphogenesis. <i>Developmental Cell</i> , <b>2010</b> , 18, 713-24	10.2	188
321	Cell communications in the heart. <i>Circulation</i> , <b>2010</b> , 122, 928-37	16.7	186
320	Endostatin: yeast production, mutants, and antitumor effect in renal cell carcinoma. <i>Cancer Research</i> , <b>1999</b> , 59, 189-97	10.1	184
319	Intracoronary administration of recombinant human vascular endothelial growth factor to patients with coronary artery disease. <i>American Heart Journal</i> , <b>2001</b> , 142, 872-80	4.9	182
318	FGF-dependent metabolic control of vascular development. <i>Nature</i> , <b>2017</b> , 545, 224-228	50.4	181
317	VEGF signaling inside vascular endothelial cells and beyond. <i>Current Opinion in Cell Biology</i> , <b>2012</b> , 24, 188-93	9	178
316	Cloning, expression, and in vitro activity of human endostatin. <i>Biochemical and Biophysical Research Communications</i> , <b>1999</b> , 258, 345-52	3.4	165
315	Antisense nonmuscle myosin heavy chain and c-myc oligonucleotides suppress smooth muscle cell proliferation in vitro. <i>Circulation Research</i> , <b>1992</b> , 70, 835-43	15.7	165
314	Correlation approach to identify coding regions in DNA sequences. <i>Biophysical Journal</i> , <b>1994</b> , 67, 64-70	2.9	161
313	Angiocrine factors deployed by tumor vascular niche induce B cell lymphoma invasiveness and chemoresistance. <i>Cancer Cell</i> , <b>2014</b> , 25, 350-65	24.3	158
312	Angiogenesis-dependent and independent phases of intimal hyperplasia. <i>Circulation</i> , <b>2004</b> , 110, 2436-43	16.7	157
311	Synectin, syndecan-4 cytoplasmic domain binding PDZ protein, inhibits cell migration. <i>Journal of Cellular Physiology</i> , <b>2000</b> , 184, 373-9	7	155
310	The neuropilin 1 cytoplasmic domain is required for VEGF-A-dependent arteriogenesis. <i>Developmental Cell</i> , <b>2013</b> , 25, 156-68	10.2	154
309	Fibroblast growth factor-specific modulation of cellular response by syndecan-4. <i>Journal of Cell Biology</i> , <b>2002</b> , 157, 715-25	7.3	153
308	The extracellular matrix and blood vessel formation: not just a scaffold. <i>Journal of Cellular and Molecular Medicine</i> , <b>2007</b> , 11, 176-205	5.6	151
307	VEGF administration in chronic myocardial ischemia in pigs. <i>Cardiovascular Research</i> , <b>1998</b> , 40, 272-81	9.9	151

306	Therapeutic angiogenesis with recombinant fibroblast growth factor-2 improves stress and rest myocardial perfusion abnormalities in patients with severe symptomatic chronic coronary artery disease. <i>Circulation</i> , <b>2000</b> , 102, 1605-10	16.7	143
305	Therapeutic angiogenesis in cardiology using protein formulations. <i>Cardiovascular Research</i> , <b>2001</b> , 49, 522-31	9.9	141
304	Stretch-induced VEGF expression in the heart. <i>Journal of Clinical Investigation</i> , <b>1997</b> , 100, 18-24	15.9	139
303	Long-term effects of surgical angiogenic therapy with fibroblast growth factor 2 protein. <i>Journal of Thoracic and Cardiovascular Surgery</i> , <b>2002</b> , 124, 28-34	1.5	136
302	FGF-dependent regulation of VEGF receptor 2 expression in mice. <i>Journal of Clinical Investigation</i> , <b>2011</b> , 121, 2668-78	15.9	133
301	Branching morphogenesis. <i>Circulation Research</i> , <b>2008</b> , 103, 784-95	15.7	131
300	Fractal landscapes and molecular evolution: modeling the myosin heavy chain gene family. <i>Biophysical Journal</i> , <b>1993</b> , 65, 2673-9	2.9	131
299	Statistical mechanics in biology: how ubiquitous are long-range correlations?. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1994</b> , 205, 214-53	3.3	131
298	Generalized Lévy-walk model for DNA nucleotide sequences. <i>Physical Review E</i> , <b>1993</b> , 47, 4514-23	2.4	125
297	Syndecan-4 signaling at a glance. <i>Journal of Cell Science</i> , <b>2013</b> , 126, 3799-804	5.3	123
296	Fibroblast growth factor 2 endocytosis in endothelial cells proceed via syndecan-4-dependent activation of Rac1 and a Cdc42-dependent macropinocytic pathway. <i>Journal of Cell Science</i> , <b>2004</b> , 117, 3189-99	5.3	123
295	Syndecan-4-mediated signalling. <i>Cellular Signalling</i> , <b>2001</b> , 13, 855-62	4.9	123
294	Probucol prevents early coronary heart disease and death in the high-density lipoprotein receptor SR-BI/apolipoprotein E double knockout mouse. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 7283-8	11.5	121
293	Inhibition of ubiquitin-proteasome pathway-mediated I kappa B alpha degradation by a naturally occurring antibacterial peptide. <i>Journal of Clinical Investigation</i> , <b>2000</b> , 106, 439-48	15.9	121
292	Coronary vasoconstriction and catecholamine cardiomyopathy. <i>American Heart Journal</i> , <b>1985</b> , 109, 297-304	14.9	120
291	Selective regulation of arterial branching morphogenesis by synectin. <i>Developmental Cell</i> , <b>2006</b> , 10, 783-95.2	15.2	116
290	Relation between activated smooth-muscle cells in coronary-artery lesions and restenosis after atherectomy. <i>New England Journal of Medicine</i> , <b>1993</b> , 328, 608-13	59.2	116
289	Evolving revascularization approaches for myocardial ischemia. <i>American Journal of Cardiology</i> , <b>2003</b> , 92, 9N-17N	3	115

288	Inhibition of tumor angiogenesis and growth by a small-molecule multi-FGF receptor blocker with allosteric properties. <i>Cancer Cell</i> , <b>2013</b> , 23, 477-88	24.3	110
287	Myocardial hypertrophy in the absence of external stimuli is induced by angiogenesis in mice. <i>Journal of Clinical Investigation</i> , <b>2007</b> , 117, 3188-97	15.9	110
286	ERK1/2-Akt1 crosstalk regulates arteriogenesis in mice and zebrafish. <i>Journal of Clinical Investigation</i> , <b>2010</b> , 120, 1217-28	15.9	110
285	Vasa vasorum in normal and diseased arteries. <i>Circulation</i> , <b>2014</b> , 129, 2557-66	16.7	109
284	Medical device development: from prototype to regulatory approval. <i>Circulation</i> , <b>2004</b> , 109, 3068-72	16.7	109
283	Syndecan 4 is required for endothelial alignment in flow and atheroprotective signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 17308-13	11.5	108
282	VEGF-B-induced vascular growth leads to metabolic reprogramming and ischemia resistance in the heart. <i>EMBO Molecular Medicine</i> , <b>2014</b> , 6, 307-21	12	106
281	Translational physiology: porcine models of human coronary artery disease: implications for preclinical trials of therapeutic angiogenesis. <i>Journal of Applied Physiology</i> , <b>2003</b> , 94, 1689-701	3.7	106
280	Neuropilin-1-VEGFR-2 complexing requires the PDZ-binding domain of neuropilin-1. <i>Journal of Biological Chemistry</i> , <b>2008</b> , 283, 25110-25114	5.4	105
279	Enhancement of migration by protein kinase Calpha and inhibition of proliferation and cell cycle progression by protein kinase Cdelta in capillary endothelial cells. <i>Journal of Biological Chemistry</i> , <b>1997</b> , 272, 7390-7	5.4	103
278	The role of syndecan cytoplasmic domain in basic fibroblast growth factor-dependent signal transduction. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 24417-24	5.4	102
277	Regulation of protein kinase B/Akt activity and Ser473 phosphorylation by protein kinase Calpha in endothelial cells. <i>Cellular Signalling</i> , <b>2004</b> , 16, 951-7	4.9	101
276	Statistical properties of DNA sequences. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1995</b> , 221, 180-92	3.3	100
275	Phosphorylation of the cytoplasmic tail of syndecan-4 regulates activation of protein kinase Calpha. <i>Journal of Biological Chemistry</i> , <b>1998</b> , 273, 25548-51	5.4	98
274	VEGF, flk-1, and flt-1 expression in a rat myocardial infarction model of angiogenesis. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>1996</b> , 270, H1803-11	5.2	98
273	Copper chelation represses the vascular response to injury. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 6700-5	11.5	96
272	Fractals in biology and medicine. <i>Chaos, Solitons and Fractals</i> , <b>1995</b> , 6, 171-201	9.3	96
271	Acceleration of cardiovascular disease by a dysfunctional prostacyclin receptor mutation: potential implications for cyclooxygenase-2 inhibition. <i>Circulation Research</i> , <b>2008</b> , 102, 986-93	15.7	95

270	Proline- and arginine-rich peptides constitute a novel class of allosteric inhibitors of proteasome activity. <i>Biochemistry</i> , <b>2003</b> , 42, 8663-70	3.2	95
269	Antisense oligonucleotide inhibition of PDGFR-beta receptor subunit expression directs suppression of intimal thickening. <i>Circulation</i> , <b>1997</b> , 95, 669-76	16.7	95
268	Progress and prospects: gene therapy clinical trials (part 1). <i>Gene Therapy</i> , <b>2007</b> , 14, 1439-47	4	94
267	Syndecan-4 regulates subcellular localization of mTOR Complex2 and Akt activation in a PKCalpha-dependent manner in endothelial cells. <i>Molecular Cell</i> , <b>2008</b> , 32, 140-9	17.6	92
266	Antisense proliferating cell nuclear antigen oligonucleotides inhibit intimal hyperplasia in a rat carotid artery injury model. <i>Journal of Clinical Investigation</i> , <b>1994</b> , 93, 2351-6	15.9	92
265	Endothelial ERK signaling controls lymphatic fate specification. <i>Journal of Clinical Investigation</i> , <b>2013</b> , 123, 1202-15	15.9	92
264	A brief etymology of the collateral circulation. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2014</b> , 34, 1854-9	9.4	91
263	Endothelial Akt1 mediates angiogenesis by phosphorylating multiple angiogenic substrates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 12865-70	11.5	91
262	An inside view: VEGF receptor trafficking and signaling. <i>Physiology</i> , <b>2012</b> , 27, 213-22	9.8	91
261	State-of-the-Art Methods for Evaluation of Angiogenesis and Tissue Vascularization: A Scientific Statement From the American Heart Association. <i>Circulation Research</i> , <b>2015</b> , 116, e99-132	15.7	90
260	Scaling features of noncoding DNA. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1999</b> , 273, 1-18	3.3	90
259	Delayed arteriogenesis in hypercholesterolemic mice. <i>Circulation</i> , <b>2005</b> , 112, 2501-9	16.7	89
258	Pericardial effusion in patients with cancer: outcome with contemporary management strategies. <i>Heart</i> , <b>1996</b> , 75, 67-71	5.1	88
257	Vascular endothelial growth factor and semaphorin induce neuropilin-1 endocytosis via separate pathways. <i>Circulation Research</i> , <b>2008</b> , 103, e71-9	15.7	87
256	Clustering induces redistribution of syndecan-4 core protein into raft membrane domains. <i>Journal of Biological Chemistry</i> , <b>2002</b> , 277, 19946-51	5.4	87
255	Molecular controls of arterial morphogenesis. <i>Circulation Research</i> , <b>2015</b> , 116, 1712-24	15.7	86
254	Lacteal junction zippering protects against diet-induced obesity. <i>Science</i> , <b>2018</b> , 361, 599-603	33.3	85
253	Intrapericardial delivery of fibroblast growth factor-2 induces neovascularization in a porcine model of chronic myocardial ischemia. <i>Journal of Pharmacology and Experimental Therapeutics</i> , <b>2000</b> , 292, 795-802	4.7	85



252	Efficacy of intracoronary or intravenous VEGF165 in a pig model of chronic myocardial ischemia. <i>Journal of the American College of Cardiology</i> , <b>2001</b> , 37, 616-23	15.1	84
251	Regulation of syndecan-4 phosphorylation in vivo. <i>Journal of Biological Chemistry</i> , <b>1998</b> , 273, 10914-8	5.4	83
250	Abnormalities in the regulators of angiogenesis in patients with scleroderma. <i>Journal of Rheumatology</i> , <b>2009</b> , 36, 576-82	4.1	82
249	Micro computed tomography for vascular exploration. <i>Journal of Angiogenesis Research</i> , <b>2010</b> , 2, 7		82
248	Systematic analysis of coding and noncoding DNA sequences using methods of statistical linguistics. <i>Physical Review E</i> , <b>1995</b> , 52, 2939-50	2.4	82
247	Endothelial deletion of murine Jag1 leads to valve calcification and congenital heart defects associated with Alagille syndrome. <i>Development (Cambridge)</i> , <b>2012</b> , 139, 4449-60	6.6	80
246	PR-39 and PR-11 peptides inhibit ischemia-reperfusion injury by blocking proteasome-mediated I kappa B alpha degradation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2001</b> , 281, H2612-8	5.2	80
245	Expression of VEGF and angiopoietins-1 and -2 during ischemia-induced coronary angiogenesis. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2003</b> , 285, H352-8	5.2	79
244	Phosphatidylinositol-4,5-bisphosphate mediates the interaction of syndecan-4 with protein kinase C. <i>Biochemistry</i> , <b>1999</b> , 38, 15871-7	3.2	79
243	Endothelial TGF- $\beta$ signalling drives vascular inflammation and atherosclerosis. <i>Nature Metabolism</i> , <b>2019</b> , 1, 912-926	14.6	78
242	Non-canonical fibroblast growth factor signalling in angiogenesis. <i>Cardiovascular Research</i> , <b>2008</b> , 78, 223-31	9.9	76
241	PKC $\alpha$ activates eNOS and increases arterial blood flow in vivo. <i>Circulation Research</i> , <b>2005</b> , 97, 482-7	15.7	76
240	Suppression of RhoG activity is mediated by a syndecan 4-synectin-RhoGDI1 complex and is reversed by PKC $\alpha$ in a Rac1 activation pathway. <i>Journal of Cell Biology</i> , <b>2009</b> , 186, 75-83	7.3	75
239	Intracoronary and intravenous administration of basic fibroblast growth factor: myocardial and tissue distribution. <i>Drug Metabolism and Disposition</i> , <b>1999</b> , 27, 821-6	4	75
238	Angiogenesis induced by acidic fibroblast growth factor as an alternative method of revascularization for chronic myocardial ischemia. <i>Surgery</i> , <b>1996</b> , 120, 182-8	3.6	74
237	c-myc in vasculoproliferative disease. <i>Circulation Research</i> , <b>1995</b> , 76, 176-82	15.7	74
236	Molecular controls of lymphatic VEGFR3 signaling. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2015</b> , 35, 421-9	9.4	73
235	Insights from angiogenesis trials using fibroblast growth factor for advanced arteriosclerotic disease. <i>Trends in Cardiovascular Medicine</i> , <b>2003</b> , 13, 116-22	6.9	72



234	PTP1b is a physiologic regulator of vascular endothelial growth factor signaling in endothelial cells. <i>Circulation</i> , <b>2014</b> , 130, 902-9	16.7	70
233	Regulation of vascular integrity. <i>Journal of Molecular Medicine</i> , <b>2009</b> , 87, 571-82	5.5	70
232	Macrophage-dependent regulation of syndecan gene expression. <i>Circulation Research</i> , <b>1997</b> , 81, 785-96	15.7	70
231	Fibroblast growth factor receptor 1 is a key inhibitor of TGF $\beta$ signaling in the endothelium. <i>Science Signaling</i> , <b>2014</b> , 7, ra90	8.8	69
230	Efficacy of intracoronary versus intravenous FGF-2 in a pig model of chronic myocardial ischemia. <i>Annals of Thoracic Surgery</i> , <b>2000</b> , 70, 2113-8	2.7	69
229	Protein kinase C (PKC) delta regulates PKCalpha activity in a Syndecan-4-dependent manner. <i>Journal of Biological Chemistry</i> , <b>2002</b> , 277, 20367-71	5.4	67
228	Evidence implicating nonmuscle myosin in restenosis. Use of in situ hybridization to analyze human vascular lesions obtained by directional atherectomy. <i>Circulation</i> , <b>1992</b> , 85, 543-53	16.7	64
227	Phosphorylation of VE-cadherin controls endothelial phenotypes via p120-catenin coupling and Rac1 activation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2011</b> , 300, H162-72	5.2	62
226	Growth factor-induced therapeutic angiogenesis in the heart: protein therapy. <i>Cardiovascular Research</i> , <b>2005</b> , 65, 649-55	9.9	62
225	Angiopoietin-2 secretion by endothelial cell exosomes: regulation by the phosphatidylinositol 3-kinase (PI3K)/Akt/endothelial nitric oxide synthase (eNOS) and syndecan-4/syntenin pathways. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 510-9	5.4	61
224	The antiangiogenic activity of rPAI-1(23) inhibits vasa vasorum and growth of atherosclerotic plaque. <i>Circulation Research</i> , <b>2009</b> , 104, 337-45	15.7	61
223	Vascular endothelial growth factor administration in chronic myocardial ischemia. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>1996</b> , 270, H1791-802	5.2	61
222	Syndecan-4 clustering induces cell migration in a PDZ-dependent manner. <i>Circulation Research</i> , <b>2006</b> , 98, 1398-404	15.7	60
221	Angiographic methods to assess human coronary angiogenesis. <i>American Heart Journal</i> , <b>1999</b> , 137, 169-79	4.9	59
220	Non-equilibrium dynamics as an indispensable characteristic of a healthy biological system. <i>Integrative Psychological and Behavioral Science</i> , <b>1994</b> , 29, 283-93		59
219	NO triggers RGS4 degradation to coordinate angiogenesis and cardiomyocyte growth. <i>Journal of Clinical Investigation</i> , <b>2013</b> , 123, 1718-31	15.9	59
218	Basic fibroblast growth factor in a porcine model of chronic myocardial ischemia: a comparison of angiographic, echocardiographic and coronary flow parameters. <i>Journal of Pharmacology and Experimental Therapeutics</i> , <b>1997</b> , 282, 385-90	4.7	59
217	Cleavage of syndecan-4 by ADAMTS1 provokes defects in adhesion. <i>International Journal of Biochemistry and Cell Biology</i> , <b>2009</b> , 41, 800-10	5.6	58

216	Syndecan 4 regulates FGFR1 signaling in endothelial cells by directing macropinocytosis. <i>Science Signaling</i> , <b>2012</b> , 5, ra36	8.8	58
215	Myocyte-dependent regulation of endothelial cell syndecan-4 expression. Role of TNF-alpha. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 14786-90	5.4	56
214	An anti-CD11/CD18 monoclonal antibody in patients with acute myocardial infarction having percutaneous transluminal coronary angioplasty (the FESTIVAL study). <i>American Journal of Cardiology</i> , <b>2001</b> , 88, 482-7	3	55
213	Endothelial nuclear factor-B-dependent regulation of arteriogenesis and branching. <i>Circulation</i> , <b>2012</b> , 126, 2589-600	16.7	54
212	Long-range power-law correlations in condensed matter physics and biophysics. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1993</b> , 200, 4-24	3.3	54
211	Netrin-1 controls sympathetic arterial innervation. <i>Journal of Clinical Investigation</i> , <b>2014</b> , 124, 3230-40	15.9	54
210	Anti-C5a monoclonal antibody reduces cardiopulmonary bypass and cardioplegia-induced coronary endothelial dysfunction. <i>Journal of Thoracic and Cardiovascular Surgery</i> , <b>1998</b> , 116, 1060-8	1.5	53
209	PR39 inhibits apoptosis in hypoxic endothelial cells: role of inhibitor apoptosis protein-2. <i>Circulation</i> , <b>2004</b> , 109, 1660-7	16.7	53
208	Increased responsiveness of hypoxic endothelial cells to FGF2 is mediated by HIF-1-dependent regulation of enzymes involved in synthesis of heparan sulfate FGF2-binding sites. <i>Journal of Cell Science</i> , <b>2002</b> , 115, 1951-1959	5.3	53
207	Increased responsiveness of hypoxic endothelial cells to FGF2 is mediated by HIF-1alpha-dependent regulation of enzymes involved in synthesis of heparan sulfate FGF2-binding sites. <i>Journal of Cell Science</i> , <b>2002</b> , 115, 1951-9	5.3	53
206	Smooth Muscle Cell Reprogramming in Aortic Aneurysms. <i>Cell Stem Cell</i> , <b>2020</b> , 26, 542-557.e11	18	52
205	Regulation of vascular smooth muscle cell proliferation by plasma membrane Ca(2+)-ATPase. <i>American Journal of Physiology - Cell Physiology</i> , <b>1997</b> , 272, C1947-59	5.4	52
204	Integrative signaling in angiogenesis. <i>Molecular and Cellular Biochemistry</i> , <b>2004</b> , 264, 99-102	4.2	52
203	Fractal landscapes in biological systems: long-range correlations in DNA and interbeat heart intervals. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1992</b> , 191, 1-12	3.3	52
202	Endothelial miR-17~92 cluster negatively regulates arteriogenesis via miRNA-19 repression of WNT signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 12812-7	11.5	51
201	Diabetic monocyte and vascular endothelial growth factor signaling impairment. <i>Circulation</i> , <b>2009</b> , 120, 104-5	16.7	51
200	Re-evaluating therapeutic neovascularization. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2004</b> , 36, 25-32	5.8	51
199	Endothelial cell-dependent regulation of arteriogenesis. <i>Circulation Research</i> , <b>2013</b> , 113, 1076-86	15.7	50

198	Endothelial RAF1/ERK activation regulates arterial morphogenesis. <i>Blood</i> , <b>2013</b> , 121, 3988-96, S1-9	2.2	50
197	Dll4-Notch signaling determines the formation of native arterial collateral networks and arterial function in mouse ischemia models. <i>Development (Cambridge)</i> , <b>2013</b> , 140, 1720-9	6.6	49
196	Antiangiogenic plasma activity in patients with systemic sclerosis. <i>Arthritis and Rheumatism</i> , <b>2007</b> , 56, 3448-58		49
195	Fibroblast growth factor (FGF) signaling regulates transforming growth factor beta (TGF $\beta$ )-dependent smooth muscle cell phenotype modulation. <i>Scientific Reports</i> , <b>2016</b> , 6, 33407	4.9	48
194	Long-range fractal correlations in DNA. <i>Physical Review Letters</i> , <b>1993</b> , 71, 1776	7.4	48
193	Fibroblast growth factor signaling potentiates VE-cadherin stability at adherens junctions by regulating SHP2. <i>PLoS ONE</i> , <b>2012</b> , 7, e37600	3.7	47
192	Development and application of a multimodal contrast agent for SPECT/CT hybrid imaging. <i>Bioconjugate Chemistry</i> , <b>2011</b> , 22, 1784-92	6.3	47
191	Angiogenesis in the human heart: gene and cell therapy. <i>Angiogenesis</i> , <b>2005</b> , 8, 241-51	10.6	47
190	Smooth muscle FGF/TGF $\beta$ cross talk regulates atherosclerosis progression. <i>EMBO Molecular Medicine</i> , <b>2016</b> , 8, 712-28	12	47
189	Molecular basis for proline- and arginine-rich peptide inhibition of proteasome. <i>Journal of Molecular Biology</i> , <b>2008</b> , 384, 219-27	6.5	46
188	Transcriptional profiling in coronary artery disease: indications for novel markers of coronary collateralization. <i>Circulation</i> , <b>2006</b> , 114, 1811-20	16.7	45
187	Assessment of relative sensitivities of noninvasive tests for cardiac amyloidosis in documented cardiac amyloidosis. <i>American Journal of Cardiology</i> , <b>1992</b> , 69, 425-7	3	45
186	A unifying concept in vascular health and disease. <i>Science</i> , <b>2018</b> , 360, 270-271	33.3	44
185	c-myb affects intracellular calcium handling in vascular smooth muscle cells. <i>American Journal of Physiology - Cell Physiology</i> , <b>1995</b> , 268, C856-68	5.4	44
184	Angiogenesis versus arteriogenesis: neuropilin 1 modulation of VEGF signaling. <i>F1000prime Reports</i> , <b>2015</b> , 7, 26		43
183	Humoral and cellular factors responsible for coronary collateral formation. <i>American Journal of Cardiology</i> , <b>2006</b> , 98, 1194-7	3	43
182	Fractal landscape analysis of DNA walks. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1992</b> , 191, 25-9	3.3	43
181	Gene transfer for angiogenesis in coronary artery disease. <i>Annual Review of Medicine</i> , <b>2001</b> , 52, 485-502	17.4	42

180	Coronary angiogenesis: detection in vivo with MR imaging sensitive to collateral neocirculation--preliminary study in pigs. <i>Radiology</i> , <b>2000</b> , 214, 801-7	20.5	42
179	Syndecan-4 modulates basic fibroblast growth factor 2 signaling in vivo. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2003</b> , 284, H2078-82	5.2	41
178	ELAVL1 regulates alternative splicing of eIF4E transporter to promote postnatal angiogenesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 18309-14	11.5	40
177	Syndecan-4 mediates macrophage uptake of group V secretory phospholipase A2-modified LDL. <i>Journal of Lipid Research</i> , <b>2009</b> , 50, 641-50	6.3	39
176	N-terminal syndecan-2 domain selectively enhances 6-O heparan sulfate chains sulfation and promotes VEGFA-dependent neovascularization. <i>Nature Communications</i> , <b>2019</b> , 10, 1562	17.4	38
175	Spatial heterogeneity in VEGF-induced vasodilation: VEGF dilates microvessels but not epicardial and systemic arteries and veins. <i>Annals of Vascular Surgery</i> , <b>2003</b> , 17, 245-52	1.7	37
174	Endothelial-to-Mesenchymal Transition, Vascular Inflammation, and Atherosclerosis. <i>Frontiers in Cardiovascular Medicine</i> , <b>2020</b> , 7, 53	5.4	36
173	When endothelial cells go rogue. <i>EMBO Molecular Medicine</i> , <b>2016</b> , 8, 1-2	12	36
172	FRS2 via fibroblast growth factor receptor 1 is required for platelet-derived growth factor receptor beta-mediated regulation of vascular smooth muscle marker gene expression. <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 15980-92	5.4	36
171	Pharmacokinetics and pharmacodynamics of recombinant FGF-2 in a phase I trial in coronary artery disease. <i>Journal of Clinical Pharmacology</i> , <b>2001</b> , 41, 378-85	2.9	36
170	Adenoviral PR39 improves blood flow and myocardial function in a pig model of chronic myocardial ischemia by enhancing collateral formation. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , <b>2006</b> , 290, R494-500	3.2	35
169	Transmembrane protein ESDN promotes endothelial VEGF signaling and regulates angiogenesis. <i>Journal of Clinical Investigation</i> , <b>2013</b> , 123, 5082-97	15.9	35
168	Chemokine-coupled $\beta$ 2 integrin-induced macrophage Rac2-Myosin IIA interaction regulates VEGF-A mRNA stability and arteriogenesis. <i>Journal of Experimental Medicine</i> , <b>2014</b> , 211, 1957-68	16.6	34
167	Targeting GIPC/synectin in pancreatic cancer inhibits tumor growth. <i>Clinical Cancer Research</i> , <b>2009</b> , 15, 4095-103	12.9	34
166	Expression of vascular endothelial growth factor and its receptors is increased, but microvascular relaxation is impaired in patients after acute myocardial ischemia. <i>Journal of Thoracic and Cardiovascular Surgery</i> , <b>2001</b> , 121, 735-42	1.5	34
165	Medical imaging techniques in the evaluation of strategies for therapeutic angiogenesis. <i>Current Pharmaceutical Design</i> , <b>2002</b> , 8, 1467-96	3.3	34
164	Subxyphoid access of the normal pericardium: a novel drug delivery technique. <i>Catheterization and Cardiovascular Interventions</i> , <b>1999</b> , 47, 109-11	2.7	34
163	Enhanced microvascular relaxations to VEGF and bFGF in chronically ischemic porcine myocardium. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>1996</b> , 271, H713-20	5.2	34

162	The syndecan-4/protein kinase C pathway mediates prostaglandin E2-induced extracellular regulated kinase (ERK) activation in endothelial cells and angiogenesis in vivo. <i>Journal of Biological Chemistry</i> , <b>2013</b> , 288, 12712-21	5.4	33
161	Role of synectin in lymphatic development in zebrafish and frogs. <i>Blood</i> , <b>2010</b> , 116, 3356-66	2.2	33
160	FRactal Landscapes in Biological Systems. <i>Fractals</i> , <b>1993</b> , 01, 283-301	3.2	33
159	Modulation of myocardial perfusion and vascular reactivity by pericardial basic fibroblast growth factor: insight into ischemia-induced reduction in endothelium-dependent vasodilatation. <i>Journal of Thoracic and Cardiovascular Surgery</i> , <b>1998</b> , 116, 1022-8	1.5	32
158	High-resolution quantitative computed tomography demonstrating selective enhancement of medium-size collaterals by placental growth factor-1 in the mouse ischemic hindlimb. <i>Circulation</i> , <b>2006</b> , 113, 2445-53	16.7	32
157	Endothelium as master regulator of organ development and growth. <i>Vascular Pharmacology</i> , <b>2009</b> , 50, 1-7	5.9	31
156	Basic FGF reduces stunning via a NOS2-dependent pathway in coronary-perfused mouse hearts. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2000</b> , 279, H260-8	5.2	31
155	SUMOylation of VEGFR2 regulates its intracellular trafficking and pathological angiogenesis. <i>Nature Communications</i> , <b>2018</b> , 9, 3303	17.4	30
154	Endothelial ERK1/2 signaling maintains integrity of the quiescent endothelium. <i>Journal of Experimental Medicine</i> , <b>2019</b> , 216, 1874-1890	16.6	29
153	Receptor tyrosine kinases endocytosis in endothelium: biology and signaling. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2014</b> , 34, 1831-7	9.4	29
152	Reduced-dose fibrinolytic acceleration of ST-segment elevation myocardial infarction treatment coupled with urgent percutaneous coronary intervention compared to primary percutaneous coronary intervention alone results of the AMICO (Alliance for Myocardial Infarction Care Optimization) Registry. <i>JACC: Cardiovascular Interventions</i> , <b>2008</b> , 1, 504-10	5	29
151	Serotonin-induced human coronary microvascular contraction during acute myocardial ischemia is blocked by COX-2 inhibition. <i>Basic Research in Cardiology</i> , <b>2001</b> , 96, 59-67	11.8	29
150	c-Myb-dependent cell cycle progression and Ca <sup>2+</sup> storage in cultured vascular smooth muscle cells. <i>Circulation Research</i> , <b>1997</b> , 80, 617-26	15.7	29
149	The expanding role of neuropilin: regulation of transforming growth factor- $\beta$ and platelet-derived growth factor signaling in the vasculature. <i>Current Opinion in Hematology</i> , <b>2016</b> , 23, 260-7	3.3	29
148	Therapeutic angiogenesis for critical limb ischemia: design of the hepatocyte growth factor therapeutic angiogenesis clinical trial. <i>Vascular Medicine</i> , <b>2004</b> , 9, 193-8	3.3	28
147	Post-market approval surveillance: a call for a more integrated and comprehensive approach. <i>Circulation</i> , <b>2004</b> , 109, 3073-7	16.7	28
146	The proto-oncogene c-myc mediates an intracellular calcium rise during the late G1 phase of the cell cycle.. <i>Journal of Biological Chemistry</i> , <b>1993</b> , 268, 627-632	5.4	28
145	The quiescent endothelium: signalling pathways regulating organ-specific endothelial normalcy. <i>Nature Reviews Cardiology</i> , <b>2021</b> , 18, 565-580	14.8	28

144	Syndecan 4 controls lymphatic vasculature remodeling during mouse embryonic development. <i>Development (Cambridge)</i> , <b>2016</b> , 143, 4441-4451	6.6	27
143	Magnetic resonance imaging demonstrates improved regional systolic wall motion and thickening and myocardial perfusion of myocardial territories treated by laser myocardial revascularization. <i>Journal of the American College of Cardiology</i> , <b>2002</b> , 39, 1-8	15.1	27
142	Endothelial Cell Autonomous Role of Akt1: Regulation of Vascular Tone and Ischemia-Induced Arteriogenesis. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2018</b> , 38, 870-879	9.4	26
141	Vascular disease in scleroderma: angiogenesis and vascular repair. <i>Rheumatic Disease Clinics of North America</i> , <b>2008</b> , 34, 73-9; vi	2.4	26
140	Post-endocytic sorting of Plexin-D1 controls signal transduction and development of axonal and vascular circuits. <i>Nature Communications</i> , <b>2017</b> , 8, 14508	17.4	25
139	Arteriogenesis: noninvasive quantification with multi-detector row CT angiography and three-dimensional volume rendering in rodents. <i>Radiology</i> , <b>2006</b> , 240, 698-707	20.5	25
138	Angiogenesis in cardiovascular disease: current status and therapeutic potential. <i>Drugs</i> , <b>1999</b> , 58, 391-6	12.1	25
137	Food for starving hearts. <i>Nature Medicine</i> , <b>1996</b> , 2, 519-20	50.5	25
136	Protection against myocardial ischemia-reperfusion injury by the angiogenic Masterswitch protein PR 39 gene therapy: the roles of HIF1alpha stabilization and FGFR1 signaling. <i>Antioxidants and Redox Signaling</i> , <b>2007</b> , 9, 437-45	8.4	25
135	Chronic mTOR activation induces a degradative smooth muscle cell phenotype. <i>Journal of Clinical Investigation</i> , <b>2020</b> , 130, 1233-1251	15.9	24
134	When it is better to regress: dynamics of vascular pruning. <i>PLoS Biology</i> , <b>2015</b> , 13, e1002148	9.7	23
133	Cardiomyopathy and Worsened Ischemic Heart Failure in SM22-Cre-Mediated Neuropilin-1 Null Mice: Dysregulation of PGC1 $\beta$ and Mitochondrial Homeostasis. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2015</b> , 35, 1401-12	9.4	23
132	Hemodynamic effects of intracoronary VEGF delivery: evidence of tachyphylaxis and NO dependence of response. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>1997</b> , 273, H1317-23	5.2	23
131	Therapeutic myocardial angiogenesis using percutaneous intrapericardial drug delivery. <i>Clinical Cardiology</i> , <b>1999</b> , 22, 6-9	3.3	23
130	Endothelial signaling and the molecular basis of arteriovenous malformation. <i>Cellular and Molecular Life Sciences</i> , <b>2013</b> , 71, 867	10.3	22
129	Modulation of VEGF receptor 2 signaling by protein phosphatases. <i>Pharmacological Research</i> , <b>2017</b> , 115, 107-123	10.2	22
128	Embryonic coronary vasculogenesis and angiogenesis are regulated by interactions between multiple FGFs and VEGF and are influenced by mesenchymal stem cells. <i>Developmental Dynamics</i> , <b>2010</b> , 239, 3182-91	2.9	22
127	Synectin/syndecan-4 regulate coronary arteriolar growth during development. <i>Developmental Dynamics</i> , <b>2007</b> , 236, 2004-10	2.9	22



126	Live 3D echo guidance of catheter-based endomyocardial injection. <i>Catheterization and Cardiovascular Interventions</i> , <b>2005</b> , 65, 340-5	2.7	22
125	Myb-dependent regulation of thrombospondin 2 expression. Role of mRNA stability. <i>Journal of Biological Chemistry</i> , <b>1998</b> , 273, 21423-9	5.4	22
124	TGFR1 inhibition blocks the formation of stenosis in tissue-engineered vascular grafts. <i>Journal of the American College of Cardiology</i> , <b>2015</b> , 65, 512-4	15.1	21
123	The proto-oncogene c-myb mediates an intracellular calcium rise during the late G1 phase of the cell cycle. <i>Journal of Biological Chemistry</i> , <b>1993</b> , 268, 627-32	5.4	21
122	Endothelium-driven myocardial growth or nitric oxide at the crossroads. <i>Trends in Cardiovascular Medicine</i> , <b>2008</b> , 18, 299-305	6.9	20
121	Comparison of VEGF delivery techniques on collateral-dependent microvascular reactivity. <i>Microvascular Research</i> , <b>1998</b> , 55, 175-8	3.7	20
120	Attenuation of Endothelium-Dependent Dilation of Pig Pulmonary Arterioles After Cardiopulmonary Bypass Is Prevented by Monoclonal Antibody to Complement C5a. <i>Anesthesia and Analgesia</i> , <b>1999</b> , 89, 42-48	3.9	20
119	Statistical and linguistic features of DNA sequences. <i>Fractals</i> , <b>1995</b> , 3, 269-84	3.2	20
118	Mantegna et al. reply. <i>Physical Review Letters</i> , <b>1996</b> , 76, 1979-1981	7.4	20
117	Antiangiogenic activity of rPAI-1(23) promotes vasa vasorum regression in hypercholesterolemic mice through a plasmin-dependent mechanism. <i>Circulation Research</i> , <b>2011</b> , 108, 1419-28	15.7	19
116	SUMOylation Negatively Regulates Angiogenesis by Targeting Endothelial NOTCH Signaling. <i>Circulation Research</i> , <b>2017</b> , 121, 636-649	15.7	18
115	c-Myb function in fibroblasts. <i>Journal of Cellular Physiology</i> , <b>1997</b> , 173, 319-26	7	18
114	Comparison of transendocardial and retrograde coronary venous intramyocardial catheter delivery systems in healthy and infarcted pigs. <i>Catheterization and Cardiovascular Interventions</i> , <b>2006</b> , 68, 416-23	2.7	18
113	Plasminogen and plasmin activity in patients with coronary artery disease. <i>Journal of Thrombosis and Haemostasis</i> , <b>2006</b> , 4, 1288-95	15.4	18
112	Arteriogenesis: lessons learned from clinical trials. <i>Endothelium: Journal of Endothelial Cell Research</i> , <b>2003</b> , 10, 217-23		18
111	Angiogenic potential of perivascularly delivered aFGF in a porcine model of chronic myocardial ischemia. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>1998</b> , 274, H930-6	5.2	18
110	Beta-adrenergic modulation of the collateral-dependent coronary microcirculation. <i>Journal of Surgical Research</i> , <b>1995</b> , 59, 185-90	2.5	18
109	Basic FGF enhances endothelium-dependent relaxation of the collateral-perfused coronary microcirculation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>1994</b> , 267, H1303-11	5.2	18



108	Lipomatous hypertrophy of the atrial septum: diagnosis by combined echocardiography and computerized tomography. <i>American Journal of Cardiology</i> , <b>1984</b> , 54, 465-6	3	18
107	Lymphatic fate specification: an ERK-controlled transcriptional program. <i>Microvascular Research</i> , <b>2014</b> , 96, 10-5	3.7	17
106	Fibroblast growth factor-2 is required for vasa vasorum plexus stability in hypercholesterolemic mice. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2012</b> , 32, 2644-51	9.4	17
105	Current concepts in normal and defective angiogenesis: implications for systemic sclerosis. <i>Current Rheumatology Reports</i> , <b>2007</b> , 9, 173-9	4.9	17
104	The Rab-effector protein RABEP2 regulates endosomal trafficking to mediate vascular endothelial growth factor receptor-2 (VEGFR2)-dependent signaling. <i>Journal of Biological Chemistry</i> , <b>2018</b> , 293, 4805-4817	5.4	16
103	The docking protein FRS2 $\beta$ is a critical regulator of VEGF receptors signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 5514-9	11.5	16
102	Modulation of microvascular signaling by heparan sulfate matrix: studies in syndecan-4 transgenic mice. <i>Microvascular Research</i> , <b>2002</b> , 64, 38-46	3.7	16
101	Vascular adaptation to a dysfunctional endothelium as a consequence of Shb deficiency. <i>Angiogenesis</i> , <b>2012</b> , 15, 469-80	10.6	15
100	Heterogeneity among RIP-Tag2 insulinomas allows vascular endothelial growth factor-A independent tumor expansion as revealed by studies in Shb mutant mice: implications for tumor angiogenesis. <i>Molecular Oncology</i> , <b>2012</b> , 6, 333-46	7.9	15
99	Branching morphogenesis. <i>Circulation Research</i> , <b>2009</b> , 104, e21	15.7	15
98	Physiology. Lymphatics are in my veins. <i>Science</i> , <b>2013</b> , 341, 622-4	33.3	14
97	Auxiliary and autonomous proteoglycan signaling networks. <i>Methods in Enzymology</i> , <b>2010</b> , 480, 3-31	1.7	14
96	Postmarket surveillance for drug-eluting coronary stents: a comprehensive approach. <i>Circulation</i> , <b>2006</b> , 113, 891-7	16.7	14
95	The anti-angiogenic activity of rPAI-1(23) inhibits fibroblast growth factor-2 functions. <i>Journal of Biological Chemistry</i> , <b>2006</b> , 281, 33336-44	5.4	14
94	Effects of coronary artery disease on expression and microvascular response to VEGF. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>1998</b> , 275, H1411-8	5.2	14
93	Fibroblast growth factor-transforming growth factor beta dialogues, endothelial cell to mesenchymal transition, and atherosclerosis. <i>Current Opinion in Lipidology</i> , <b>2018</b> , 29, 397-403	4.4	14
92	Effects of cell grafting on coronary remodeling after myocardial infarction. <i>Journal of the American Heart Association</i> , <b>2013</b> , 2, e000202	6	13
91	Synectin-dependent gene expression in endothelial cells. <i>Physiological Genomics</i> , <b>2006</b> , 27, 380-90	3.6	13

90	Up-regulation of thrombospondin-2 in Akt1-null mice contributes to compromised tissue repair due to abnormalities in fibroblast function. <i>Journal of Biological Chemistry</i> , <b>2015</b> , 290, 409-22	5.4	12
89	Sympathetic Innervation Promotes Arterial Fate by Enhancing Endothelial ERK Activity. <i>Circulation Research</i> , <b>2016</b> , 119, 607-20	15.7	12
88	Myosin VI and cardiomyopathy: Left ventricular hypertrophy, fibrosis, and both cardiac and pulmonary vascular endothelial cell defects in the Snell® waltzer mouse. <i>Cytoskeleton</i> , <b>2015</b> , 72, 373-87	2.4	12
87	VEGF and restenosis: the rest of the story. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2009</b> , 29, 439-40	9.4	12
86	Progress and prospects: cell based regenerative therapy for cardiovascular disease. <i>Gene Therapy</i> , <b>2006</b> , 13, 659-71	4	12
85	Endothelial progenitor cells: precursors for angiogenesis. <i>Seminars in Thoracic and Cardiovascular Surgery</i> , <b>2003</b> , 15, 250-8	1.7	12
84	Identification of driver genes for critical forms of COVID-19 in a deeply phenotyped young patient cohort. <i>Science Translational Medicine</i> , <b>2021</b> , eabj7521	17.5	12
83	Syndecan 4 regulation of PDK1-dependent Akt activation. <i>Cellular Signalling</i> , <b>2013</b> , 25, 101-5	4.9	11
82	Extent of myocardial collateralization: determination with three-dimensional elastic-subtraction spiral CT. <i>Academic Radiology</i> , <b>1997</b> , 4, 680-6	4.3	11
81	The impact of clinical data on interpretation of thallium scintigrams. <i>Journal of Nuclear Cardiology</i> , <b>1994</b> , 1, 365-71	2.1	11
80	Synectin promotes fibrogenesis by regulating PDGFR isoforms through distinct mechanisms. <i>JCI Insight</i> , <b>2017</b> , 2,	9.9	10
79	Local perivascular administration of basic fibroblast growth factor: drug delivery and toxicological evaluation. <i>Drug Metabolism and Disposition</i> , <b>1996</b> , 24, 922-4	4	10
78	Flow-regulated lymphatic vasculature development and signaling. <i>Vascular Cell</i> , <b>2014</b> , 6, 14	1	9
77	Need glucose to sprout: local metabolic control of angiogenesis. <i>EMBO Molecular Medicine</i> , <b>2013</b> , 5, 1459-61	2.1	9
76	Challenging the surgical rodent hindlimb ischemia model with the miniinterventional technique. <i>Journal of Vascular and Interventional Radiology</i> , <b>2011</b> , 22, 1437-46	2.4	9
75	Synectin-dependent regulation of arterial maturation. <i>Developmental Dynamics</i> , <b>2009</b> , 238, 604-10	2.9	9
74	Statistical and linguistic features of noncoding DNA: A heterogeneous «Complex system». <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , <b>1994</b> , 16, 1339-1356		9
73	Arteriogenesis: Lessons Learned from Clinical Trials. <i>Endothelium: Journal of Endothelial Cell Research</i> , <b>2003</b> , 10, 217-223		9

72	Isoform-Specific Roles of ERK1 and ERK2 in Arteriogenesis. <i>Cells</i> , <b>2019</b> , 9,	7.9	9
71	Calling on reserves: granulocyte colony stimulating growth factor in cardiac repair. <i>Circulation</i> , <b>2005</b> , 112, 3033-5	16.7	8
70	Gene therapy versus protein-based therapy: a matter of pharmacokinetics. <i>Drug Discovery Today</i> , <b>2001</b> , 6, 769-770	8.8	8
69	Effect of Adenosine on Transmural Flow Gradients in Normal Canine Myocardium. <i>Journal of Cardiovascular Pharmacology</i> , <b>1984</b> , 6, 1115-1119	3.1	8
68	Inter-cellular exchange of cellular components via VE-cadherin-dependent trans-endocytosis. <i>PLoS ONE</i> , <b>2014</b> , 9, e90736	3.7	7
67	Inhibition of in-stent restenosis by oral copper chelation in porcine coronary arteries. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2006</b> , 291, H2692-7	5.2	7
66	The effect of intracoronary fibroblast growth factor-2 on restenosis after primary angioplasty or stent placement in a pig model of atherosclerosis. <i>Clinical Cardiology</i> , <b>2002</b> , 25, 271-8	3.3	7
65	Recent advances in understanding lymphangiogenesis and metabolism. <i>F1000Research</i> , <b>2018</b> , 7,	3.6	7
64	Activation of Smad2/3 signaling by low fluid shear stress mediates artery inward remodeling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	7
63	Chapter 14. Assessment of arteriogenesis. <i>Methods in Enzymology</i> , <b>2008</b> , 445, 331-42	1.7	6
62	Characterization of synectin expression and promoter activity. <i>Gene</i> , <b>2004</b> , 342, 29-34	3.8	6
61	Intramyocardial delivery of FGF2 in combination with radio frequency transmural revascularization. <i>Catheterization and Cardiovascular Interventions</i> , <b>2001</b> , 53, 429-34	2.7	6
60	Attenuation of endothelium-dependent dilation of pig pulmonary arterioles after cardiopulmonary bypass is prevented by monoclonal antibody to complement C5a. <i>Anesthesia and Analgesia</i> , <b>1999</b> , 89, 42-8	3.9	6
59	Effect of sialyl Lewis(x) oligosaccharide on myocardial and cerebral injury in the pig. <i>Annals of Thoracic Surgery</i> , <b>1999</b> , 67, 112-9	2.7	6
58	Direct vasomotor effects of isoflurane in subepicardial resistance vessels from collateral-dependent and normal coronary circulation of pigs. <i>Anesthesiology</i> , <b>1996</b> , 85, 584-91	4.3	6
57	Future Targets in Endothelial Biology: Endothelial Cell to Mesenchymal Transition. <i>Current Drug Targets</i> , <b>2016</b> , 17, 1707-1713	3	6
56	Endothelial Metabolic Control of Lymphangiogenesis. <i>BioEssays</i> , <b>2018</b> , 40, e1700245	4.1	5
55	Therapeutic angiogenesis: potential role of basic fibroblast growth factor in patients with severe ischaemic heart disease. <i>BioDrugs</i> , <b>2000</b> , 14, 13-20	7.9	5

54	Local Extravascular Growth Factor Delivery in Myocardial Ischemia. <i>Drug Delivery</i> , <b>1996</b> , 3, 143-7	7	5
53	Role of Venous Endothelial Cells in Developmental and Pathologic Angiogenesis. <i>Circulation</i> , <b>2021</b> , 144, 1308-1322	16.7	5
52	Lymphatics thrive on stress: mechanical force in lymphatic development. <i>EMBO Journal</i> , <b>2012</b> , 31, 781-2	13	4
51	Serial motion assessment by reference tracking (SMART): application to detection of local functional impact of chronic myocardial ischemia. <i>Journal of Computer Assisted Tomography</i> , <b>2001</b> , 25, 558-62	2.2	4
50	Therapeutic manipulation of cell cycle in smooth muscle cells: implications for restenosis. <i>Translational Research</i> , <b>1996</b> , 128, 361-6		4
49	Fractal Landscapes in Physiology & Medicine: Long-Range Correlations in DNA Sequences and Heart Rate Intervals <b>1994</b> , 55-65		4
48	Fractals in biology and medicine <b>1994</b> , 147-178		4
47	Metabolic Analysis of Lymphatic Endothelial Cells. <i>Methods in Molecular Biology</i> , <b>2018</b> , 1846, 325-334	1.4	4
46	Stem cell therapies in cardiovascular disease A "realistic" appraisal. <i>Drug Discovery Today: Therapeutic Strategies</i> , <b>2008</b> , 5, 73-78		3
45	Silky, sticky chimeras-designer VEGFs display their wares. <i>Circulation Research</i> , <b>2007</b> , 100, 1402-4	15.7	3
44	Perivascular delivery of prolonged half-life aFGF via EVAC results in angiographic collateral development, improvement in coronary flow and function in chronic myocardial ischemia. <i>Journal of the American College of Cardiology</i> , <b>1996</b> , 27, 30	15.1	3
43	Activation of Smad 2/3 signaling by low shear stress mediates artery inward remodeling		3
42	Amyloid- $\beta$ Precursor Protein APP Down-Regulation Alters Actin Cytoskeleton-Interacting Proteins in Endothelial Cells. <i>Cells</i> , <b>2020</b> , 9,	7.9	3
41	MEKK3-TGF $\beta$ Crosstalk regulates inward arterial remodeling.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	3
40	Antisense approach to restenosis. <i>Japanese Circulation Journal</i> , <b>1996</b> , 60, 1-9		2
39	... and surreal antisense?. <i>Nature Medicine</i> , <b>1996</b> , 2, 131-2	50.5	2
38	Fuzzy logic, sharp results. <i>Journal of Nuclear Medicine</i> , <b>1995</b> , 36, 1415-6	8.9	2
37	Coronary Artery Disease: Vascular Endothelial Growth Factor and Fibroblast Growth Factor. <i>Current Interventional Cardiology Reports</i> , <b>2001</b> , 3, 185-191		2

36	Endothelium-derived lactate is required for pericyte function and blood-brain barrier maintenance.. <i>EMBO Journal</i> , <b>2022</b> , e109890	13	2
35	Syndecan 4 controls lymphatic vasculature remodeling during mouse embryonic development. <i>Journal of Cell Science</i> , <b>2016</b> , 129, e1.1-e1.1	53	1
34	Long-range correlations and generalized Lévy walks in DNA sequences <b>1995</b> , 331-347		1
33	Myocardial Ischemia and Growth Factor Therapy <b>1999</b> , 125-145		1
32	FGF-VEGF crosstalk regulating vascular integrity and angiogenesis. <i>FASEB Journal</i> , <b>2011</b> , 25, 1091.5	0.9	1
31	FRS2-dependent cell fate transition during endocardial cushion morphogenesis. <i>Developmental Biology</i> , <b>2020</b> , 458, 88-97	3.1	1
30	Identification of driver genes for severe forms of COVID-19 in a deeply phenotyped young patient cohort		1
29	MEKK3-TGF $\beta$ crosstalk regulates inward arterial remodeling		1
28	Fibroblast growth factors: the keepers of endothelial normalcy. <i>Journal of Clinical Investigation</i> , <b>2021</b> , 131,	15.9	1
27	Subxyphoid access of the normal pericardium: A novel drug delivery technique <b>1999</b> , 47, 109		1
26	Endogenous Expression Modification: Antisense Approaches. <i>Developments in Cardiovascular Medicine</i> , <b>1997</b> , 143-175		1
25	Developmental Perspectives on Arterial Fate Specification. <i>Frontiers in Cell and Developmental Biology</i> , <b>2021</b> , 9, 691335	5.7	0
24	Syndecan-2 selectively regulates VEGF-induced vascular permeability <b>2022</b> , 1, 518-528		0
23	c-Myb in Smooth Muscle Cells. <i>Methods in Molecular Medicine</i> , <b>1996</b> , 1, 121-41		
22	Syndecans396-402		
21	Fibroblast Growth Factors291-303		
20	Introductory Essay: Endothelial Cell Coupling627-631		
19	Statistical and Linguistic Features of DNA Sequences <b>1996</b> , 219-234		

- 18 Post-myocardial infarction risk assessment. *Comprehensive Therapy*, **1989**, 15, 71-6
- 17 Endothelial Activation and Neointimal Hyperplasia: A Double-Edged Sword **2007**, 75-84
- 16 MRI of angiogenesis **2004**, 471-499
- 15 Syndecan-4 plays a key role in the phosphorylation of protein kinase B / Akt. *FASEB Journal*, **2006**, 20, A1080 0.9
- 14 THE ANTI-ANGIOGENIC ACTIVITY OF rPAI-123 INHIBITS ANGIOGENIC VASA VASORUM AND ATHEROSCLEROTIC PLAQUE GROWTH. *FASEB Journal*, **2007**, 21, A16 0.9
- 13 Overview of Angiogenesis **2007**, 225-232
- 12 Journeys in Coronary Angiogenesis **2008**, 561-573
- 11 FGF mediates maintenance of vascular integrity in a Csk dependent manner. *FASEB Journal*, **2008**, 22, 329.5 0.9
- 10 Arterial branching morphogenesis. *FASEB Journal*, **2008**, 22, 520.1 0.9
- 9 phenotype projection of endothelial ERK1/2 signaling. *Aging*, **2020**, 12, 10001-10003 5.6
- 8 Chronic myocardial ischemia: contemporary management strategies. *Drugs of Today*, **1999**, 35, 667-84
- 7 Vascular Antisense Therapy Directed Against c-myc, c-myb and PCNA. *Perspectives in Antisense Science*, **1999**, 71-98
- 6 Chemokine-coupled  $\alpha$ 2 integrin-induced macrophage Rac2/Myosin IIA interaction regulates VEGF-A mRNA stability and arteriogenesis. *Journal of Cell Biology*, **2014**, 206, 2066OIA157 7.3
- 5 Adrenomedullin 2 activates extracellular-signal-regulated kinase in endothelial cells via a protein kinase C  $\beta$  independent pathway. *F1000Research*, **5**, 26 3.6
- 4 FGF regulation of myocardial integrity and angiogenesis. *FASEB Journal*, **2010**, 24, 180.1 0.9
- 3 Aging-induced collateral impairment: role of arterial rarefaction, decreased eNOS expression/signaling, and increased susceptibility of endothelial cells to apoptosis. *FASEB Journal*, **2010**, 24, 294.3 0.9
- 2 Angiogenesis: Therapeutic Applications--Second Annual Meeting. 13-14 December 1999, Washington DC, USA. *IDrugs: the Investigational Drugs Journal*, **2000**, 3, 287-8
- 1 Novel vascularization strategies. *IDrugs: the Investigational Drugs Journal*, **1999**, 2, 396-7

