Massimiliano Gnecchi

List of Publications by Year
in descending order

114 papers	10,277 citations	117625 34 h-index	38395 95 g-index
123 all docs	123 docs citations	123 times ranked	13378 citing authors

#	Article	IF	Citations
1	Paracrine Mechanisms in Adult Stem Cell Signaling and Therapy. Circulation Research, 2008, 103, 1204-1219.	4.5	1,809
2	Paracrine action accounts for marked protection of ischemic heart by Akt-modified mesenchymal stem cells. Nature Medicine, 2005, 11, 367-368.	30.7	1,512
3	Evidence supporting paracrine hypothesis for Aktâ€modified mesenchymal stem cellâ€mediated cardiac protection and functional improvement. FASEB Journal, 2006, 20, 661-669.	0.5	1,082
4	Reduction of hospitalizations for myocardial infarction in Italy in the COVID-19 era. European Heart Journal, 2020, 41, 2083-2088.	2.2	716
5	Secreted frizzled related protein 2 (Sfrp2) is the key Akt-mesenchymal stem cell-released paracrine factor mediating myocardial survival and repair. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 1643-1648.	7.1	500
6	Mesenchymal stem cells overexpressing Akt dramatically repair infarcted myocardium and improve cardiac function despite infrequent cellular fusion or differentiation. Molecular Therapy, 2006, 14, 840-850.	8.2	454
7	Paracrine mechanisms of stem cell reparative and regenerative actions in the heart. Journal of Molecular and Cellular Cardiology, 2011, 50, 280-289.	1.9	414
8	Paracrine Mechanisms of Mesenchymal Stem Cells in Tissue Repair. Methods in Molecular Biology, 2016, 1416, 123-146.	0.9	318
9	Cytokine-Induced Mobilization of Circulating Endothelial Progenitor Cells Enhances Repair of Injured Arteries. Circulation, 2004, 110, 2039-2046.	1.6	279
10	Bone Marrow-Derived Mesenchymal Stem Cells: Isolation, Expansion, Characterization, Viral Transduction, and Production of Conditioned Medium. Methods in Molecular Biology, 2009, 482, 281-294.	0.9	227
11	Therapeutic Potential of Endothelial Progenitor Cells in Cardiovascular Diseases. Hypertension, 2005, 46, 7-18.	2.7	199
12	Vagal Stimulation, Through its Nicotinic Action, Limits Infarct Size and the Inflammatory Response to Myocardial Ischemia and Reperfusion. Journal of Cardiovascular Pharmacology, 2011, 58, 500-507.	1.9	163
13	Association of Troponin Levels With Mortality in Italian Patients Hospitalized With Coronavirus Disease 2019. JAMA Cardiology, 2020, 5, 1274.	6.1	157
14	Mesenchymal stem cell therapy for heart disease. Vascular Pharmacology, 2012, 57, 48-55.	2.1	137
15	Heme oxygenaseâ€1 (HOâ€1) inhibits postmyocardial infarct remodeling and restores ventricular function. FASEB Journal, 2006, 20, 207-216.	0.5	118
16	Early Beneficial Effects of Bone Marrow-Derived Mesenchymal Stem Cells Overexpressing Akt on Cardiac Metabolism After Myocardial Infarction. Stem Cells, 2009, 27, 971-979.	3.2	110
17	Elucidating arrhythmogenic mechanisms of long-QT syndrome CALM1-F142L mutation in patient-specific induced pluripotent stem cell-derived cardiomyocytes. Cardiovascular Research, 2017, 113, 531-541.	3.8	110
18	Identification of a targeted and testable antiarrhythmic therapy for long-QT syndrome type 2 using a patient-specific cellular model. European Heart Journal, 2018, 39, 1446-1455.	2.2	100

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19	Impact of heart failure on the clinical course and outcomes of patients hospitalized for <scp>COVID</scp>â€19. Results of the <scp>Cardioâ€COVIDâ€Italy</scp> multicentre study. European Journal of Heart Failure, 2020, 22, 2238-2247.	7.1	99
20	Conditioned Medium From Human Amniotic Mesenchymal Stromal Cells Limits Infarct Size and Enhances Angiogenesis. Stem Cells Translational Medicine, 2015, 4, 448-458.	3.3	94
21	Liver X receptors Â and Â regulate renin expression in vivo. Journal of Clinical Investigation, 2005, 115, 1913-1922.	8.2	86
22	Protocols for in vitro Differentiation of Human Mesenchymal Stem Cells into Osteogenic, Chondrogenic and Adipogenic Lineages. Methods in Molecular Biology, 2016, 1416, 149-158.	0.9	82
23	Molecular and Cell-Based Therapies for Protection, Rescue, and Repair of Ischemic Myocardium. Circulation, 2004, 109, 2386-2393.	1.6	73
24	Paracrine Factors of Human Fetal MSCs Inhibit Liver Cancer Growth Through Reduced Activation of IGF-1R/PI3K/Akt Signaling. Molecular Therapy, 2015, 23, 746-756.	8.2	72
25	Gene and cellâ€based therapies for heart disease. FASEB Journal, 2004, 18, 648-663.	0.5	71
26	From patient-specific induced pluripotent stem cells to clinical translation in long QT syndrome Type 2. European Heart Journal, 2019, 40, 1832-1836.	2.2	69
27	Proteotoxicity in cardiac amyloidosis: amyloidogenic light chains affect the levels of intracellular proteins in human heart cells. Scientific Reports, 2017, 7, 15661.	3.3	63
28	Novel mitochondrial protein interactors of immunoglobulin light chains causing heart amyloidosis. FASEB Journal, 2015, 29, 4614-4628.	0.5	60
29	Endothelium-Targeted Gene and Cell-Based Therapies for Cardiovascular Disease. Arteriosclerosis, Thrombosis, and Vascular Biology, 2004, 24, 1761-1774.	2.4	59
30	Myocarditis in a 16-year-old boy positive for SARS-CoV-2. Lancet, The, 2020, 395, e116.	13.7	52
31	Neutrophil Extracellular Traps Induce the Epithelial-Mesenchymal Transition: Implications in Post-COVID-19 Fibrosis. Frontiers in Immunology, 2021, 12, 663303.	4.8	45
32	Genetic therapies for cardiovascular diseases. Trends in Molecular Medicine, 2005, 11, 240-250.	6.7	42
33	Synthetic extracellular matrix mimic hydrogel improves efficacy of mesenchymal stromal cell therapy for ischemic cardiomyopathy. Acta Biomaterialia, 2018, 70, 71-83.	8.3	41
34	Calcineurin Inhibitor-Based Immunosuppression and COVID-19: Results from a Multidisciplinary Cohort of Patients in Northern Italy. Microorganisms, 2020, 8, 977.	3.6	41
35	Human mesenchymal stromal cells do not express ACE2 and TMPRSS2 and are not permissive to SARS-CoV-2 infection. Stem Cells Translational Medicine, 2021, 10, 636-642.	3.3	40
36	Long QT Syndrome Modelling with Cardiomyocytes Derived from Human-induced Pluripotent Stem Cells. Arrhythmia and Electrophysiology Review, 2019, 8, 105-110.	2.4	36

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37	MTMR4 SNVs modulate ion channel degradation and clinical severity in congenital long QT syndrome: insights in the mechanism of action of protective modifier genes. Cardiovascular Research, 2021, 117, 767-779.	3.8	34
38	Precision Medicine and cardiac channelopathies: when dreams meet reality. European Heart Journal, 2021, 42, 1661-1675.	2.2	34
39	Implications of atrial fibrillation on the clinical course and outcomes of hospitalized COVID-19 patients: results of the Cardio-COVID-Italy multicentre study. Europace, 2021, 23, 1603-1611.	1.7	34
40	Induced pluripotent stem cell technology: Toward the future of cardiac arrhythmias. International Journal of Cardiology, 2017, 237, 49-52.	1.7	33
41	Different pro-angiogenic potential of Î³-irradiated PBMC-derived secretome and its subfractions. Scientific Reports, 2018, 8, 18016.	3.3	33
42	Cardiac involvement at presentation in patients hospitalized with COVID-19 and their outcome in a tertiary referral hospital in Northern Italy. Internal and Emergency Medicine, 2020, 15, 1457-1465.	2.0	32
43	Pulmonary embolism in patients with COVID-19: characteristics and outcomes in the Cardio-COVID Italy multicenter study. Clinical Research in Cardiology, 2021, 110, 1020-1028.	3.3	32
44	Combination of miRNA499 and miRNA133 Exerts a Synergic Effect on Cardiac Differentiation. Stem Cells, 2015, 33, 1187-1199.	3.2	31
45	The KCNH2-IVS9-28A/G mutation causes aberrant isoform expression and hERG trafficking defect in cardiomyocytes derived from patients affected by Long QT Syndrome type 2. International Journal of Cardiology, 2017, 240, 367-371.	1.7	28
46	The prognostic value of serial troponin measurements in patients admitted for COVIDâ€19. ESC Heart Failure, 2021, 8, 3504-3511.	3.1	25
47	NOS1AP polymorphisms reduce NOS1 activity and interact with prolonged repolarization in arrhythmogenesis. Cardiovascular Research, 2021, 117, 472-483.	3.8	22
48	Elevated serum uric acid is associated with a greater inflammatory response and with short- and long-term mortality in patients with ST-segment elevation myocardial infarction undergoing primary percutaneous coronary intervention. Nutrition, Metabolism and Cardiovascular Diseases, 2021, 31, 608-614.	2.6	22
49	Allogeneic Lethally Irradiated Cord Blood Mononuclear Cells in No-Option Critical Limb Ischemia: A â€œBox of Rainâ€• Stem Cells and Development, 2013, 22, 2806-2812.	2.1	20
50	Effectiveness of adjunctive stent implantation following directional coronary atherectomy for treatment of left anterior descending ostial stenosis. American Journal of Cardiology, 2002, 90, 1074-1078.	1.6	17
51	Neutrophil to platelet ratio: A novel prognostic biomarker in ST-elevation myocardial infarction patients undergoing primary percutaneous coronary intervention. European Journal of Preventive Cardiology, 2020, 27, 2338-2340.	1.8	17
52	Firstâ€inâ€man case of nonâ€invasive proton radiotherapy for the treatment of refractory ventricular tachycardia in advanced heart failure. European Journal of Heart Failure, 2021, 23, 195-196.	7.1	16
53	microRNA and Cardiac Regeneration. Advances in Experimental Medicine and Biology, 2015, 887, 119-141.	1.6	14
54	Serum uric acid may modulate the inflammatory response after primary percutaneous coronary intervention in patients with ST-elevation myocardial infarction. Journal of Cardiovascular Medicine, 2020, 21, 337-339.	1.5	14

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55	Rat Experimental Model of Myocardial Ischemia/Reperfusion Injury: An Ethical Approach to Set up the Analgesic Management of Acute Post-Surgical Pain. PLoS ONE, 2014, 9, e95913.	2.5	14
56	Combined Role of Troponin and Natriuretic Peptides Measurements in Patients With Covid-19 (from the) Tj ETQq0 0 0 rgBT /Overlock 10	1.6	14
57	Testing the Paracrine Properties of Human Mesenchymal Stem Cells Using Conditioned Medium. Methods in Molecular Biology, 2016, 1416, 445-456.	0.9	12
58	Prognostic Impact of in-Hospital-Bleeding in Patients With ST-Elevation Myocardial Infarction Treated by Primary Percutaneous Coronary Intervention. American Journal of Cardiology, 2017, 120, 1734-1741.	1.6	12
59	Elevated serum uric acid is a predictor of contrast associated acute kidney injury in patient with ST-segment elevation myocardial infarction undergoing primary percutaneous coronary intervention. Nutrition, Metabolism and Cardiovascular Diseases, 2021, 31, 2140-2143.	2.6	12
60	Angiography- vs. physiology-guided complete revascularization in patients with ST-elevation myocardial infarction and multivessel disease: who is the better gatekeeper in this setting? A meta-analysis of randomized controlled trials. European Heart Journal Quality of Care & Clinical Outcomes, 2020, 6, 199-200.	4.0	11
61	Estimating the Posttest Probability of Long QT Syndrome Diagnosis for Rare KCNH2 Variants. Circulation Genomic and Precision Medicine, 2021, 14, e003289.	3.6	10
62	Extracellular vesicles fail to trigger the generation of new cardiomyocytes in chronically infarcted hearts. Theranostics, 2021, 11, 10114-10124.	10.0	10
63	Cell Therapy for Heart Regeneration: Learning from the Past to Build a Brighter Future. Stem Cells Translational Medicine, 2018, 7, 702-704.	3.3	9
64	Has hyperglycemia a different prognostic role in STEMI patients with or without diabetes?. Nutrition, Metabolism and Cardiovascular Diseases, 2021, 31, 528-531.	2.6	9
65	Comparison of Outcomes of Staged Complete Revascularization Versus Culprit Lesionâ€“Only Revascularization for ST-Elevation Myocardial Infarction and Multivessel Coronary Artery Disease. American Journal of Cardiology, 2017, 119, 508-514.	1.6	8
66	Early Complete Revascularization in Hemodynamically Stable Patients With ST-Segment Elevation Myocardial Infarction and Multivessel Disease. Canadian Journal of Cardiology, 2019, 35, 1047-1057.	1.7	8
67	The Unstoppable Attraction for Induced Pluripotent Stem Cells. Journal of the American College of Cardiology, 2012, 60, 1001-1004.	2.8	7
68	Mesenchymal Stem Cell Therapy for Heart Disease. , 2013, , 241-270.		7
69	Risk factors for primary ventricular fibrillation during a first myocardial infarction: Clinical findings from PREDESTINATION (PRimary vEntricular fibrillation and suDden dEath during firST) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.7	7
70	Direct oral Xa inhibitors versus warfarin in patients with cancer and atrial fibrillation: a meta-analysis. Journal of Cardiovascular Medicine, 2020, 21, 570-576.	1.5	7
71	Generation of the human induced pluripotent stem cell (hiPSC) line PSMi003-A from a patient affected by an autosomal recessive form of Long QT Syndrome type 1. Stem Cell Research, 2018, 29, 170-173.	0.7	6
72	Determinants of the protective effect of glucocorticoids on mortality in hospitalized patients with COVID-19. International Journal of Infectious Diseases, 2021, 108, 270-273.	3.3	6

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73	Machine learning for prediction of in-hospital mortality in coronavirus disease 2019 patients: results from an Italian multicenter study. Journal of Cardiovascular Medicine, 2022, 23, 439-446.	1.5	6
74	Tuning Tissue Ingrowth into Proangiogenic Hydrogels via Dual Modality Degradation. ACS Biomaterials Science and Engineering, 2019, 5, 5430-5438.	5.2	5
75	Favorable effect of glycoprotein IIbIIIa inhibitors among STEMI patients treated with primary PCI and incomplete ST resolution. Platelets, 2020, 31, 48-54.	2.3	5
76	Optimized lentiviral transduction of human amniotic mesenchymal stromal cells. Pharmacological Research, 2018, 127, 49-57.	7.1	4
77	Generation of the human induced pluripotent stem cell (hiPSC) line PSMi006-A from a patient affected by an autosomal recessive form of long QT syndrome type 1. Stem Cell Research, 2020, 42, 101658.	0.7	4
78	Leptin affects the inflammatory response after STEMI. Nutrition, Metabolism and Cardiovascular Diseases, 2020, 30, 922-924.	2.6	4
79	Use of hiPSC-Derived Cardiomyocytes to Rule Out Proarrhythmic Effects of Drugs: The Case of Hydroxychloroquine in COVID-19. Frontiers in Physiology, 2021, 12, 730127.	2.8	4
80	Gene- and cell-based therapies for cardiovascular diseases: current status and future directions. European Heart Journal Supplements, 2004, 6, E24-E35.	0.1	3
81	Generation of the human induced pluripotent stem cell (hiPSC) line PSMi002-A from a patient affected by the Jervell and Lange-Nielsen syndrome and carrier of two compound heterozygous mutations on the KCNQ1 gene. Stem Cell Research, 2018, 29, 157-161.	0.7	3
82	Generation of two human induced pluripotent stem cell (hiPSC) lines from a long QT syndrome South African founder population. Stem Cell Research, 2019, 39, 101510.	0.7	3
83	Vascular Remodeling in Health and Disease. , 2007, , 1541-1565.		3
84	Overexpression of growth factors to improve cardiac differentiation of human mesenchymal stem cells derived from the amniotic membrane. European Heart Journal, 2013, 34, P5692-P5692.	2.2	2
85	Smokerâ€™s paradox in ST-elevation myocardial infarction: Role of inflammation and platelets. Hellenic Journal of Cardiology, 2019, 60, 397-399.	1.0	2
86	Generation of the human induced pluripotent stem cell (hiPSC) line PSMi007-A from a Long QT Syndrome type 1 patient carrier of two common variants in the NOS1AP gene. Stem Cell Research, 2019, 36, 101416.	0.7	2
87	Generation of the human induced pluripotent stem cell (hiPSC) line PSMi004-A from a carrier of the KCNQ1-R594Q mutation. Stem Cell Research, 2019, 37, 101431.	0.7	2
88	Mesenchymal Stromal Cell Secretome for Tissue Repair. , 2020, , 641-666.		2
89	Angiotensin-converting enzyme insertion/deletion polymorphism and risk of restenosis after directional coronary atherectomy followed by stent implantation. Thrombosis and Haemostasis, 2004, 91, 795-800.	3.4	1
90	Genotype-Phenotype Correlation in Induced Pluripotent Stem Cell (iPSC)Derived Cardiomyocytes Carrying Calmodulin Mutations. Biophysical Journal, 2014, 106, 333a.	0.5	1

#	Article	IF	Citations
91	Generation of the human induced pluripotent stem cell (hiPSC) line PSMi005-A from a patient carrying the KCNQ1-R190W mutation. Stem Cell Research, 2019, 37, 101437.	0.7	1
92	Endothelium-targeted Gene and Cell-based Therapy for Cardiovascular Disease. , 0, , 365-399.		1
93	Cardiac Repolarization and Stem Cells: An Emerging Path Toward Precision Medicine. , 2020, , 87-107.		1
94	Mesenchymal Stromal Cell Secretome for Tissue Repair. , 2019, , 1-26.		1
95	The unfavourable inflammatory response in elderly patients after myocardial infarction: should we talk of â€˜dysflammagingâ€™?. Journal of Cardiovascular Medicine, 2020, 21, 340-342.	1.5	1
96	Barriers associated with emergency medical service activation in patients with ST-segment elevation acute coronary syndromes. Internal and Emergency Medicine, 2021, , 1.	2.0	1
97	Adult Stem Cell-Based Therapy for the Heart. , 2010, , 899-935.		0
98	Novel IRES-based lentivirus co-expressing IGF1 and BMP2 enhances both cardiomyogenesis and cytoprotection of bone marrow-derived mesenchymal stem cells. European Heart Journal, 2013, 34, P1473-P1473.	2.2	0
99	Amyloidogenic light chains induce human cardiac fibroblast toxicity through alteration of mitochondrial functionality. European Heart Journal, 2013, 34, P4239-P4239.	2.2	0
100	MicroRNA133 and microRNA499 exert synergistic effect on cardiac differentiation. European Heart Journal, 2013, 34, P1460-P1460.	2.2	0
101	Pentraxin-3 and galectin-1 are key mediators of the cardioprotective paracrine effects exerted by fetal mesenchymal stem cells isolated from human placenta. European Heart Journal, 2013, 34, P3271-P3271.	2.2	0
102	Novel degradable heparin hydrogel improves the engraftment and therapeutic effect of mesenchymal stromal cells in ischemic heart disease. Cytotherapy, 2015, 17, S54.	0.7	0
103	Modeling Heart Failure in Danon Disease Using Patient-Specific Induced Pluripotent Stem Cell-Derived Cardiomyocytes. Cytotherapy, 2016, 18, S12.	0.7	0
104	Human Induced Pluripotent Stem Cells-Derived Cardiomyocytes Carrying CALM1-F142l Mutation Recapitulate LQTS Phenotype in Vitro. Biophysical Journal, 2016, 110, 263a.	0.5	0
105	Optimized Method to Determine Infarct Size and Stem Cell Engraftment in Rodent Hearts Subjected to Ischemia-Reperfusion Injury. Cytotherapy, 2016, 18, S80-S81.	0.7	0
106	Improving the Cardioprotective and Regenerative Properties of Bone Marrow Derived Mesenchymal Stem Cells Through the Overexpression of IGF1 and BMP2. Cytotherapy, 2016, 18, S81.	0.7	0
107	Donor Age Impairs the Capacity of Human Mesenchymal Stromal Cells to Repair Cardiac and Renal Damage. Cytotherapy, 2016, 18, S16.	0.7	0
108	Symptomatic and Asymptomatic Discrimination by Single Nucleotide Polymorphisms in LQTS2 Patients: A DNA-Based Patient Stratification. Cytotherapy, 2016, 18, S151.	0.7	0

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109	How do Extracellular Vesicles Protect the Ischemic Myocardium?. Cytotherapy, 2020, 22, S189.	0.7	0
110	What is the Paracrine Effect of Stem Cells?. , 2012, , 219-267.		0
111	Transfection of Embryoid Bodies with miRNA Precursors to Induce Cardiac Differentiation. Bio-protocol, 2016, 6, .	0.4	0
112	386â€ƒAchieving Ldl Cholesterol Target In A Real-World Secondary Prevention Cohort: When Two Is Better Than One. European Heart Journal Supplements, 2020, 22, N132-N134.	0.1	0
113	D-dimer for the prediction of left atrial appendage thrombosis: daydream or reality? A meta-analysis. European Heart Journal, 2020, 41, .	2.2	0
114	Self-perception of acute symptoms in adolescents with COVID-19. Lancet Regional Health - Europe, The, 2022, 16, 100383.	5.6	0