

# Ke Huang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6871983/publications.pdf>

Version: 2024-02-01

89

papers

9,274

citations

41344

49

h-index

45317

90

g-index

92

all docs

92

docs citations

92

times ranked

8706

citing authors

#	ARTICLE	IF	CITATIONS
1	Intrapericardial hydrogel injection generates high cell retention and augments therapeutic effects of mesenchymal stem cells in myocardial infarction. Chemical Engineering Journal, 2022, 427, 131581.	12.7	15
2	Nanoparticles functionalized with stem cell secretome and CXCR4-overexpressing endothelial membrane for targeted osteoporosis therapy. Journal of Nanobiotechnology, 2022, 20, 35.	9.1	20
3	Resuscitating the Field of Cardiac Regeneration: Seeking Answers from Basic Biology. Advanced Biology, 2022, 6, 2101133.	2.5	0
4	Minimally invasive delivery of a hydrogel-based exosome patch to prevent heart failure. Journal of Molecular and Cellular Cardiology, 2022, 169, 113-121.	1.9	31
5	Inhalable exosomes outperform liposomes as mRNA and protein drug carriers to the lung. , 2022, 1, 100002.		34
6	Exosomes decorated with a recombinant SARS-CoV-2 receptor-binding domain as an inhalable COVID-19 vaccine. Nature Biomedical Engineering, 2022, 6, 791-805.	22.5	100
7	Engineering stem cell therapeutics for cardiac repair. Journal of Molecular and Cellular Cardiology, 2022, 171, 56-68.	1.9	12
8	Bispecific Antibody Inhalation Therapy for Redirecting Stem Cells from the Lungs to Repair Heart Injury. Advanced Science, 2021, 8, 2002127.	11.2	16
9	A stem cell-derived ovarian regenerative patch restores ovarian function and rescues fertility in rats with primary ovarian insufficiency. Theranostics, 2021, 11, 8894-8908.	10.0	10
10	Advanced Nanobiomedical Approaches to Combat Coronavirus Disease of 2019. Advanced NanoBiomed Research, 2021, 1, 2000063.	3.6	5
11	Exosome therapeutics for COVID-19 and respiratory viruses. View, 2021, 2, 20200186.	5.3	36
12	Injection of ROS-Responsive Hydrogel Loaded with Basic Fibroblast Growth Factor into the Pericardial Cavity for Heart Repair. Advanced Functional Materials, 2021, 31, 2004377.	14.9	60
13	Cardiac Cell Therapy for Heart Repair: Should the Cells Be Left Out?. Cells, 2021, 10, 641.	4.1	20
14	Minimally invasive delivery of therapeutic agents by hydrogel injection into the pericardial cavity for cardiac repair. Nature Communications, 2021, 12, 1412.	12.8	155
15	Exosome-eluting stents for vascular healing after ischaemic injury. Nature Biomedical Engineering, 2021, 5, 1174-1188.	22.5	98
16	All Roads Lead to Rome (the Heart): Cell Retention and Outcomes From Various Delivery Routes of Cell Therapy Products to the Heart. Journal of the American Heart Association, 2021, 10, e020402.	3.7	49
17	Cardiac fibrosis: Myofibroblast-mediated pathological regulation and drug delivery strategies. Advanced Drug Delivery Reviews, 2021, 173, 504-519.	13.7	97
18	A Minimally Invasive Exosome Spray Repairs Heart after Myocardial Infarction. ACS Nano, 2021, 15, 11099-11111.	14.6	68

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19	Bioengineering Technologies for Cardiac Regenerative Medicine. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 681705.	4.1	15
20	Cell-mimicking nanodecoys neutralize SARS-CoV-2 and mitigate lung injury in a non-human primate model of COVID-19. <i>Nature Nanotechnology</i> , 2021, 16, 942-951.	31.5	103
21	Advances in biomaterials and regenerative medicine for primary ovarian insufficiency therapy. <i>Bioactive Materials</i> , 2021, 6, 1957-1972.	15.6	28
22	Platelet membrane and stem cell exosome hybrids enhance cellular uptake and targeting to heart injury. <i>Nano Today</i> , 2021, 39, 101210.	11.9	71
23	Generation and Manipulation of Exosomes. <i>Methods in Molecular Biology</i> , 2021, 2158, 295-305.	0.9	5
24	A fluid-powered refillable origami heart pouch for minimally invasive delivery of cell therapies in rats and pigs. <i>Med</i> , 2021, 2, 1253-1268.e4.	4.4	11
25	Extruded Mesenchymal Stem Cell Nanovesicles Are Equally Potent to Natural Extracellular Vesicles in Cardiac Repair. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 55767-55779.	8.0	30
26	Atorvastatin enhances the therapeutic efficacy of mesenchymal stem cells-derived exosomes in acute myocardial infarction via up-regulating long non-coding RNA H19. <i>Cardiovascular Research</i> , 2020, 116, 353-367.	3.8	213
27	Cardiac Stromal Cell Patch Integrated with Engineered Microvessels Improves Recovery from Myocardial Infarction in Rats and Pigs. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 6309-6320.	5.2	25
28	Recent Development in Therapeutic Cardiac Patches. <i>Frontiers in Cardiovascular Medicine</i> , 2020, 7, 610364.	2.4	47
29	Engineering better stem cell therapies for treating heart diseases. <i>Annals of Translational Medicine</i> , 2020, 8, 569-569.	1.7	8
30	Dermal exosomes containing miR-218-5p promote hair regeneration by regulating $\beta$ -catenin signaling. <i>Science Advances</i> , 2020, 6, eaba1685.	10.3	90
31	Tumor cell-derived exosomes home to their cells of origin and can be used as Trojan horses to deliver cancer drugs. <i>Theranostics</i> , 2020, 10, 3474-3487.	10.0	226
32	Exosome therapeutics for lung regenerative medicine. <i>Journal of Extracellular Vesicles</i> , 2020, 9, 1785161.	12.2	59
33	Inhalation of lung spheroid cell secretome and exosomes promotes lung repair in pulmonary fibrosis. <i>Nature Communications</i> , 2020, 11, 1064.	12.8	228
34	Targeted anti-IL-1 $\beta$ platelet microparticles for cardiac detoxing and repair. <i>Science Advances</i> , 2020, 6, eaay0589.	10.3	55
35	An off-the-shelf artificial cardiac patch improves cardiac repair after myocardial infarction in rats and pigs. <i>Science Translational Medicine</i> , 2020, 12, .	12.4	131
36	Exosome and Biomimetic Nanoparticle Therapies for Cardiac Regenerative Medicine. <i>Current Stem Cell Research and Therapy</i> , 2020, 15, 674-684.	1.3	13

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37	A New Era of Cardiac Cell Therapy: Opportunities and Challenges. <i>Advanced Healthcare Materials</i> , 2019, 8, e1801011.	7.6	61
38	Needle-Free Injection of Exosomes Derived from Human Dermal Fibroblast Spheroids Ameliorates Skin Photoaging. <i>ACS Nano</i> , 2019, 13, 11273-11282.	14.6	142
39	Chemical Engineering of Cell Therapy for Heart Diseases. <i>Accounts of Chemical Research</i> , 2019, 52, 1687-1696.	15.6	50
40	Hyaluronic Acid Hydrogel Integrated with Mesenchymal Stem Cell Secretome to Treat Endometrial Injury in a Rat Model of Asherman's Syndrome. <i>Advanced Healthcare Materials</i> , 2019, 8, e1900411.	7.6	103
41	Bispecific Antibody Therapy for Effective Cardiac Repair through Redirection of Endogenous Stem Cells. <i>Advanced Therapeutics</i> , 2019, 2, 1900009.	3.2	7
42	Antibody-Armed Platelets for the Regenerative Targeting of Endogenous Stem Cells. <i>Nano Letters</i> , 2019, 19, 1883-1891.	9.1	31
43	Cells and cell derivatives as drug carriers for targeted delivery. <i>Medicine in Drug Discovery</i> , 2019, 3, 100014.	4.5	26
44	Platelet-Inspired Nanocells for Targeted Heart Repair After Ischemia/Reperfusion Injury. <i>Advanced Functional Materials</i> , 2019, 29, 1803567.	14.9	92
45	microRNA-21-5p dysregulation in exosomes derived from heart failure patients impairs regenerative potential. <i>Journal of Clinical Investigation</i> , 2019, 129, 2237-2250.	8.2	197
46	Concise Review: Is Cardiac Cell Therapy Dead? Embarrassing Trial Outcomes and New Directions for the Future. <i>Stem Cells Translational Medicine</i> , 2018, 7, 354-359.	3.3	95
47	Targeted repair of heart injury by stem cells fused with platelet nanovesicles. <i>Nature Biomedical Engineering</i> , 2018, 2, 17-26.	22.5	161
48	Body builder: from synthetic cells to engineered tissues. <i>Current Opinion in Cell Biology</i> , 2018, 54, 37-42.	5.4	15
49	Platelets and their biomimetics for regenerative medicine and cancer therapies. <i>Journal of Materials Chemistry B</i> , 2018, 6, 7354-7365.	5.8	70
50	Cardiac cell-integrated microneedle patch for treating myocardial infarction. <i>Science Advances</i> , 2018, 4, eaat9365.	10.3	192
51	Pretargeting and Bioorthogonal Click Chemistry-Mediated Endogenous Stem Cell Homing for Heart Repair. <i>ACS Nano</i> , 2018, 12, 12193-12200.	14.6	42
52	NIPAM-based Microgel Microenvironment Regulates the Therapeutic Function of Cardiac Stromal Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 37783-37796.	8.0	32
53	Cardiac Stem Cell Patch Integrated with Microengineered Blood Vessels Promotes Cardiomyocyte Proliferation and Neovascularization after Acute Myocardial Infarction. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 33088-33096.	8.0	66
54	Mesenchymal Stem Cell/Red Blood Cell-Inspired Nanoparticle Therapy in Mice with Carbon Tetrachloride-Induced Acute Liver Failure. <i>ACS Nano</i> , 2018, 12, 6536-6544.	14.6	109

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55	Targeting regenerative exosomes to myocardial infarction using cardiac homing peptide. <i>Theranostics</i> , 2018, 8, 1869-1878.	10.0	263
56	Targeted Treatment of Ischemic and Fibrotic Complications of Myocardial Infarction Using a Dual-Delivery Microgel Therapeutic. <i>ACS Nano</i> , 2018, 12, 7826-7837.	14.6	63
57	A Regenerative Cardiac Patch Formed by Spray Painting of Biomaterials onto the Heart. <i>Tissue Engineering - Part C: Methods</i> , 2017, 23, 146-155.	2.1	56
58	Fabrication of Synthetic Mesenchymal Stem Cells for the Treatment of Acute Myocardial Infarction in Mice. <i>Circulation Research</i> , 2017, 120, 1768-1775.	4.5	158
59	Therapeutic microparticles functionalized with biomimetic cardiac stem cell membranes and secretome. <i>Nature Communications</i> , 2017, 8, 13724.	12.8	203
60	Heart Repair Using Nanogel-Encapsulated Human Cardiac Stem Cells in Mice and Pigs with Myocardial Infarction. <i>ACS Nano</i> , 2017, 11, 9738-9749.	14.6	128
61	Safety and Efficacy of Allogeneic Lung Spheroid Cells in a Mismatched Rat Model of Pulmonary Fibrosis. <i>Stem Cells Translational Medicine</i> , 2017, 6, 1905-1916.	3.3	27
62	Angiopeliosis as an Alternative Mechanism of Cell Extravasation. <i>Stem Cells</i> , 2017, 35, 170-180.	3.2	42
63	Effects of Matrix Metalloproteinases on the Performance of Platelet Fibrin Gel Spiked With Cardiac Stem Cells in Heart Repair. <i>Stem Cells Translational Medicine</i> , 2016, 5, 793-803.	3.3	22
64	Magnetically Targeted Stem Cell Delivery for Regenerative Medicine. <i>Journal of Functional Biomaterials</i> , 2015, 6, 526-546.	4.4	60
65	Intravenous Cardiac Stem Cell-Derived Exosomes Ameliorate Cardiac Dysfunction in Doxorubicin Induced Dilated Cardiomyopathy. <i>Stem Cells International</i> , 2015, 2015, 1-8.	2.5	78
66	Bispecific antibodies, nanoparticles and cells: bringing the right cells to get the job done. <i>Expert Opinion on Biological Therapy</i> , 2015, 15, 1251-1255.	3.1	10
67	Adult Lung Spheroid Cells Contain Progenitor Cells and Mediate Regeneration in Rodents With Bleomycin-Induced Pulmonary Fibrosis. <i>Stem Cells Translational Medicine</i> , 2015, 4, 1265-1274.	3.3	56
68	Cardiac regenerative potential of cardiosphere-derived cells from adult dog hearts. <i>Journal of Cellular and Molecular Medicine</i> , 2015, 19, 1805-1813.	3.6	22
69	Isolation and Cryopreservation of Neonatal Rat Cardiomyocytes. <i>Journal of Visualized Experiments</i> , 2015, , .	0.3	24
70	Relative Roles of CD90 and c-Kit to the Regenerative Efficacy of Cardiosphere-Derived Cells in Humans and in a Mouse Model of Myocardial Infarction. <i>Journal of the American Heart Association</i> , 2014, 3, e001260.	3.7	104
71	Intracoronary Cardiosphere-Derived Cells After Myocardial Infarction. <i>Journal of the American College of Cardiology</i> , 2014, 63, 110-122.	2.8	468
72	Human Cardiosphere-Derived Cells From Advanced Heart Failure Patients Exhibit Augmented Functional Potency in Myocardial Repair. <i>JACC: Heart Failure</i> , 2014, 2, 49-61.	4.1	100

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73	Exosomes as Critical Agents of Cardiac Regeneration Triggered by Cell Therapy. <i>Stem Cell Reports</i> , 2014, 2, 606-619.	4.8	705
74	Magnetic targeting of cardiosphere-derived stem cells with ferumoxytol nanoparticles for treating rats with myocardial infarction. <i>Biomaterials</i> , 2014, 35, 8528-8539.	11.4	101
75	Magnetic antibody-linked nanomatchmakers for therapeutic cell targeting. <i>Nature Communications</i> , 2014, 5, 4880.	12.8	119
76	Importance of Cell-Cell Contact in the Therapeutic Benefits of Cardiosphere-Derived Cells. <i>Stem Cells</i> , 2014, 32, 2397-2406.	3.2	55
77	Safety and Efficacy of Allogeneic Cell Therapy in Infarcted Rats Transplanted With Mismatched Cardiosphere-Derived Cells. <i>Circulation</i> , 2012, 125, 100-112.	1.6	262
78	Magnetic Enhancement of Cell Retention, Engraftment, and Functional Benefit after Intracoronary Delivery of Cardiac-Derived Stem Cells in a Rat Model of Ischemia/Reperfusion. <i>Cell Transplantation</i> , 2012, 21, 1121-1135.	2.5	86
79	Intracoronary cardiosphere-derived cells for heart regeneration after myocardial infarction (CADUCEUS): a prospective, randomised phase 1 trial. <i>Lancet, The</i> , 2012, 379, 895-904.	13.7	1,294
80	Dose-dependent functional benefit of human cardiosphere transplantation in mice with acute myocardial infarction. <i>Journal of Cellular and Molecular Medicine</i> , 2012, 16, 2112-2116.	3.6	49
81	Brief Report: Mechanism of Extravasation of Infused Stem Cells. <i>Stem Cells</i> , 2012, 30, 2835-2842.	3.2	27
82	Intramyocardial Injection of Platelet Gel Promotes Endogenous Repair and Augments Cardiac Function in Rats With Myocardial Infarction. <i>Journal of the American College of Cardiology</i> , 2012, 59, 256-264.	2.8	47
83	Direct Comparison of Different Stem Cell Types and Subpopulations Reveals Superior Paracrine Potency and Myocardial Repair Efficacy With Cardiosphere-Derived Cells. <i>Journal of the American College of Cardiology</i> , 2012, 59, 942-953.	2.8	427
84	Three Dimensional Neuronal Cell Cultures More Accurately Model Voltage Gated Calcium Channel Functionality in Freshly Dissected Nerve Tissue. <i>PLoS ONE</i> , 2012, 7, e45074.	2.5	49
85	Transplantation of platelet gel spiked with cardiosphere-derived cells boosts structural and functional benefits relative to gel transplantation alone in rats with myocardial infarction. <i>Biomaterials</i> , 2012, 33, 2872-2879.	11.4	44
86	Functional performance of human cardiosphere-derived cells delivered in an in situ polymerizable hyaluronan-gelatin hydrogel. <i>Biomaterials</i> , 2012, 33, 5317-5324.	11.4	100
87	The amelioration of cardiac dysfunction after myocardial infarction by the injection of keratin biomaterials derived from human hair. <i>Biomaterials</i> , 2011, 32, 9290-9299.	11.4	66
88	Exploring cellular adhesion and differentiation in a micro-/nano-hybrid polymer scaffold. <i>Biotechnology Progress</i> , 2010, 26, 838-846.	2.6	51
89	Magnetic Targeting Enhances Engraftment and Functional Benefit of Iron-Labeled Cardiosphere-Derived Cells in Myocardial Infarction. <i>Circulation Research</i> , 2010, 106, 1570-1581.	4.5	226