Toh, Wei Seong

List of Publications by Year
in descending order

82 papers	13,261 citations	38 h-index	78 g-index
84 all docs	84 docs citations	84 times ranked	17717 citing authors

87888

66911

#	Article	IF	Citations
1	Practical considerations in transforming MSC therapy for neurological diseases from cell to EV. Experimental Neurology, 2022, 349, 113953.	4.1	9
2	Macrophage Polarization as a Facile Strategy to Enhance Efficacy of Macrophage Membraneâ€Coated Nanoparticles in Osteoarthritis. Small Science, 2022, 2, .	9.9	11
3	Mesenchymal Stem Cell Exosomes Promote Functional Osteochondral Repair in a Clinically Relevant Porcine Model. American Journal of Sports Medicine, 2022, 50, 788-800.	4.2	24
4	Enhanced skin penetration of berberine from proniosome gel attenuates pain and inflammation in a mouse model of osteoarthritis. Biomaterials Science, 2022, 10, 1752-1764.	5.4	3
5	Mesenchymal Stem Cell Exosomes Promote Growth Plate Repair and Reduce Limb-Length Discrepancy in Young Rats. Journal of Bone and Joint Surgery - Series A, 2022, 104, 1098-1106.	3.0	4
6	Mesenchymal stromal cell-derived small extracellular vesicles modulate macrophage polarization and enhance angio-osteogenesis to promote bone healing. Genes and Diseases, 2022, 9, 841-844.	3.4	9
7	Mesenchymal Stem Cell Exosomes for Cartilage Regeneration: A Systematic Review of Preclinical <i>In Vivo</i> Studies. Tissue Engineering - Part B: Reviews, 2021, 27, 1-13.	4.8	46
8	Intra-articular Injections of Mesenchymal Stem Cells Without Adjuvant Therapies for Knee Osteoarthritis: A Systematic Review and Meta-analysis. American Journal of Sports Medicine, 2021, 49, 3113-3124.	4.2	29
9	Editorial: Extracellular Vesicle Treatment, Epigenetic Modification and Cell Reprogramming to Promote Bone and Cartilage Regeneration. Frontiers in Bioengineering and Biotechnology, 2021, 9, 678014.	4.1	0
10	Critical considerations for the development of potency tests for therapeutic applications of mesenchymal stromal cell-derived small extracellular vesicles. Cytotherapy, 2021, 23, 373-380.	0.7	125
11	Mesenchymal Stem Cell Extracellular Vesicles as Adjuvant to Bone Marrow Stimulation in Chondral Defect Repair in a Minipig Model. Cartilage, 2021, 13, 254S-266S.	2.7	5
12	International Society for Extracellular Vesicles and International Society for Cell and Gene Therapy statement on extracellular vesicles from mesenchymal stromal cells and other cells: considerations for potential therapeutic agents to suppress coronavirus disease-19. Cytotherapy, 2020, 22, 482-485.	0.7	94
13	Mesenchymal stem cell exosomes in bone regenerative strategiesâ€”a systematic review of preclinical studies. Materials Today Bio, 2020, 7, 100067.	5.5	82
14	Intra-Articular Injections of Mesenchymal Stem Cell Exosomes and Hyaluronic Acid Improve Structural and Mechanical Properties of Repaired Cartilage in a Rabbit Model. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2020, 36, 2215-2228.e2.	2.7	60
15	Optimising administration of MSC exosomes for cartilage repair in the clinic. Cytotherapy, 2020, 22, S55.	0.7	0
16	Equivalent 10-Year Outcomes After Implantation of Autologous Bone Marrowâ€“Derived Mesenchymal Stem Cells Versus Autologous Chondrocyte Implantation for Chondral Defects of the Knee. American Journal of Sports Medicine, 2019, 47, 2881-2887.	4.2	54
17	Defining mesenchymal stromal cell (MSC)â€derived small extracellular vesicles for therapeutic applications. Journal of Extracellular Vesicles, 2019, 8, 1609206.	12.2	400
18	Mesenchymal stem cell exosomes enhance periodontal ligament cell functions and promote periodontal regeneration. Acta Biomaterialia, 2019, 89, 252-264.	8.3	170

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19	MSC exosomes alleviate temporomandibular joint osteoarthritis by attenuating inflammation and restoring matrix homeostasis. Biomaterials, 2019, 200, 35-47.	11.4	329
20	Substrate stiffness modulates the multipotency of human neural crest derived ectomesenchymal stem cells via CD44 mediated PDGFR signaling. Biomaterials, 2018, 167, 153-167.	11.4	28
21	MSC exosomes mediate cartilage repair by enhancing proliferation, attenuating apoptosis and modulating immune reactivity. Biomaterials, 2018, 156, 16-27.	11.4	606
22	Minimal information for studies of extracellular vesicles 2018 (MISEV2018): a position statement of the International Society for Extracellular Vesicles and update of the MISEV2014 guidelines. Journal of Extracellular Vesicles, 2018, 7, 1535750.	12.2	6,961
23	Immune regulatory targets of mesenchymal stromal cell exosomes/small extracellular vesicles in tissue regeneration. Cytotherapy, 2018, 20, 1419-1426.	0.7	59
24	Injectable Hydrogels for Cartilage Regeneration. Gels Horizons: From Science To Smart Materials, 2018, , 315-337.	0.3	3
25	MSC exosome works through a protein-based mechanism of action. Biochemical Society Transactions, 2018, 46, 843-853.	3.4	252
26	Comparison of cytotoxicity test models for evaluating resin-based composites. Human and Experimental Toxicology, 2017, 36, 339-348.	2.2	14
27	Distribution of pericellular matrix molecules in the temporomandibular joint and their chondroprotective effects against inflammation. International Journal of Oral Science, 2017, 9, 43-52.	8.6	30
28	Concise Review: Developing Best-Practice Models for the Therapeutic Use of Extracellular Vesicles. Stem Cells Translational Medicine, 2017, 6, 1730-1739.	3.3	247
29	MSC exosome as a cell-free MSC therapy for cartilage regeneration: Implications for osteoarthritis treatment. Seminars in Cell and Developmental Biology, 2017, 67, 56-64.	5.0	351
30	The role of laminins in cartilaginous tissues: from development to regeneration. , 2017, 34, 40-54.		33
31	Pluripotent Stem Cells: Differentiation Potential and Therapeutic Efficacy for Cartilage Repair. , 2016, , .		1
32	Exosomes derived from human embryonic mesenchymal stem cells promote osteochondral regeneration. Osteoarthritis and Cartilage, 2016, 24, 2135-2140.	1.3	480
33	Adipose Tissue and Extracellular Matrix Development by Injectable Decellularized Adipose Matrix Loaded with Basic Fibroblast Growth Factor. Plastic and Reconstructive Surgery, 2016, 137, 1171-1180.	1.4	50
34	Repair and Regeneration of Temporomandibular Joint: The Future of Stem Cell-Based Therapies. Stem Cells in Clinical Applications, 2016, , 47-75.	0.4	2
35	Stem Cells for Articular Cartilage Repair and Regeneration. Stem Cells in Clinical Applications, 2016, , 119-147.	0.4	0
36	Depth of cure of contemporary bulk-fill resin-based composites. Dental Materials Journal, 2016, 35, 503-510.	1.8	66

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37	Collagen Type IV and Laminin Expressions during Cartilage Repair and in Late Clinically Failed Repair Tissues from Human Subjects. Cartilage, 2016, 7, 52-61.	2.7	19
38	Cellular senescence in aging and osteoarthritis. Monthly Notices of the Royal Astronomical Society: Letters, 2016, 87, 6-14.	3.3	96
39	Potential applications of keratinocytes derived from human embryonic stem cells. Biotechnology Journal, 2016, 11, 58-70.	3.5	14
40	Exploiting Stem Cell-Extracellular Matrix Interactions for Cartilage Regeneration: A Focus on Basement Membrane Molecules. Current Stem Cell Research and Therapy, 2016, 11, 618-625.	1.3	13
41	Stem Cells: Microenvironment, Micro/Nanotechnology, and Application. Stem Cells International, 2015, 2015, 1-2.	2.5	3
42	Modulation of Dental Pulp Stem Cell Odontogenesis in a Tunable PEG-Fibrinogen Hydrogel System. Stem Cells International, 2015, 2015, 1-9.	2.5	38
43	Differential Effects of the Extracellular Microenvironment on Human Embryonic Stem Cell Differentiation into Keratinocytes and Their Subsequent Replicative Life Span. Tissue Engineering - Part A, 2015, 21, 1432-1443.	3.1	16
44	Investigation of Human Embryonic Stem Cell-Derived Keratinocytes as an In Vitro Research Model for Mechanical Stress Dynamic Response. Stem Cell Reviews and Reports, 2015, 11, 460-473.	5.6	11
45	Stem Cells for Temporomandibular Joint Repair and Regeneration. Stem Cell Reviews and Reports, 2015, 11, 728-742.	5.6	34
46	In Vitro Biocompatibility of Contemporary Bulk-fill Composites. Operative Dentistry, 2015, 40, 644-652.	1.2	32
47	Hydrogels for Stem Cell Fate Control and Delivery in Regenerative Medicine. Series in Bioengineering, 2015, , 187-214.	0.6	6
48	Recent Progress in Stem Cell Chondrogenesis. Progress in Stem Cell, 2014, 1, .	0.4	1
49	Inducing pluripotency for disease modeling, drug development and craniofacial applications. Expert Opinion on Biological Therapy, 2014, 14, 1233-1240.	3.1	12
50	Derivation of Chondrogenic Cells from Human Embryonic Stem Cells for Cartilage Tissue Engineering. Methods in Molecular Biology, 2014, , 263-279.	0.9	11
51	Distribution of Basement Membrane Molecules, Laminin and Collagen Type IV, in Normal and Degenerated Cartilage Tissues. Cartilage, 2014, 5, 123-132.	2.7	38
52	Modulation of chondrocyte functions and stiffness-dependent cartilage repair using an injectable enzymatically crosslinked hydrogelÂwith tunable mechanical properties. Biomaterials, 2014, 35, 2207-2217.	11.4	170
53	Advances in hydrogel delivery systems for tissue regeneration. Materials Science and Engineering C, 2014, 45, 690-697.	7.3	157
54	Identification of Nephrotoxic Compounds with Embryonic Stem-Cell-Derived Human Renal Proximal Tubular-Like Cells. Molecular Pharmaceutics, 2014, 11, 1982-1990.	4.6	61

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55	Advances in Mesenchymal Stem Cell-based Strategies for Cartilage Repair and Regeneration. Stem Cell Reviews and Reports, 2014, 10, 686-696.	5.6	126
56	Recent Progress in Stem Cell Chondrogenesis. Progress in Stem Cell, 2014, 1, 7.	0.4	3
57	Differentiation of Human Embryonic Stem Cells into Clinically Amenable Keratinocytes in an Autogenic Environment. Journal of Investigative Dermatology, 2013, 133, 618-628.	0.7	40
58	Chemotactic recruitment of adult neural progenitor cells into multifunctional hydrogels providing sustained SDFâ€•1Î± release and compatible structural support. FASEB Journal, 2013, 27, 1023-1033.	0.5	58
59	Basement membrane molecule expression attendant to chondrogenesis by nucleus pulposus cells and mesenchymal stem cells. Journal of Orthopaedic Research, 2013, 31, 1136-1143.	2.3	27
60	Human fibroblast matrices bio-assembled under macromolecular crowding support stable propagation of human embryonic stem cells. Journal of Tissue Engineering and Regenerative Medicine, 2012, 6, e74-e86.	2.7	31
61	The effect of injectable gelatin-hydroxyphenylpropionic acid hydrogel matrices on the proliferation, migration, differentiation and oxidative stress resistance of adult neural stem cells. Biomaterials, 2012, 33, 3446-3455.	11.4	96
62	Modulation of mesenchymal stem cell chondrogenesis in a tunable hyaluronic acid hydrogel microenvironment. Biomaterials, 2012, 33, 3835-3845.	11.4	261
63	Biomaterial-Mediated Delivery of Microenvironmental Cues for Repair and Regeneration of Articular Cartilage. Molecular Pharmaceutics, 2011, 8, 994-1001.	4.6	60
64	Potential of Human Embryonic Stem Cells in Cartilage Tissue Engineering and Regenerative Medicine. Stem Cell Reviews and Reports, 2011, 7, 544-559.	5.6	96
65	Establishment of Clinically Compliant Human Embryonic Stem Cells in an Autologous Feeder-Free System. Tissue Engineering - Part C: Methods, 2011, 17, 927-937.	2.1	39
66	Cartilage repair using hyaluronan hydrogel-encapsulated human embryonic stem cell-derived chondrogenic cells. Biomaterials, 2010, 31, 6968-6980.	11.4	239
67	Autologous Feeder Cells from Embryoid Body Outgrowth Support the Long-Term Growth of Human Embryonic Stem Cells More Effectively than Those from Direct Differentiation. Tissue Engineering - Part C: Methods, 2010, 16, 719-733.	2.1	27
68	Therapeutic angiogenesis by transplantation of human embryonic stem cell-derived CD133⁺ endothelial progenitor cells for cardiac repair. Regenerative Medicine, 2010, 5, 231-244.	1.7	58
69	Differentiation and enrichment of expandable chondrogenic cells from human embryonic stem cells <i>in vitro</i>. Journal of Cellular and Molecular Medicine, 2009, 13, 3570-3590.	3.6	66
70	A subpopulation of mesenchymal stromal cells with high osteogenic potential. Journal of Cellular and Molecular Medicine, 2009, 13, 2436-2447.	3.6	28
71	Stage-Dependent Effect of TGF-Î²1 on Chondrogenic Differentiation of Human Embryonic Stem Cells. Stem Cells and Development, 2009, 18, 929-940.	2.1	50
72	In Vitro Derivation of Chondrogenic Cells from Human Embryonic Stem Cells. Methods in Molecular Biology, 2009, 584, 317-331.	0.9	25

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73	An autologous cell lysate extract from human embryonic stem cell (hESC) derived osteoblasts can enhance osteogenesis of hESC. Tissue and Cell, 2008, 40, 219-228.	2.2	24
74	Effects of Culture Conditions and Bone Morphogenetic Protein 2 on Extent of Chondrogenesis from Human Embryonic Stem Cells. Stem Cells, 2007, 25, 950-960.	3.2	139
75	Culture media conditioned by heat-shocked osteoblasts enhances the osteogenesis of bone marrow-derived mesenchymal stromal cells. Cell Biochemistry and Function, 2007, 25, 267-276.	2.9	25
76	Directing endothelial differentiation of human embryonic stem cells via transduction with an adenoviral vector expressing the VEGF165 gene. Journal of Gene Medicine, 2007, 9, 452-461.	2.8	55
77	Differentiation of Human Embryonic Stem Cells Toward the Chondrogenic Lineage. Methods in Molecular Biology, 2007, 407, 333-349.	0.9	16
78	New Perspectives in Chondrogenic Differentiation of Stem Cells for Cartilage Repair. Scientific World Journal, The, 2006, 6, 361-364.	2.1	3
79	Loss of viability during freezeâ€"thaw of intact and adherent human embryonic stem cells with conventional slow-cooling protocols is predominantly due toâ£apoptosis rather than cellular necrosis. Journal of Biomedical Science, 2006, 13, 433-445.	7.0	108
80	Kinetics of cell death of frozen-thawed human embryonic stem cell colonies is reversibly slowed down by exposure to low temperature. Zygote, 2006, 14, 341-348.	1.1	17
81	Combined effects of TGFÎ²1 and BMP2 in serum-free chondrogenic differentiation of mesenchymal stem cells induced hyaline-like cartilage formation. Growth Factors, 2005, 23, 313-321.	1.7	100
82	Osteogenic differentiation within intact human embryoid bodies result in a marked increase in osteocalcin secretion after 12 days of in vitro culture, and formation of morphologically distinct nodule-like structures. Tissue and Cell, 2005, 37, 325-334.	2.2	72