Magali Cucchiarini

List of Publications by Year
in descending order

172 papers	5,960 citations	66343 42 h-index	110387 64 g-index
175 all docs	175 docs citations	175 times ranked	5248 citing authors

#	Article	IF	Citations
1	Tissue engineering for articular cartilage repair â€“ the state of the art. , 2013, 25, 248-267.		305
2	Mesenchymal stem cells for the treatment of cartilage lesions: from preclinical findings to clinical application in orthopaedics. Knee Surgery, Sports Traumatology, Arthroscopy, 2013, 21, 1717-1729.	4.2	199
3	Improved Tissue Repair in Articular Cartilage Defects in Vivo by rAAV-Mediated Overexpression of Human Fibroblast Growth Factor 2. Molecular Therapy, 2005, 12, 229-238.	8.2	152
4	Restoration of the extracellular matrix in human osteoarthritic articular cartilage by overexpression of the transcription factorSOX9. Arthritis and Rheumatism, 2007, 56, 158-167.	6.7	143
5	Recombinant Adeno-Associated Virus Vectors Efficiently and Persistently Transduce Chondrocytes in Normal and Osteoarthritic Human Articular Cartilage. Human Gene Therapy, 2003, 14, 393-402.	2.7	135
6	Small Subchondral Drill Holes Improve Marrow Stimulation of Articular Cartilage Defects. American Journal of Sports Medicine, 2014, 42, 2741-2750.	4.2	119
7	Transforming Growth Factor Beta-Releasing Scaffolds for Cartilage Tissue Engineering. Tissue Engineering - Part B: Reviews, 2014, 20, 106-125.	4.8	114
8	Gene therapy for cartilage defects. Journal of Gene Medicine, 2005, 7, 1495-1509.	2.8	112
9	Local stimulation of articular cartilage repair by transplantation of encapsulated chondrocytes overexpressing human fibroblast growth factor 2 (FGF-2)in vivo. Journal of Gene Medicine, 2006, 8, 100-111.	2.8	109
10	Effect of Subchondral Drilling on the Microarchitecture of Subchondral Bone. American Journal of Sports Medicine, 2012, 40, 828-836.	4.2	109
11	SOX9 gene transfer via safe, stable, replication-defective recombinant adeno-associated virus vectors as a novel, powerful tool to enhance the chondrogenic potential of human mesenchymal stem cells. Stem Cell Research and Therapy, 2012, 3, 22.	5.5	108
12	Thermosensitive Hydrogel Based on PEOâ€“PPOâ€“PEO Poloxamers for a Controlled In Situ Release of Recombinant Adenoâ€Associated Viral Vectors for Effective Gene Therapy of Cartilage Defects. Advanced Materials, 2020, 32, e1906508.	21.0	108
13	A review of dental composites: Challenges, chemistry aspects, filler influences, and future insights. Composites Part B: Engineering, 2021, 216, 108852.	12.0	97
14	Biomaterial-guided delivery of gene vectors for targeted articular cartilage repair. Nature Reviews Rheumatology, 2019, 15, 18-29.	8.0	92
15	The Use of Nanomaterials in Tissue Engineering for Cartilage Regeneration; Current Approaches and Future Perspectives. International Journal of Molecular Sciences, 2020, 21, 536.	4.1	86
16	Metabolic Activities and Chondrogenic Differentiation of Human Mesenchymal Stem Cells Following Recombinant Adeno-Associated Virusâ€“Mediated Gene Transfer and Overexpression of Fibroblast Growth Factor 2. Tissue Engineering - Part A, 2011, 17, 1921-1933.	3.1	82
17	Failed cartilage repair for early osteoarthritis defects: a biochemical, histological and immunohistochemical analysis of the repair tissue after treatment with marrow-stimulation techniques. Knee Surgery, Sports Traumatology, Arthroscopy, 2012, 20, 2315-2324.	4.2	82
18	Direct rAAV SOX9 administration for durable articular cartilage repair with delayed terminal differentiation and hypertrophy in vivo. Journal of Molecular Medicine, 2013, 91, 625-636.	3.9	80

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19	Sustained transgene expression in cartilage defectsin vivo after transplantation of articular chondrocytes modified by lipid-mediated gene transfer in a gel suspension delivery system. Journal of Gene Medicine, 2003, 5, 502-509.	2.8	77
20	Autologous Matrix-Induced Chondrogenesis: A Systematic Review of the Clinical Evidence. American Journal of Sports Medicine, 2019, 47, 222-231.	4.2	77
21	A Comprehensive Review of Detection Methods for SARS-CoV-2. Microorganisms, 2021, 9, 232.	3.6	74
22	Basic science of osteoarthritis. Journal of Experimental Orthopaedics, 2016, 3, 22.	1.8	69
23	Small-Diameter Awls Improve Articular Cartilage Repair After Microfracture Treatment in a Translational Animal Model. American Journal of Sports Medicine, 2016, 44, 209-219.	4.2	67
24	Remodelling of human osteoarthritic cartilage by FGFâ€2, alone or combined with <i>Sox9 via</i> rAAV gene transfer. Journal of Cellular and Molecular Medicine, 2009, 13, 2476-2488.	3.6	65
25	Current perspectives in stem cell research for knee cartilage repair. Stem Cells and Cloning: Advances and Applications, 2014, 7, 1.	2.3	64
26	Phytochemical and nutra-pharmaceutical attributes of Mentha spp.: A comprehensive review. Arabian Journal of Chemistry, 2021, 14, 103106.	4.9	64
27	Secretome and Extracellular Vesicles as New Biological Therapies for Knee Osteoarthritis: A Systematic Review. Journal of Clinical Medicine, 2019, 8, 1867.	2.4	62
28	Natural and Synthetic Bioinks for 3D Bioprinting. Advanced NanoBiomed Research, 2021, 1, 2000097.	3.6	60
29	PEO-PPO-PEO Tri-Block Copolymers for Gene Delivery Applications in Human Regenerative Medicineâ€"An Overview. International Journal of Molecular Sciences, 2018, 19, 775.	4.1	59
30	Acceleration of articular cartilage repair by combined gene transfer of human insulin-like growth factor I and fibroblast growth factor-2 in vivo. Archives of Orthopaedic and Trauma Surgery, 2010, 130, 1311-1322.	2.4	58
31	Transplanted articular chondrocytes co-overexpressing IGF-I and FGF-2 stimulate cartilage repair in vivo. Knee Surgery, Sports Traumatology, Arthroscopy, 2011, 19, 2119-2130.	4.2	57
32	Benefits of Recombinant Adeno-Associated Virus (rAAV)-Mediated Insulinlike Growth Factor I (IGF-I) Overexpression for the Long-Term Reconstruction of Human Osteoarthritic Cartilage by Modulation of the IGF-I Axis. Molecular Medicine, 2012, 18, 346-358.	4.4	56
33	Bone Marrow Aspirate Concentrate-Enhanced Marrow Stimulation of Chondral Defects. Stem Cells International, 2017, 2017, 1-13.	2.5	56
34	Nanotechnology in Bladder Cancer: Diagnosis and Treatment. Cancers, 2021, 13, 2214.	3.7	56
35	rAAV-mediated overexpression of TGF-Î² stably restructures human osteoarthritic articular cartilage in situ. Journal of Translational Medicine, 2013, 11, 211.	4.4	51
36	PEOâ€“PPOâ€“PEO micelles as effective rAAV-mediated gene delivery systems to target human mesenchymal stem cells without altering their differentiation potency. Acta Biomaterialia, 2015, 27, 42-52.	8.3	50

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37	Improved repair of chondral and osteochondral defects in the ovine trochlea compared with the medial condyle. Journal of Orthopaedic Research, 2013, 31, 1772-1779.	2.3	49
38	Multi-Functionalized Nanomaterials and Nanoparticles for Diagnosis and Treatment of Retinoblastoma. Biosensors, 2021, 11, 97.	4.7	49
39	Gene Therapy for Cartilage Repair. Cartilage, 2011, 2, 201-225.	2.7	48
40	Determination of the Chondrogenic Differentiation Processes in Human Bone Marrow-Derived Mesenchymal Stem Cells Genetically Modified to Overexpress Transforming Growth Factor-Î² via Recombinant Adeno-Associated Viral Vectors. Human Gene Therapy, 2014, 25, 1050-1060.	2.7	47
41	Effective and durable genetic modification of human mesenchymal stem cells via controlled release of rAAV vectors from self-assembling peptide hydrogels with a maintained differentiation potency. Acta Biomaterialia, 2015, 18, 118-127.	8.3	47
42	Hydrogelâ€Guided, rAAVâ€Mediated IGFâ€I Overexpression Enables Longâ€Term Cartilage Repair and Protection against Perifocal Osteoarthritis in a Largeâ€Animal Fullâ€Thickness Chondral Defect Model at One Year In Vivo. Advanced Materials, 2021, 33, e2008451.	21.0	47
43	DNA Based and Stimuli-Responsive Smart Nanocarrier for Diagnosis and Treatment of Cancer: Applications and Challenges. Cancers, 2021, 13, 3396.	3.7	46
44	Direct FGF-2 Gene Transfer via Recombinant Adeno-Associated Virus Vectors Stimulates Cell Proliferation, Collagen Production, and the Repair of Experimental Lesions in the Human ACL. American Journal of Sports Medicine, 2013, 41, 194-202.	4.2	44
45	Gene therapy for human osteoarthritis: principles and clinical translation. Expert Opinion on Biological Therapy, 2016, 16, 331-346.	3.1	44
46	Advances and challenges in geneâ€based approaches for osteoarthritis. Journal of Gene Medicine, 2013, 15, 343-355.	2.8	43
47	Current Progress in Stem Cell-Based Gene Therapy for Articular Cartilage Repair. Current Stem Cell Research and Therapy, 2015, 10, 121-131.	1.3	43
48	Clinical potential and challenges of using genetically modified cells for articular cartilage repair. Croatian Medical Journal, 2011, 52, 245-261.	0.7	42
49	Influence of insulin-like growth factor I overexpression via recombinant adeno-associated vector gene transfer upon the biological activities and differentiation potential of human bone marrow-derived mesenchymal stem cells. Stem Cell Research and Therapy, 2014, 5, 103.	5.5	42
50	An overview of thermal necrosis: present and future. Current Medical Research and Opinion, 2019, 35, 1555-1562.	1.9	41
51	Controlled release strategies for rAAV-mediated gene delivery. Acta Biomaterialia, 2016, 29, 1-10.	8.3	40
52	Synthesis, characterization, toxicity and morphology assessments of newly prepared microemulsion systems for delivery of valproic acid. Journal of Molecular Liquids, 2021, 338, 116625.	4.9	40
53	Menisci are Efficiently Transduced by Recombinant Adeno-Associated virus Vectors in Vitro and in Vivo. American Journal of Sports Medicine, 2004, 32, 1860-1865.	4.2	39
54	Hydrogel-Based Controlled Delivery Systems for Articular Cartilage Repair. BioMed Research International, 2016, 2016, 1-12.	1.9	39

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55	Application of Alginate Hydrogels for Next-Generation Articular Cartilage Regeneration. International Journal of Molecular Sciences, 2022, 23, 1147.	4.1	39
56	PEO-PPO-PEO Carriers for rAAV-Mediated Transduction of Human Articular Chondrocytes in Vitro and in a Human Osteochondral Defect Model. ACS Applied Materials & Interfaces, 2016, 8, 20600-20613.	8.0	38
57	Subchondral drilling for articular cartilage repair: a systematic review of translational research. DMM Disease Models and Mechanisms, 2018, 11, .	2.4	37
58	Supramolecular Cyclodextrin-Based Hydrogels for Controlled Gene Delivery. Polymers, 2019, 11, 514.	4.5	37
59	Pluronic F127/Doxorubicin microemulsions: Preparation, characterization, and toxicity evaluations. Journal of Molecular Liquids, 2022, 345, 117028.	4.9	37
60	Effective, safe nonviral gene transfer to preserve the chondrogenic differentiation potential of human mesenchymal stem cells. Journal of Gene Medicine, 2012, 14, 501-511.	2.8	35
61	Effect of open wedge high tibial osteotomy on the lateral tibiofemoral compartment in sheep. Part III: analysis of the microstructure of the subchondral bone and correlations with the articular cartilage and meniscus. Knee Surgery, Sports Traumatology, Arthroscopy, 2015, 23, 2704-2714.	4.2	35
62	<i>In Vitro</i>and<i>In Vivo</i>Characterization of Nonbiomedical- and Biomedical-Grade Alginates for Articular Chondrocyte Transplantation. Tissue Engineering - Part C: Methods, 2011, 17, 829-842.	2.1	33
63	Effect of open wedge high tibial osteotomy on the lateral tibiofemoral compartment in sheep. Part II: standard and overcorrection do not cause articular cartilage degeneration. Knee Surgery, Sports Traumatology, Arthroscopy, 2014, 22, 1666-1677.	4.2	33
64	Supramolecular polypseudorotaxane gels for controlled delivery of rAAV vectors in human mesenchymal stem cells for regenerative medicine. International Journal of Pharmaceutics, 2017, 531, 492-503.	5.2	33
65	rAAV-mediated overexpression of TGF-β via vector delivery in polymeric micelles stimulates the biological and reparative activities of human articular chondrocytes in vitro and in a human osteochondral defect model. International Journal of Nanomedicine, 2017, Volume 12, 6985-6996.	6.7	33
66	Effect of open wedge high tibial osteotomy on the lateral compartment in sheep. Part I: analysis of the lateral meniscus. Knee Surgery, Sports Traumatology, Arthroscopy, 2013, 21, 39-48.	4.2	32
67	Nanomaterials for the Diagnosis and Treatment of Urinary Tract Infections. Nanomaterials, 2021, 11, 546.	4.1	32
68	Reduction of Sample Size Requirements by Bilateral Versus Unilateral Research Designs in Animal Models for Cartilage Tissue Engineering. Tissue Engineering - Part C: Methods, 2013, 19, 885-891.	2.1	31
69	Large animal models in experimental knee sports surgery: focus on clinical translation. Journal of Experimental Orthopaedics, 2015, 2, 9.	1.8	31
70	Topographic modeling of early human osteoarthritis in sheep. Science Translational Medicine, 2019, 11, .	12.4	31
71	Effects of TGF-Î² Overexpression via rAAV Gene Transfer on the Early Repair Processes in an Osteochondral Defect Model in Minipigs. American Journal of Sports Medicine, 2018, 46, 1987-1996.	4.2	30
72	Nanomaterials for the Diagnosis and Treatment of Inflammatory Arthritis. International Journal of Molecular Sciences, 2021, 22, 3092.	4.1	30

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73	Effective Remodelling of Human Osteoarthritic Cartilage by <i>sox9</i> Gene Transfer and Overexpression upon Delivery of rAAV Vectors in Polymeric Micelles. Molecular Pharmaceutics, 2018, 15, 2816-2826.	4.6	29
74	Orthopaedic regenerative tissue engineering en route to the holy grail: disequilibrium between the demand and the supply in the operating room. Journal of Experimental Orthopaedics, 2018, 5, 14.	1.8	28
75	Application of Nanotechnology for Sensitive Detection of Low-Abundance Single-Nucleotide Variations in Genomic DNA: A Review. Nanomaterials, 2021, 11, 1384.	4.1	27
76	Human gene therapy: novel approaches to improve the current gene delivery systems. Discovery Medicine, 2016, 21, 495-506.	0.5	27
77	Single-cell RNA-seq reveals novel mitochondria-related musculoskeletal cell populations during adult axolotl limb regeneration process. Cell Death and Differentiation, 2021, 28, 1110-1125.	11.2	26
78	Analysis of Novel Nonviral Gene Transfer Systems for Gene Delivery to Cells of the Musculoskeletal System. Molecular Biotechnology, 2008, 38, 137-144.	2.4	25
79	Hydrogels for precision meniscus tissue engineering: a comprehensive review. Connective Tissue Research, 2017, 58, 317-328.	2.3	25
80	Injectable Systems for Intra-Articular Delivery of Mesenchymal Stromal Cells for Cartilage Treatment: A Systematic Review of Preclinical and Clinical Evidence. International Journal of Molecular Sciences, 2018, 19, 3322.	4.1	25
81	Translational applications of photopolymerizable hydrogels for cartilage repair. Journal of Experimental Orthopaedics, 2019, 6, 47.	1.8	25
82	Overexpression of TGF-Î² via rAAV-Mediated Gene Transfer Promotes the Healing of Human Meniscal Lesions Ex Vivo on Explanted Menisci. American Journal of Sports Medicine, 2015, 43, 1197-1205.	4.2	24
83	Comprehensive analysis of translational osteochondral repair: Focus on the histological assessment. Progress in Histochemistry and Cytochemistry, 2015, 50, 19-36.	5.1	24
84	Role of the Subchondral Bone in Articular Cartilage Degeneration and Repair. Journal of the American Academy of Orthopaedic Surgeons, The, 2016, 24, e45-e46.	2.5	24
85	Co-overexpression of TGF-Î² and SOX9 via rAAV gene transfer modulates the metabolic and chondrogenic activities of human bone marrow-derived mesenchymal stem cells. Stem Cell Research and Therapy, 2016, 7, 20.	5.5	24
86	Nanodiagnosis and Nanotreatment of Cardiovascular Diseases: An Overview. Chemosensors, 2021, 9, 67.	3.6	24
87	Triblock Copolymer Bioinks in Hydrogel Three-Dimensional Printing for Regenerative Medicine: A Focus on Pluronic F127. Tissue Engineering - Part B: Reviews, 2022, 28, 451-463.	4.8	24
88	Adapted chondrogenic differentiation of human mesenchymal stem cells via controlled release of TGF-Î²1 from poly(ethylene oxide)-terephtalate/poly(butylene terepthalate) multiblock scaffolds. Journal of Biomedical Materials Research - Part A, 2015, 103, 371-383.	4.0	23
89	rAAVâ€mediated combined gene transfer and overexpression of TGFâ€Î² and SOX9 remodels human osteoarthritic articular cartilage. Journal of Orthopaedic Research, 2016, 34, 2181-2190.	2.3	23
90	Design of Mannose-Coated Rifampicin nanoparticles modulating the immune response and Rifampicin induced hepatotoxicity with improved oral drug delivery. Arabian Journal of Chemistry, 2021, 14, 103321.	4.9	23

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91	The Potential Application of Magnetic Nanoparticles for Liver Fibrosis Theranostics. Frontiers in Chemistry, 2021, 9, 674786.	3.6	22
92	Analysis of spatial osteochondral heterogeneity in advanced knee osteoarthritis exposes influence of joint alignment. Science Translational Medicine, 2020, 12, .	12.4	21
93	Evaluation of nonbiomedical and biomedical grade alginates for the transplantation of genetically modified articular chondrocytes to cartilage defects in a large animal model <i>in vivo</i>. Journal of Gene Medicine, 2011, 13, 230-242.	2.8	20
94	Tissue-Engineering Strategies to Repair Joint Tissue in Osteoarthritis: Nonviral Gene-Transfer Approaches. Current Rheumatology Reports, 2014, 16, 450.	4.7	20
95	Chondrogenic Differentiation Processes in Human Bone Marrow Aspirates upon rAAV-Mediated Gene Transfer and Overexpression of the Insulin-Like Growth Factor I. Tissue Engineering - Part A, 2015, 21, 2460-2471.	3.1	20
96	Early loss of subchondral bone following microfracture is counteracted by bone marrow aspirate in a translational model of osteochondral repair. Scientific Reports, 2017, 7, 45189.	3.3	20
97	Human mesenchymal stem cells overexpressing therapeutic genes: From basic science to clinical applications for articular cartilage repair. Bio-Medical Materials and Engineering, 2012, 22, 197-208.	0.6	19
98	Current Trends in Viral Gene Therapy for Human Orthopaedic Regenerative Medicine. Tissue Engineering and Regenerative Medicine, 2019, 16, 345-355.	3.7	19
99	Improved Chondrogenic Differentiation of rAAV SOX9-Modified Human MSCs Seeded in Fibrin-Polyurethane Scaffolds in a Hydrodynamic Environment. International Journal of Molecular Sciences, 2018, 19, 2635.	4.1	18
100	Cells, soluble factors and matrix harmonically play the concert of allograft integration. Knee Surgery, Sports Traumatology, Arthroscopy, 2019, 27, 1717-1725.	4.2	18
101	<scp>TGF</scp>â€Î² gene transfer and overexpression <i>via</i><scp>rAAV</scp> vectors stimulates chondrogenic events in human bone marrow aspirates. Journal of Cellular and Molecular Medicine, 2016, 20, 430-440.	3.6	16
102	Sustained spatiotemporal release of TGFâ€Î²1 confers enhanced very early chondrogenic differentiation during osteochondral repair in specific topographic patterns. FASEB Journal, 2018, 32, 5298-5311.	0.5	16
103	Scaffold-Mediated Gene Delivery for Osteochondral Repair. Pharmaceutics, 2020, 12, 930.	4.5	16
104	Curcumin Nanocrystals: Production, Physicochemical Assessment, and In Vitro Evaluation of the Antimicrobial Effects against Bacterial Loading of the Implant Fixture. Applied Sciences (Switzerland), 2020, 10, 8356.	2.5	16
105	Comparative anatomy and morphology of the knee in translational models for articular cartilage disorders. Part II: Small animals. Annals of Anatomy, 2021, 234, 151630.	1.9	16
106	Is Extracellular Vesicle-Based Therapy the Next Answer for Cartilage Regeneration?. Frontiers in Bioengineering and Biotechnology, 2021, 9, 645039.	4.1	16
107	Effects of solid acellular type-I/III collagen biomaterials on in vitro and in vivo chondrogenesis of mesenchymal stem cells. Expert Review of Medical Devices, 2017, 14, 717-732.	2.8	15
108	rAAV-Mediated Overexpression of SOX9 and TGF-Î² via Carbon Dot-Guided Vector Delivery Enhances the Biological Activities in Human Bone Marrow-Derived Mesenchymal Stromal Cells. Nanomaterials, 2020, 10, 855.	4.1	15

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109	Enhanced Chondrogenic Differentiation Activities in Human Bone Marrow Aspirates via sox9 Overexpression Mediated by pNaSS-Grafted PCL Film-Guided rAAV Gene Transfer. Pharmaceutics, 2020, 12, 280.	4.5	15
110	Controlled Release of rAAV Vectors from APMA-Functionalized Contact Lenses for Corneal Gene Therapy. Pharmaceutics, 2020, 12, 335.	4.5	15
111	rAAV-Mediated Human FGF-2 Gene Therapy Enhances Osteochondral Repair in a Clinically Relevant Large Animal Model Over Time In Vivo. American Journal of Sports Medicine, 2021, 49, 958-969.	4.2	15
112	Biomedical-grade, high mannuronic acid content (BioMVM) alginate enhances the proteoglycan production of primary human meniscal fibrochondrocytes in a 3-D microenvironment. Scientific Reports, 2016, 6, 28170.	3.3	14
113	Use of Tissue Engineering Strategies to Repair Joint Tissues in Osteoarthritis: Viral Gene Transfer Approaches. Current Rheumatology Reports, 2014, 16, 449.	4.7	13
114	rAAV-Mediated <i>sox9</i> Overexpression Improves the Repair of Osteochondral Defects in a Clinically Relevant Large Animal Model Over Time In Vivo and Reduces Perifocal Osteoarthritic Changes. American Journal of Sports Medicine, 2021, 49, 3696-3707.	4.2	13
115	New trends in articular cartilage repair. Journal of Experimental Orthopaedics, 2015, 2, 8.	1.8	12
116	Chondrogenic Differentiation Processes in Human Bone-Marrow Aspirates Seeded in Three-Dimensional-Woven Poly(É›-Caprolactone) Scaffolds Enhanced by Recombinant Adeno-Associated Virusâ€"MediatedSOX9Gene Transfer. Human Gene Therapy, 2018, 29, 1277-1286.	2.7	12
117	Biomaterial-Guided Recombinant Adeno-associated Virus Delivery from Poly(Sodium Styrene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf Engineering - Part A, 2020, 26, 450-459.	3.1	12
118	Small-Diameter Subchondral Drilling Improves DNA and Proteoglycan Content of the Cartilaginous Repair Tissue in a Large Animal Model of a Full-Thickness Chondral Defect. Journal of Clinical Medicine, 2020, 9, 1903.	2.4	12
119	Nonviral gene transfer to human meniscal cells. Part I: transfection analyses and cell transplantation to meniscus explants. International Orthopaedics, 2014, 38, 1923-1930.	1.9	11
120	Recent tissue engineering-based advances for effective rAAV-mediated gene transfer in the musculoskeletal system. Bioengineered, 2016, 7, 175-188.	3.2	11
121	A novel algorithm for a precise analysis of subchondral bone alterations. Scientific Reports, 2016, 6, 32982.	3.3	11
122	Genetic Modification of Human Peripheral Blood Aspirates Using Recombinant Adeno-Associated Viral Vectors for Articular Cartilage Repair with a Focus on Chondrogenic Transforming Growth Factor-Î² Gene Delivery. Stem Cells Translational Medicine, 2017, 6, 249-260.	3.3	11
123	Cyst formation in the subchondral bone following cartilage repair. Clinical and Translational Medicine, 2020, 10, e248.	4.0	11
124	Biomaterials and Gene Therapy: A Smart Combination for MSC Musculoskeletal Engineering. Current Stem Cell Research and Therapy, 2019, 14, 337-343.	1.3	11
125	Genetic modification of mesenchymal stem cells for cartilage repair. Bio-Medical Materials and Engineering, 2010, 20, 135-143.	0.6	10
126	Nonviral gene transfer into human meniscal cells. Part II: effect of three-dimensional environment and overexpression of human fibroblast growth factor 2. International Orthopaedics, 2014, 38, 1931-1936.	1.9	10

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127	Therapeutic Delivery of rAAV sox9 via Polymeric Micelles Counteracts the Effects of Osteoarthritis-Associated Inflammatory Cytokines in Human Articular Chondrocytes. Nanomaterials, 2020, 10, 1238.	4.1	10
128	Quantifying the Human Subchondral Trabecular Bone Microstructure in Osteoarthritis with Clinical CT. Advanced Science, 2022, 9, .	11.2	10
129	Enhanced expression of the central survival of motor neuron (<scp>SMN</scp>) protein during the pathogenesis of osteoarthritis. Journal of Cellular and Molecular Medicine, 2014, 18, 115-124.	3.6	9
130	Peripheral blood aspirates overexpressing IGFâ€ł <i>via</i> rAAV gene transfer undergo enhanced chondrogenic differentiation processes. Journal of Cellular and Molecular Medicine, 2017, 21, 2748-2758.	3.6	9
131	Impact of mechanical stimulation on the chondrogenic processes in human bone marrow aspirates modified to overexpress sox9 via rAAV vectors. Journal of Experimental Orthopaedics, 2017, 4, 22.	1.8	9
132	Tissue Regeneration through Cyberâ€Physical Systems and Microbots. Advanced Functional Materials, 2021, 31, 2009663.	14.9	9
133	The potential of gene transfer for the treatment of osteoarthritis. Regenerative Medicine, 2014, 9, 5-8.	1.7	8
134	Effects of rAAV-mediated FGF-2 gene transfer and overexpression upon the chondrogenic differentiation processes in human bone marrow aspirates. Journal of Experimental Orthopaedics, 2016, 3, 16.	1.8	8
135	Effects of rAAV-Mediated sox9 Overexpression on the Biological Activities of Human Osteoarthritic Articular Chondrocytes in Their Intrinsic Three-Dimensional Environment. Journal of Clinical Medicine, 2019, 8, 1637.	2.4	8
136	Therapeutic Effects of rAAV-Mediated Concomittant Gene Transfer and Overexpression of TGF-Î² and IGF-I on the Chondrogenesis of Human Bone-Marrow-Derived Mesenchymal Stem Cells. International Journal of Molecular Sciences, 2019, 20, 2591.	4.1	8
137	Mitochondrial Genome Editing to Treat Human Osteoarthritisâ€"A Narrative Review. International Journal of Molecular Sciences, 2022, 23, 1467.	4.1	8
138	Gene- and Stem Cell-Based Approaches to Regulate Hypertrophic Differentiation in Articular Cartilage Disorders. Stem Cells and Development, 2016, 25, 1495-1512.	2.1	7
139	Advances in gene therapy for cartilage repair. Annals of Joint, 2018, 3, 97-97.	1.0	7
140	Smart and Controllable rAAV Gene Delivery Carriers in Progenitor Cells for Human Musculoskeletal Regenerative Medicine with a Focus on the Articular Cartilage. Current Gene Therapy, 2017, 17, 127-138.	2.0	7
141	Axial alignment is a critical regulator of knee osteoarthritis. Science Translational Medicine, 2022, 14, eabn0179.	12.4	7
142	Enamel matrix derivative inhibits proteoglycan production and articular cartilage repair, delays the restoration of the subchondral bone and induces changes of the synovial membrane in a lapine osteochondral defect modelin vivo. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 41-49.	2.7	6
143	Analysis of early cellular responses of anterior cruciate ligament fibroblasts seeded on different molecular weight polycaprolactone films functionalized by a bioactive poly(sodium styrene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5	1.6	6
144	Cyclodextrin Cationic Polymer-Based Nanoassemblies to Manage Inflammation by Intra-Articular Delivery Strategies. Nanomaterials, 2020, 10, 1712.	4.1	6

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145	Effects of combined rAAV-mediated TGF-Î² and sox9 gene transfer and overexpression on the metabolic and chondrogenic activities in human bone marrow aspirates. Journal of Experimental Orthopaedics, 2017, 4, 4.	1.8	5
146	Association of Nicotine with Osteochondrogenesis and Osteoarthritis Development: The State of the Art of Preclinical Research. Journal of Clinical Medicine, 2019, 8, 1699.	2.4	5
147	Investigation of microstructural alterations of the human subchondral bone following microfracture penetration reveals effect of threeâ€dimensional device morphology. Clinical and Translational Medicine, 2020, 10, e230.	4.0	5
148	SOX2 and Bcl-2 as a Novel Prognostic Value in Hepatocellular Carcinoma Progression. Current Oncology, 2021, 28, 3015-3029.	2.2	5
149	Controlled release of gene therapy constructs from solid scaffolds for therapeutic applications in orthopedics. Discovery Medicine, 2018, 25, 195-203.	0.5	5
150	Remodeling of Human Osteochondral Defects via rAAV-Mediated Co-Overexpression of TGF-Î² and IGF-I from Implanted Human Bone Marrow-Derived Mesenchymal Stromal Cells. Journal of Clinical Medicine, 2019, 8, 1326.	2.4	4
151	Biomaterial-assisted gene therapy for translational approaches to treat musculoskeletal disorders. Materials Today Advances, 2021, 9, 100126.	5.2	4
152	pNaSS-Grafted PCL Film-Guided rAAV TGF-Î² Gene Therapy Activates the Chondrogenic Activities in Human Bone Marrow Aspirates. Human Gene Therapy, 2021, 32, 895-906.	2.7	4
153	Stem cell-derived biofactors fight against coronavirus infection. World Journal of Stem Cells, 2021, 13, 1813-1825.	2.8	4
154	Exploring the Role of Stem Cells in Cancer Development and Progression. Annals of Cancer Research and Therapy, 2020, 28, 3-8.	0.3	3
155	Ectopic models recapitulating morphological and functional features of articular cartilage. Annals of Anatomy, 2021, 237, 151721.	1.9	3
156	Dysregulated levels of glycogen synthase kinase-3Î² (GSK-3Î²) and miR-135 in peripheral blood samples of cases with nephrotic syndrome. PeerJ, 2020, 8, e10377.	2.0	3
157	The effect of pNaSS grafting of knitted poly(Îµ-caprolactone) artificial ligaments on in vitro mineralization and in vivo osseointegration. Materialia, 2022, 21, 101331.	2.7	3
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