



Any time

Since 2020

Since 2019

Since 2016

Custom range...

Sort by relevance

Sort by date

include patents

include citations

Create alert

[\[HTML\] Improved human bone marrow mesenchymal stem cell osteogenesis in 3D bioprinted tissue scaffolds with low intensity pulsed ultrasound stimulation](#)

[\[HTML\] nature.com](#)

[X Zhou, NJ Castro, W Zhu, H Cui, M Aliabouzar...](#) - Scientific reports, 2016 - nature.com

... containing 3D printed scaffolds under LIPUS treatment can greatly **promote** MSC proliferation ... Several **methods of promoting** the healing of fractures have been proposed, including physical ... LIPUS) has been reported to improve MSC differentiation, **promoting bone** union and ...

☆ [Cited by 58](#) [Related articles](#) [All 14 versions](#)

[Role of adult mesenchymal stem cells in bone tissue engineering applications: current status and future prospects](#)

[JR Mauney, V Volloch, DL Kaplan](#) - Tissue engineering, 2005 - liebertpub.com

... 5. A scalable **approach** to obtain **mesenchymal stem cells** with osteogenic potency on apatite microcarriers. 10 December 2013 | Journal of Biomaterials Applications, Vol ... 6. **Cell-based approaches** to the engineering of vascularized **bone** tissue. Cytotherapy, Vol ... C: **Methods**, Vol ...

☆ [Cited by 315](#) [Related articles](#) [All 5 versions](#)

[\[HTML\] Upregulation of BMSCs Osteogenesis by Positively-Charged Tertiary Amines on Polymeric Implants via Charge/iNOS Signaling Pathway](#)

[\[HTML\] nature.com](#)

[W Zhang, N Liu, H Shi, J Liu, L Shi, B Zhang, H Wang...](#) - Scientific reports, 2015 - nature.com

... **Surface** plasma modification is an excellent **approach** to modify the chemical structure 26 and produce the ... possible to exploit the cation- $\pi$  interaction with the protonated tertiary amines to **promote** the **surface** ... Positively-charged **surface promoting** osteogenic potential of BMSCs ...

☆ [Cited by 23](#) [Related articles](#) [All 12 versions](#)

[Stem cell technology and bioceramics: from cell to gene engineering](#)

[H Ohgushi, AI Caplan](#) - ... : An Official Journal of The Society for ..., 1999 - Wiley Online Library

... new **bone-forming** capability, which can thereby provide tissue engineering **approaches** to patients ... derived from donor **marrow** MSCs have been reported; thus, this **approach** provides an ... The current experimental results indicate that, regardless of the fabrication **methods**, if the ...

☆ [Cited by 733](#) [Related articles](#) [All 7 versions](#)

[Differential regulation of osteogenic differentiation of stem cells on surface](#)

[PDF\] academia.edu](#)

Approaches to promoting bone marrow mesenchymal st



ALL

IMAGES

VIDEOS

31,000 Results

Any time ▾

## Application of Stem Cells in Orthopedics

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3328166>

Feb 23, 2012 · Here, autologous **bone marrow** or autologous **mesenchymal stem cells** was successfully implanted in a number of patients to enhance fracture/osteotomy healing, fill **bone** defects, treat pseudarthrosis, **bone** cysts, osteonecrosis, or enhance spinal fusion. Relevant clinical applications are summarized in Table 1.

**Cited by:** 85

**Author:** Andreas Schmitt, Martijn van Griensven, ...

**Publish Year:** 2012

## Improved Human Bone Marrow Mesenchymal Stem Cell ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5011779>

Improved Human **Bone Marrow Mesenchymal Stem Cell Osteogenesis** in 3D Bioprinted Tissue Scaffolds with Low Intensity Pulsed Ultrasound Stimulation Xuan Zhou , 1 Nathan J. Castro , 1 Wei Zhu , 1 Haitao Cui , 1 Mitra Aliabouzar , 1 Kausik Sarkar , 1 and Lijie Grace Zhang a, 1, 2, 3

**Cited by:** 56

**Author:** Xuan Zhou, Nathan J. Castro, Wei Zhu, H...

**Publish Year:** 2016



Approaches to promoting bone marrow mesenchymal st



30,700 Results

Any time ▾

## [The Holy Grail of Orthopedic Surgery: Mesenchymal Stem ...](#)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5494105>

Jun 18, 2017 · Stem cell (SC) use in orthopedic surgery has the potential to change the field of orthopedics from one dominated by surgical replacement and reconstruction to one of bioregeneration and prevention . Around the 1960s, a unique group of bone marrow cells was discovered with the capability to differentiate into various other cells [2, 3].

Cited by: 18

Author: Roberto Berebichez-Fridman, Ricardo Gó...

Publish Year: 2017

## [Stem cells in Osteoporosis: From Biology to New ...](#)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6589256>

Jun 02, 2019 · The term mesenchymal stem cells (MSCs) has been used for years in literature to characterize a multipotent stromal cell population that can differentiate into a variety of cell types, including osteoblasts (bone cells) and chondrocytes (cartilage cells), and most articles use this term when they refer to multipotent skeletal stem cells [90–92].

## [Effect of porous tantalum on promoting the osteogenic ...](#)

<https://www.sciencedirect.com/science/article/pii/S2214031X18301906>

BMSCs = bone marrow mesenchymal stem cells; CCK-8 = cell counting kit-8; OD = optical density. ALP activity assay and osteogenic mineralised nodule staining ALP is a marker of the early differentiation of osteoblasts and plays an important role in promoting the formation of mineral elements in bone

**Name of Journal:** *World Journal of Stem Cells*

**Manuscript NO:** 55061

**Manuscript Type:** REVIEW

**Approaches to promoting bone marrow mesenchymal stem cell osteogenesis on orthopedic implant surface**

Huo S *et al.* MSC osteogenesis on orthopedic implant surface

Shi-Cheng Huo, Bing Yue

### Match Overview

1	<b>Crossref</b> 76 words Qian-li Ma, Liang Fang, Nan Jiang, Liang Zhang, Ying Wang, Yu-mei Zhang, Li-hua Chen. "Bone mesenchymal stem c	1%
2	<b>Crossref</b> 68 words Qianli Ma, Nan Jiang, Shuang Liang, Fulin Chen, Liang Fang, Xian Wang, Jinjin Wang, Lihua Chen. "Functionalizatio	1%
3	<b>Crossref</b> 42 words Julio C.M. Souza, Mariane B. Sordi, Miya Kanazawa, Sriram Ravindran et al. "Nano-scale modification of titanium in ...	1%
4	<b>Crossref</b> 38 words Jordi Guillem-Marti, Maria Gelabert, Aina Heras-Parets, Marta Pegueroles, Maria-Pau Ginebra, Jose Maria Manero. "R	1%
5	<b>Internet</b> 38 words crawled on 19-Aug-2019 <a href="http://f6publishing.blob.core.windows.net">f6publishing.blob.core.windows.net</a>	1%
6	<b>Crossref</b> 35 words Nasser K. Awad, Sharon L. Edwards, Yosry S. Morsi. "A review of TiO <sub>2</sub> NTs on Ti metal: Electrochemical synthesis	1%