Subha N Rath

List of Publications by Year
in descending order

50 papers	1,651 citations	257450 24 h-index	302126 39 g-index
50 all docs	50 docs citations	50 times ranked	2533 citing authors

#	Article	IF	Citations
1	Antagonistic interaction between TTA-A2 and paclitaxel for anti-cancer effects by complex formation with T-type calcium channel. Journal of Biomolecular Structure and Dynamics, 2022, 40, 2395-2406.	3.5	19
2	Modulation of 3D Printed Calcium-Deficient Apatite Constructs with Varying Mn Concentrations for Osteochondral Regeneration via Endochondral Differentiation. ACS Applied Materials & Interfaces, 2022, 14, 23245-23259.	8.0	11
3	Biocompatibility-on-a-chip: Characterization and evaluation of decellularized tendon extracellular matrix (tdECM) hydrogel for 3D stem cell culture in a microfluidic device. International Journal of Biological Macromolecules, 2022, 213, 768-779.	7.5	10
4	Microfluidic Biosensor-Based Devices for Rapid Diagnosis and Effective Anti-cancer Therapeutic Monitoring for Breast Cancer Metastasis. Advances in Experimental Medicine and Biology, 2022, , 319-339.	1.6	2
5	Indirect co-culture of lung carcinoma cells with hyperthermia-treated mesenchymal stem cells influences tumor spheroid growth in a collagen-based 3-dimensional microfluidic model. Cytotherapy, 2021, 23, 25-36.	0.7	23
6	Recent approaches in clinical applications of 3D printing in neonates and pediatrics. European Journal of Pediatrics, 2021, 180, 323-332.	2.7	9
7	Electrospun freestanding hydrophobic fabric as a potential polymer semi-permeable membrane for islet encapsulation. Materials Science and Engineering C, 2021, 118, 111409.	7.3	13
8	3D printed microfluidic devices: a review focused on four fundamental manufacturing approaches and implications on the field of healthcare. Bio-Design and Manufacturing, 2021, 4, 311-343.	7.7	96
9	3D bioprinting of mesenchymal stem cells and endothelial cells in an alginate-gelatin-based bioink. Journal of 3D Printing in Medicine, 2021, 5, 23-36.	2.0	8
10	Human Umbilical Cord-Derived Mesenchymal Stem Cells Promote Corneal Epithelial Repair In Vitro. Cells, 2021, 10, 1254.	4.1	20
11	Facile Route for 3D Printing of Transparent PETg-Based Hybrid Biomicrofluidic Devices Promoting Cell Adhesion. ACS Biomaterials Science and Engineering, 2021, 7, 3947-3963.	5.2	13
12	Beneficial effects of secretome derived from mesenchymal stem cells with stigmasterol to negate IL-1Î²-induced inflammation in-vitro using rat chondrocytesâ€”OA management. Inflammopharmacology, 2021, 29, 1701-1717.	3.9	9
13	A novel design of microfluidic platform for metronomic combinatorial chemotherapy drug screening based on 3D tumor spheroid model. Biomedical Microdevices, 2021, 23, 50.	2.8	8
14	Mechanically tunable photo-cross-linkable bioinks for osteogenic differentiation of MSCs in 3D bioprinted constructs. Materials Science and Engineering C, 2021, 131, 112478.	7.3	13
15	Adjuvant role of a T-type calcium channel blocker, TTA-A2, in lung cancer treatment with paclitaxel. , 2021, 4, 996-1007.		3
16	T-type calcium channel antagonist, TTA-A2 exhibits anti-cancer properties in 3D spheroids of A549, a lung adenocarcinoma cell line. Life Sciences, 2020, 260, 118291.	4.3	15
17	Perfusion-based 3D tumor-on-chip devices for anticancer drug testing. , 2020, , 379-398.		2
18	Biosynthesis and characterization of nano magnetic hydroxyapatite (nMHAp): An accelerated approach using simulated body fluid for biomedical applications. Ceramics International, 2020, 46, 27866-27876.	4.8	17

#	Article	IF	Citations
19	Selective Cytotoxicity of a Novel Trpâ€Rich Peptide against Lung Tumor Spheroids Encapsulated inside a 3D Microfluidic Device. Advanced Biology, 2020, 4, e1900285.	3.0	19
20	Isogenic-induced endothelial cells enhance osteogenic differentiation of mesenchymal stem cells on silk fibroin scaffold. Regenerative Medicine, 2019, 14, 647-661.	1.7	13
21	3D printable SiO₂ nanoparticle ink for patient specific bone regeneration. RSC Advances, 2019, 9, 23832-23842.	3.6	54
22	Synthesis and Optimization of PCL-Bioactive Glass Composite Scaffold for Bone Tissue Engineering. Materials Today: Proceedings, 2019, 15, 294-299.	1.8	20
23	Valorization of discarded Marine Eel fish skin for collagen extraction as a 3D printable blue biomaterial for tissue engineering. Journal of Cleaner Production, 2019, 230, 412-419.	9.3	76
24	On-chip anticancer drug screening â€“ Recent progress in microfluidic platforms to address challenges in chemotherapy. Biosensors and Bioelectronics, 2019, 137, 236-254.	10.1	68
25	Recent advances in threeâ€dimensional bioprinting of stem cells. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 908-924.	2.7	23
26	Mechanochemically synthesized phase stable and biocompatible Î2-tricalcium phosphate from avian eggshell for the development of tissue ingrowth system. Ceramics International, 2019, 45, 12910-12919.	4.8	29
27	Optimization of extrusion based ceramic 3D printing process for complex bony designs. Materials and Design, 2019, 162, 263-270.	7.0	84
28	Enhanced osteodifferentiation of MSC spheroids on patterned electrospun fiber mats - An advanced 3D double strategy for bone tissue regeneration. Materials Science and Engineering C, 2019, 94, 703-712.	7.3	35
29	Regional Differentiation of Adipose-Derived Stem Cells Proves the Role of Constant Electric Potential in Enhancing Bone Healing. Journal of Medical and Biological Engineering, 2018, 38, 804-815.	1.8	12
30	Effect of patterned electrospun hierarchical structures on alignment and differentiation of mesenchymal stem cells: Biomimicking bone. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e2073-e2084.	2.7	24
31	Electrospun nanofibres to mimic natural hierarchical structure of tissues: application in musculoskeletal regeneration. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e604-e619.	2.7	29
32	Indenone derivatives as inhibitor of human DNA dealkylation repair enzyme AlkBH3. Bioorganic and Medicinal Chemistry, 2018, 26, 4100-4112.	3.0	33
33	Oxidized Alginate-Gelatin Hydrogel: A Favorable Matrix for Growth and Osteogenic Differentiation of Adipose-Derived Stem Cells in 3D. ACS Biomaterials Science and Engineering, 2017, 3, 1730-1737.	5.2	62
34	Electrospun Fibers for Recruitment and Differentiation of Stem Cells in Regenerative Medicine. Biotechnology Journal, 2017, 12, 1700263.	3.5	35
35	3D printers for surgical practice. , 2017, , 139-154.		5
36	Adipose- and bone marrow-derived mesenchymal stem cells display different osteogenic differentiation patterns in 3D bioactive glass-based scaffolds. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, E497-E509.	2.7	40

#	ARTICLE	IF	CITATIONS
37	Soluble eggshell membrane: A natural protein to improve the properties of biomaterials used for tissue engineering applications. Materials Science and Engineering C, 2016, 67, 807-821.	7.3	83
38	In vitro and in vivo Biocompatibility of Alginate Dialdehyde/Gelatin Hydrogels with and without Nanoscaled Bioactive Glass for Bone Tissue Engineering Applications. Materials, 2014, 7, 1957-1974.	2.9	107
39	Induction of bone formation in biphasic calcium phosphate scaffolds by bone morphogenetic protein-2 and primary osteoblasts. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 176-185.	2.7	58
40	Bioactive Copper-Doped Glass Scaffolds Can Stimulate Endothelial Cells in Co-Culture in Combination with Mesenchymal Stem Cells. PLoS ONE, 2014, 9, e113319.	2.5	87
41	Development of a pre-vascularized 3D scaffold-hydrogel composite graft using an arterio-venous loop for tissue engineering applications. Journal of Biomaterials Applications, 2012, 27, 277-289.	2.4	37
42	Osteoinduction and survival of osteoblasts and boneâ€marrow stromal cells in 3<scp>D</scp> biphasic calcium phosphate scaffolds under static and dynamic culture conditions. Journal of Cellular and Molecular Medicine, 2012, 16, 2350-2361.	3.6	84
43	Endothelial progenitor cells are integrated in newly formed capillaries and alter adjacent fibrovascular tissue after subcutaneous implantation in a fibrin matrix. Journal of Cellular and Molecular Medicine, 2011, 15, 2452-2461.	3.6	41
44	Hyaluronan-based heparin-incorporated hydrogels for generation of axially vascularized bioartificial bone tissues: inÂvitro and inÂvivo evaluation in a PLDLLAâ€"TCPâ€"PCL-composite system. Journal of Materials Science: Materials in Medicine, 2011, 22, 1279-1291.	3.6	37
45	<i>In vitro</i> evaluation of 45S5 BioglassÂ®â€derived glassâ€ceramic scaffolds coated with carbon nanotubes. Journal of Biomedical Materials Research - Part A, 2011, 99A, 435-444.	4.0	40
46	Factors Influencing Successful Outcome in the Arteriovenous Loop Model: A Retrospective Study of 612 Loop Operations. Journal of Reconstructive Microsurgery, 2011, 27, 011-018.	1.8	12
47	T17b murine embryonal endothelial progenitor cells can be induced towards both proliferation and differentiation in a fibrin matrix. Journal of Cellular and Molecular Medicine, 2009, 13, 926-935.	3.6	29
48	Comparison of chondrogenesis in static and dynamic environments using a SFF designed and fabricated PCL-PEO scaffold. Virtual and Physical Prototyping, 2008, 3, 209-219.	10.4	18
49	Sustained release and osteogenic potential of heparan sulfate-doped fibrin glue scaffolds within a rat cranial model. Journal of Molecular Histology, 2007, 38, 425-433.	2.2	40
50	Investigating the effects of preinduction on human adipose-derived precursor cells in an athymic rat model. Differentiation, 2006, 74, 519-529.	1.9	26