Sharon L Hyzy

List of Publications by Year
in descending order

51	3,553	186209 28	182361 51
papers	citations	h-index	g-index

51	51	51	5196
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A review on the wettability of dental implant surfaces II: Biological and clinical aspects. Acta Biomaterialia, 2014, 10, 2907-2918.	4.1	607
2	Titanium surface characteristics, including topography and wettability, alter macrophage activation. Acta Biomaterialia, 2016, 31, 425-434.	4.1	471
3	Direct and indirect effects of microstructured titanium substrates on the induction of mesenchymal stem cell differentiation towards the osteoblast lineage. Biomaterials, 2010, 31, 2728-2735.	5.7	265
4	Osteoblasts exhibit a more differentiated phenotype and increased bone morphogenetic protein production on titanium alloy substrates than on poly-ether-ether-ketone. Spine Journal, 2012, 12, 265-272.	0.6	168
5	Substrate Stiffness Controls Osteoblastic and Chondrocytic Differentiation of Mesenchymal Stem Cells without Exogenous Stimuli. PLoS ONE, 2017, 12, e0170312.	1.1	157
6	Differential responses of osteoblast lineage cells to nanotopographically-modified, microroughened titaniumâ€“aluminumâ€“vanadium alloy surfaces. Biomaterials, 2012, 33, 8986-8994.	5.7	141
7	Mediation of osteogenic differentiation of human mesenchymal stem cells on titanium surfaces by a Wnt-integrin feedback loop. Biomaterials, 2011, 32, 6399-6411.	5.7	128
8	Implant Materials Generate Different Peri-implant Inflammatory Factors. Spine, 2015, 40, 399-404.	1.0	127
9	Rough titanium alloys regulate osteoblast production of angiogenic factors. Spine Journal, 2013, 13, 1563-1570.	0.6	112
10	Role of integrin subunits in mesenchymal stem cell differentiation and osteoblast maturation on graphitic carbon-coated microstructured surfaces. Biomaterials, 2015, 51, 69-79.	5.7	86
11	Osteoblast maturation and new bone formation in response to titanium implant surface features are reduced with age. Journal of Bone and Mineral Research, 2012, 27, 1773-1783.	3.1	71
12	Dental implant surface chemistry and energy alter macrophage activation inÂvitro. Clinical Oral Implants Research, 2017, 28, 414-423.	1.9	70
13	Intact amino acid uptake by northern hardwood and conifer trees. Oecologia, 2009, 160, 129-138.	0.9	69
14	Role of non-canonical Wnt signaling in osteoblast maturation on microstructured titanium surfaces. Acta Biomaterialia, 2011, 7, 2740-2750.	4.1	68
15	Osteoblast Lineage Cells Can Discriminate Microscale Topographic Features on Titaniumâ€“Aluminumâ€“Vanadium Surfaces. Annals of Biomedical Engineering, 2014, 42, 2551-2561.	1.3	67
16	The roles of Wnt signaling modulators Dickkopf-1 (Dkk1) and Dickkopf-2 (Dkk2) and cell maturation state in osteogenesis on microstructured titanium surfaces. Biomaterials, 2010, 31, 2015-2024.	5.7	61
17	Novel hydrophilic nanostructured microtexture on direct metal laser sintered Ti-6Al-4V surfaces enhances osteoblast responsein vitroand osseointegration in a rabbit model. Journal of Biomedical Materials Research - Part A, 2016, 104, 2086-2098.	2.1	59
18	Selective enrichment of microRNAs in extracellular matrix vesicles produced by growth plate chondrocytes. Bone, 2016, 88, 47-55.	1.4	48

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19	BMP2 induces osteoblast apoptosis in a maturation state and noggin–dependent manner. Journal of Cellular Biochemistry, 2012, 113, 3236-3245.	1.2	44
20	The dependence of MG63 osteoblast responses to (meth)acrylate-based networks on chemical structure and stiffness. Biomaterials, 2010, 31, 6131-6141.	5.7	40
21	Disruption of Pdia3 gene results in bone abnormality and affects 1Î±,25-dihydroxy-vitamin D3-induced rapid activation of PKC. Journal of Steroid Biochemistry and Molecular Biology, 2010, 121, 257-260.	1.2	40
22	Laser Sintered Porous Ti–6Al–4V Implants Stimulate Vertical Bone Growth. Annals of Biomedical Engineering, 2017, 45, 2025-2035.	1.3	37
23	Microstructured titanium regulates interleukin production by osteoblasts, an effect modulated by exogenous BMP-2. Acta Biomaterialia, 2013, 9, 5821-5829.	4.1	35
24	Coordinated regulation of mesenchymal stem cell differentiation on microstructured titanium surfaces by endogenous bone morphogenetic proteins. Bone, 2015, 73, 208-216.	1.4	34
25	Hydrogels derived from cartilage matrices promote induction of human mesenchymal stem cell chondrogenic differentiation. Acta Biomaterialia, 2016, 43, 139-149.	4.1	34
26	Comparable responses of osteoblast lineage cells to microstructured hydrophilic titanium–zirconium and microstructured hydrophilic titanium. Clinical Oral Implants Research, 2017, 28, e51-e59.	1.9	34
27	Signaling components of the 1Î±,25(OH)2D3-dependent Pdia3 receptor complex are required for Wnt5a calcium-dependent signaling. Biochimica Et Biophysica Acta - Molecular Cell Research, 2014, 1843, 2365-2375.	1.9	30
28	Spag17 Deficiency Results in Skeletal Malformations and Bone Abnormalities. PLoS ONE, 2015, 10, e0125936.	1.1	30
29	24R,25-Dihydroxyvitamin D3 Protects against Articular Cartilage Damage following Anterior Cruciate Ligament Transection in Male Rats. PLoS ONE, 2016, 11, e0161782.	1.1	30
30	Characterization of osteoarthritic human knees indicates potential sex differences. Biology of Sex Differences, 2016, 7, 27.	1.8	30
31	MicroRNA Contents in Matrix Vesicles Produced by Growth Plate Chondrocytes are Cell Maturation Dependent. Scientific Reports, 2018, 8, 3609.	1.6	27
32	VEGF–A regulates angiogenesis during osseointegration of Ti implants via paracrine/autocrine regulation of osteoblast response to hierarchical microstructure of the surface. Journal of Biomedical Materials Research - Part A, 2019, 107, 423-433.	2.1	25
33	Sex dependent regulation of osteoblast response to implant surface properties by systemic hormones. Biology of Sex Differences, 2010, 1, 4.	1.8	24
34	Osteogenic Differentiation of Stem Cells Alters Vitamin D Receptor Expression. Stem Cells and Development, 2012, 21, 1726-1735.	1.1	24
35	Role of integrin Î±7Î²1 signaling in myoblast differentiation on aligned polydioxanone scaffolds. Acta Biomaterialia, 2016, 39, 44-54.	4.1	24
36	Bone Morphogenetic Protein 2 Alters Osteogenesis and Anti-Inflammatory Profiles of Mesenchymal Stem Cells Induced by Microtextured Titanium In Vitro<sup />. Tissue Engineering - Part A, 2017, 23, 1132-1141.	1.6	24

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37	Role of Wnt11 during Osteogenic Differentiation of Human Mesenchymal Stem Cells on Microstructured Titanium Surfaces. Scientific Reports, 2018, 8, 8588.	1.6	24
38	Superposition of nanostructures on microrough titaniumâ€“aluminumâ€“vanadium alloy surfaces results in an altered integrin expression profile in osteoblasts. Connective Tissue Research, 2014, 55, 164-168.	1.1	20
39	Osteoblast maturation on microtextured titanium involves paracrine regulation of bone morphogenetic protein signaling. Journal of Biomedical Materials Research - Part A, 2015, 103, 1721-1731.	2.1	20
40	Chaperone Properties of Pdia3 Participate in Rapid Membrane Actions of 1Î±,25-Dihydroxyvitamin D3. Molecular Endocrinology, 2013, 27, 1065-1077.	3.7	18
41	Surface modification of bulk titanium substrates for biomedical applications via lowâ€temperature microwave hydrothermal oxidation. Journal of Biomedical Materials Research - Part A, 2018, 106, 782-796.	2.1	16
42	Endogenous Regeneration of Critical-Size Chondral Defects in Immunocompromised Rat Xiphoid Cartilage Using Decellularized Human Bone Matrix Scaffolds. Tissue Engineering - Part A, 2012, 18, 2332-2342.	1.6	15
43	Inhibition of angiogenesis impairs bone healing in an in vivo murine rapid resynostosis model. Journal of Biomedical Materials Research - Part A, 2017, 105, 2742-2749.	2.1	15
44	Regulation of Osteoblast Differentiation by Acid-Etched and/or Grit-Blasted Titanium Substrate Topography Is Enhanced by 1,25(OH)₂D₃in a Sex-Dependent Manner. BioMed Research International, 2015, 2015, 1-9.	0.9	13
45	Regeneration of bone marrow after tibial ablation in immunocompromised rats is age dependent. Bone, 2010, 46, 396-401.	1.4	11
46	Osteogenic Embryoid Body-Derived Material Induces Bone Formation In Vivo. Scientific Reports, 2015, 5, 9960.	1.6	11
47	Differential spatial regulation of BMP molecules is associated with single-suture craniosynostosis. Journal of Neurosurgery: Pediatrics, 2016, 18, 83-91.	0.8	11
48	Effects of Tunable Keratin Hydrogel Erosion on Recombinant Human Bone Morphogenetic Protein 2 Release, Bioactivity, and Bone Induction. Tissue Engineering - Part A, 2018, 24, 1616-1630.	1.6	11
49	Effects of lowâ€frequency ultrasound treatment of titanium surface roughness on osteoblast phenotype and maturation. Clinical Oral Implants Research, 2017, 28, e151-e158.	1.9	10
50	Characterization of Distinct Classes of Differential Gene Expression in Osteoblast Cultures from Non-Syndromic Craniosynostosis Bone. Journal of Genomics, 2014, 2, 121-130.	0.6	9
51	Microencapsulated rabbit adipose stem cells initiate tissue regeneration in a rabbit ear defect model. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 1742-1753.	1.3	8