Luke J Mortensen

List of Publications by Year in descending order

60 papers	2,787 citations	331259 21 h-index	223531 46 g-index
64 all docs	64 docs citations	64 times ranked	5228 citing authors

#	Article	IF	Citations
1	Direct measurement of local oxygen concentration in the bone marrow of live animals. Nature, 2014, 508, 269-273.	13.7	933
2	In Vivo Skin Penetration of Quantum Dot Nanoparticles in the Murine Model: The Effect of UVR. Nano Letters, 2008, 8, 2779-2787.	4.5	273
3	ABCB5 is a limbal stem cell gene required for corneal development and repair. Nature, 2014, 511, 353-357.	13.7	217
4	Engineered cell homing. Blood, 2011, 118, e184-e191.	0.6	187
5	mRNA-engineered mesenchymal stem cells for targeted delivery of interleukin-10 to sites of inflammation. Blood, 2013, 122, e23-e32.	0.6	169
6	Postnatal Calvarial Skeletal Stem Cells Expressing PRX1 Reside Exclusively inÂthe Calvarial Sutures and Are Required for Bone Regeneration. Stem Cell Reports, 2017, 8, 933-946.	2.3	113
7	Silencing of CCR2 in myocarditis. European Heart Journal, 2015, 36, 1478-1488.	1.0	101
8	Glycoengineering of E-Selectin Ligands by Intracellular versus Extracellular Fucosylation Differentially Affects Osteotropism of Human Mesenchymal Stem Cells. Stem Cells, 2016, 34, 2501-2511.	1.4	48
9	A Small-Molecule Screen for Enhanced Homing of Systemically Infused Cells. Cell Reports, 2015, 10, 1261-1268.	2.9	45
10	Femtosecond laser bone ablation with a high repetition rate fiber laser source. Biomedical Optics Express, 2015, 6, 32.	1.5	37
11	Tracking and Quantification of Magnetically Labeled Stem Cells Using Magnetic Resonance Imaging. Advanced Functional Materials, 2016, 26, 3899-3915.	7.8	35
12	Effect of Nanoparticle Surface Coating on Cell Toxicity and Mitochondria Uptake. Journal of Biomedical Nanotechnology, 2017, 13, 155-166.	0.5	35
13	In Vivo Imaging of Microglia Turnover in the Mouse Retina After Ionizing Radiation and Dexamethasone Treatment. , 2014, 55, 5314.		34
14	Characterization of multiphoton microscopy in the bone marrow following intravital laser osteotomy. Biomedical Optics Express, 2014, 5, 3578.	1.5	33
15	Chronic Electrical Stimulation Promotes the Excitability and Plasticity of ESC-derived Neurons following Glutamate-induced Inhibition In vitro. Scientific Reports, 2018, 8, 10957.	1.6	33
16	PGC-1Î± overexpression partially rescues impaired oxidative and contractile pathophysiology following volumetric muscle loss injury. Scientific Reports, 2019, 9, 4079.	1.6	33
17	Labeling and analysis of chicken taste buds using molecular markers in oral epithelial sheets. Scientific Reports, 2016, 6, 37247.	1.6	29
18	Thiol Antioxidant-Functionalized CdSe/ZnS Quantum Dots: Synthesis, Characterization, Cytotoxicity. Journal of Biomedical Nanotechnology, 2013, 9, 382-392.	0.5	28

#	Article	IF	Citations
19	Five-dimensional two-photon volumetric microscopy of in-vivo dynamic activities using liquid lens remote focusing. Biomedical Optics Express, 2019, 10, 3591.	1.5	28
20	Quantification of quantum dot murine skin penetration with UVR barrier impairment. Nanotoxicology, 2013, 7, 1386-1398.	1.6	27
21	Tetrandrine identified in a small molecule screen to activate mesenchymal stem cells for enhanced immunomodulation. Scientific Reports, 2016, 6, 30263.	1.6	24
22	Quantification of human skin barrier function and susceptibility to quantum dot skin penetration. Nanotoxicology, 2011, 5, 675-686.	1.6	22
23	An authentic imaging probe to track cell fate from beginning to end. Nature Communications, 2014, 5, 5216.	5.8	22
24	Mitochondrial-specific autophagy linked to mitochondrial dysfunction following traumatic freeze injury in mice. American Journal of Physiology - Cell Physiology, 2020, 318, C242-C252.	2.1	19
25	Second harmonic generation characterization of collagen in whole bone. Biomedical Optics Express, 2020, 11, 4379.	1.5	19
26	Characterization of wavefront errors in mouse cranial bone using second-harmonic generation. Journal of Biomedical Optics, 2017, 22, 036012.	1.4	17
27	Image-guided transplantation of single cells in the bone marrow of live animals. Scientific Reports, 2017, 7, 3875.	1.6	15
28	Two-photon deep-tissue spatially resolved mitochondrial imaging using membrane potential fluorescence fluctuations. Biomedical Optics Express, 2018, 9, 254.	1.5	15
29	The Wave2 scaffold Hem-1 is required for transition of fetal liver hematopoiesis to bone marrow. Nature Communications, 2018, 9, 2377.	5.8	15
30	Spatial frequency metrics for analysis of microscopic images of musculoskeletal tissues. Connective Tissue Research, 2021, 62, 4-14.	1.1	15
31	Quantification of Mesenchymal Stem Cell (MSC) Delivery to a Target Site Using In Vivo Confocal Microscopy. PLoS ONE, 2013, 8, e78145.	1.1	15
32	Near-IR fluorescence and reflectance confocal microscopy for imaging of quantum dots in mammalian skin. Biomedical Optics Express, 2011, 2, 1610.	1.5	14
33	Lifelong Ulk1-Mediated Autophagy Deficiency in Muscle Induces Mitochondrial Dysfunction and Contractile Weakness. International Journal of Molecular Sciences, 2021, 22, 1937.	1.8	14
34	Bitter taste receptor T2R7 and umami taste receptor subunit T1R1 are expressed highly in Vimentin-negative taste bud cells in chickens. Biochemical and Biophysical Research Communications, 2019, 511, 280-286.	1.0	13
35	Improved diffuse fluorescence flow cytometer prototype for high sensitivity detection of rare circulating cellsin vivo. Journal of Biomedical Optics, 2013, 18, 077002.	1.4	11
36	Heparin/collagen surface coatings modulate the growth, secretome, and morphology of human mesenchymal stromal cell response to <scp>interferonâ€gamma</scp>. Journal of Biomedical Materials Research - Part A, 2021, 109, 951-965.	2.1	10

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37	Characterizing human mesenchymal stromal cellsâ€™ immune-modulatory potency using targeted lipidomic profiling of sphingolipids. Cytotherapy, 2022, 24, 608-618.	0.3	10
38	Progress and Challenges in Quantifying Skin Permeability to Nanoparticles Using a Quantum Dot Model. Journal of Biomedical Nanotechnology, 2010, 6, 596-604.	0.5	9
39	UVB Dependence of Quantum Dot Reactive Oxygen Species Generation in Common Skin Cell Models. Journal of Biomedical Nanotechnology, 2015, 11, 1644-1652.	0.5	8
40	Increased in vivo skin penetration of quantum dots with UVR and in vitro quantum dot cytotoxicity. , 2009, , .		7
41	The impact of UVB exposure and differentiation state of primary keratinocytes on their interaction with quantum dots. Nanotoxicology, 2013, 7, 1244-1254.	1.6	7
42	Novel Lipid Signaling Mediators for Mesenchymal Stem Cell Mobilization During Bone Repair. Cellular and Molecular Bioengineering, 2018, 11, 241-253.	1.0	7
43	In situ measurement of the isoplanatic patch for imaging through intact bone. Journal of Biophotonics, 2021, 14, e202000160.	1.1	7
44	Nanofiber-Based Delivery of Bioactive Lipids Promotes Pro-regenerative Inflammation and Enhances Muscle Fiber Growth After Volumetric Muscle Loss. Frontiers in Bioengineering and Biotechnology, 2021, 9, 650289.	2.0	6
45	Skeletal stem cells for bone development, homeostasis and repair: one or many?. BoneKEy Reports, 2015, 4, 769.	2.7	5
46	Breeching Epithelial Barriers â€“ Physiochemical Factors Impacting Nanomaterial Translocation and Toxicity. Nanostructure Science and Technology, 2009, , 33-62.	0.1	4
47	Resolution enhancement of 2-photon microscopy using high-refractive index microspheres. , 2018, , .		4
48	Fast axial scanning for 2-photon microscopy using liquid lens technology. , 2017, 10070, .		3
49	Advances in Single-cell Tracking of Mesenchymal Stem Cells (MSCs) During Musculoskeletal Regeneration. , 2012, 14, 22-28.		3
50	Deep tissue single cell MSC ablation using a fiber laser source to evaluate therapeutic potential in osteogenesis imperfecta. Proceedings of SPIE, 2016, , .	0.8	2
51	Shape Up Before You Ship Out: Morphology as a Potential Critical Quality Attribute for Cellular Therapies. Current Opinion in Biomedical Engineering, 2021, 20, 100352.	1.8	2
52	In Vivo Imaging of Bone Marrow Stem Cells. , 2014, , 143-162.		1
53	Wavelet-based denoising of the Fourier metric in real-time wavefront correction for single molecule localization microscopy. , 2016, , .		1
54	Modelling of optical aberrations caused by light propagation in mouse cranial bone using second harmonic generation imaging. , 2017, , .		1

#	Article	IF	Citations
55	In Vivo Femtosecond Ablation and Imaging in Bone with a High Repetition Rate Source. , 2015, , .		0
56	Spatially Resolved Mitochondrial 2-Photon Imaging Using Flickering Membrane Potential Fluorescence. , 2017, , .		0
57	Characterization of bone collagen organization defects in murine hypophosphatasia using a Zernike model of optical aberrations. , 2018, , .		0
58	Finite difference time domain modeling of wavefront aberrations in bone using second harmonic generation microscopy (Conference Presentation). , 2018, , .		0
59	Characterization of memory effect in juvenile mouse skull for imaging through intact bone. , 2019, , .		0
60	Adaptive Optics Microscopy for Mouse Imaging. , 2021, , .		0