Elisabet Engel Lopez

List of Publications by Year in Descending Order

97 papers	3,100 citations	31 h-index	53 g-index
100 ext. papers	3,562 ext. citations	6.8 avg, IF	5.28 L-index

#	Paper	IF	Citations
97	Soft-Tissue-Mimicking Using Hydrogels for the Development of Phantoms.. *Gels*, **2022**, 8,	4.2	4
96	Chemotactic TEG3 CellsUGuiding Platforms Based on PLA Fibers Functionalized With the SDF-1ÆCXCL12 Chemokine for Neural Regeneration Therapy. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 627805	5.8	2
95	A microphysiological system combining electrospun fibers and electrical stimulation for the maturation of highly anisotropic cardiac tissue. *Biofabrication*, **2021**, 13,	10.5	2
94	Nanotechnology Approaches in Chronic Wound Healing. *Advances in Wound Care*, **2021**, 10, 234-256	4.8	18
93	Polymeric Composite Dressings Containing Calcium-Releasing Nanoparticles Accelerate Wound Healing in Diabetic Mice. *Advances in Wound Care*, **2021**, 10, 301-316	4.8	3
92	Chitosan/PEGDA based scaffolds as bioinspired materials to control in vitro angiogenesis. *Materials Science and Engineering C*, **2021**, 118, 111420	8.3	7
91	Proteinaceous Hydrogels for Bioengineering Advanced 3D Tumor Models. *Advanced Science*, **2021**, 8, 2003129	13.6	19
90	Tuning multilayered polymeric self-standing films for controlled release of L-lactate by electrical stimulation. *Journal of Controlled Release*, **2021**, 330, 669-683	11.7	2
89	Engineered microtissues for the bystander therapy against cancer. *Materials Science and Engineering C*, **2021**, 121, 111854	8.3	1
88	Development and Angiogenic Potential of Cell-Derived Microtissues Using Microcarrier-Template. *Biomedicines*, **2021**, 9,	4.8	3
87	Development of Cell-Derived Matrices for Three-Dimensional Cancer Cell Models. *ACS Applied Materials & Interfaces*, **2021**, 13, 44108-44123	9.5	2
86	Engineering Cell-Derived Matrices: From 3D Models to Advanced Personalized Therapies. *Advanced Functional Materials*, **2020**, 30, 2000496	15.6	7
85	Chondroinductive Alginate-Based Hydrogels Having Graphene Oxide for 3D Printed Scaffold Fabrication. *ACS Applied Materials & Interfaces*, **2020**, 12, 4343-4357	9.5	52
84	Hydrogel co-networks of gelatine methacrylate and poly(ethylene glycol) diacrylate sustain 3D functional in vitro models of intestinal mucosa. *Biofabrication*, **2020**, 12, 025008	10.5	10
83	Layer-by-layer modification effects on a nanoporeÍs inner surface of polycarbonate track-etched membranes.. *RSC Advances*, **2020**, 10, 35930-35940	3.7	2
82	Feasible and pure PO-CaO nanoglasses: An in-depth NMR study of synthesis for the modulation of the bioactive ion release. *Acta Biomaterialia*, **2019**, 94, 574-584	10.8	4
81	Electrospun Conducting and Biocompatible Uniaxial and Core-Shell Fibers Having Poly(lactic acid), Poly(ethylene glycol), and Polyaniline for Cardiac Tissue Engineering. *ACS Omega*, **2019**, 4, 3660-3672	3.9	43

80	Development of a Self-Assembled Peptide/Methylcellulose-Based Bioink for 3D Bioprinting. *Macromolecular Materials and Engineering*, **2019**, 304, 1900353	3.9	21
79	Therapeutic Potential of Articular Cartilage Regeneration using Tissue Engineering Based on Multiphase Designs **2019**,		2
78	Development of a Three-Dimensional Bioengineered Platform for Articular Cartilage Regeneration. *Biomolecules*, **2019**, 10,	5.9	7
77	Polymers for bone repair **2019**, 179-197		3
76	Poly-l/dl-lactic acid films functionalized with collagen IV as carrier substrata for corneal epithelial stem cells. *Colloids and Surfaces B: Biointerfaces*, **2019**, 177, 121-129	6	6
75	Development of a novel automatable fabrication method based on electrospinning co electrospraying for rotator cuff augmentation patches. *PLoS ONE*, **2019**, 14, e0224661	3.7	2
74	Instructive microenvironments in skin wound healing: Biomaterials as signal releasing platforms. *Advanced Drug Delivery Reviews*, **2018**, 129, 95-117	18.5	68
73	PEG hydrogel containing calcium-releasing particles and mesenchymal stromal cells promote vessel maturation. *Acta Biomaterialia*, **2018**, 67, 53-65	10.8	13
72	Wound healing-promoting effects stimulated by extracellular calcium and calcium-releasing nanoparticles on dermal fibroblasts. *Nanotechnology*, **2018**, 29, 395102	3.4	24
71	Polylactic acid organogel as versatile scaffolding technique. *Polymer*, **2017**, 113, 81-91	3.9	9
70	The proangiogenic potential of a novel calcium releasing composite biomaterial: Orthotopic in vivo evaluation. *Acta Biomaterialia*, **2017**, 54, 377-385	10.8	15
69	Modular bioink for 3D printing of biocompatible hydrogels: sol gel polymerization of hybrid peptides and polymers. *RSC Advances*, **2017**, 7, 12231-12235	3.7	24
68	Layer-by-layer bioassembly of cellularized polylactic acid porous membranes for bone tissue engineering. *Journal of Materials Science: Materials in Medicine*, **2017**, 28, 78	4.5	29
67	Fast-degrading PLA/ORMOGLASS fibrous composite scaffold leads to a calcium-rich angiogenic environment. *International Journal of Nanomedicine*, **2017**, 12, 4901-4919	7.3	8
66	Differential neuronal and glial behavior on flat and micro patterned chitosan films. *Colloids and Surfaces B: Biointerfaces*, **2017**, 158, 569-577	6	8
65	Analysis of the degradation and the tissue response to bi-layered 3D-printed scaffolds combining PLA and biphasic PLA/bioglass components - Guidance of the inflammatory response as basis for osteochondral regeneration. *Bioactive Materials*, **2017**, 2, 208-223	16.7	63
64	The proangiogenic potential of a novel calcium releasing biomaterial: Impact on cell recruitment. *Acta Biomaterialia*, **2016**, 29, 435-445	10.8	31
63	3D silicon doped hydroxyapatite scaffolds decorated with Elastin-like Recombinamers for bone regenerative medicine. *Acta Biomaterialia*, **2016**, 45, 349-356	10.8	21

62	A novel hybrid nanofibrous strategy to target progenitor cells for cost-effective in situ angiogenesis. *Journal of Materials Chemistry B*, **2016**, 4, 6967-6978	7.3	14
61	Real-Time Bioluminescence Imaging of Cell Distribution, Growth, and Differentiation in a Three-Dimensional Scaffold Under Interstitial Perfusion for Tissue Engineering. *Tissue Engineering - Part C: Methods*, **2016**, 22, 864-72	2.9	4
60	Role of ECM/peptide coatings on SDF-1 triggered mesenchymal stromal cell migration from microcarriers for cell therapy. *Acta Biomaterialia*, **2015**, 18, 59-67	10.8	35
59	Development of tailored and self-mineralizing citric acid-crosslinked hydrogels for in situ bone regeneration. *Biomaterials*, **2015**, 68, 42-53	15.6	35
58	Disassembling bacterial extracellular matrix with DNase-coated nanoparticles to enhance antibiotic delivery in biofilm infections. *Journal of Controlled Release*, **2015**, 209, 150-8	11.7	140
57	Towards 4th generation biomaterials: a covalent hybrid polymer-ormoglass architecture. *Nanoscale* , **2015**, 7, 15349-61	7.7	23
56	Biomolecular functionalization for enhanced cell-material interactions of poly(methyl methacrylate) surfaces. *International Journal of Energy Production and Management*, **2015**, 2, 167-75	5.3	26
55	Optimization of blend parameters for the fabrication of polycaprolactone-silicon based ormoglass nanofibers by electrospinning. *Journal of Biomedical Materials Research - Part B Applied Biomaterials* , **2015**, 103, 1287-93	3.5	10
54	Biofunctionalization of polymeric surfaces. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 1745-8	0.9	
53	Biofabrication of tissue constructs by 3D bioprinting of cell-laden microcarriers. *Biofabrication*, **2014**, 6, 035020	10.5	256
52	Effect of structure, topography and chemistry on fibroblast adhesion and morphology. *Journal of Materials Science: Materials in Medicine*, **2014**, 25, 1781-7	4.5	16
51	Extracellular calcium and CaSR drive osteoinduction in mesenchymal stromal cells. *Acta Biomaterialia*, **2014**, 10, 2824-33	10.8	81
50	Bioactive membranes for bone regeneration applications: effect of physical and biomolecular signals on mesenchymal stem cell behavior. *Acta Biomaterialia*, **2014**, 10, 134-41	10.8	39
49	Relevance of PEG in PLA-based blends for tissue engineering 3D-printed scaffolds. *Materials Science and Engineering C*, **2014**, 38, 55-62	8.3	137
48	Angiogenesis in bone regeneration: tailored calcium release in hybrid fibrous scaffolds. *ACS Applied Materials & Interfaces*, **2014**, 6, 7512-22	9.5	64
47	An efficient and reproducible method to culture Bergmann and cortical radial glia using textured PMMA. *Journal of Neuroscience Methods*, **2014**, 232, 93-101	3	2
46	Bone Biology and Regeneration **2014**, 315-342		3
45	A bioactive elastin-like recombinamer reduces unspecific protein adsorption and enhances cell response on titanium surfaces. *Colloids and Surfaces B: Biointerfaces*, **2014**, 114, 225-33	6	31

44	Neurogenesis and vascularization of the damaged brain using a lactate-releasing biomimetic scaffold. *Biomaterials*, **2014**, 35, 4769-81	15.6	68
43	Hybrid Organic-Inorganic Scaffolding Biomaterials for Regenerative Therapies. *Current Organic Chemistry*, **2014**, 18, 2299-2314	1.7	30
42	The effect of the composition of PLA films and lactate release on glial and neuronal maturation and the maintenance of the neuronal progenitor niche. *Biomaterials*, **2013**, 34, 2221-33	15.6	28
41	Fabrication of hierarchical micro-nanotopographies for cell attachment studies. *Nanotechnology*, **2013**, 24, 255305	3.4	31
40	Enhanced cell-material interactions through the biofunctionalization of polymeric surfaces with engineered peptides. *Biomacromolecules*, **2013**, 14, 2690-702	6.9	33
39	Modular polylactic acid microparticle-based scaffolds prepared via microfluidic emulsion/solvent displacement process: fabrication, characterization, and in vitro mesenchymal stem cells interaction study. *Journal of Biomedical Materials Research - Part A*, **2013**, 101, 720-32	5.4	20
38	Calcium phosphate glass improves angiogenesis capacity of poly(lactic acid) scaffolds and stimulates differentiation of adipose tissue-derived mesenchymal stromal cells to the endothelial lineage. *Journal of Biomedical Materials Research - Part A*, **2013**, 101, 932-41	5.4	17
37	Co-Assembled and Microfabricated Bioactive Membranes. *Advanced Functional Materials*, **2013**, 23, 430-438	10.4	42
36	Hierarchically engineered fibrous scaffolds for bone regeneration. *Journal of the Royal Society Interface*, **2013**, 10, 20130684	4.1	29
35	Inducing functional radial glia-like progenitors from cortical astrocyte cultures using micropatterned PMMA. *Biomaterials*, **2012**, 33, 1759-70	15.6	50
34	Osteoblast-like cellular response to dynamic changes in the ionic extracellular environment produced by calcium-deficient hydroxyapatite. *Journal of Materials Science: Materials in Medicine*, **2012**, 23, 2509-20	4.5	40
33	Engineering membrane scaffolds with both physical and biomolecular signaling. *Acta Biomaterialia*, **2012**, 8, 998-1009	10.8	33
32	Electrochemical microelectrodes for improved spatial and temporal characterization of aqueous environments around calcium phosphate cements. *Acta Biomaterialia*, **2012**, 8, 386-93	10.8	4
31	Control of microenvironmental cues with a smart biomaterial composite promotes endothelial progenitor cell angiogenesis. *European Cells and Materials*, **2012**, 24, 90-106; discussion 106	4.3	58
30	Ion reactivity of calcium-deficient hydroxyapatite in standard cell culture media. *Acta Biomaterialia*, **2011**, 7, 4242-52	10.8	70
29	Effect of blasting treatment and Fn coating on MG63 adhesion and differentiation on titanium: a gene expression study using real-time RT-PCR. *Journal of Materials Science: Materials in Medicine*, **2011**, 22, 617-27	4.5	22
28	Streptococcus sanguinis adhesion on titanium rough surfaces: effect of shot-blasting particles. *Journal of Materials Science: Materials in Medicine*, **2011**, 22, 1913-22	4.5	22
27	Extracellular calcium modulates in vitro bone marrow-derived Flk-1+ CD34+ progenitor cell chemotaxis and differentiation through a calcium-sensing receptor. *Biochemical and Biophysical Research Communications*, **2010**, 393, 156-61	3.4	78

26	Dynamics of bone marrow-derived endothelial progenitor cell/mesenchymal stem cell interaction in co-culture and its implications in angiogenesis. *Biochemical and Biophysical Research Communications*, **2010**, 400, 284-91	3.4	145
25	Injectable and fast resorbable calcium phosphate cement for body-setting bone grafts. *Journal of Materials Science: Materials in Medicine*, **2010**, 21, 2049-56	4.5	26
24	Perfusion cell seeding on large porous PLA/calcium phosphate composite scaffolds in a perfusion bioreactor system under varying perfusion parameters. *Journal of Biomedical Materials Research - Part A*, **2010**, 95, 1011-8	5.4	28
23	Spatial organization of osteoblast fibronectin matrix on titanium surfaces: effects of roughness, chemical heterogeneity and surface energy. *Acta Biomaterialia*, **2010**, 6, 291-301	10.8	89
22	Foamed surfactant solution as a template for self-setting injectable hydroxyapatite scaffolds for bone regeneration. *Acta Biomaterialia*, **2010**, 6, 876-85	10.8	72
21	Materials Surface Effects on Biological Interactions. *NATO Science for Peace and Security Series A: Chemistry and Biology*, **2010**, 233-252	0.1	11
20	Development of Provisional Extracellular Matrix on Biomaterials Interface: Lessons from In Vitro Cell Culture. *NATO Science for Peace and Security Series A: Chemistry and Biology*, **2010**, 19-43	0.1	3
19	Influence of fabrication parameters in cellular microarrays for stem cell studies. *Journal of Materials Science: Materials in Medicine*, **2009**, 20, 1525-33	4.5	6
18	Mesenchymal stem cell differentiation on microstructured poly (methyl methacrylate) substrates. *Annals of Anatomy*, **2009**, 191, 136-44	2.9	35
17	Nanotechnology in regenerative medicine: the materials side. *Trends in Biotechnology*, **2008**, 26, 39-47	15.1	244
16	Discerning the role of topography and ion exchange in cell response of bioactive tissue engineering scaffolds. *Tissue Engineering - Part A*, **2008**, 14, 1341-51	3.9	54
15	Surface modifications of silicon nitride for cellular biosensor applications. *Journal of Materials Science: Materials in Medicine*, **2008**, 19, 1839-50	4.5	24
14	A PLA/calcium phosphate degradable composite material for bone tissue engineering: an in vitro study. *Journal of Materials Science: Materials in Medicine*, **2008**, 19, 1503-13	4.5	56
13	Directional alignment of MG63 cells on polymer surfaces containing point microstructures. *Small*, **2007**, 3, 871-9	11	20
12	Effect of Ionic Exchange on Osteoblast Behaviour on Bioactive Tissue Engineering Substrates. *Key Engineering Materials*, **2007**, 361-363, 1051-1054	0.4	
11	Nanoembossed Polymer Substrates for Biomedical Surface Interaction Studies. *Journal of Nanoscience and Nanotechnology*, **2007**, 7, 4588-4594	1.3	8
10	Nanoembossed polymer substrates for biomedical surface interaction studies. *Journal of Nanoscience and Nanotechnology*, **2007**, 7, 4588-94	1.3	1
9	Transparent micro- and nanopatterned poly(lactic acid) for biomedical applications. *Journal of Biomedical Materials Research - Part A*, **2006**, 76, 781-7	5.4	32

8	Modulation of Biological Properties of Silicon Nitride for Biosensor Applications by Self-Assembled Monolayers. *Advances in Science and Technology*, **2006**, 53, 122-127	0.1	1
7	Surface characterization of completely degradable composite scaffolds. *Journal of Materials Science: Materials in Medicine*, **2005**, 16, 1125-30	4.5	19
6	Cell Behaviour of Calcium Phosphate Bone Cement Modified with a Protein-Based Foaming Agent. *Key Engineering Materials*, **2005**, 284-286, 117-120	0.4	2
5	Micro- and nanostructuring of poly(ethylene-2,6-naphthalate) surfaces, for biomedical applications, using polymer replication techniques. *Nanotechnology*, **2005**, 16, 369-375	3.4	26
4	Alendronate and etidronate do not regulate interleukin 6 and 11 synthesis in normal human osteoblasts in culture. *Calcified Tissue International*, **2003**, 72, 228-35	3.9	6
3	Human-osteoblast proliferation and differentiation on grit-blasted and bioactive titanium for dental applications. *Journal of Materials Science: Materials in Medicine*, **2002**, 13, 1105-11	4.5	60
2	Lactate promotes cardiomyocyte dedifferentiation through metabolic reprogramming		3
1	Bioprinting Decellularized Breast Tissue for the Development of Three-Dimensional Breast Cancer Models. *ACS Applied Materials & Interfaces*,	9.5	2