Evelyn K F Yim

List of Publications by Year
in descending order

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96 papers	6,612 citations	76326 40 h-index	62596 80 g-index
100 all docs	100 docs citations	100 times ranked	8466 citing authors

#	Article	IF	Citations
1	Rabbit Surgery Protocol for End-to-End and End-to-Side Vascular Graft Anastomosis. Methods in Molecular Biology, 2022, 2375, 177-189.	0.9	1
2	Vascular Imaging in Small Animals Using Clinical Ultrasound Scanners. Methods in Molecular Biology, 2022, 2375, 191-201.	0.9	0
3	Characterization and Functional Assessment of Endothelial Progenitor Cells in Ischemic Stroke Patients. Stem Cell Reviews and Reports, 2021, 17, 952-967.	3.8	22
4	Changing Compliance of Poly(Vinyl Alcohol) Tubular Scaffold for Vascular Graft Applications Through Modifying Interlayer Adhesion and Crosslinking Density. Frontiers in Materials, 2021, 7, .	2.4	7
5	Enhanced efficiency of nonviral direct neuronal reprogramming on topographical patterns. Biomaterials Science, 2021, 9, 5175-5191.	5.4	9
6	POPX2 phosphatase enhances topographical contact guidance for cell morphology and migration. Biomedical Materials (Bristol), 2021, 16, 025020.	3.3	3
7	The effects of surface topography modification on hydrogel properties. APL Bioengineering, 2021, 5, 031509.	6.2	31
8	Fucoidan for cardiovascular application and the factors mediating its activities. Carbohydrate Polymers, 2021, 270, 118347.	10.2	27
9	Topography elicits distinct phenotypes and functions in human primary and stem cell derived endothelial cells. Biomaterials, 2020, 234, 119747.	11.4	16
10	One-Pot Covalent Grafting of Gelatin on Poly(Vinyl Alcohol) Hydrogel to Enhance Endothelialization and Hemocompatibility for Synthetic Vascular Graft Applications. ACS Applied Bio Materials, 2020, 3, 693-703.	4.6	26
11	Effect of sterilization treatment on mechanical properties, biodegradation, bioactivity and printability of GelMA hydrogels. Biomedical Materials (Bristol), 2020, 15, 065017.	3.3	36
12	Gelatin Methacrylate as an Enzyme-Controlled Release Vehicle of Hyaluronic Acid for the Treatment of Recurrent Corneal Erosion. ACS Applied Bio Materials, 2020, 3, 6214-6223.	4.6	2
13	Emerging Methods for Enhancing Pluripotent Stem Cell Expansion. Frontiers in Cell and Developmental Biology, 2020, 8, 70.	3.7	28
14	Current understanding of intimal hyperplasia and effect of compliance in synthetic small diameter vascular grafts. Biomaterials Science, 2020, 8, 4383-4395.	5.4	47
15	Effect of Ethylene Oxide Sterilization on Polyvinyl Alcohol Hydrogel Compared with Gamma Radiation. Tissue Engineering - Part A, 2020, 26, 1077-1090.	3.1	18
16	Fucoidan functionalization on poly(vinyl alcohol) hydrogels for improved endothelialization and hemocompatibility. Biomaterials, 2020, 249, 120011.	11.4	67
17	Bioconjugation of a Collagen-Mimicking Peptide Onto Poly(vinyl alcohol) Encourages Endothelialization While Minimizing Thrombosis. Frontiers in Bioengineering and Biotechnology, 2020, 8, 621768.	4.1	10
18	Extracellular matrix and biomimetic engineering microenvironment for neuronal differentiation. Neural Regeneration Research, 2020, 15, 573.	3.0	45

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19	Cellâ€“Substrate Interactions. , 2019, , 437-468.		10
20	Biomaterials and controlled release strategy for epithelial wound healing. Biomaterials Science, 2019, 7, 4444-4471.	5.4	47
21	Nanoscale Architecture of the Cortical Actin Cytoskeleton in Embryonic Stem Cells. Cell Reports, 2019, 28, 1251-1267.e7.	6.4	62
22	Environmental Specification of Pluripotent Stem Cell Derived Endothelial Cells Toward Arterial and Venous Subtypes. Frontiers in Bioengineering and Biotechnology, 2019, 7, 143.	4.1	13
23	Biomimetic modification of poly(vinyl alcohol): Encouraging endothelialization and preventing thrombosis with antiplatelet monotherapy. Acta Biomaterialia, 2019, 86, 291-299.	8.3	43
24	Optimization of a Novel Preferential Covered Stent through Bench Experiments and in Vitro Platelet Activation Studies. ACS Biomaterials Science and Engineering, 2019, 5, 6216-6230.	5.2	1
25	Molecular Organization of Integrin-Based Adhesion Complexes in Mouse Embryonic Stem Cells. ACS Biomaterials Science and Engineering, 2019, 5, 3828-3842.	5.2	21
26	Luminal Plasma Treatment for Small Diameter Polyvinyl Alcohol Tubular Scaffolds. Frontiers in Bioengineering and Biotechnology, 2019, 7, 117.	4.1	12
27	Determination of critical shear stress for maturation of human pluripotent stem cellâ€derived endothelial cells towards an arterial subtype. Biotechnology and Bioengineering, 2019, 116, 1164-1175.	3.3	27
28	Human Rett-derived neuronal progenitor cells in 3D graphene scaffold as an in vitro platform to study the effect of electrical stimulation on neuronal differentiation. Biomedical Materials (Bristol), 2018, 13, 034111.	3.3	32
29	Functional differences between healthy and diabetic endothelial cells on topographical cues. Biomaterials, 2018, 153, 70-84.	11.4	23
30	Reactive Ion Plasma Modification of Poly(Vinylâ€Alcohol) Increases Primary Endothelial Cell Affinity and Reduces Thrombogenicity. Macromolecular Bioscience, 2018, 18, e1800132.	4.1	16
31	Sequential Application of Discrete Topographical Patterns Enhances Derivation of Functional Mesencephalic Dopaminergic Neurons from Human Induced Pluripotent Stem Cells. Scientific Reports, 2018, 8, 9567.	3.3	16
32	Anisotropic traction stresses and focal adhesion polarization mediates topography-induced cell elongation. Biomaterials, 2018, 181, 103-112.	11.4	29
33	Improving Surgical Methods for Studying Vascular Grafts in Animal Models. Tissue Engineering - Part C: Methods, 2018, 24, 457-464.	2.1	16
34	Temporal Changes in Nucleus Morphology, Lamin A/C and Histone Methylation During Nanotopography-Induced Neuronal Differentiation of Stem Cells. Frontiers in Bioengineering and Biotechnology, 2018, 6, 69.	4.1	35
35	Human mesenchymal stem cell basal membrane bending on gratings is dependent on both grating width and curvature. Scientific Reports, 2018, 8, 6444.	3.3	4
36	Evaluation of the Topographical Influence on the Cellular Behavior of Human Umbilical Vein Endothelial Cells. Advanced Biology, 2018, 2, 1700217.	3.0	19

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37	Microlens topography combined with vascular endothelial growth factor induces endothelial differentiation of human mesenchymal stem cells into vasculogenic progenitors. Biomaterials, 2017, 131, 68-85.	11.4	16
38	Sequentially-crosslinked bioactive hydrogels as nano-patterned substrates with customizable stiffness and degradation for corneal tissue engineering applications. Biomaterials, 2017, 120, 139-154.	11.4	179
39	Correlation and Comparison of Cortical and Hippocampal Neural Progenitor Morphology and Differentiation through the Use of Micro- and Nano-Topographies. Journal of Functional Biomaterials, 2017, 8, 35.	4.4	5
40	Cell and Molecular Mechanics in Health and Disease. BioMed Research International, 2017, 2017, 1-2.	1.9	2
41	Submillimeter Diameter Poly(Vinyl Alcohol) Vascular Graft Patency in Rabbit Model. Frontiers in Bioengineering and Biotechnology, 2016, 4, 44.	4.1	31
42	From nano to micro: topographical scale and its impact on cell adhesion, morphology and contact guidance. Journal of Physics Condensed Matter, 2016, 28, 183001.	1.8	202
43	Mechanical confinement triggers glioma linear migration dependent on formin FHOD3. Molecular Biology of the Cell, 2016, 27, 1246-1261.	2.1	51
44	In Vitro Topographical Model of Fuchs Dystrophy for Evaluation of Corneal Endothelial Cell Monolayer Formation. Advanced Healthcare Materials, 2016, 5, 2896-2910.	7.6	44
45	Cell Therapy: In Vitro Topographical Model of Fuchs Dystrophy for Evaluation of Corneal Endothelial Cell Monolayer Formation (Adv. Healthcare Mater. 22/2016). Advanced Healthcare Materials, 2016, 5, 2960-2960.	7.6	0
46	Cell contractility arising from topography and shear flow determines human mesenchymal stem cell fate. Scientific Reports, 2016, 6, 20415.	3.3	62
47	Fibers by interfacial polyelectrolyte complexation â€“ processes, materials and applications. Materials Today, 2016, 19, 437-450.	14.2	55
48	Contribution of actin filaments and microtubules to cell elongation and alignment depends on the grating depth of microgratings. Journal of Nanobiotechnology, 2016, 14, 35.	9.1	36
49	Planar and tubular patterning of micro and nano-topographies on poly(vinyl alcohol) hydrogel for improved endothelial cell responses. Biomaterials, 2016, 84, 184-195.	11.4	77
50	Composite Scaffolds of Interfacial Polyelectrolyte Fibers for Temporally Controlled Release of Biomolecules. Journal of Visualized Experiments, 2015, , e53079.	0.3	1
51	Composite Scaffold of Poly(Vinyl Alcohol) and Interfacial Polyelectrolyte Complexation Fibers for Controlled Biomolecule Delivery. Frontiers in Bioengineering and Biotechnology, 2015, 3, 3.	4.1	27
52	Differential Cell Adhesion of Breast Cancer Stem Cells on Biomaterial Substrate with Nanotopographical Cues. Journal of Functional Biomaterials, 2015, 6, 241-258.	4.4	14
53	Actomyosin contractility plays a role in MAP2 expression during nanotopography-directed neuronal differentiation of human embryonic stem cells. Biomaterials, 2015, 47, 20-28.	11.4	59
54	Enhanced differentiation of neural progenitor cells into neurons of the mesencephalic dopaminergic subtype on topographical patterns. Biomaterials, 2015, 43, 32-43.	11.4	54

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55	In vitro and ex vivo hemocompatibility of off-the-shelf modified poly(vinyl alcohol) vascular grafts. Acta Biomaterialia, 2015, 25, 97-108.	8.3	65
56	Micro- and nano-topography to enhance proliferation and sustain functional markers of donor-derived primary human corneal endothelial cells. Acta Biomaterialia, 2015, 19, 138-148.	8.3	57
57	Sub-100 nm patterning of TiO₂ film for the regulation of endothelial and smooth muscle cell functions. Biomaterials Science, 2014, 2, 1740-1749.	5.4	25
58	Organic nanoparticles with aggregation-induced emission for tracking bone marrow stromal cells in the rat ischemic stroke model. Chemical Communications, 2014, 50, 15136-15139.	4.1	22
59	Micro- and nanotopography with extracellular matrix coating modulate human corneal endothelial cell behavior. Acta Biomaterialia, 2014, 10, 1975-1984.	8.3	56
60	Composite pullulanâ€“dextran polysaccharide scaffold with interfacial polyelectrolyte complexation fibers: A platform with enhanced cell interaction and spatial distribution. Acta Biomaterialia, 2014, 10, 4410-4418.	8.3	38
61	Extending neurites sense the depth of the underlying topography during neuronal differentiation and contact guidance. Biomaterials, 2014, 35, 7750-7761.	11.4	106
62	The Synergistic Effect of Nanotopography and Sustained Dual Release of Hydrophobic and Hydrophilic Neurotrophic Factors on Human Mesenchymal Stem Cell Neuronal Lineage Commitment. Tissue Engineering - Part A, 2014, 20, 2151-2161.	3.1	20
63	Anisotropic rigidity sensing on grating topography directs human mesenchymal stem cell elongation. Biomechanics and Modeling in Mechanobiology, 2014, 13, 27-39.	2.8	45
64	Evaluation of hemocompatibility and endothelialization of hybrid poly(vinyl alcohol) (PVA)/gelatin polymer films. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101, 1549-1559.	3.4	46
65	Substrate topography and size determine the fate of human embryonic stem cells to neuronal or glial lineage. Acta Biomaterialia, 2013, 9, 4535-4545.	8.3	140
66	Nanotopography Modulates Mechanotransduction of Stem Cells and Induces Differentiation through Focal Adhesion Kinase. ACS Nano, 2013, 7, 4785-4798.	14.6	352
67	Temporal application of topography to increase the rate of neural differentiation from human pluripotent stem cells. Biomaterials, 2013, 34, 382-392.	11.4	64
68	Normalized Median Fluorescence: An Alternative Flow Cytometry Analysis Method for Tracking Human Embryonic Stem Cell States During Differentiation. Tissue Engineering - Part C: Methods, 2013, 19, 156-165.	2.1	36
69	High throughput screening to investigate the interaction of stem cells with their extracellular microenvironment. Organogenesis, 2013, 9, 128-142.	1.2	34
70	Cultivation of Human Microvascular Endothelial Cells on Topographical Substrates to Mimic the Human Corneal Endothelium. Journal of Functional Biomaterials, 2013, 4, 38-58.	4.4	5
71	Force-dependent cell signaling in stem cell differentiation. Stem Cell Research and Therapy, 2012, 3, 41.	5.5	130
72	Functional reconstruction of corneal endothelium using nanotopography for tissue-engineering applications. Acta Biomaterialia, 2012, 8, 2941-2952.	8.3	39

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73	Microarray with Microâ€•and Nanoâ€topographies Enables Identification of the Optimal Topography for Directing the Differentiation of Primary Murine Neural Progenitor Cells. Small, 2012, 8, 3050-3061.	10.0	110
74	The effect of micro and nanotopography on endocytosis in drug and gene delivery systems. Biomaterials, 2011, 32, 9866-9875.	11.4	86
75	Human Corneal Keratocyte Response to Micro- and Nano-Gratings on Chitosan and PDMS. Cellular and Molecular Bioengineering, 2011, 4, 399-410.	2.1	27
76	A 3D Electroactive Polypyrrole-Collagen Fibrous Scaffold for Tissue Engineering. Polymers, 2011, 3, 527-544.	4.5	53
77	Nanotopography-induced changes in focal adhesions, cytoskeletal organization, and mechanical properties of human mesenchymal stem cells. Biomaterials, 2010, 31, 1299-1306.	11.4	618
78	Stem Cell Interaction with Topography. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2010, , 61-87.	1.0	1
79	Nanotopography/Mechanical Induction of Stem-Cell Differentiation. Methods in Cell Biology, 2010, 98, 241-294.	1.1	64
80	Nano-Patterned Poly-Îµ-caprolactone with Controlled Release of Retinoic Acid and Nerve Growth Factor for Neuronal Regeneration. IFMBE Proceedings, 2009, , 1348-1351.	0.3	2
81	Amidine surface modification of poly(acrylonitrileâ€‹coâ€‹vinyl chloride) reduces platelet adhesion. Journal of Biomedical Materials Research - Part A, 2009, 89A, 780-790.	4.0	9
82	Collagen-based fibrous scaffold for spatial organization of encapsulated and seeded human mesenchymal stem cells. Biomaterials, 2009, 30, 1133-1142.	11.4	56
83	Cellâ€“Substrate Interactions. , 2008, , 666-685.		2
84	Tissue Compatibility of Interfacial Polyelectrolyte Complexation Fibrous Scaffold: Evaluation of Blood Compatibility and Biocompatibility. Tissue Engineering, 2007, 13, 423-433.	4.6	37
85	Synthetic nanostructures inducing differentiation of human mesenchymal stem cells into neuronal lineage. Experimental Cell Research, 2007, 313, 1820-1829.	2.6	702
86	Enhanced extracellular matrix production and differentiation of human embryonic germ cell derivatives in biodegradable poly(Îµ-caprolactone-co-ethyl ethylene phosphate) scaffold. Acta Biomaterialia, 2006, 2, 365-376.	8.3	5
87	Proliferation and differentiation of human mesenchymal stem cell encapsulated in polyelectrolyte complexation fibrous scaffold. Biomaterials, 2006, 27, 6111-6122.	11.4	70
88	Tissue Compatibility of Interfacial Polyelectrolyte Complexation Fibrous Scaffold: Evaluation of Blood Compatibility and Biocompatibility. Tissue Engineering, 2006, .	4.6	0
89	Nanopattern-induced changes in morphology and motility of smooth muscle cells. Biomaterials, 2005, 26, 5405-5413.	11.4	592
90	Controlled release from fibers of polyelectrolyte complexes. Journal of Controlled Release, 2005, 104, 347-358.	9.9	106

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91	Significance of synthetic nanostructures in dictating cellular response. Nanomedicine: Nanotechnology, Biology, and Medicine, 2005, 1, 10-21.	3.3	262
92	Proliferation and differentiation of human embryonic germ cell derivatives in bioactive polymeric fibrous scaffold. Journal of Biomaterials Science, Polymer Edition, 2005, 16, 1193-1217.	3.5	41
93	Effects of nanoimprinted patterns in tissue-culture polystyrene on cell behavior. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 2984.	1.6	98
94	Sustained Release of Proteins from Electrospun Biodegradable Fibers. Biomacromolecules, 2005, 6, 2017-2024.	5.4	527
95	Encapsulation of biologics in self-assembled fibers as biostructural units for tissue engineering. Journal of Biomedical Materials Research Part B, 2004, 71A, 586-595.	3.1	50
96	Mechanism of Fiber Formation by Interfacial Polyelectrolyte Complexation. Macromolecules, 2004, 37, 7019-7025.	4.8	74