

# Pauline M Doran

## List of Publications by Year in descending order

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Version: 2024-02-01

58  
papers

2,904  
citations

201385

27  
h-index

197535

49  
g-index

59  
all docs

59  
docs citations

59  
times ranked

2839  
citing authors

#	ARTICLE	IF	CITATIONS
1	Foreign protein degradation and instability in plants and plant tissue cultures. Trends in Biotechnology, 2006, 24, 426-432.	4.9	253
2	Foreign protein production in plant tissue cultures. Current Opinion in Biotechnology, 2000, 11, 199-204.	3.3	235
3	Ni-induced oxidative stress in roots of the Ni hyperaccumulator, <i>Alyssum bertolonii</i> . New Phytologist, 2002, 156, 205-215.	3.5	225
4	Characterization of monoclonal antibody fragments produced by plant cells. Biotechnology and Bioengineering, 2001, 73, 338-346.	1.7	153
5	Application of plant tissue cultures in phytoremediation research: Incentives and limitations. Biotechnology and Bioengineering, 2009, 103, 60-76.	1.7	151
6	Hyperaccumulation of cadmium by hairy roots of <i>Thlaspi caerulescens</i> . , 2000, 67, 607-615.		147
7	Strategies for Enhancing Monoclonal Antibody Accumulation in Plant Cell and Organ Cultures. Biotechnology Progress, 2001, 17, 979-992.	1.3	126
8	Chondrogenic differentiation of human adipose-derived stem cells in polyglycolic acid mesh scaffolds under dynamic culture conditions. Biomaterials, 2010, 31, 3858-3867.	5.7	102
9	Characteristics of growth and tropane alkaloid synthesis in <i>Atropa belladonna</i> roots transformed by <i>Agrobacterium rhizogenes</i> . Journal of Biotechnology, 1990, 16, 171-185.	1.9	85
10	Chondrogenesis and cartilage tissue engineering: the longer road to technology development. Trends in Biotechnology, 2012, 30, 166-176.	4.9	82
11	Design of Mixing Systems for Plant Cell Suspensions in Stirred Reactors. Biotechnology Progress, 1999, 15, 319-335.	1.3	80
12	Tissue engineering of human cartilage and osteochondral composites using recirculation bioreactors. Biomaterials, 2005, 26, 7012-7024.	5.7	73
13	Tissue engineering of human cartilage in bioreactors using single and composite cell-seeded scaffolds. Biotechnology and Bioengineering, 2005, 91, 338-355.	1.7	71
14	Oxygen requirements and mass transfer in hairy-root culture. Biotechnology and Bioengineering, 1994, 44, 880-887.	1.7	70
15	Kinetic and stoichiometric analysis of hairy roots in a segmented bubble column reactor. Biotechnology Progress, 1995, 11, 429-435.	1.3	67
16	Mesenchymal Stem Cells Derived from Human Adipose Tissue. Methods in Molecular Biology, 2015, 1340, 53-64.	0.4	66
17	Foreign protein production using plant cell and organ cultures: Advantages and limitations. Biotechnology Advances, 2009, 27, 1036-1042.	6.0	63
18	Loss of secreted antibody from transgenic plant tissue cultures due to surface adsorption. Journal of Biotechnology, 2006, 122, 39-54.	1.9	50

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19	Injectable 3D Hydrogel Scaffold with Tailorable Porosity Post-Implantation. <i>Advanced Healthcare Materials</i> , 2014, 3, 725-736.	3.9	46
20	Production of steroidal alkaloids by hairy roots of <i>Solanum aviculare</i> and the effect of gibberellic acid. <i>Plant Cell, Tissue and Organ Culture</i> , 1994, 38, 93-102.	1.2	43
21	Tissue engineering of cartilage using a mechanobioreactor exerting simultaneous mechanical shear and compression to simulate the rolling action of articular joints. <i>Biotechnology and Bioengineering</i> , 2012, 109, 1060-1073.	1.7	43
22	Effect of bacitracin on growth and monoclonal antibody production by tobacco hairy roots and cell suspensions. <i>Biotechnology and Bioprocess Engineering</i> , 1999, 4, 253-258.	1.4	42
23	Foaming and cell flotation in suspended plant cell cultures and the effect of chemical antifoams. <i>Biotechnology and Bioengineering</i> , 1994, 44, 481-488.	1.7	41
24	Hyperaccumulation of Nickel by Hairy Roots of <i>Alyssum</i> Species: Comparison with Whole Regenerated Plants. <i>Biotechnology Progress</i> , 2001, 17, 752-759.	1.3	40
25	Strategies for Enhancing the Accumulation and Retention of Extracellular Matrix in Tissue-Engineered Cartilage Cultured in Bioreactors. <i>PLoS ONE</i> , 2011, 6, e23119.	1.1	40
26	Hairy Root Culture in a Liquid-Dispersed Bioreactor: Characterization of Spatial Heterogeneity. <i>Biotechnology Progress</i> , 2000, 16, 391-401.	1.3	38
27	Analysis of cell cycle activity and population dynamics in heterogeneous plant cell suspensions using flow cytometry. , 1998, 58, 515-528.		32
28	Application of Membrane Tubing Aeration and Perfluorocarbon To Improve Oxygen Delivery to Hairy Root Cultures. <i>Biotechnology Progress</i> , 1998, 14, 479-486.	1.3	29
29	Coculture of genetically transformed roots and shoots for synthesis, translocation, and biotransformation of secondary metabolites. , 2000, 49, 481-494.		29
30	Osteogenic differentiation and osteochondral tissue engineering using human adipose-derived stem cells. <i>Biotechnology Progress</i> , 2013, 29, 176-185.	1.3	29
31	Investigation of liquid-solid hydrodynamic boundary layers and oxygen requirements in hairy root cultures. , 1999, 64, 729-740.		28
32	Oxygen transfer and culture characteristics of self-immobilized <i>Solanum aviculare</i> aggregates. <i>Biotechnology and Bioengineering</i> , 1995, 47, 541-549.	1.7	25
33	In Situ Generation of Tunable Porosity Gradients in Hydrogel-Based Scaffolds for Microfluidic Cell Culture. <i>Advanced Healthcare Materials</i> , 2014, 3, 1655-1670.	3.9	21
34	Biosynthesis of fluorescent CdS nanocrystals with semiconductor properties: Comparison of microbial and plant production systems. <i>Journal of Biotechnology</i> , 2016, 223, 13-23.	1.9	21
35	Coculture of genetically transformed roots and shoots for synthesis, translocation, and biotransformation of secondary metabolites. , 1996, 49, 481.		21
36	Extent of cell differentiation and capacity for cartilage synthesis in human adult adipose-derived stem cells: Comparison with fetal chondrocytes. <i>Biotechnology and Bioengineering</i> , 2010, 107, 393-401.	1.7	20

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37	Application of <i>Solanum lycopersicum</i> (tomato) hairy roots for production of passivated CdS nanocrystals with quantum dot properties. <i>Biochemical Engineering Journal</i> , 2014, 84, 36-44.	1.8	19
38	Influence of inoculum morphology on growth of <i>Atropa belladonna</i> hairy roots and production of tropane alkaloids. <i>Biotechnology Letters</i> , 1996, 18, 1099-1104.	1.1	18
39	Limitations associated with conductivity measurement for monitoring growth in plant tissue culture. <i>Plant Cell, Tissue and Organ Culture</i> , 1992, 29, 93-99.	1.2	17
40	Cartilage Tissue Engineering: What Have We Learned in Practice?. <i>Methods in Molecular Biology</i> , 2015, 1340, 3-21.	0.4	16
41	Fast three-dimensional micropatterning of PC12 cells in rapidly crosslinked hydrogel scaffolds using ultrasonic standing waves. <i>Biofabrication</i> , 2020, 12, 015013.	3.7	15
42	Improved seeding of chondrocytes into polyglycolic acid scaffolds using semi-static and alginate loading methods. <i>Biotechnology Progress</i> , 2011, 27, 191-200.	1.3	14
43	Redirection of Cellular Metabolism.. <i>Annals of the New York Academy of Sciences</i> , 1987, 506, 1-23.	1.8	13
44	Shear and Compression Bioreactor for Cartilage Synthesis. <i>Methods in Molecular Biology</i> , 2015, 1340, 221-233.	0.4	13
45	The Filtration Properties of <i>Atropa belladonna</i> Plant Cell Suspensions; Effects of Hydrodynamic Shear and Elevated Carbon Dioxide Levels on Culture and Filtration Parameters. <i>Journal of Chemical Technology and Biotechnology</i> , 1997, 69, 15-26.	1.6	12
46	In vitro propagation of plant virus using different forms of plant tissue culture and modes of culture operation. <i>Journal of Biotechnology</i> , 2009, 143, 198-206.	1.9	10
47	Therapeutically Important Proteins From In Vitro Plant Tissue Culture Systems. <i>Current Medicinal Chemistry</i> , 2013, 20, 1047-1055.	1.2	10
48	Electrical stimulation of cell growth and neurogenesis using conductive and nonconductive microfibrinous scaffolds. <i>Integrative Biology (United Kingdom)</i> , 2019, 11, 264-279.	0.6	10
49	Production of Chemicals Using Genetically Transformed Plant Organs<sup>a</sup>. <i>Annals of the New York Academy of Sciences</i> , 1994, 745, 426-441.	1.8	9
50	Foreign Protein Expression Using Plant Cell Suspension and Hairy Root Cultures. , 2005, , 13-36.		7
51	Production of zebrafish cardiospheres and cardiac progenitor cells in vitro and three-dimensional culture of adult zebrafish cardiac tissue in scaffolds. <i>Biotechnology and Bioengineering</i> , 2017, 114, 2142-2148.	1.7	7
52	Stimulation of cell growth and neurogenesis using protein-functionalized microfibrinous scaffolds and fluid flow in bioreactors. <i>Biochemical Engineering Journal</i> , 2020, 159, 107602.	1.8	6
53	Bioreactor scale-down studies of suspended plant cell cultures. <i>AIChE Journal</i> , 2018, 64, 4281-4288.	1.8	5
54	Hyperaccumulation of cadmium by hairy roots of <i>Thlaspi caerulescens</i> . <i>Biotechnology and Bioengineering</i> , 2000, 67, 607.	1.7	4

#	ARTICLE	IF	CITATIONS
55	Enhanced Neural Differentiation Using Simultaneous Application of 3D Scaffold Culture, Fluid Flow, and Electrical Stimulation in Bioreactors. <i>Advanced Biology</i> , 2021, 5, e2000136.	1.4	3
56	The Filtration Properties of <i>Atropa belladonna</i> Plant Cell Suspensions; Effects of Hydrodynamic Shear and Elevated Carbon Dioxide Levels on Culture and Filtration Parameters. , 1997, 69, 15.		1
57	Human Fetal and Adult Chondrocytes. <i>Methods in Molecular Biology</i> , 2015, 1340, 25-40.	0.4	0
58	Interactivity of biochemical and physical stimuli during epigenetic conditioning and cardiomyocytic differentiation of stem and progenitor cells derived from adult hearts. <i>Integrative Biology (United Tj ETQq0 0 0 rgBT.6 Overlock 10 Tf 50</i>		