

Mercedes Bonfill

List of Publications by Year in descending order

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95
papers

4,491
citations

81743

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110170

64
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96
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96
docs citations

96
times ranked

3535
citing authors

#	ARTICLE	IF	CITATIONS
1	Metabolic gene expression and centelloside production in elicited <i>Centella asiatica</i> hairy root cultures. <i>Industrial Crops and Products</i> , 2022, 184, 114988.	2.5	16
2	Improved biotechnological production of paclitaxel in <i>Taxus media</i> cell cultures by the combined action of coronatine and calix[8]arenes. <i>Plant Physiology and Biochemistry</i> , 2021, 163, 68-75.	2.8	25
3	Effect of gamma rays and colchicine on silymarin production in cell suspension cultures of <i>Silybum marianum</i> : A transcriptomic study of key genes involved in the biosynthetic pathway. <i>Gene</i> , 2021, 790, 145700.	1.0	3
4	Transfecting <i>Taxus media</i> Protoplasts to Study Transcription Factors BIS2 and TSAR2 as Activators of Taxane-Related Genes. <i>Plant and Cell Physiology</i> , 2020, 61, 576-583.	1.5	7
5	Production of Encecalin in Cell Cultures and Hairy Roots of <i>Helianthella quinquenervis</i> (Hook.) A. Gray. <i>Molecules</i> , 2020, 25, 3231.	1.7	3
6	A Novel Hydroxylation Step in the Taxane Biosynthetic Pathway: A New Approach to Paclitaxel Production by Synthetic Biology. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 410.	2.0	30
7	Biotechnological production of ruscogenins in plant cell and organ cultures of <i>Ruscus aculeatus</i> . <i>Plant Physiology and Biochemistry</i> , 2019, 141, 133-141.	2.8	4
8	Genomic methylation in plant cell cultures: A barrier to the development of commercial long-term biofactories. <i>Engineering in Life Sciences</i> , 2019, 19, 872-879.	2.0	23
9	Physiological and anatomical studies of two wheat cultivars irrigated with magnetic water under drought stress conditions. <i>Plant Physiology and Biochemistry</i> , 2019, 135, 480-488.	2.8	45
10	Specialized Plant Metabolism Characteristics and Impact on Target Molecule Biotechnological Production. <i>Molecular Biotechnology</i> , 2018, 60, 169-183.	1.3	59
11	Biotechnological Production of Pharmaceuticals and Biopharmaceuticals in Plant Cell and Organ Cultures. <i>Current Medicinal Chemistry</i> , 2018, 25, 3577-3596.	1.2	50
12	Effect of in vitro morphogenesis on the production of podophyllotoxin derivatives in callus cultures of <i>Linum album</i> . <i>Journal of Plant Physiology</i> , 2018, 228, 47-58.	1.6	17
13	Advances in the Regulation of In Vitro Paclitaxel Production: Methylation of a Y-Patch Promoter Region Alters BAPT Gene Expression in <i>Taxus</i> Cell Cultures. <i>Plant and Cell Physiology</i> , 2018, 59, 2255-2267.	1.5	15
14	Comparing aryltetralin lignan accumulation patterns in four biotechnological systems of <i>Linum album</i> . <i>Journal of Plant Physiology</i> , 2018, 228, 197-207.	1.6	12
15	Taxol from <i>Corylus avellana</i> : paving the way for a new source of this anti-cancer drug. <i>Plant Cell, Tissue and Organ Culture</i> , 2017, 129, 1-16.	1.2	42
16	Viability-reducing activity of <i>Corylus avellana</i> L. extracts against human cancer cell lines. <i>Biomedicine and Pharmacotherapy</i> , 2017, 89, 565-572.	2.5	15
17	Isolation of the antibiotic methyl (R,E)-3-(1-hydroxy-4-oxocyclopent-2-en-1-yl)-acrylate EA-2801 from <i>Trichoderma atroviridae</i> . <i>Journal of Antibiotics</i> , 2017, 70, 1053-1056.	1.0	7
18	Secondary metabolites profiling of <i>Dracocephalum kotschyi</i> Boiss at three phenological stages using uni- and multivariate methods. <i>Journal of Applied Research on Medicinal and Aromatic Plants</i> , 2016, 3, 177-185.	0.9	14

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19	Essential oil variation in wild-growing populations of <i>Salvia reuterana</i> Boiss. collected from Iran: Using GC-MS and multivariate analysis. <i>Industrial Crops and Products</i> , 2016, 81, 180-190.	2.5	46
20	Plant Anti-cancer Agents and their Biotechnological Production in Plant Cell Biofactories. <i>Current Medicinal Chemistry</i> , 2016, 23, 4418-4441.	1.2	11
21	Genetic Transformation of <i>Artemisia carvifolia</i> Buch with rol Genes Enhances Artemisinin Accumulation. <i>PLoS ONE</i> , 2015, 10, e0140266.	1.1	47
22	Taxane production induced by methyl jasmonate in free and immobilized cell cultures of Mexican yew (<i>Taxus globosa</i> Schtdl). <i>Acta Physiologiae Plantarum</i> , 2015, 37, 1.	1.0	9
23	Enhanced artemisinin yield by expression of rol genes in <i>Artemisia annua</i> . <i>Malaria Journal</i> , 2015, 14, 424.	0.8	39
24	Development of a hazel cell culture-based paclitaxel and baccatin III production process on a benchtop scale. <i>Journal of Biotechnology</i> , 2015, 195, 93-102.	1.9	22
25	Optimization of a liquid chromatography-tandem mass spectrometry method for the quantification of traces of taxanes in a <i>Corylus avellana</i> cell suspension medium. <i>RSC Advances</i> , 2015, 5, 17976-17983.	1.7	3
26	Perfluorodecalin-supported system enhances taxane production in hairy root cultures of <i>Taxus x media</i> var. <i>Hicksii</i> carrying a taxadiene synthase transgene. <i>Plant Cell, Tissue and Organ Culture</i> , 2015, 120, 1051-1059.	1.2	35
27	Changes in gene transcription and taxane production in elicited cell cultures of <i>Taxus media</i> and <i>Taxus globosa</i> . <i>Phytochemistry</i> , 2015, 117, 174-184.	1.4	47
28	Assessing factors that affect the growth of <i>Corylus avellana</i> cell suspension cultures: a statistical approach. <i>In Vitro Cellular and Developmental Biology - Plant</i> , 2015, 51, 530-538.	0.9	15
29	Paclitaxel production and PAL activity in hairy root cultures of <i>Taxus x media</i> var. <i>Hicksii</i> carrying a taxadiene synthase transgene elicited with nitric oxide and methyl jasmonate. <i>Acta Physiologiae Plantarum</i> , 2015, 37, 1.	1.0	24
30	A rational approach to improving the biotechnological production of taxanes in plant cell cultures of <i>Taxus</i> spp.. <i>Biotechnology Advances</i> , 2014, 32, 1157-1167.	6.0	123
31	Bicyclic and tetracyclic diterpenes from a <i>Trichoderma</i> symbiont of <i>Taxus baccata</i> . <i>Phytochemistry</i> , 2014, 97, 55-61.	1.4	54
32	Synergistic effect of cyclodextrins and methyl jasmonate on taxane production in <i>Taxus x media</i> cell cultures. <i>Plant Biotechnology Journal</i> , 2014, 12, 1075-1084.	4.1	86
33	Xanthomicrol: A Comprehensive Review of Its Chemistry, Distribution, Biosynthesis and Pharmacological Activity. <i>Mini-Reviews in Medicinal Chemistry</i> , 2014, 14, 725-733.	1.1	17
34	Living between two worlds: two-phase culture systems for producing plant secondary metabolites. <i>Critical Reviews in Biotechnology</i> , 2013, 33, 1-22.	5.1	61
35	Influence of hairy root ecotypes on production of tropane alkaloids in <i>Brugmansia candida</i> . <i>Plant Cell, Tissue and Organ Culture</i> , 2013, 114, 305-312.	1.2	12
36	Effect of the culture medium and biotic stimulation on taxane production in <i>Taxus globosa</i> Schtdl in vitro cultures. <i>Acta Physiologiae Plantarum</i> , 2013, 35, 3447-3455.	1.0	16

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37	Coronatine, a more powerful elicitor for inducing taxane biosynthesis in <i>Taxus media</i> cell cultures than methyl jasmonate. <i>Journal of Plant Physiology</i> , 2013, 170, 211-219.	1.6	113
38	Phenolic Acids. , 2013, , 1951-1973.		49
39	Production and Genetic Engineering of Terpenoids Production in Plant Cell and Organ Cultures. , 2013, , 2761-2796.		10
40	LC-MS/MS method for the quantification of withaferin-A in plant extracts of <i>Withania</i> spp.. <i>Acta Chromatographica</i> , 2013, 25, 745-754.	0.7	4
41	Bioprocessing of Plant In Vitro Systems for the Mass Production of Pharmaceutically Important Metabolites: Paclitaxel and its Derivatives. <i>Current Medicinal Chemistry</i> , 2013, 20, 880-891.	1.2	6
42	Biosynthesis of Panaxynol and Panaxydol in <i>Panax ginseng</i> . <i>Molecules</i> , 2013, 18, 7686-7698.	1.7	17
43	Bioprocessing of Plant In Vitro Systems for the Mass Production of Pharmaceutically Important Metabolites: Paclitaxel and its Derivatives. <i>Current Medicinal Chemistry</i> , 2013, 20, 880-891.	1.2	49
44	Bioprocessing of plant in vitro systems for the mass production of pharmaceutically important metabolites: paclitaxel and its derivatives. <i>Current Medicinal Chemistry</i> , 2013, 20, 880-91.	1.2	48
45	Isolation and characterization of <i>Stemphylium sedicola</i> SBU-16 as a new endophytic taxol-producing fungus from <i>Taxus baccata</i> grown in Iran. <i>FEMS Microbiology Letters</i> , 2012, 328, 122-129.	0.7	54
46	Lignans from in vitro cultures of transgenic roots of <i>Taxus x media</i> var. <i>Hicksii</i> . <i>Planta Medica</i> , 2012, 78, .	0.7	0
47	The relationship between <i>TXS</i> , <i>DBAT</i> , <i>BAPT</i> and <i>DBTNBT</i> gene expression and taxane production during the development of <i>Taxus baccata</i> plantlets. <i>Plant Science</i> , 2011, 181, 282-287.	1.7	42
48	Overexpression of the <i>Arabidopsis thaliana</i> squalene synthase gene in <i>Withania coagulans</i> hairy root cultures. <i>Biologia Plantarum</i> , 2011, 55, 357-360.	1.9	44
49	Production of centellosides and phytosterols in cell suspension cultures of <i>Centella asiatica</i> . <i>Plant Cell, Tissue and Organ Culture</i> , 2011, 104, 61-67.	1.2	95
50	Production of the anticancer drug taxol in <i>Taxus baccata</i> suspension cultures: A review. <i>Process Biochemistry</i> , 2011, 46, 23-34.	1.8	311
51	Changes of taxane production and gene expression during the development of in vitro <i>Taxus</i> plant cultures. <i>Planta Medica</i> , 2011, 77, .	0.7	1
52	Podophyllotoxin: Current approaches to its biotechnological production and future challenges. <i>Engineering in Life Sciences</i> , 2010, 10, 281-292.	2.0	77
53	Conversion of $\hat{\pm}$ -amyrin into centellosides by plant cell cultures of <i>Centella asiatica</i> . <i>Biotechnology Letters</i> , 2010, 32, 315-319.	1.1	24
54	Metabolic responses of <i>Taxus media</i> transformed cell cultures to the addition of methyl jasmonate. <i>Biotechnology Progress</i> , 2010, 26, 1145-1153.	1.3	70

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55	An approach to the molecular mechanism of methyl jasmonate and vanadyl sulphate elicitation in <i>Taxus baccata</i> cell cultures: The role of <i>txs</i> and <i>bapt</i> gene expression. <i>Biochemical Engineering Journal</i> , 2010, 53, 104-111.	1.8	47
56	Centelloside production in <i>Centella asiatica</i> cell suspension cultures elicited with methyl jasmonate. <i>Planta Medica</i> , 2010, 76, .	0.7	3
57	Taxane production in hairy roots of <i>Taxus x media</i> var. <i>Hicksii</i> carrying taxadiene synthase gene. <i>Planta Medica</i> , 2010, 76, .	0.7	0
58	Biotechnological Production of Taxol and Related Taxoids: Current State and Prospects. <i>Anti-Cancer Agents in Medicinal Chemistry</i> , 2009, 9, 109-121.	0.9	117
59	Effect of taxol feeding on taxol and related taxane production in <i>Taxus baccata</i> suspension cultures. <i>New Biotechnology</i> , 2009, 25, 252-259.	2.4	48
60	Overexpression of the <i>Arabidopsis thaliana</i> squalene synthase gene in <i>Withania coagulans</i> hairy root cultures increases the biosynthesis of phytosterols and withanolides. <i>New Biotechnology</i> , 2009, 25, S334.	2.4	2
61	Metabolic and genomic studies in transgenic cell lines of <i>Taxus media</i> . <i>New Biotechnology</i> , 2009, 25, S319-S320.	2.4	0
62	Morphology and withanolide production of <i>Withania coagulans</i> hairy root cultures. <i>Engineering in Life Sciences</i> , 2009, 9, 197-204.	2.0	41
63	Steroidal Lactones from <i>Withania somnifera</i> , an Ancient Plant for Novel Medicine. <i>Molecules</i> , 2009, 14, 2373-2393.	1.7	426
64	Triterpenoid saponin content and the expression level of some related genes in calli of <i>Centella asiatica</i> . <i>Biotechnology Letters</i> , 2008, 30, 1853-1859.	1.1	51
65	Immobilization of <i>Galphimia glauca</i> Plant Cell Suspensions for the Production of Enhanced Amounts of Galphimine-B. <i>Planta Medica</i> , 2008, 74, 94-99.	0.7	20
66	Biotransformation of hyoscyamine into scopolamine in transgenic tobacco cell cultures. <i>Journal of Plant Physiology</i> , 2007, 164, 521-524.	1.6	34
67	Source of isopentenyl diphosphate for taxol and baccatin III biosynthesis in cell cultures of <i>Taxus baccata</i> . <i>Biochemical Engineering Journal</i> , 2007, 33, 159-167.	1.8	37
68	Paclitaxel and baccatin III production induced by methyl jasmonate in free and immobilized cells of <i>Taxus baccata</i> . <i>Biologia Plantarum</i> , 2007, 51, 647-652.	1.9	38
69	Manipulation by culture mixing and elicitation of paclitaxel and baccatin III production in <i>Taxus baccata</i> suspension cultures. <i>In Vitro Cellular and Developmental Biology - Plant</i> , 2006, 42, 422-426.	0.9	24
70	The effect of methyl jasmonate on triterpene and sterol metabolisms of <i>Centella asiatica</i> , <i>Ruscus aculeatus</i> and <i>Galphimia glauca</i> cultured plants. <i>Phytochemistry</i> , 2006, 67, 2041-2049.	1.4	99
71	In vitro micropropagation of <i>Ruscus aculeatus</i> . <i>Biologia Plantarum</i> , 2006, 50, 441-443.	1.9	6
72	Effect of organogenesis on steroidal saponin biosynthesis in calli cultures of <i>Ruscus aculeatus</i> . <i>FÁ-toterapÁ-t</i> , 2006, 77, 216-220.	1.1	14

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73	Identification of triterpenoid compounds of <i>Centella asiatica</i> by thin-layer chromatography and mass spectrometry. <i>Biomedical Chromatography</i> , 2006, 20, 151-153.	0.8	68
74	Effects of immobilization by entrapment in alginate and scale-up on paclitaxel and baccatin III production in cell suspension cultures of <i>Taxus baccata</i> . <i>Biotechnology and Bioengineering</i> , 2005, 89, 647-655.	1.7	97
75	Engineering tropane biosynthetic pathway in <i>Hyoscyamus niger</i> hairy root cultures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 6786-6791.	3.3	275
76	The T-DNA ORF8 of the cucumopine-type <i>Agrobacterium rhizogenes</i> Ri plasmid is involved in auxin response in transgenic tobacco. <i>Plant Science</i> , 2004, 166, 557-567.	1.7	14
77	Relationship between peroxidase activity and organogenesis in <i>Panax ginseng</i> calluses. <i>Plant Cell, Tissue and Organ Culture</i> , 2003, 73, 37-41.	1.2	18
78	Elicitation of different <i>Panax ginseng</i> transformed root phenotypes for an improved ginsenoside production. <i>Plant Physiology and Biochemistry</i> , 2003, 41, 1019-1025.	2.8	113
79	Influence of elicitors on taxane production and 3-hydroxy-3-methylglutaryl coenzyme A reductase activity in <i>Taxus media</i> cells. <i>Plant Physiology and Biochemistry</i> , 2003, 41, 91-96.	2.8	41
80	Inhibition of paclitaxel and baccatin III accumulation by mevinolin and fosmidomycin in suspension cultures of <i>Taxus baccata</i> . <i>Journal of Biotechnology</i> , 2003, 101, 157-163.	1.9	66
81	Alkaloid production in <i>Duboisia</i> hybrid hairy roots and plants overexpressing the h6h gene. <i>Plant Science</i> , 2003, 165, 1289-1295.	1.7	80
82	Improved high performance liquid chromatographic determination of ginsenosides in <i>Panax ginseng</i> -based pharmaceuticals using a diol column. <i>Biomedical Chromatography</i> , 2002, 16, 68-72.	0.8	23
83	Improved Paclitaxel and Baccatin III Production in Suspension Cultures of <i>Taxus media</i> . <i>Biotechnology Progress</i> , 2002, 18, 418-423.	1.3	89
84	Influence of auxins on organogenesis and ginsenoside production in <i>Panax ginseng</i> calluses. <i>Plant Cell, Tissue and Organ Culture</i> , 2002, 68, 73-78.	1.2	39
85	Ginsenoside production in different phenotypes of <i>Panax ginseng</i> transformed roots. <i>Phytochemistry</i> , 2001, 57, 365-371.	1.4	88
86	Effect of Benzyladenine and Indolebutyric Acid on Ultrastructure, Glands Formation, and Essential Oil Accumulation in <i>Lavandula Dentata</i> Plantlets. <i>Biologia Plantarum</i> , 2001, 44, 1-6.	1.9	28
87	<i>Datura metel</i> : In Vitro Production of Tropane Alkaloids. <i>Planta Medica</i> , 1999, 65, 144-148.	0.7	34
88	Effect of <i>Agrobacterium rhizogenes</i> T-DNA on alkaloid production in Solanaceae plants. <i>Phytochemistry</i> , 1999, 52, 1287-1292.	1.4	59
89	Title is missing!. <i>Plant Cell, Tissue and Organ Culture</i> , 1999, 58, 177-184.	1.2	54
90	Production of Taxol® and baccatin III by a selected <i>Taxus baccata</i> callus line and its derived cell suspension culture. <i>Plant Science</i> , 1999, 146, 101-107.	1.7	73

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91	Relation between the amount of rolC gene product and indole alkaloid accumulation in <i>Catharanthus roseus</i> transformed root cultures. <i>Journal of Plant Physiology</i> , 1998, 153, 712-718.	1.6	91
92	Effect of auxin and phenobarbital on the ultrastructure and digitoxin content in <i>Digitalis purpurea</i> tissue culture. <i>Canadian Journal of Botany</i> , 1996, 74, 378-382.	1.2	9
93	Effects of Auxin and Phenobarbital on Morphogenesis and Production of Digitoxin in <i>Digitalis</i> Callus. <i>Plant and Cell Physiology</i> , 1995, 36, 247-252.	1.5	22
94	Response of <i>Digitalis purpurea</i> plants to temporary salinity. <i>Journal of Plant Nutrition</i> , 1993, 16, 327-335.	0.9	25
95	The Epigenetic Regulation in Plant Specialized Metabolism: DNA Methylation Limits Paclitaxel in vitro Biotechnological Production. <i>Frontiers in Plant Science</i> , 0, 13, .	1.7	9