

Rosa Maria Cusido

List of Publications by Year in descending order

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106
papers

5,192
citations

76326

40
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98798

67
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107
all docs

107
docs citations

107
times ranked

3831
citing authors

#	ARTICLE	IF	CITATIONS
1	Steroidal Lactones from <i>Withania somnifera</i> , an Ancient Plant for Novel Medicine. <i>Molecules</i> , 2009, 14, 2373-2393.	3.8	426
2	Elicitation, an Effective Strategy for the Biotechnological Production of Bioactive High-Added Value Compounds in Plant Cell Factories. <i>Molecules</i> , 2016, 21, 182.	3.8	375
3	Production of the anticancer drug taxol in <i>Taxus baccata</i> suspension cultures: A review. <i>Process Biochemistry</i> , 2011, 46, 23-34.	3.7	311
4	Effect of pmt gene overexpression on tropane alkaloid production in transformed root cultures of <i>Datura metel</i> and <i>Hyoscyamus muticus</i> . <i>Journal of Experimental Botany</i> , 2003, 54, 203-211.	4.8	128
5	A rational approach to improving the biotechnological production of taxanes in plant cell cultures of <i>Taxus spp.</i> . <i>Biotechnology Advances</i> , 2014, 32, 1157-1167.	11.7	123
6	Growth and Ginsenoside Production in Hairy Root Cultures of <i>Panax ginseng</i> using a Novel Bioreactor. <i>Planta Medica</i> , 2003, 69, 344-349.	1.3	117
7	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.	5.8	113
8	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.	3.5	113
9	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.	2.9	99
10	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.	3.3	97
11	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.	2.3	95
12	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.	3.5	91
13	Alkaloid production in <i>Duboisia</i> hybrid hairy root cultures overexpressing the pmt gene. <i>Phytochemistry</i> , 2002, 59, 697-702.	2.9	89
14	Improved Paclitaxel and Baccatin III Production in Suspension Cultures of <i>Taxus media</i> . <i>Biotechnology Progress</i> , 2002, 18, 418-423.	2.6	89
15	Ginsenoside production in different phenotypes of <i>Panax ginseng</i> transformed roots. <i>Phytochemistry</i> , 2001, 57, 365-371.	2.9	88
16	Expression of the rol C gene and nicotine production in transgenic roots and their regenerated plants. <i>Plant Cell Reports</i> , 1998, 17, 384-390.	5.6	87
17	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.	8.3	86
18	Alkaloid production in <i>Duboisia</i> hybrid hairy roots and plants overexpressing the h6h gene. <i>Plant Science</i> , 2003, 165, 1289-1295.	3.6	80

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19	Enhanced secretion of tropane alkaloids in <i>Nicotiana tabacum</i> hairy roots expressing heterologous hyoscyamine-6 β -hydroxylase. <i>Journal of Experimental Botany</i> , 2005, 56, 2611-2618.	4.8	80
20	Podophyllotoxin: Current approaches to its biotechnological production and future challenges. <i>Engineering in Life Sciences</i> , 2010, 10, 281-292.	3.6	77
21	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.	3.6	73
22	Metabolic responses of <i>Taxus media</i> transformed cell cultures to the addition of methyl jasmonate. <i>Biotechnology Progress</i> , 2010, 26, 1145-1153.	2.6	70
23	Identification of triterpenoid compounds of <i>Centella asiatica</i> by thin-layer chromatography and mass spectrometry. <i>Biomedical Chromatography</i> , 2006, 20, 151-153.	1.7	68
24	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.	3.8	66
25	Effect of <i>Agrobacterium rhizogenes</i> T-DNA on alkaloid production in Solanaceae plants. <i>Phytochemistry</i> , 1999, 52, 1287-1292.	2.9	59
26	Identification and quantification of leaf surface flavonoids in wild-growing populations of <i>Dracocephalum kotschyi</i> by LC-ESI-MS. <i>Food Chemistry</i> , 2013, 141, 139-146.	8.2	57
27	Production of highly bioactive resveratrol analogues pterostilbene and piceatannol in metabolically engineered grapevine cell cultures. <i>Plant Biotechnology Journal</i> , 2016, 14, 1813-1825.	8.3	57
28	Title is missing!. <i>Plant Cell, Tissue and Organ Culture</i> , 1999, 58, 177-184.	2.3	54
29	Effect of salinity on soluble protein, free amino acids and nicotine contents in <i>Nicotiana rustica</i> L.. <i>Plant and Soil</i> , 1987, 102, 55-60.	3.7	51
30	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.	2.2	51
31	Exploring the Metabolic Stability of Engineered Hairy Roots after 16 Years Maintenance. <i>Frontiers in Plant Science</i> , 2016, 7, 1486.	3.6	50
32	Phenolic Acids. , 2013, , 1951-1973.		49
33	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.	4.4	48
34	An approach to the molecular mechanism of methyl jasmonate and vanadyl sulphate elicitation in <i>Taxus baccata</i> cell cultures: The role of txs and bap1 gene expression. <i>Biochemical Engineering Journal</i> , 2010, 53, 104-111.	3.6	47
35	A new biotechnological source of rosmarinic acid and surface flavonoids: Hairy root cultures of <i>Dracocephalum kotschyi</i> Boiss. <i>Industrial Crops and Products</i> , 2013, 50, 256-263.	5.2	47
36	Genetic Transformation of <i>Artemisia carvifolia</i> Buch with rol Genes Enhances Artemisinin Accumulation. <i>PLoS ONE</i> , 2015, 10, e0140266.	2.5	47

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37	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.	2.9	47
38	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
39	Phenolic compound production in relation to differentiation in cell and tissue cultures of <i>Larrea divaricata</i> (Cav.). <i>Plant Science</i> , 2012, 193-194, 1-7.	3.6	44
40	The relationship between TXS, DBAT, BAPT and DBTNBT gene expression and taxane production during the development of <i>Taxus baccata</i> plantlets. <i>Plant Science</i> , 2011, 181, 282-287.	3.6	42
41	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.	5.8	41
42	Morphology and withanolide production of <i>Withania coagulans</i> hairy root cultures. <i>Engineering in Life Sciences</i> , 2009, 9, 197-204.	3.6	41
43	Biotechnological production of centellosides in cell cultures of <i>Centella asiatica</i> (L) Urban. <i>Engineering in Life Sciences</i> , 2014, 14, 633-642.	3.6	41
44	Transcript profiling of jasmonate-elicited <i>Taxus</i> cells reveals a phenylalanine-CoA ligase. <i>Plant Biotechnology Journal</i> , 2016, 14, 85-96.	8.3	41
45	Powerful Plant Antioxidants: A New Biosustainable Approach to the Production of Rosmarinic Acid. <i>Antioxidants</i> , 2020, 9, 1273.	5.1	40
46	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.	2.3	39
47	Enhanced artemisinin yield by expression of rol genes in <i>Artemisia annua</i> . <i>Malaria Journal</i> , 2015, 14, 424.	2.3	39
48	Influence of calcium ion-concentration in the medium on tropane alkaloid accumulation in <i>Datura stramonium</i> hairy roots. <i>Plant Science</i> , 1999, 141, 41-49.	3.6	38
49	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
50	Taxol® and baccatin III production in suspension cultures of <i>Taxus baccata</i> and <i>Taxus wallichiana</i> in an airlift bioreactor. <i>Journal of Plant Physiology</i> , 2002, 159, 97-102.	3.5	37
51	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.	3.6	37
52	<i>Datura metel</i> : In Vitro Production of Tropane Alkaloids. <i>Planta Medica</i> , 1999, 65, 144-148.	1.3	34
53	Biotransformation of hyoscyamine into scopolamine in transgenic tobacco cell cultures. <i>Journal of Plant Physiology</i> , 2007, 164, 521-524.	3.5	34
54	Effect of Rol Genes on Polyphenols Biosynthesis in <i>Artemisia annua</i> and Their Effect on Antioxidant and Cytotoxic Potential of the Plant. <i>Applied Biochemistry and Biotechnology</i> , 2016, 179, 1456-1468.	2.9	34

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55	Taximin, a conserved plant-specific peptide is involved in the modulation of plant-specialized metabolism. <i>Plant Biotechnology Journal</i> , 2014, 12, 971-983.	8.3	30
56	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.	4.1	30
57	Effect of pmt gene overexpression on tropane alkaloid production in transformed root cultures of <i>Datura metel</i> and <i>Hyoscyamus muticus</i> . <i>Journal of Experimental Botany</i> , 2003, 54, 203-211.	4.8	30
58	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
59	Taxol transport in <i>Taxus baccata</i> cell suspension cultures. <i>Plant Physiology and Biochemistry</i> , 2002, 40, 81-88.	5.8	27
60	Decreased Scopolamine Yield in Field-Grown <i>Duboisia</i> Plants Regenerated from Hairy Roots. <i>Planta Medica</i> , 2001, 67, 249-253.	1.3	26
61	Methyl jasmonate enhanced production of rosmarinic acid in cell cultures of <i>Satureja khuzistanica</i> in a bioreactor. <i>Engineering in Life Sciences</i> , 2016, 16, 740-749.	3.6	26
62	Phenolic compound production by <i>Larrea divaricata</i> Cav. plant cell cultures and effect of precursor feeding. <i>Process Biochemistry</i> , 2011, 46, 418-422.	3.7	25
63	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.	5.8	25
64	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.	2.1	24
65	Conversion of β -amyrin into centellosides by plant cell cultures of <i>Centella asiatica</i> . <i>Biotechnology Letters</i> , 2010, 32, 315-319.	2.2	24
66	Rol genes enhance the biosynthesis of antioxidants in <i>Artemisia carvifolia</i> Buch. <i>BMC Plant Biology</i> , 2016, 16, 125.	3.6	24
67	Production of Paclitaxel and Baccatin III in a 20-L Airlift Bioreactor by a Cell Suspension of <i>Taxus wallichiana</i> . <i>Planta Medica</i> , 2002, 68, 336-340.	1.3	23
68	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.	3.6	23
69	Effects of Auxin and Phenobarbital on Morphogenesis and Production of Digitoxin in <i>Digitalis Callus</i> . <i>Plant and Cell Physiology</i> , 1995, 36, 247-252.	3.1	22
70	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.	3.8	22
71	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.	1.3	20
72	Perfluorodecalins and Hexenol as Inducers of Secondary Metabolism in <i>Taxus media</i> and <i>Vitis vinifera</i> Cell Cultures. <i>Frontiers in Plant Science</i> , 2018, 9, 335.	3.6	20

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73	Relationship between peroxidase activity and organogenesis in <i>Panax ginseng</i> calluses. <i>Plant Cell, Tissue and Organ Culture</i> , 2003, 73, 37-41.	2.3	18
74	Ontogenic variations in the alkaloids of <i>Narcissus assoanus</i> . <i>Physiologia Plantarum</i> , 1986, 68, 657-661.	5.2	17
75	In Vitro Propagation of "Jarilla" (<i>Larrea divaricata</i> CAV.) and Secondary Metabolite Production. <i>Biological and Pharmaceutical Bulletin</i> , 2008, 31, 2321-2325.	1.4	17
76	Biosynthesis of Panaxynol and Panaxydol in <i>Panax ginseng</i> . <i>Molecules</i> , 2013, 18, 7686-7698.	3.8	17
77	An optimized biotechnological system for the production of centellosides based on elicitation and bioconversion of <i>Centella asiatica</i> cell cultures. <i>Engineering in Life Sciences</i> , 2017, 17, 413-419.	3.6	17
78	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.	3.5	17
79	Xanthomicrol: A Comprehensive Review of Its Chemistry, Distribution, Biosynthesis and Pharmacological Activity. <i>Mini-Reviews in Medicinal Chemistry</i> , 2014, 14, 725-733.	2.4	17
80	Tailoring tobacco hairy root metabolism for the production of stilbenes. <i>Scientific Reports</i> , 2017, 7, 17976.	3.3	16
81	Metabolic gene expression and centelloside production in elicited <i>Centella asiatica</i> hairy root cultures. <i>Industrial Crops and Products</i> , 2022, 184, 114988.	5.2	16
82	Expression of the truncated tissue plasminogen activator (K2S) gene in tobacco chloroplast. <i>Molecular Biology Reports</i> , 2013, 40, 5749-5758.	2.3	15
83	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.	2.1	15
84	Biotechnological production of recombinant tissue plasminogen activator protein (reteplase) from transplastomic tobacco cell cultures. <i>Plant Physiology and Biochemistry</i> , 2017, 118, 130-137.	5.8	15
85	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.	3.1	15
86	Effect of organogenesis on steroidal saponin biosynthesis in calli cultures of <i>Ruscus aculeatus</i> . <i>FÄ-toterapÄ-Äç</i> , 2006, 77, 216-220.	2.2	14
87	Secondary metabolites profiling of <i>Dracocephalum kotschy</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.	1.5	14
88	Purification of recombinant tissue plasminogen activator (rtPA) protein from transplastomic tobacco plants. <i>Plant Physiology and Biochemistry</i> , 2016, 108, 139-144.	5.8	12
89	Comparing aryltetralin lignan accumulation patterns in four biotechnological systems of <i>Linum album</i> . <i>Journal of Plant Physiology</i> , 2018, 228, 197-207.	3.5	12
90	The effect of rol genes on phytoecdysteroid biosynthesis in <i>Ajuga bracteosa</i> differs between transgenic plants and hairy roots. <i>RSC Advances</i> , 2016, 6, 22700-22708.	3.6	11

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91	In Vitro Study of the Anticancer Effects of Biotechnological Extracts of the Endangered Plant Species <i>Satureja Khuzistanica</i> . <i>International Journal of Molecular Sciences</i> , 2019, 20, 2400.	4.1	11
92	Plant Anti-cancer Agents and their Biotechnological Production in Plant Cell Biofactories. <i>Current Medicinal Chemistry</i> , 2016, 23, 4418-4441.	2.4	11
93	Production and Genetic Engineering of Terpenoids Production in Plant Cell and Organ Cultures. , 2013, , 2761-2796.		10
94	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.	1.1	9
95	The Epigenetic Regulation in Plant Specialized Metabolism: DNA Methylation Limits Paclitaxel in vitro Biotechnological Production. <i>Frontiers in Plant Science</i> , 0, 13, .	3.6	9
96	Effect of pRi T-DNA genes and elicitation on morphology and phytoecdysteroid biosynthesis in <i>Ajuga bracteosa</i> hairy roots. <i>RSC Advances</i> , 2017, 7, 47945-47953.	3.6	8
97	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.	3.1	7
98	Characterization of lipid droplets from a <i>Taxus media</i> cell suspension and their potential involvement in trafficking and secretion of paclitaxel. <i>Plant Cell Reports</i> , 2022, 41, 853-871.	5.6	7
99	In vitro micropropagation of <i>Ruscus aculeatus</i> . <i>Biologia Plantarum</i> , 2006, 50, 441-443.	1.9	6
100	<i>Taxus</i> Cell Cultures: An Effective Biotechnological Tool to Enhance and Gain New Biosynthetic Insights into Taxane Production. <i>Reference Series in Phytochemistry</i> , 2018, , 295-316.	0.4	6
101	Metabolite profiling of <i>Artemisia carvifolia</i> Buch transgenic plants and estimation of their anticancer and antidiabetic potential. <i>Biocatalysis and Agricultural Biotechnology</i> , 2020, 24, 101539.	3.1	6
102	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.	5.8	4
103	Comprehensive screening of influential factors in the <i>Agrobacterium tumefaciens</i> - mediated transformation of the Himalayan elixir: <i>Ajuga bracteosa</i> Wall. ex. Benth. <i>Journal of Applied Research on Medicinal and Aromatic Plants</i> , 2016, 3, 151-159.	1.5	3
104	Centellosides Production and Expression Level of Genes Encoding their Synthesis in <i>Centella asiatica</i> in vitro cultures. <i>Journal of Biotechnology</i> , 2007, 131, S45-S46.	3.8	1
105	<i>Taxus</i> Cell Cultures, an Effective Biotechnological Tool to Enhance and Gain New Biosynthetic Insights into Taxane Production. , 2016, , 1-23.		1
106	Stimulation of defense reactions in potato against <i>Pectobacterium</i> sp.. <i>Journal of General Plant Pathology</i> , 2019, 85, 257-272.	1.0	0