Praveen K Saxena

List of Publications by Year
in descending order

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134 papers	6,312 citations	61984 43 h-index	74163 75 g-index
135 all docs	135 docs citations	135 times ranked	4061 citing authors

#	Article	IF	Citations
1	Thidiazuron: A potent regulator ofin vitro plant morphogenesis. In Vitro Cellular and Developmental Biology - Plant, 1998, 34, 267-275.	2.1	397
2	Role of melatonin in alleviating cold stress in <scp>A</scp>rabidopsis thaliana. Journal of Pineal Research, 2014, 56, 238-245.	7.4	334
3	Tryptophan is a precursor for melatonin and serotonin biosynthesis in in vitro regenerated St. John's wort (Hypericum perforatum L. cv. Anthos) plants. Plant Cell Reports, 2000, 19, 698-704.	5.6	289
4	Melatonin in feverfew and other medicinal plants. Lancet, The, 1997, 350, 1598-1599.	13.7	225
5	Morphoregulatory Role of Thidiazuron. Plant Physiology, 1992, 99, 1704-1707.	4.8	182
6	Thidiazuron-induced somatic embryogenesis in intact seedlings of peanut (Arachis hypogaea): Endogenous growth regulator levels and significance of cotyledons. Physiologia Plantarum, 1995, 94, 268-276.	5.2	178
7	Melatonin Natural Health Products and Supplements: Presence of Serotonin and Significant Variability of Melatonin Content. Journal of Clinical Sleep Medicine, 2017, 13, 275-281.	2.6	167
8	Melatonin and serotonin in flowers and fruits of Datura metel L.. Journal of Pineal Research, 2009, 47, 277-283.	7.4	161
9	The role of serotonin and melatonin in plant morphogenesis: Regulation of auxin-induced root organogenesis in in vitro-cultured explants of st. John's Wort (Hypericum perforatum L.). In Vitro Cellular and Developmental Biology - Plant, 2001, 37, 786-793.	2.1	155
10	Melatonin improves the survival of cryopreserved callus of Rhodiola crenulata. Journal of Pineal Research, 2011, 50, 83-88.	7.4	122
11	Identification and quantification of eight flavones in root and shoot tissues of the medicinal plant Huang-qin (Scutellaria baicalensis Georgi) using high-performance liquid chromatography with diode array and mass spectrometric detection. Journal of Chromatography A, 2005, 1062, 199-207.	3.7	120
12	Melatonin: A potential regulator of plant growth and development?. In Vitro Cellular and Developmental Biology - Plant, 2002, 38, 531-536.	2.1	119
13	Nickel contamination affects growth and secondary metabolite composition of St. John's wort (Hypericum perforatum L.). Environmental and Experimental Botany, 2003, 49, 251-257.	4.2	108
14	Changes in the levels of indoleamine phytochemicals during vÃ©raison and ripening of wine grapes. Journal of Pineal Research, 2010, 49, no-no.	7.4	107
15	A new balancing act: The many roles of melatonin and serotonin in plant growth and development. Plant Signaling and Behavior, 2015, 10, e1096469.	2.4	105
16	Light-enhanced caffeic acid derivatives biosynthesis in hairy root cultures of Echinacea purpurea. Plant Cell Reports, 2007, 26, 1367-1372.	5.6	97
17	Thidiazuron-induced regeneration of Echinacea purpurea L.: Micropropagation in solid and liquid culture systems. Plant Cell Reports, 2006, 26, 13-19.	5.6	96
18	Rapid method for accurate analysis of melatonin, serotonin and auxin in plant samples using liquid chromatographyâ€“tandem mass spectrometry. Journal of Chromatography A, 2006, 1134, 333-337.	3.7	89

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19	A metabolomic analysis of medicinal diversity in Huang-qin (Scutellaria baicalensis Georgi) genotypes: discovery of novel compounds. Plant Cell Reports, 2004, 23, 419-425.	5.6	86
20	Thidiazuron-induced plant regeneration from hypocotyl cultures of St. John's wort (Hypericum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 70	5.6	85
21	Regeneration of the Egyptian medicinal plant Artemisia judaica L.. Plant Cell Reports, 2003, 21, 525-530.	5.6	83
22	Melatonin enhances the recovery of cryopreserved shoot tips of <scp>A</scp>merican elm (<scp>U</scp>lmus americana <scp>L</scp>.). Journal of Pineal Research, 2013, 55, 435-442.	7.4	83
23	Morphoregulatory role of thidiazuron: Evidence of the involvement of endogenous auxin in thidiazuron-induced somatic embryogenesis of geranium (Pelargonium Ã— hortorum Bailey). Journal of Plant Physiology, 1996, 149, 573-579.	3.5	81
24	Melatonin and serotonin: Mediators in the symphony of plant morphogenesis. Journal of Pineal Research, 2018, 64, e12452.	7.4	81
25	Induction by thidiazuron of somatic embryogenesis in intact seedlings of peanut. Planta, 1992, 187, 421-4.	3.2	80
26	Title is missing!. Plant Growth Regulation, 2001, 35, 269-275.	3.4	79
27	In vitro regeneration of chickpea (Cicer arietinum L.): Stimulation of direct organogenesis and somatic embryogenesis by thidiazuron. Plant Growth Regulation, 1996, 19, 233-240.	3.4	76
28	Mammalian neurohormones: potential significance in reproductive physiology of St. John's wort (Hypericum perforatum L.)?. Die Naturwissenschaften, 2002, 89, 555-560.	1.6	74
29	The mode of action of thidiazuron: auxins, indoleamines, and ion channels in the regeneration of Echinacea purpurea L.. Plant Cell Reports, 2007, 26, 1481-1490.	5.6	73
30	Caffeic Acid Derivatives Production by Hairy Root Cultures of Echinacea purpurea. Journal of Agricultural and Food Chemistry, 2006, 54, 8456-8460.	5.2	67
31	A melatonin-rich germplasm line of St John's wort (Hypericum perforatum L.). Journal of Pineal Research, 2006, 41, 284-287.	7.4	66
32	Metal Tolerance of Scented Geranium (Pelargonium sp. â€˜Frenshamâ€™): Effects of Cadmium and Nickel on Chlorophyll Fluorescence Kinetics. International Journal of Phytoremediation, 2000, 2, 91-104.	3.1	64
33	In vitro production and chemical characterization of St. Johnâ€™s wort (Hypericum perforatum L. cv) Tj ETQq1 1 0.784314 rgBT /Ove	3.6	64
34	Serotonin: An ancient molecule and an important regulator of plant processes. Biotechnology Advances, 2016, 34, 1347-1361.	11.7	62
35	Direct visualization of location and uptake of applied melatonin and serotonin in living tissues and their redistribution in plants in response to thermal stress. Journal of Pineal Research, 2019, 66, e12527.	7.4	62
36	Somatic embryogenesis and plant regeneration of neem (Azadirachta indica A. Juss.). Plant Cell Reports, 1998, 17, 469-475.	5.6	58

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37	Acetylsalicylic acid enhances and synchronizes thidiazuron-induced somatic embryogenesis in geranium (Pelargonium x hortorum Bailey) tissue cultures. Plant Cell Reports, 1996, 15, 512-515.	5.6	57
38	Echinacea biotechnology: Challenges and opportunities. In Vitro Cellular and Developmental Biology - Plant, 2007, 43, 481-492.	2.1	53
39	In vitro regeneration of Echinacea purpurea L.: Direct somatic embryogenesis and indirect shoot organogenesis in petiole culture. In Vitro Cellular and Developmental Biology - Plant, 2000, 36, 30-36.	2.1	52
40	Medicinal biotechnology in the genus scutellaria. In Vitro Cellular and Developmental Biology - Plant, 2007, 43, 318-327.	2.1	50
41	Comparisons of Scutellaria baicalensis, Scutellaria lateriflora and Scutellaria racemosa: Genome Size, Antioxidant Potential and Phytochemistry. Planta Medica, 2008, 74, 474-481.	1.3	49
42	Title is missing!. Plant Cell, Tissue and Organ Culture, 2000, 62, 169-173.	2.3	48
43	Melatonin in plant signalling and behaviour. Functional Plant Biology, 2018, 45, 58.	2.1	48
44	An efficient temporary immersion system for micropropagation of hybrid hazelnut. Botany, 2016, 94, 1-8.	1.0	41
45	In vitro Culture and Temporary Immersion Bioreactor Production of Crescentia cujete. Plant Cell, Tissue and Organ Culture, 2004, 78, 63-68.	2.3	40
46	Application of 3D printing to prototype and develop novel plant tissue culture systems. Plant Methods, 2017, 13, 6.	4.3	40
47	St. Johnâ€™s wort (Hypericum perforatum L.): Challenges and strategies for production of chemically-consistent plants. Canadian Journal of Plant Science, 2006, 86, 765-771.	0.9	39
48	Induction of high-frequency somatic embryogenesis in geranium (Pelargonium x hortorum Bailey cv) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	5.6	38
49	A Fragrant Solution to Soil Remediation. International Journal of Phytoremediation, 2000, 2, 117-132.	3.1	38
50	In vitro conservation of American elm (Ulmus americana): potential role of auxin metabolism in sustained plant proliferation. Canadian Journal of Forest Research, 2012, 42, 686-697.	1.7	38
51	Thidiazuron-induced morphogenesis of Regal geranium (Pelargonium domesticum): A potential stress response. Physiologia Plantarum, 1997, 101, 183-191.	5.2	37
52	Assessment of genetic stability of the germplasm lines of medicinal plant Scutellaria baicalensis Georgi (Huang-qin) in long-term, in vitro maintained cultures. Plant Cell Reports, 2007, 26, 1345-1355.	5.6	37
53	Identification and characterization of serotonin as an anti-browning compound of apple and pear. Postharvest Biology and Technology, 2015, 110, 183-189.	6.0	36
54	Recent advances in Pelargonium in vitro regeneration systems. Plant Cell, Tissue and Organ Culture, 2001, 67, 1-9.	2.3	35

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55	Title is missing!. Plant Cell, Tissue and Organ Culture, 2003, 75, 143-149.	2.3	35
56	Cadmium and Nickel Uptake and Accumulation in Scented Geranium (Pelargonium sp. `Frensham'). Water, Air, and Soil Pollution, 2002, 137, 355-364.	2.4	33
57	In vitro conservation and sustained production of breadfruit (Artocarpus altilis, Moraceae): modern technologies for a traditional tropical crop. Die Naturwissenschaften, 2008, 95, 99-107.	1.6	33
58	In vitro propagation of North American ginseng (Panax quinquefolius L.). In Vitro Cellular and Developmental Biology - Plant, 2011, 47, 710-718.	2.1	33
59	Elicitation of secondary metabolism in Echinacea purpurea L. by gibberellic acid and triazoles. Engineering in Life Sciences, 2009, 9, 205-210.	3.6	32
60	Optimized system for biomass production, chemical characterization and evaluation of chemo-preventive properties of Scutellaria baicalensis Georgi. Plant Science, 2004, 167, 439-446.	3.6	31
61	Title is missing!. Plant Cell, Tissue and Organ Culture, 2000, 62, 227-234.	2.3	30
62	Auxin driven indoleamine biosynthesis and the role of tryptophan as an inductive signal in Hypericum perforatum (L.). PLoS ONE, 2019, 14, e0223878.	2.5	30
63	Protection against aflatoxin-B1-induced liver mutagenesis by Scutellaria baicalensis. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2005, 578, 15-22.	1.0	29
64	Improved Mass Multiplication of Rhodiola crenulata Shoots Using Temporary Immersion Bioreactor with Forced Ventilation. Applied Biochemistry and Biotechnology, 2012, 166, 1480-1490.	2.9	28
65	Somatic embryogenesis and Agrobacterium -mediated transformation system for scented geraniums () Tj ETQq1 1 0.784314 rgBT /Ov	3.2	27
66	Improved shoot multiplication and development in hybrid hazelnut nodal cultures by ethylenediamine di-2-hydroxy-phenylacetic acid (Fe-EDDHA). Canadian Journal of Plant Science, 2013, 93, 511-521.	0.9	27
67	Thidiazuron-induced somatic embryogenesis in intact seedlings of peanut (Arachis hypogaea): Endogenous growth regulator levels and significance of cotyledons. Physiologia Plantarum, 1995, 94, 268-276.	5.2	26
68	Role of purine metabolism in thidiazuron-induced somatic embryogenesis of geranium (Pelargonium x) Tj ETQq0 0 0 rgBT /Overlock 10 T	5.2	25
69	Variation and Correlation of Properties in Different Grades of Maple Syrup. Plant Foods for Human Nutrition, 2014, 69, 50-56.	3.2	25
70	Melatonin in Plants and Plant Culture Systems: Variability, Stability and Efficient Quantification. Frontiers in Plant Science, 2016, 7, 1721.	3.6	25
71	Melatonin in plant morphogenesis. In Vitro Cellular and Developmental Biology - Plant, 2018, 54, 3-24.	2.1	25
72	Inhibition of phenylpropanoid biosynthesis increases cell wall digestibility, protoplast isolation, and facilitates sustained cell division in American elm (Ulmus americana). BMC Plant Biology, 2012, 12, 75.	3.6	24

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73	Role of purine metabolism in thidiazuron-induced somatic embryogenesis of geranium (Pelargonium x) Tj ETQq1 1 0.784314 rgBT /Ov	5.2	25
74	Anin vitroand Hydroponic Growing System for Hypericin, Pseudohypericin, and Hyperforin Production of St. Johnâ€™s Wort (Hypericum perforatumCV New Stem). Planta Medica, 2002, 68, 1108-1112.	1.3	23
75	Cichoric acid production from hairy root cultures of Echinacea purpurea grown in a modified airlift bioreactor. Journal of Chemical Technology and Biotechnology, 2009, 84, 1697-1701.	3.2	23
76	Cryopreservation of the critically endangered golden paintbrush (Castilleja levisecta Greenm.): from nature to cryobank to nature. In Vitro Cellular and Developmental Biology - Plant, 2018, 54, 69-78.	2.1	23
77	Epigenetic and Genetic Integrity, Metabolic Stability, and Field Performance of Cryopreserved Plants. Plants, 2021, 10, 1889.	3.5	22
78	Genetic diversity in seed populations of Echinacea purpurea controls the capacity for regeneration, route of morphogenesis and phytochemical composition. Plant Cell Reports, 2006, 25, 522-532.	5.6	21
79	Plant Cryopreservation for Biotechnology and Breeding. , 2015, , 63-93.		19
80	Development of cryopreservation methods for cherry birch (Betula lentaL.), an endangered tree species in Canada. Canadian Journal of Forest Research, 2016, 46, 1284-1292.	1.7	19
81	A simple and efficient method for analysis of plant growth regulators: a new tool in the chest to combat recalcitrance in plant tissue culture. Plant Cell, Tissue and Organ Culture, 2017, 131, 459-470.	2.3	19
82	The Morphoregulatory Role of Thidiazuron: Metabolomics-Guided Hypothesis Generation for Mechanisms of Activity. Biomolecules, 2020, 10, 1253.	4.0	19
83	Cryopreservation of potato microtubers: the critical roles of sucrose and desiccation. Plant Cell, Tissue and Organ Culture, 2016, 124, 649-656.	2.3	18
84	Plant signals during beetle (Scolytus multistriatus) feeding in American elm (Ulmus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302	2.4	18
85	In vitro propagation of cherry birch (Betula lentaL.). Canadian Journal of Plant Science, 0, , 571-578.	0.9	17
86	Root cryopreservation to biobank medicinal plants: a case study for Hypericum perforatum L.. In Vitro Cellular and Developmental Biology - Plant, 2019, 55, 392-402.	2.1	17
87	Serotonin in Plants. , 2019, , 23-46.		17
88	Plant regeneration of an endangered medicinal plant Hydrastis canadensis L.. Scientia Horticulturae, 2007, 113, 82-86.	3.6	16
89	High light intensity stress as the limiting factor in micropropagation of sugar maple (Acer saccharum) Tj ETQq1 1 0.784314 rgBT /Ove	2.3	16
90	In Vitro Technology in Plant Conservation: Relevance to Biocultural Diversity. Plants, 2022, 11, 503.	3.5	15

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91	Goldenseal (Hydrastis canadensis L.): In vitro regeneration for germplasm conservation and elimination of heavy metal contamination. In Vitro Cellular and Developmental Biology - Plant, 2004, 40, 75-79.	2.1	13
92	Development of a reliable Corylus sp. reference database through the implementation of a DNA fingerprinting test. Planta, 2019, 249, 1863-1874.	3.2	13
93	Root cryobanking: an important tool in plant cryopreservation. Plant Cell, Tissue and Organ Culture, 2021, 144, 49-66.	2.3	13
94	Induction of high-frequency somatic embryogenesis in geranium (Pelargoniumï¿½hortorum Bailey cv) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	5.6	13
95	In vitroconservation and propagation of medicinal plants. Biodiversity, 2004, 5, 19-24.	1.1	12
96	Improved in vitro rooting in liquid culture using a two piece scaffold system. Engineering in Life Sciences, 2020, 20, 126-132.	3.6	12
97	Morphoregulatory role of thidiazuron: morphogenesis of root outgrowths in thidiazuron-treated geranium (Pelargonium x hortorum Bailey). Plant Cell Reports, 1995, 15, 205-211.	5.6	11
98	Saving threatened plant species: Reintroduction of Hillâ€™s thistle (Cirsium hillii. (Canby) Fernald) to its natural habitat. PLoS ONE, 2020, 15, e0231741.	2.5	11
99	Transcriptomics of Improved Fruit Retention by Hexanal in â€˜Honeycrispâ€™ Reveals Hormonal Crosstalk and Reduced Cell Wall Degradation in the Fruit Abscission Zone. International Journal of Molecular Sciences, 2021, 22, 8830.	4.1	11
100	Galanthamine, an anti-cholinesterase drug, effects plant growth and development inArtemisia tridentataNutt. via modulation of auxin and neurotransmitter signaling. Plant Signaling and Behavior, 2014, 9, e28645.	2.4	10
101	Evaluation of ploidy variations in Hypericum perforatum L. (St. Johnâ€™s wort) germplasm from seeds, in vitro germplasm collection, and regenerants from floral cultures. In Vitro Cellular and Developmental Biology - Plant, 2015, 51, 452-462.	2.1	10
102	In Vitro and Cryobiotechnology Approaches to Safeguard Lupinus rivularis Douglas ex Lindl., an Endangered Plant in Canada. Agronomy, 2021, 11, 37.	3.0	10
103	Iron supplementation promotes in vitro shoot induction and multiplication of Baptisia australis. Plant Cell, Tissue and Organ Culture, 2017, 129, 145-152.	2.3	9
104	Conservation, propagation, and redistribution (CPR) of Hillâ€™s thistle: paradigm for plant species at risk. Plant Cell, Tissue and Organ Culture, 2021, 145, 75-88.	2.3	9
105	Micropropagation of Primulina dryas (Dunn) Mich. MÃ¶ller & A. Webber: High frequency regeneration from leaf explants. Scientia Horticulturae, 2015, 192, 250-255.	3.6	8
106	In vitro rooting of hybrid hazelnuts (Corylus avellana Ã— Corylus americana) in a temporary immersion system. Botany, 2020, 98, 343-352.	1.0	8
107	Cryopreservation of Prunus padus seeds: emphasising the significance of Bayesian methods for data analysis. Canadian Journal of Forest Research, 2016, 46, 766-774.	1.7	7
108	Thidiazuron: Modulator of Morphogenesis In Vitro. , 2018, , 1-36.		7

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109	Metabolomics and hormonomics to crack the code of filbert growth. Metabolomics, 2020, 16, 62.	3.0	7
110	Deciphering the Genome-Wide Transcriptomic Changes during Interactions of Resistant and Susceptible Genotypes of American Elm with Ophiostoma novo-ulmi. Journal of Fungi (Basel,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 697	3.5	7
111	Development of an efficient protocol for high frequency in vitro regeneration of a horticultural plant Primulina tamiana (B.L. Burtt) Mich. MÃ¶ller & A. Webber. Canadian Journal of Plant Science, 2014, 94, 1281-1287.	0.9	6
112	Growth regulating properties of isoprene and isoprenoid-based essential oils. Plant Cell Reports, 2016, 35, 91-102.	5.6	6
113	Physiological and Molecular Responses of Six Apple Rootstocks to Osmotic Stress. International Journal of Molecular Sciences, 2021, 22, 8263.	4.1	6
114	NaCl enhances growth and morphogenesis potential of Alhagi graecorum. In Vitro Cellular and Developmental Biology - Plant, 2006, 42, 607-613.	2.1	5
115	In vitro propagation and reintroduction of golden paintbrush (Castilleja levisecta), a critically imperilled plant species. Canadian Journal of Plant Science, 2018, 98, 762-770.	0.9	5
116	Indoleamines and phenylpropanoids modify development in the bryophyte Plagiomnium cuspidatum (Hedw.) T.J. Kop. In Vitro Cellular and Developmental Biology - Plant, 2018, 54, 454-464.	2.1	5
117	Role of water percolation in reproductive physiology of hazelnut (Corylus spp.). Environmental and Experimental Botany, 2021, 182, 104278.	4.2	5
118	Selection and Micropropagation of an Elite Melatonin Rich Tulsi (Ocimum sanctum L.) Germplasm Line. Agronomy, 2021, 11, 207.	3.0	5
119	Production of Medicinal Plant Species in Sterile, Controlled Environments. , 2000, , 160-165.		5
120	Thidiazuron-induced morphogenesis of Regal geranium (Pelargonium domesticum): A potential stress response. Physiologia Plantarum, 1997, 101, 183-191.	5.2	5
121	Micropropagation and Cryopreservation of Yukon Draba (Draba yukonensis), a Special Concern Plant Species Endemic to Yukon Territory, Canada. Plants, 2021, 10, 2093.	3.5	5
122	In Vitro Technologies for American Chestnut (Castanea dentata (Marshall) Borkh) Conservation. Plants, 2022, 11, 464.	3.5	5
123	Comparative Analysis of Transcriptomes of Ophiostoma novo-ulmi ssp. americana Colonizing Resistant or Sensitive Genotypes of American Elm. Journal of Fungi (Basel, Switzerland), 2022, 8, 637.	3.5	5
124	The Rhizofiltration of Sodium from Hydroponic Fluid using Scented Geraniums. Water, Air, and Soil Pollution, 2002, 140, 343-365.	2.4	4
125	Approaches to Quality Plant Based Medicine: Significance of Chemical Profiling. , 2007, , 311-330.		4
126	Investigating the roles of phenylpropanoids in the growth and development of Zea mays L.. In Vitro Cellular and Developmental Biology - Plant, 2013, 49, 765-772.	2.1	4

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127	Rootstocks Overexpressing StNPR1 and StDREB1 Improve Osmotic Stress Tolerance of Wild-Type Scion in Transgrafted Tobacco Plants. International Journal of Molecular Sciences, 2021, 22, 8398.	4.1	4
128	Preharvest Spray Hexanal Formulation Enhances Postharvest Quality in â€˜Honeycrispâ€™ Apples by Regulating Phospholipase D and Calcium Sensor Proteins Genes. Plants, 2021, 10, 2332.	3.5	4
129	Improved Conservation of Coffee (Coffea arabica L.) Germplasm via Micropropagation and Cryopreservation. Agronomy, 2021, 11, 1861.	3.0	3
130	Optimized St. John's Wort (Hypericum perforatum L.) Germplasm Lines Exert Cytotoxicity in HT-29 Colon Cancer Cells via Downregulation of NF-?B. Journal of Complementary and Integrative Medicine, 2010, 7, .	0.9	2
131	Melatonin Rich Plants: Production, Significance in Agriculture and Human Health. , 2014, , 445-468.		2
132	2004 SIVB Congress Symposium Proceedings â€œThinking Outside the Cellâ€• In Vitro Cellular and Developmental Biology - Plant, 2005, 41, 201-201.	2.1	0
133	A Technique For Predicting How To Better Grow Rare, Endangered, And Recalcitrant Plants. , 2018, , .		0
134	Mammalian Neurotransmitter Are Important Signals Mediating Plant Morphogenesis. , 2019, , 411-449.		0