

# Saikat Gantait

## List of Publications by Year in descending order

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121  
papers

2,476  
citations

230014

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299063

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124  
docs citations

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times ranked

2392  
citing authors

#	ARTICLE	IF	CITATIONS
1	Genetic Transformation in Sugar Beet ( <i>Beta vulgaris</i> L.): Technologies and Applications. <i>Sugar Tech</i> , 2023, 25, 269-281.	0.9	4
2	Alginate Encapsulation of Shoot Tips and Their Regeneration for Enhanced Mass Propagation and Germplasm Exchange of Genetically Stable <i>Stevia rebaudiana</i> Bert.. <i>Sugar Tech</i> , 2023, 25, 542-551.	0.9	5
3	Green synthesis of carbon-based nanomaterials and their applications in various sectors: a topical review. <i>Carbon Letters</i> , 2022, 32, 365-393.	3.3	15
4	Agri-biotechnology of coriander ( <i>Coriandrum sativum</i> L.): an inclusive appraisal. <i>Applied Microbiology and Biotechnology</i> , 2022, 106, 951-969.	1.7	5
5	Drought tolerance improvement in <i>Solanum lycopersicum</i> : an insight into "OMICS" approaches and genome editing. <i>3 Biotech</i> , 2022, 12, 63.	1.1	11
6	Accelerated mono-phasic in vitro mass production of banana propagules and their morpho-cyto-genetic stability assessment. <i>South African Journal of Botany</i> , 2022, 146, 794-806.	1.2	17
7	Enhanced somatic embryogenesis, plant regeneration and total phenolic content estimation in <i>Lycium barbarum</i> L.: a highly nutritive and medicinal plant. <i>Journal of Crop Science and Biotechnology</i> , 2022, 25, 547-555.	0.7	5
8	One-step in vitro protocol for clonal propagation of <i>Dendrobium Yuki White</i> , a high value ornamental orchid hybrid. <i>South African Journal of Botany</i> , 2022, 146, 883-888.	1.2	6
9	M-brigde- and elicitor-assisted enhanced post-storage germination of <i>Rauvolfia serpentina</i> synthetic seeds, their genetic fidelity assessment and reserpine estimation. <i>Industrial Crops and Products</i> , 2022, 180, 114732.	2.5	9
10	Improving crops through transgenic breeding" Technological advances and prospects. , 2022, , 295-324.		2
11	Hyperhydricity-induced changes among in vitro regenerants of gerbera. <i>South African Journal of Botany</i> , 2022, 149, 496-501.	1.2	8
12	Hairy root culture technology: applications, constraints and prospect. <i>Applied Microbiology and Biotechnology</i> , 2021, 105, 35-53.	1.7	35
13	Advances in biotechnology of <i>Emblica officinalis</i> Gaertn. syn. <i>Phyllanthus emblica</i> L.: a nutraceuticals-rich fruit tree with multifaceted ethnomedicinal uses. <i>3 Biotech</i> , 2021, 11, 62.	1.1	41
14	Recent trends in agro-technology, post-harvest management and molecular characterisation of pomegranate. <i>Journal of Horticultural Science and Biotechnology</i> , 2021, 96, 409-427.	0.9	6
15	Induced autopolyploidy" a promising approach for enhanced biosynthesis of plant secondary metabolites: an insight. <i>Journal of Genetic Engineering and Biotechnology</i> , 2021, 19, 4.	1.5	35
16	meta-Topolin-induced enhanced biomass production via direct and indirect regeneration, synthetic seed production, and genetic fidelity assessment of <i>Bacopa monnieri</i> (L.) Pennell, a memory-booster plant. <i>Acta Physiologiae Plantarum</i> , 2021, 43, 1.	1.0	17
17	Secondary metabolites in orchids: Biosynthesis, medicinal uses, and biotechnology. <i>South African Journal of Botany</i> , 2021, 139, 338-351.	1.2	19
18	Tissue culture-based genetic improvement of fava bean ( <i>Vicia faba</i> L.): analysis on previous achievements and future perspectives. <i>Applied Microbiology and Biotechnology</i> , 2021, 105, 6531-6546.	1.7	3

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19	Role of Meta-topolin on in Vitro Shoot Regeneration: An Insight. , 2021, , 143-168.		7
20	Artificial Seed Development of Selected Anti-Diabetic Plants, Their Storage and Regeneration: Progress and Prospect. , 2021, , 409-436.		3
21	Picloram-induced enhanced callus-mediated regeneration, acclimatization, and genetic clonality assessment of gerbera. Journal of Genetic Engineering and Biotechnology, 2021, 19, 175.	1.5	7
22	Cryopreservation of oil palm ( <i>Elaeis guineensis</i> Jacq.) polyembryoids via encapsulation and desiccation. 3 Biotech, 2020, 10, 9.	1.1	8
23	Light Intensity-Induced Morphogenetic Response and Enhanced Î²-Sitosterol Accumulation in Date Palm ( <i>Phoenix dactylifera</i> L. cv. Hayani) Callus Culture. Sugar Tech, 2020, 22, 1122-1129.	0.9	5
24	Ameliorated reserpine production via in vitro direct and indirect regeneration system in <i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz.. 3 Biotech, 2020, 10, 294.	1.1	9
25	Effects of some gelling agents and their concentrations on conversion of oil palm polyembryoids into plantlets. Journal of Genetic Engineering and Biotechnology, 2020, 18, 5.	1.5	6
26	<i>Coleus forskohlii</i> : advancements and prospects of in vitro biotechnology. Applied Microbiology and Biotechnology, 2020, 104, 2359-2371.	1.7	19
27	Role of ethylene crosstalk in seed germination and early seedling development: A review. Plant Physiology and Biochemistry, 2020, 151, 124-131.	2.8	40
28	Biotechnological advancements in <i>Catharanthus roseus</i> (L.) G. Don. Applied Microbiology and Biotechnology, 2020, 104, 4811-4835.	1.7	37
29	Biotechnological Interventions for Ginsenosides Production. Biomolecules, 2020, 10, 538.	1.8	28
30	Tissue Culture-Mediated Biotechnological Advancements in Genus Brassica. , 2020, , 85-107.		2
31	Biotechnological interventions on the genus <i>Rauvolfia</i> : recent trends and imminent prospects. Applied Microbiology and Biotechnology, 2019, 103, 7325-7354.	1.7	35
32	In-silico study of biotic and abiotic stress-related transcription factor binding sites in the promoter regions of rice germin-like protein genes. PLoS ONE, 2019, 14, e0211887.	1.1	44
33	Applications of carbon nanomaterials in the plant system: A perspective view on the pros and cons. Science of the Total Environment, 2019, 667, 485-499.	3.9	210
34	Transgenic Ornamentals for Phytoremediation of Metals and Metalloids. , 2019, , 477-497.		2
35	<i>Justicia beddomei</i> , a source of comprehensive vasicinone production. Israel Journal of Plant Sciences, 2019, 66, 213-219.	0.3	2
36	Extension of postharvest shelf-life in green bell pepper ( <i>Capsicum annuum</i> L.) using exogenous application of polyamines (spermidine and putrescine). Food Chemistry, 2019, 275, 681-687.	4.2	40

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37	Peanut ( <i>Arachis hypogaea</i> L.) Breeding. , 2019, , 253-299.		1
38	Applications of Synthetic Seed Technology for Propagation, Storage, and Conservation of Orchid Germplasms. , 2019, , 301-321.		5
39	Natural production and quantification of ellagic acid in multiple plant parts of three <i>Terminalia</i> spp.. Medicinal Plants - International Journal of Phytomedicines and Related Industries, 2019, 11, 321.	0.1	0
40	Advances in Functional Genomics in Investigating Salinity Tolerance in Plants. , 2019, , 171-188.		2
41	Salient Biotechnological Interventions in Saffron ( <i>Crocus sativus</i> L.): A Major Source of Bio-active Apocarotenoids. , 2019, , 205-223.		0
42	Genetic variability, character association and genetic divergence in groundnut ( <i>Arachis hypogaea</i> L.) accessions. Legume Research, 2019, , .	0.0	0
43	Optimization of planting materials for large scale plantation of <i>Bambusa balcooa</i> Roxb.: Influence of propagation methods. Journal of the Saudi Society of Agricultural Sciences, 2018, 17, 79-87.	1.0	13
44	Engineered nanomaterials for plant growth and development: A perspective analysis. Science of the Total Environment, 2018, 630, 1413-1435.	3.9	196
45	An effective validated method for HPTLC-fingerprinting of alkaloids and glycosides from multiple plant parts of three <i>Terminalia</i> spp.. Israel Journal of Plant Sciences, 2018, 65, 109-117.	0.3	2
46	Influence of auxin and its polar transport inhibitor on the development of somatic embryos in <i>Digitalis trojana</i> . 3 Biotech, 2018, 8, 99.	1.1	18
47	Effect of rootstocks on growth, yield, quality, and leaf mineral composition of Nagpur mandarin ( <i>Citrus reticulata</i> Blanco.), grown in red lateritic soil of West Bengal, India. Scientia Horticulturae, 2018, 237, 142-147.	1.7	15
48	Thidiazuron-Induced Protocorm-Like Bodies in Orchid: Progress and Prospects. , 2018, , 273-287.		10
49	Acacia: An exclusive survey on in vitro propagation. Journal of the Saudi Society of Agricultural Sciences, 2018, 17, 163-177.	1.0	17
50	Geographical Distribution, Botanical Description and Self-Incompatibility Mechanism of Genus <i>Stevia</i> . Sugar Tech, 2018, 20, 1-10.	0.9	46
51	Silver nitrate-induced in vitro shoot multiplication and precocious flowering in <i>Catharanthus roseus</i> (L.) G. Don, a rich source of terpenoid indole alkaloids. Plant Cell, Tissue and Organ Culture, 2018, 132, 579-584.	1.2	24
52	Enhanced growth and cardenolides production in <i>Digitalis purpurea</i> under the influence of different LED exposures in the plant factory. Scientific Reports, 2018, 8, 18009.	1.6	36
53	Transgenic approaches for genetic improvement in groundnut ( <i>Arachis hypogaea</i> L.) against major biotic and abiotic stress factors. Journal of Genetic Engineering and Biotechnology, 2018, 16, 537-544.	1.5	19
54	Cryopreservation of Medicinal Herbs: Major Breakthroughs, Hurdles and Future. , 2018, , 353-381.		7

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55	Fundamental Facets of Somatic Embryogenesis and Its Applications for Advancement of Peanut Biotechnology. , 2018, , 267-298.		2
56	The retrospect and prospect of the applications of biotechnology in Phoenix dactylifera L.. Applied Microbiology and Biotechnology, 2018, 102, 8229-8259.	1.7	33
57	Conserving Biodiversity of a Potent Anticancer Plant, Catharanthus roseus Through In Vitro Biotechnological Intercessions: Substantial Progress and Imminent Prospects. , 2018, , 83-107.		1
58	Transgenic Research on Tomato: Problems, Strategies, and Achievements. , 2018, , 287-334.		1
59	In vitro biotechnological advancements in Malabar nut ( <i>Adhatoda vasica</i> Nees): Achievements, status and prospects. Journal of Genetic Engineering and Biotechnology, 2018, 16, 545-552.	1.5	11
60	Changes in antioxidant and biochemical activities in castor oil-coated <i>Capsicum annum</i> L. during postharvest storage. 3 Biotech, 2018, 8, 280.	1.1	11
61	Cytological analysis for meiotic patterns in wild rice ( <i>Oryza rufipogon</i> Griff.). Biotechnology Reports (Amsterdam, Netherlands), 2017, 13, 26-29.	2.1	2
62	Impact of differential levels of sodium alginate, calcium chloride and basal media on germination frequency of genetically true artificial seeds of <i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz.. Journal of Applied Research on Medicinal and Aromatic Plants, 2017, 4, 75-81.	0.9	24
63	Abscisic acid signal crosstalk during abiotic stress response. Plant Gene, 2017, 11, 61-69.	1.4	32
64	Sex-oriented research on dioecious crops of Indian subcontinent: an updated review. 3 Biotech, 2017, 7, 93.	1.1	14
65	An Efficient In Vitro Approach for Direct Regeneration and Callogenesis of <i>Adhatoda vasica</i> Nees, a Potential Source of Quinazoline Alkaloids. The National Academy of Sciences, India, 2017, 40, 319-324.	0.8	9
66	Concurrent production and relative quantification of vasicinone from in vivo and in vitro plant parts of Malabar nut ( <i>Adhatoda vasica</i> Nees). 3 Biotech, 2017, 7, 280.	1.1	13
67	Does synthetic seed storage at higher temperature reduce reserpine content of <i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz.?. Rendiconti Lincei, 2017, 28, 679-686.	1.0	14
68	Physiological role of rice germin-like protein 1 ( <i>OsGLP1</i> ) at early stages of growth and development in indica rice cultivar under salt stress condition. Plant Cell, Tissue and Organ Culture, 2017, 131, 127-137.	1.2	34
69	Artificial Seed Production of <i>Tylophora indica</i> for Interim Storing and Swapping of Germplasm. Horticultural Plant Journal, 2017, 3, 41-46.	2.3	31
70	In vitro biotechnological approaches on <i>Vanilla planifolia</i> Andrews: advancements and opportunities. Acta Physiologiae Plantarum, 2017, 39, 1.	1.0	27
71	Gibberellic acid coating: A novel approach to expand the shelf-life in green chilli ( <i>Capsicum annum</i> ) Tj ETQq1 1 0.784314 rgBT /Overloc	1.7	33
72	Neoteric trends in tissue culture-mediated biotechnology of Indian ipecac [ <i>Tylophora indica</i> (Burm. f.) Merrill]. 3 Biotech, 2017, 7, 231.	1.1	14

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73	Evaluation of rapeseed-mustard cultivars under late sown condition in coastal ecosystem of West Bengal. <i>Journal of Applied and Natural Science</i> , 2017, 9, 940-949.	0.2	3
74	Evaluation of Genetic Divergence in Spanish Bunch Groundnut ( <i>Arachis hypogaea</i> Linn.) Genotypes. <i>Plant Breeding and Biotechnology</i> , 2017, 5, 163-171.	0.3	3
75	Quantitative description of upper storey vegetation at a foothill forest in Indian Eastern Himalayas., 2017, , 309-316.		3
76	High Performance thin layer chromatographic quantification of key cholesterol reducing compound ( $\beta$ -sitosterol) from leaf, bark, fruit and root of <i>Terminalia arjuna</i> , <i>T. bellerica</i> and <i>T. chebula</i> . <i>Medicinal Plants - International Journal of Phytomedicines and Related Industries</i> , 2017, 9, 272.	0.1	2
77	Cryoconservation methods for extended storage of plant genetic resources., 2017, , 458-464.		2
78	<i>In vitro</i> regeneration of <i>Chlorophytum borivianum</i> Santapau & R.R. Fern.. <i>Medicinal Plants - International Journal of Phytomedicines and Related Industries</i> , 2017, 9, 76.	0.1	0
79	LVC-priming mediated modulation of forskolin biosynthesis key genes against <i>Macrophomina</i> root rot of <i>Coleus forskohlii</i> – A tissue culture based sustainable approach. <i>Phytochemistry Letters</i> , 2016, 17, 36-44.	0.6	13
80	Cryopreservation of Forest Tree Seeds: A Mini-Review. <i>Journal of Forest and Environmental Science</i> , 2016, 32, 311-322.	0.2	7
81	Asymbiotic Germination of <i>Phalaenopsis</i> cv. "Dublin"™ Seeds in Relation to Pollination Months and Nutrient Media. <i>Notulae Scientia Biologicae</i> , 2015, 7, 330-333.	0.1	0
82	Capsule formation and asymbiotic seed germination in some hybrids of <i>Phalaenopsis</i> , influenced by pollination season and capsule maturity. <i>Physiology and Molecular Biology of Plants</i> , 2015, 21, 341-347.	1.4	11
83	Synthetic seed production of medicinal plants: a review on influence of explants, encapsulation agent and matrix. <i>Acta Physiologiae Plantarum</i> , 2015, 37, 1.	1.0	96
84	<i>In vitro</i> regeneration of high value spice <i>Crocus sativus</i> L.: A concise appraisal. <i>Journal of Applied Research on Medicinal and Aromatic Plants</i> , 2015, 2, 124-133.	0.9	14
85	Bamboo: an overview on its genetic diversity and characterization. <i>3 Biotech</i> , 2015, 5, 1-11.	1.1	75
86	Storage of encapsulated oil palm polyembryoids: influence of temperature and duration. <i>In Vitro Cellular and Developmental Biology - Plant</i> , 2015, 51, 118-124.	0.9	13
87	<i>Stevia</i> : A Comprehensive Review on Ethnopharmacological Properties and <i>In Vitro</i> Regeneration. <i>Sugar Tech</i> , 2015, 17, 95-106.	0.9	56
88	Improved cryopreservation of oil palm ( <i>Elaeis guineensis</i> Jacq.) polyembryoids using droplet vitrification approach and assessment of genetic fidelity. <i>Protoplasma</i> , 2015, 252, 89-101.	1.0	24
89	Gibberellins - A Multifaceted Hormone in Plant Growth Regulatory Network. <i>Current Protein and Peptide Science</i> , 2015, 16, 406-412.	0.7	30
90	Influence of encapsulating agent and matrix levels on synseed production of <i>Bacopa monnieri</i> (L.) Pennell. <i>Medicinal Plants - International Journal of Phytomedicines and Related Industries</i> , 2015, 7, 182.	0.1	6

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91	Asymbiotic Germination of <i>Phalaenopsis</i> cv. "Dublin"™ Seeds in Relation to Pollination Months and Nutrient Media. <i>Notulae Scientia Biologicae</i> , 2015, 7, .	0.1	0
92	Aloe vera: a review update on advancement of in vitro culture. <i>Acta Agriculturae Scandinavica - Section B Soil and Plant Science</i> , 2014, 64, 1-12.	0.3	11
93	Selection of Rice Genotypes for Salinity Tolerance Through Morpho-Biochemical Assessment. <i>Rice Science</i> , 2014, 21, 288-298.	1.7	10
94	In vitro direct rhizogenesis from <i>Gerbera jamesonii</i> Bolus leaf. <i>Acta Physiologiae Plantarum</i> , 2014, 36, 3081-3087.	1.0	4
95	Screening of rice landraces for salinity tolerance at seedling stage through morphological and molecular markers. <i>Physiology and Molecular Biology of Plants</i> , 2014, 20, 411-423.	1.4	78
96	Genomic profile of the plants with pharmaceutical value. <i>3 Biotech</i> , 2014, 4, 563-578.	1.1	29
97	Cryopreservation of immature <i>Parkia speciosa</i> Hassk. zygotic embryonic axes following desiccation or exposure to vitrification solution. <i>Acta Physiologiae Plantarum</i> , 2013, 35, 2629-2634.	1.0	5
98	Storability, post-storage conversion and genetic stability assessment of alginate-encapsulated shoot tips of monopodial orchid hybrid Aranda Wan Chark Kuan "Blue"™—Vanda coerulea Griff. ex. Lindl.. <i>Plant Biotechnology Reports</i> , 2013, 7, 257-266.	0.9	29
99	In vitro developmental study of oil palm ( <i>Elaeis guineensis</i> Jacq.) polyembryoids from cell suspension using scanning electron microscopy. <i>Acta Physiologiae Plantarum</i> , 2013, 35, 1727-1733.	1.0	11
100	A potential retardant for lodging resistance in direct seeded rice ( <i>Oryza sativa</i> L.). <i>Canadian Journal of Plant Science</i> , 2012, 92, 13-18.	0.3	21
101	Rapid micropropagation of monopodial orchid hybrid (Aranda Wan Chark Kuan "Blue"™—Vanda coerulea) Growth Regulation, 2012, 68, 129-140.	Tj ETQq1 1 0.7843 1.8	29
102	Alginate-encapsulation, short-term storage and plant regeneration from protocorm-like bodies of Aranda Wan Chark Kuan "Blue"™—Vanda coerulea Griff. ex. Lindl. (Orchidaceae). <i>Plant Growth Regulation</i> , 2012, 68, 303-311.	1.8	33
103	Direct induction of protocorm-like bodies from shoot tips, plantlet formation, and clonal fidelity analysis in <i>Anthurium andreanum</i> cv. CanCan. <i>Plant Growth Regulation</i> , 2012, 67, 257-270.	1.8	28
104	Effect of loading and vitrification solutions on survival of cryopreserved oil palm polyembryoids. <i>Plant Growth Regulation</i> , 2012, 66, 101-109.	1.8	27
105	Influence of gibberellin A3 application, pH of the medium, photoperiod and temperature on the enhancement of in vitro flowering in <i>Vitex negundo</i> L.. <i>Plant Growth Regulation</i> , 2012, 66, 203-209.	1.8	8
106	Morphology, flow cytometry and molecular assessment of ex-vitro grown micropropagated anthurium in comparison with seed germinated plants. <i>African Journal of Biotechnology</i> , 2011, 10, 13991-13998.	0.3	18
107	Induction and identification of tetraploids using in vitro colchicine treatment of <i>Gerbera jamesonii</i> Bolus cv. Sciella. <i>Plant Cell, Tissue and Organ Culture</i> , 2011, 106, 485-493.	1.2	79
108	A two step method for accelerated mass propagation of <i>Dendrocalamus asper</i> and their evaluation in field. <i>Physiology and Molecular Biology of Plants</i> , 2011, 17, 387-393.	1.4	21

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109	<i>In vitro</i> accelerated mass propagation and <i>ex vitro</i> evaluation of <i>Aloe vera</i> L. with aloin content and superoxide dismutase activity. <i>Natural Product Research</i> , 2011, 25, 1370-1378.	1.0	23
110	An elite protocol for accelerated quality-cloning in <i>Gerbera jamesonii</i> Bolus cv. Sciella. <i>In Vitro Cellular and Developmental Biology - Plant</i> , 2010, 46, 537-548.	0.9	20
111	Advances in Micropropagation of Selected Aromatic Plants: A Review on Vanilla and Strawberry. <i>American Journal of Biochemistry and Molecular Biology</i> , 2010, 1, 1-19.	0.6	7
112	An Overview on <i>in vitro</i> Culture of Genus <i>Allium</i> . <i>American Journal of Plant Physiology</i> , 2010, 5, 325-337.	0.2	11
113	Determination of Genetic Integrity in Long-term Micropropagated Plantlets of <i>Allium ampeloprasum</i> L. Using ISSR Markers. <i>Biotechnology</i> , 2010, 9, 218-223.	0.5	21
114	A Novel Strategy for <i>in vitro</i> Conservation of <i>Aloe vera</i> L. through Long Term Shoot Culture. <i>Biotechnology</i> , 2010, 9, 326-331.	0.5	18
115	Micropropagation of an Elite Medicinal Plant: <i>Stevia rebaudiana</i> Bert.. <i>International Journal of Agricultural Research</i> , 2010, 6, 40-48.	0.0	49
116	Tissue Culture of <i>Anthurium andreanum</i> : A Significant Review and Future Prospective. <i>International Journal of Botany</i> , 2010, 6, 207-219.	0.2	27
117	<i>In vitro</i> Mass Multiplication with Pure Genetic Identity in <i>Anthurium andreanum</i> Lind.. <i>Plant Tissue Culture and Biotechnology</i> , 2009, 18, 113-122.	0.1	23
118	Optimization of growing conditions, substrate-types and their concentrations for acclimatization and post-acclimatization growth of <i>in vitro</i> -raised flame lily ( <i>Gloriosa superba</i> L.) plantlets. <i>Vegetos</i> , 0, , 1.	0.8	1
119	Cryo-conservation of <i>Musa</i> germplasms: progress and prospect. <i>Conservation Genetics Resources</i> , 0, , 1.	0.4	1
120	Biotechnology of banana ( <i>Musa</i> spp.): multi-dimensional progress and prospect of <i>in vitro</i> mediated system. <i>Applied Microbiology and Biotechnology</i> , 0, , .	1.7	3
121	How Do Extraction Methods and Biotechnology Influence Our Understanding and Usages of Ginsenosides?: A Critical View and Perspectives. , 0, , .		0