Sumita Jha

List of Publications by Year
in descending order

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130	2,239	236833	302012
papers	citations	25 h-index	39 g-index

134	134	134	1434
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Elicitation: A biotechnological tool for enhanced production of secondary metabolites in hairy root cultures. Engineering in Life Sciences, 2019, 19, 880-895.	2.0	163
2	Changes in morphological phenotypes and withanolide composition of Ri-transformed roots of Withania somnifera. Plant Cell Reports, 2007, 26, 599-609.	2.8	90
3	Production of Withaferin A in Shoot Cultures of Withania somnifera. Planta Medica, 2001, 67, 432-436.	0.7	81
4	Genetic transformation of Tylophora indica with Agrobacterium rhizogenesï¿½A4: growth and tylophorine productivity in different transformed root clones. Plant Cell Reports, 2005, 24, 25-35.	2.8	78
5	Genetic transformation of Bacopa monnieri by wild type strains of Agrobacterium rhizogenes stimulates production of bacopa saponins in transformed calli and plants. Plant Cell Reports, 2011, 30, 941-954.	2.8	72
6	Spontaneous plant regeneration in transformed roots and calli from Tylophora indica: changes in morphological phenotype and tylophorine accumulation associated with transformation by Agrobacterium rhizogenes. Plant Cell Reports, 2006, 25, 1059-1066.	2.8	59
7	Withanolide Production by Root Cultures ofWithania somniferaTransformed withAgrobacterium rhizogenes. Planta Medica, 1996, 62, 571-573.	0.7	53
8	Title is missing!. Biotechnology Letters, 2002, 24, 231-234.	1.1	53
9	A critical review on use of Agrobacterium rhizogenes and their associated binary vectors for plant transformation. Biotechnology Advances, 2019, 37, 107405.	6.0	48
10	In vitro propagation of cashewnut. Plant Cell Reports, 1996, 15, 615-619.	2.8	46
11	Somatic embryogenesis from immature cotyledons of an elite Darjeeling tea clone. Plant Science, 1992, 84, 209-213.	1.7	44
12	The root: a potential new source of competent cells for high-frequency regeneration in Tylophora indica. Plant Cell Reports, 2004, 22, 731-740.	2.8	43
13	Transgenic mimicry of pathogen attack stimulates growth and secondary metabolite accumulation. Transgenic Research, 2009, 18, 121-134.	1.3	42
14	Aluminium Chloride Enhances Colchicine Production in Root Cultures of Gloriosa superba. Biotechnology Letters, 2006, 28, 497-503.	1.1	41
15	Establishment of forskolin yielding transformed cell suspension cultures of Coleus forskohlii as controlled by different factors. Journal of Biotechnology, 2000, 76, 73-81.	1.9	40
16	Withanolide synthesis in cultures of Withania somnifera transformed with Agrobacterium tumefaciens. Plant Science, 1999, 146, 1-7.	1.7	38
17	In vitro regeneration from bulb explants of Indian squill, Urginea indica Kunth. Plant Cell, Tissue and Organ Culture, 1984, 3, 91-100.	1.2	32
18	Production of the Alkaloids Emetine and Cephaeline in Callus Cultures ofCephaelis ipecacuanha. Planta Medica, 1988, 54, 504-506.	0.7	32

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19	Micropropagation of Cephaelis ipecacuanha rich. Plant Cell Reports, 1989, 8, 437-439.	2.8	30
20	Genetic transformation of Artemisia annua by Agrobacterium tumefaciens and artemisinin synthesis in transformed cultures. Plant Science, 1997, 122, 193-199.	1.7	30
21	Variation in Content of Taxol and Related Taxanes in Eastern Himalayan Populations of Taxus wallichiana. Planta Medica, 2002, 68, 757-759.	0.7	30
22	Use of the cryptogein gene to stimulate the accumulation of bacopa saponins in transgenic Bacopa monnieri plants. Plant Cell Reports, 2012, 31, 1899-1909.	2.8	30
23	Biotechnological Approaches for Production of Anti-Cancerous Compounds Resveratrol, Podophyllotoxin and Zerumbone. Current Medicinal Chemistry, 2018, 25, 4693-4717.	1.2	30
24	In Vitro Propagation, Phytochemical and Neuropharmacological Profiles of Bacopa monnieri (L.) Wettst.: A Review. Plants, 2020, 9, 411.	1.6	29
25	Improved Taxol Yield in Cell Suspension Culture ofTaxus wallichiana(Himalayan Yew). Planta Medica, 1998, 64, 270-272.	0.7	28
26	Organogenesis and plant regeneration in Taxus wallichiana (Zucc.). Plant Cell Reports, 2006, 25, 11-18.	2.8	27
27	Agrobacterium rhizogenes-Mediated Transformation in Medicinal Plants: Prospects and Challenges. , 2013, , 29-68.		27
28	Bufadienolides in different chromosomal races of Indian squill. Phytochemistry, 1981, 20, 524-526.	1.4	23
29	In vitro tuberisation of Gloriosa superba L. on basal medium. Scientia Horticulturae, 2007, 114, 220-223.	1.7	23
30	Development of an ISSR based STS marker for sex identification in pointed gourd (Trichosanthes dioica) Tj ETQq0 0 0 rgBT /Overlock 10	1.7	23
31	Enhanced trans-resveratrol production in genetically transformed root cultures of Peanut (Arachis) Tj ETQq1 1 0.784314 rgBT /Overlo	1.2	23
32	Genetic and morphological stability of six-year-old transgenic Tylophora indica plants. Nucleus (India), 2013, 56, 81-89.	0.9	22
33	Quantitation of Principal Bufadienolides in Different Cytotypes of Urginea indica. Planta Medica, 1983, 47, 43-45.	0.7	21
34	Production of emetine and cephaeline from cell suspension and excised root cultures of Cephaelis ipecacuanha. Phytochemistry, 1991, 30, 3999-4003.	1.4	21
35	Forskolin synthesis in in vitro cultures of Coleus forskohlii Briq transformed with Agrobacterium tumefaciens. Plant Cell Reports, 1996, 15, 691-694.	2.8	21
36	Dynamics of sex expression and chromosome diversity in Cucurbitaceae: a story in the making. Journal of Genetics, 2015, 94, 793-808.	0.4	21

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37	Metabolic shift from withasteroid formation to phenylpropanoid accumulation in cryptogein-cotransformed hairy roots of Withania somnifera (L.) Dunal. Protoplasma, 2015, 252, 1097-1110.	1.0	21
38	Chromosome study of diploid Indian squill, Urginea indica Kunth.. Cytologia, 1983, 48, 79-86.	0.2	20
39	Transcriptome profiling of the floral buds and discovery of genes related to sex-differentiation in the dioecious cucurbit Coccinia grandis (L.) Voigt. Gene, 2017, 626, 395-406.	1.0	20
40	Biotechnological approaches for the production of forskolin, withanolides, colchicine and tylophorine. Plant Genetic Resources: Characterisation and Utilisation, 2005, 3, 101-115.	0.4	19
41	An improved method of genome size estimation by flow cytometry in five mucilaginous species of Hyacinthaceae. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2014, 85, 833-840.	1.1	19
42	Effects associated with insertion of cryptogein gene utilizing Ri and Ti plasmids on morphology and secondary metabolites are stable in Bacopa monnieri-transformed plants grown in vitro and ex vitro. Plant Biotechnology Reports, 2015, 9, 231-245.	0.9	19
43	Characterization of Podophyllotoxin Yielding Cell Lines ofPodophyllum hexandrum. Caryologia, 2009, 62, 220-235.	0.2	18
44	Morphological and molecular variation in Ri-transformed root lines are stable in long term cultures of Tylophora indica. Plant Growth Regulation, 2015, 75, 443-453.	1.8	17
45	A Critical Review on Biotechnological Interventions for Production and Yield Enhancement of Secondary Metabolites in Hairy Root Cultures. , 2018, , 21-44.		17
46	Karyotype analysis of three important traditional Indian medicinal plants, Bacopa monnieri, Tylophora indica and Withania somnifera. Nucleus (India), 2012, 55, 17-20.	0.9	16
47	Title is missing!. Biotechnology Letters, 2000, 22, 133-136.	1.1	14
48	Hairy Roots: A Promising Tool for Phytoremediation. , 2012, , 607-629.		14
49	Genetic transformation of sarpagandha (Rauvolfia serpentina) with Agrobacterium rhizogenes for identification of high alkaloid yielding lines. Acta Physiologiae Plantarum, 2014, 36, 1599-1605.	1.0	14
50	Karyological relationships in Indian species of Drimia based on fluorescent chromosome banding and nuclear DNA amount. Protoplasma, 2015, 252, 283-299.	1.0	14
51	Differential heterochromatin distribution, flow cytometric genome size and meiotic behavior of chromosomes in three Cucurbitaceae species. Scientia Horticulturae, 2015, 193, 322-329.	1.7	14
52	The Effects of rol Genes of Agrobacterium rhizogenes on Morphogenesis and Secondary Metabolite Accumulation in Medicinal Plants. , 2018, , 27-51.		14
53	Genetic Transformation of Plumbago zeylanica with Agrobacterium rhizogenes Strain LBA 9402 and Characterization of Transformed Root Lines. Plant Tissue Culture and Biotechnology, 2015, 25, 21-35.	0.1	13
54	Regeneration and rapid multiplication of Bowiea volubilis Harv. in tissue culture. Plant Cell Reports, 1985, 4, 12-14.	2.8	12

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55	Karyotype stability in long-term callus derived plants ofCrepis tectorum L.. Biologia Plantarum, 1988, 30, 247-251.	1.9	12
56	An APETALA3 MADS-box linked SCAR marker associated with male specific sex expression in Coccinia grandis (L). Voigt. Scientia Horticulturae, 2014, 176, 85-90.	1.7	12
57	Tobacco plantlets ameliorate oxidative stress upon expression of a cryptogein gene. Plant Cell, Tissue and Organ Culture, 2016, 125, 553-570.	1.2	12
58	Cytogenetics of two Indian varieties of Momordica charantia L. (bittergourd). Scientia Horticulturae, 2018, 240, 333-343.	1.7	12
59	Plants: The Future Pharmaceutical Factory. American Journal of Plant Sciences, 2014, 05, 319-327.	0.3	12
60	Sterols in different cytological races of Urginea indica. Phytochemistry, 1981, 20, 1442-1443.	1.4	11
61	Chromosome study of polyploid indian squill, Urginea indica Kunth.. Cytologia, 1983, 48, 407-418.	0.2	11
62	Nuclear changes and organogenesis during callus culture of Urginea indica Kunth., Indian squill.. Cytologia, 1987, 52, 433-438.	0.2	11
63	Karyotype variability in regenerated plants of Urginea indica Kunth.. Cytologia, 1987, 52, 615-626.	0.2	11
64	Morphological and cytogenetical characterization of â€˜Dalle Khursaniâ€™: a polyploid cultivated Capsicum of India. Scientia Horticulturae, 2017, 215, 80-90.	1.7	11
65	Callus induction, organogenesis and somatic embryogenesis in three chromosomal races of Urginea indica and production of bufadienolides. Plant Cell, Tissue and Organ Culture, 1991, 25, 85-90.	1.2	11
66	Development of Indian Squill (Urginea indica Kunth.) through Somatic Embryogenesis from Long Term Culture. Journal of Plant Physiology, 1986, 124, 431-439.	1.6	10
67	Micropropagation and genetic transformation of Tylophora indica (Burm. f.) Merr.: a review. Plant Cell Reports, 2016, 35, 2207-2225.	2.8	10
68	Chromosomal localization of 45S rDNA, sex-specific C values, and heterochromatin distribution in Coccinia grandis (L.) Voigt. Protoplasma, 2016, 253, 201-209.	1.0	10
69	Chromosome number and modal karyotype in a polysomatic endangered orchid, Bulbophyllum auricomum Lindl., the Royal Flower of Myanmar. Plant Systematics and Evolution, 2011, 294, 167-175.	0.3	9
70	Cytogenetic characterization of Agrobacterium rhizogenes transformed root lines of Rauvolfia serpentina. Nucleus (India), 2014, 57, 105-112.	0.9	9
71	Molecular phylogenetic studies based on rDNA ITS, cpDNA trnL intron sequence and cladode characteristics in nine Protasparagus taxa. Protoplasma, 2015, 252, 1121-1134.	1.0	9
72	Role of Exogenous Carbohydrate and Amino Acid Sources on Biomass and Colchicine Production in Nontransformed Root Cultures of Gloriosa superba. Plant Tissue Culture and Biotechnology, 2016, 25, 247-256.	0.1	9

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73	Agrobacterium rhizogenes-Mediated Transformation in Medicinal Plants: Genetic Stability in Long-Term Culture. , 2016, , 1-23.		9
74	Plant Regeneration Through Somatic Embryogenesis in Taxus wallichiana. Journal of Plant Biochemistry and Biotechnology, 2008, 17, 37-44.	0.9	8
75	Bacosides and Neuroprotection. , 2013, , 3639-3660.		8
76	Metabolic Engineering for Improving Production of Taxol. Reference Series in Phytochemistry, 2017, , 463-484.	0.2	8
77	Agrobacterium rhizogenes-Mediated Transformation in Medicinal Plants: Genetic Stability in Long-Term Culture. Reference Series in Phytochemistry, 2017, , 323-345.	0.2	8
78	Morpho-histological characterization and direct shoot organogenesis in two types of explants from Bacopa monnieri on unsupplemented basal medium. Plant Cell, Tissue and Organ Culture, 2017, 130, 435-441.	1.2	8
79	In vitro regeneration of Ruscus hypophyllum L. plants. Plant Cell, Tissue and Organ Culture, 1985, 5, 79-87.	1.2	7
80	Cytological Analysis of Embryogenic Callus and Regenerated Plants ofUrginea IndicaKunth., Indian Squill. Caryologia, 1989, 42, 165-173.	0.2	7
81	Stable regenerants from long-term callus cultures of Ruscus hypophyllum L.. Cytologia, 1989, 54, 687-691.	0.2	7
82	Factors affecting in vitro development of embryonic axes of cashewnut. Scientia Horticulturae, 1999, 82, 135-144.	1.7	7
83	Chromosome morphometric analysis of Indian cultivars of Lens culinaris Medik. using EMA based Giemsa staining method. Caryologia, 2017, 70, 270-283.	0.2	7
84	Ribosomal DNA ITS1, 5.8S and ITS2 secondary structure, nuclear DNA content and phytochemical analyses reveal distinctive characteristics of four subclades of Protasparagus. Journal of Systematics and Evolution, 2017, 55, 54-70.	1.6	7
85	Effects of cryptogein gene on growth, phenotype and secondary metabolite accumulation in co-transformed roots and plants of Tylophora indica. Acta Physiologiae Plantarum, 2017, 39, 1.	1.0	7
86	Differences in Karyotype and Fluorochrome Banding Patterns among Variations of Trichosanthes cucumerina with Different Fruit Size. Cytologia, 2019, 84, 237-245.	0.2	7
87	A phylogenetic analysis of Momordica (Cucurbitaceae) in India based on karyo-morphology, nuclear DNA content and rDNA ITS1â€“5.8Sâ€“ITS2 sequences. Protoplasma, 2021, 258, 347-360.	1.0	7
88	Induction of mitosis in polytene nuclei and hormonal effect on nuclear changes during callus initiation in diploid Urginea indica Kunth. (liliaceae). Genetica, 1990, 80, 9-15.	0.5	6
89	Organogenesis and regeneration from pigmented callus in Camellia sinensis (L.) O. Kuntze cv. Nandadevi, an elite Darjeeling tea clone. Plant Science, 1996, 121, 207-212.	1.7	6
90	Polymorphism in Gloriosa superba. Plant Genetic Resources: Characterisation and Utilisation, 2009, 7, 9-15.	0.4	6

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91	Agrobacterium rhizogenes Mediated Transformation of the Critically Endangered Species, Swertia chirayita. Plant Tissue Culture and Biotechnology, 2020, 29, 231-244.	0.1	6
92	Morphogenesis, Genetic Stability, and Secondary Metabolite Production in Untransformed and Transformed Cultures. Reference Series in Phytochemistry, 2021, , 663-722.	0.2	6
93	Higher Production of Forskolin in Genetically Transformed Cultures of Coleus forskohlii Briq Induced by Growth Regulators. Journal of Plant Biochemistry and Biotechnology, 2003, 12, 81-85.	0.9	5
94	Molecular characterization of aromatic Oryza sativa L. cultivars from West Bengal, India. Nucleus (India), 2012, 55, 83-88.	0.9	5
95	Cytogenetic and DNA fingerprinting analysis in three species ofSwertiafrom Eastern Himalaya. Caryologia, 2015, 68, 207-216.	0.2	5
96	A molecular phylogeny of the genus Drimia (Asparagaceae: Scilloideae: Urgineeae) in India inferred from non-coding chloroplast and nuclear ribosomal DNA sequences. Scientific Reports, 2019, 9, 7563.	1.6	5
97	Cytogenetic Diversity in Scilloideae (Asparagaceae): a Comprehensive Recollection and Exploration of Karyo-Evolutionary Trends. Botanical Review, The, 2023, 89, 158-200.	1.7	5
98	Alkaloids Derived from Tyrosine: Penethylisoquinoline (Autumnaline, Colchicine). , 2013, , 461-478.		4
99	The Fate of Integrated Ri T-DNA rol Genes during Regeneration via Somatic Embryogenesis in Tylophora indica. Journal of Botany, 2015, 2015, 1-16.	1.2	4
100	Hairy Roots and Phytoremediation. , 2016, , 1-24.		4
101	A sequence tagged site (STS) marker encoding Copia-like retrotransposable element is associated with male specific sex expression in Momordica dioica Roxb.. Scientia Horticulturae, 2016, 201, 265-270.	1.7	4
102	Hairy Roots and Phytoremediation. Reference Series in Phytochemistry, 2018, , 549-572.	0.2	4
103	Medicinal Plant Research at Crossroads: Biotechnological Approaches for Conservation, Production and Stability in Tissue Cultures and Regenerated Plants. Sustainable Development and Biodiversity, 2021, , 459-544.	1.4	4
104	Effects associated with insertion of rol genes on morphogenic potential in explants derived from transgenic Bacopa monnieri (L.) Wettst. Plant Cell, Tissue and Organ Culture, 2021, 146, 541-552.	1.2	4
105	Indian Swertia from Eastern Himalaya: Strategies of Conservation and Biotechnological Improvements. , 2014, , 279-301.		4
106	Tissue Culture of Cashewnut. , 2004, , 244-260.		3
107	Genomic variations among in vitro regenerated Bulbophyllum auricomum Lindl. plants. Nucleus (India), 2011, 54, 9-17.	0.9	3
108	A new online database on genome-related information of Indian plants. Plant Systematics and Evolution, 2019, 305, 837-843.	0.3	3

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109	Colchicine â€“ an Overview for Plant Biotechnologists. , 2008, , 215-232.		3
110	In vitro propagation of cashewnut. Plant Cell Reports, 1996, 15, 615-619.	2.8	3
111	ï»¿A critical review on cytogenetics of Cucurbitaceae with updates on Indian taxa. Comparative Cytogenetics, 2022, 16, 93-125.	0.3	3
112	Bufadienolides. , 1988, , 179-191.		2
113	A Comparative Account of Fluorescent Banding Pattern in the Karyotypes of Two Indian Luffa Species. Cytologia, 2021, 86, 35-39.	0.2	2
114	Tuberous Medicinal Plants of India: Biology and Biotechnology. , 2016, , 319-345.		2
115	Forskolin synthesis in in vitro cultures of Coleus forskohlii Briq transformed with Agrobacterium tumefaciens. Plant Cell Reports, 1996, 15, 691-694.	2.8	2
116	A simple and efficient protocol for hairy root culture of Arabidopsis thaliana. Plant Cell, Tissue and Organ Culture, 2022, 150, 105-112.	1.2	2
117	Influence on chromosome behaviour, nucleic acid content and ultra-structural analysis of accessories inUrginea indica KUNTH.. Biologia Plantarum, 1984, 26, 260-262.	1.9	1
118	An analysis of somatic and meiotic behaviour of chromosomes ofBowiea volubilis HARV.. Biologia Plantarum, 1984, 26, 299-302.	1.9	1
119	TISSUE CULTURE OF SMILAX ZEYLANICA L.. Acta Horticulturae, 1987, , 273-279.	0.1	1
120	Morphogenesis, Genetic Stability, and Secondary Metabolite Production in Untransformed and Transformed Cultures. Reference Series in Phytochemistry, 2020, , 1-60.	0.2	1
121	Genetic Transformation for Production of Secondary Metabolites. , 2007, , 297-333.		1
122	Morphogenesis, Genetic Stability, and Secondary Metabolite Production in Untransformed and Transformed Cultures. Reference Series in Phytochemistry, 2020, , 1-60.	0.2	1
123	The rolBâ€transgenic <scp>Nicotiana tabacum</scp> plants exhibit upregulated ARF7 and ARF19 gene expression. Plant Direct, 2022, 6, .	0.8	1
124	Relation Between Bufadienolide Content and Differentiation in Tissue Cultures ofUrginea indica. Planta Medica, 1989, 55, 687-687.	0.7	0
125	Regeneration and Multiplication of Shoots inGlochidion multiloculaireMuell-Arg.. Journal of Herbs, Spices and Medicinal Plants, 1995, 3, 67-74.	0.5	0
126	Flow Cytometry and Its Utility. , 2017, , 109-126.		0

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127	Fluorescent Chromosome Banding and Genome Size Estimation in Three Species of Swertia. Cytologia, 2017, 82, 513-520.	0.2	0
128	Targeted profiling reveals metabolic perturbations in cryptogein-cotransformed hairy root cultures of Nicotiana tabacum. Acta Physiologiae Plantarum, 2020, 42, 1.	1.0	0
129	Metabolic Engineering for Improving Production of Taxol. Reference Series in Phytochemistry, 2016, , 1-22.	0.2	0
130	A Proteomic Approach to Evaluate the Effects of Endogenous Expression of Cryptogein Gene in Crypt-Transgenic Plants of Bacopa monnieri. Journal of Applied Biotechnology & Bioengineering, 2017, 4, .	0.0	0