Altaf Ahmad

List of Publications by Year
in descending order

132 papers	3,851 citations	126708 33 h-index	161609 54 g-index
138 all docs	138 docs citations	138 times ranked	4278 citing authors

#	Article	IF	Citations
1	Physiological, Agronomical, and Proteomic Studies Reveal Crucial Players in Rice Nitrogen Use Efficiency under Low Nitrogen Supply. International Journal of Molecular Sciences, 2022, 23, 6410.	1.8	9
2	Impact of Ferrous Sulfate on Thylakoidal Multiprotein Complexes, Metabolism and Defence of Brassica juncea L. under Arsenic Stress. Plants, 2022, 11, 1559.	1.6	1
3	Salinity tolerance mechanism in the aquatic nitrogen fixing pteridophyte Azolla: a review. Symbiosis, 2021, 83, 129-142.	1.2	5
4	Antibacterial and Antifungal Activity of the Extracts of Different Parts of Avicennia marina (Forssk.) Vierh. Plants, 2021, 10, 252.	1.6	29
5	Nitrogen Challenges and Opportunities for Agricultural and Environmental Science in India. Frontiers in Sustainable Food Systems, 2021, 5, .	1.8	29
6	FRET-Based Genetically Encoded Nanosensor for Real-Time Monitoring of the Flux of Î±-Tocopherol in Living Cells. ACS Omega, 2021, 6, 9020-9027.	1.6	3
7	Designing and Development of FRET-Based Nanosensor for Real Time Analysis of N-Acetyl-5-Neuraminic Acid in Living Cells. Frontiers in Nutrition, 2021, 8, 621273.	1.6	2
8	Ethylene reduces glucose sensitivity and reverses photosynthetic repression through optimization of glutathione production in salt-stressed wheat (Triticum aestivum L.). Scientific Reports, 2021, 11, 12650.	1.6	36
9	Suitability of Indian mustard genotypes for phytoremediation of mercury-contaminated sites. South African Journal of Botany, 2021, 142, 12-18.	1.2	11
10	TDZ-Induced Efficient Micropropagation from Juvenile Nodal Segment of Syzygium cumini (Skill): A Recalcitrant Tree. , 2021, , 163-175.		4
11	Modulation in growth, biochemical attributes and proteome profile of rice cultivars under salt stress. Plant Physiology and Biochemistry, 2020, 146, 55-70.	2.8	49
12	Real-Time Optical Detection of Isoleucine in Living Cells through a Genetically-Encoded Nanosensor. Sensors, 2020, 20, 146.	2.1	5
13	Low nitrogen stress regulates chlorophyll fluorescence in coordination with photosynthesis and Rubisco efficiency of rice. Physiology and Molecular Biology of Plants, 2020, 26, 83-94.	1.4	24
14	Reactive oxygen species detection-approaches in plants: Insights into genetically encoded FRET-based sensors. Journal of Biotechnology, 2020, 308, 108-117.	1.9	16
15	Construction and characterization of protein-based cysteine nanosensor for the real time measurement of cysteine level in living cells. International Journal of Biological Macromolecules, 2020, 143, 273-284.	3.6	10
16	Designing and construction of genetically encoded FRET-based nanosensor for qualitative analysis of digoxin. Journal of Biotechnology, 2020, 323, 322-330.	1.9	3
17	Construction of a Nanosensor for Non-Invasive Imaging of Hydrogen Peroxide Levels in Living Cells. Biology, 2020, 9, 430.	1.3	2
18	Analysis of Proteomic Profile of Contrasting Phosphorus Responsive Rice Cultivars Grown under Phosphorus Deficiency. Agronomy, 2020, 10, 1028.	1.3	9

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19	Metabolite Profiling and Network Analysis Reveal Coordinated Changes in Low-N Tolerant and Low-N Sensitive Maize Genotypes under Nitrogen Deficiency and Restoration Conditions. Plants, 2020, 9, 1459.	1.6	8
20	Leveraging the Pathophysiological Alterations of Obstructive Nephropathy to Treat Renal Fibrosis by Cerium Oxide Nanoparticles. ACS Biomaterials Science and Engineering, 2020, 6, 3563-3573.	2.6	8
21	Metabolic Regulation Analysis of Ajmalicine Biosynthesis Pathway in Catharanthus roseus (L.) G. Don Suspension Culture Using Nanosensor. Processes, 2020, 8, 589.	1.3	5
22	Development of an In Vitro Propagation Protocol and a Sequence Characterized Amplified Region (SCAR) Marker of Viola serpens Wall. ex Ging. Plants, 2020, 9, 246.	1.6	3
23	Real-time monitoring of glutathione in living cells using genetically encoded FRET-based ratiometric nanosensor. Scientific Reports, 2020, 10, 992.	1.6	15
24	A Non-Invasive Tool for Real-Time Measurement of Sulfate in Living Cells. International Journal of Molecular Sciences, 2020, 21, 2572.	1.8	5
25	Metabolic Flux Analysis of Catechin Biosynthesis Pathways Using Nanosensor. Antioxidants, 2020, 9, 288.	2.2	12
26	A Fluorescence Resonance Energy Transfer-Based Analytical Tool for Nitrate Quantification in Living Cells. ACS Omega, 2020, 5, 30306-30314.	1.6	6
27	Current Status of Nanosensors in Biological Sciences. , 2020, , 15-41.		0
28	Proteome Profiling of the Mutagen-Induced Morphological and Yield Macro-Mutant Lines of Nigella sativa L.. Plants, 2019, 8, 321.	1.6	3
29	Targeted SHP-1 Silencing Modulates the Macrophage Phenotype, Leading to Metabolic Improvement in Dietary Obese Mice. Molecular Therapy - Nucleic Acids, 2019, 16, 626-636.	2.3	11
30	Proteomics Insights Into Salt Stress Signaling in Plants. , 2019, , 479-497.		3
31	Conversion of Cytochrome P450 2D6 of Human Into a FRET-Based Tool for Real-Time Monitoring of Ajmalicine in Living Cells. Frontiers in Bioengineering and Biotechnology, 2019, 7, 375.	2.0	9
32	Regulation of Leaf Senescence by Macromolecule Degradation and Hormones. , 2019, , 61-97.		1
33	Nutrient alginate encapsulation of nodal segments of <i>Althaea officinalis</i> L., for short-term conservation and germplasm exchange. Plant Biosystems, 2018, 152, 1256-1262.	0.8	11
34	Salinity induced changes in the chloroplast proteome of the aquatic pteridophyte Azolla microphylla. Symbiosis, 2018, 75, 61-67.	1.2	6
35	Live cell imaging of vitamin B12 dynamics by genetically encoded fluorescent nanosensor. Sensors and Actuators B: Chemical, 2018, 257, 866-874.	4.0	24
36	Role of green fluorescent proteins and their variants in development of FRET-based sensors. Journal of Biosciences, 2018, 43, 763-784.	0.5	11

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37	Role of green fluorescent proteins and their variants in development of FRET-based sensors. Journal of Biosciences, 2018, 43, 763-784.	0.5	1
38	Salinity-induced inhibition of growth in the aquatic pteridophyte Azolla microphylla primarily involves inhibition of photosynthetic components and signaling molecules as revealed by proteome analysis. Protoplasma, 2017, 254, 303-313.	1.0	22
39	Antioxidant response and proteomic modulations in Indian mustard grown under salt stress. Plant Growth Regulation, 2017, 81, 31-50.	1.8	36
40	Drought-Enhanced Xylem Sap Sulfate Closes Stomata by Affecting ALMT12 and Guard Cell ABA Synthesis. Plant Physiology, 2017, 174, 798-814.	2.3	95
41	Nitrogen-regulated changes in total amino acid profile of maize genotypes having contrasting response to nitrogen deficit. Protoplasma, 2017, 254, 2143-2153.	1.0	18
42	Inhibition of Src homology 2 domain containing protein tyrosine phosphatase as the possible mechanism of metformin-assisted amelioration of obesity induced insulin resistance in high fat diet fed C57BL/6J mice. Biochemical and Biophysical Research Communications, 2017, 487, 54-61.	1.0	10
43	Molecular Network of Monoterpene Indole Alkaloids (MIAs) Signaling in Plants with Reference to Catharanthus roseus (L.) G. Don. , 2017, , 37-67.		0
44	Phytoremediation and Rhizoremediation: Uptake, Mobilization and Sequestration of Heavy Metals by Plants. , 2017, , 367-394.		25
45	Sample preparation method for tissue based proteomic analysis of Azolla microphylla. Symbiosis, 2017, 72, 207-214.	1.2	2
46	SCAR MARKER DEVELOPMENT FOR THE CORRECT IDENTIFICATION OF IRIS ENSATA. International Journal of Pharmacy and Pharmaceutical Sciences, 2017, 9, 201.	0.3	0
47	Responsive Proteins in Wheat Cultivars with Contrasting Nitrogen Efficiencies under the Combined Stress of High Temperature and Low Nitrogen. Genes, 2017, 8, 356.	1.0	16
48	GENETIC DIVERSITY IN ACCESSIONS OF INDIAN TURMERIC (CURCUMA LONGA L.) USING RAPD MARKERS. International Journal of Pharmacy and Pharmaceutical Sciences, 2017, 9, 288.	0.3	5
49	Nitrogen-Deficiency Stress Induces Protein Expression Differentially in Low-N Tolerant and Low-N Sensitive Maize Genotypes. Frontiers in Plant Science, 2016, 7, 298.	1.7	33
50	Nitrogen-Efficient and Nitrogen-Inefficient Indian Mustard Showed Differential Expression Pattern of Proteins in Response to Elevated CO2 and Low Nitrogen. Frontiers in Plant Science, 2016, 7, 1074.	1.7	10
51	Designing, construction and characterization of genetically encoded FRET-based nanosensor for real time monitoring of lysine flux in living cells. Journal of Nanobiotechnology, 2016, 14, 49.	4.2	51
52	Protein tyrosine phosphatase SHP-1: resurgence as new drug target for human autoimmune disorders. Immunologic Research, 2016, 64, 804-819.	1.3	25
53	Live cell monitoring of glycine betaine by FRET-based genetically encoded nanosensor. Biosensors and Bioelectronics, 2016, 86, 169-175.	5.3	25
54	Salt-stress-responsive chloroplast proteins in Brassica juncea genotypes with contrasting salt tolerance and their quantitative PCR analysis. Protoplasma, 2016, 253, 1565-1575.	1.0	27

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55	Implication of protein tyrosine phosphatase SHP-1 in cancer-related signaling pathways. Future Oncology, 2016, 12, 1287-1298.	1.1	27
56	Salt stress-induced modulations in the shoot proteome of Brassica juncea genotypes. Environmental Science and Pollution Research, 2016, 23, 2391-2401.	2.7	31
57	Giant cell tumor of axis: A rare entity. Journal of Pediatric Neurology, 2015, 05, 351-354.	0.0	1
58	Genotypic Variation in Phytoremediation Potential of Indian Mustard Exposed to Nickel Stress: A Hydroponic Study. International Journal of Phytoremediation, 2015, 17, 135-144.	1.7	26
59	Cultivar specific variations in antioxidative defense system, genome and proteome of two tropical rice cultivars against ambient and elevated ozone. Ecotoxicology and Environmental Safety, 2015, 115, 101-111.	2.9	64
60	Nitrogen stress-induced alterations in the leaf proteome of two wheat varieties grown at different nitrogen levels. Physiology and Molecular Biology of Plants, 2015, 21, 19-33.	1.4	19
61	FRET-based genetically-encoded sensors for quantitative monitoring of metabolites. Biotechnology Letters, 2015, 37, 1919-1928.	1.1	29
62	Determination of Curcuminoids in<i>Curcuma longa</i>Linn. by UPLC/Q-TOFâ€“MS: An Application in Turmeric Cultivation. Journal of Chromatographic Science, 2015, 53, 1346-1352.	0.7	35
63	Genetically encoded FRET-based nanosensor for in vivo monitoring of zinc concentration in physiological environment of living cell. Biochemical Engineering Journal, 2015, 102, 62-68.	1.8	6
64	Photosynthesis and growth responses of mustard (Brassica juncea L. cv Pusa Bold) plants to free air carbon dioxide enrichment (FACE). Protoplasma, 2015, 252, 935-946.	1.0	22
65	Physiological and molecular alterations in plants exposed to high [CO2] under phosphorus stress. Biotechnology Advances, 2015, 33, 303-316.	6.0	53
66	Elevated CO₂Improves Growth and Phosphorus Utilization Efficiency in Cereal Species Under Sub-Optimal Phosphorus Supply. Journal of Plant Nutrition, 2015, 38, 1196-1217.	0.9	20
67	Improving the phytoextraction capacity of plants to scavenge metal(loid)-contaminated sites. Environmental Reviews, 2015, 23, 44-65.	2.1	65
68	Metabolite Profiling of Low-P Tolerant and Low-P Sensitive Maize Genotypes under Phosphorus Starvation and Restoration Conditions. PLoS ONE, 2015, 10, e0129520.	1.1	86
69	Analysis of Genetic Diversity and Population Structure of Rice Germplasm from North-Eastern Region of India and Development of a Core Germplasm Set. PLoS ONE, 2014, 9, e113094.	1.1	59
70	Root carboxylate exudation capacity under phosphorus stress does not improve grain yield in green gram. Plant Cell Reports, 2014, 33, 919-928.	2.8	52
71	Genetic diversity analysis of Zingiber Officinale Roscoe by RAPD collected from subcontinent of India. Saudi Journal of Biological Sciences, 2014, 21, 159-165.	1.8	25
72	Determination of Gingerols in Ginger by Ultra-High Performance Liquid Chromatography-Tandem Mass Spectrometry. Analytical Letters, 2014, 47, 2120-2128.	1.0	14

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73	In vitro propagation and the acclimatization effect on the synthesis of 2-hydroxy-4-methoxy benzaldehyde in Decalepis hamiltonii Wight and Arn.. Acta Physiologiae Plantarum, 2014, 36, 2331-2344.	1.0	18
74	Genetically-encoded nanosensor for quantitative monitoring of methionine in bacterial and yeast cells. Biosensors and Bioelectronics, 2014, 59, 358-364.	5.3	58
75	Physiological studies and proteomic analysis for differentially expressed proteins and their possible role in the root of N-efficient rice (Oryza sativa L.). Molecular Breeding, 2013, 32, 785-798.	1.0	15
76	Changes in growth, lipid peroxidation and some key antioxidant enzymes in chickpea genotypes under salt stress. Acta Physiologiae Plantarum, 2013, 35, 1039-1050.	1.0	269
77	Genetically encoded FRET-based nanosensor for in vivo measurement of leucine. Biosensors and Bioelectronics, 2013, 50, 72-77.	5.3	67
78	Stress Signaling in Plants: Genomics and Proteomics Perspective, Volume 1. , 2013, , .		7
79	Selection of an apt support for the immobilization of microbes for the development of a BOD biosensor. Analytical Methods, 2013, 5, 1533.	1.3	2
80	Screening Indian Mustard Genotypes for Phytoremediating Arsenicâ€Contaminated Soils. Clean - Soil, Air, Water, 2013, 41, 195-201.	0.7	30
81	Chromium Toxicity and Tolerance in Crop Plants. , 2013, , 309-332.		0
82	RAPD Markers Associated with Salt Tolerance in Soybean Genotypes Under Salt Stress. Applied Biochemistry and Biotechnology, 2013, 170, 257-272.	1.4	17
83	Identification of the Phytoremediation Potential of Indian mustard Genotypes for Copper, Evaluated from a Hydroponic Experiment. Clean - Soil, Air, Water, 2013, 41, 789-796.	0.7	16
84	Signal Transduction and Regulatory Networks in Plant-Pathogen Interaction: A Proteomics Perspective. , 2013, , 69-90.		4
85	Auxin Genes and Auxin Responsive Factors in Signaling During Leaf Senescence. , 2013, , 91-103.		0
86	Molecular Network of Nitrogen and Sulphur Signaling in Plants. , 2013, , 191-223.		1
87	Symbiotic Nitrogen Fixation by Lentil Improves Biochemical Characteristics and Yield of Intercropped Wheat Under Low Fertilizer Input. Journal of Crop Improvement, 2013, 27, 53-66.	0.9	8
88	Differential response of wheat genotypes to applied nitrogen: biochemical and molecular analysis. Archives of Agronomy and Soil Science, 2012, 58, 915-929.	1.3	12
89	Variability of nitrogen uptake and assimilation among N-efficient and N-inefficient wheat (Triticum) Tj ETQq1 1 0.784314 rgBT /Overlock	1.0	11
90	Reactive Nitrogen Inflows and Nitrogen Use Efficiency in Agriculture: An Environment Perspective. , 2012, , 217-232.		6

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91	Physiological and Molecular Analysis of Applied Nitrogen in Rice Genotypes. Rice Science, 2012, 19, 213-222.	1.7	23
92	Proteomic Analysis for Low and High Nitrogen-Responsive Proteins in the Leaves of Rice Genotypes Grown at Three Nitrogen Levels. Applied Biochemistry and Biotechnology, 2012, 168, 834-850.	1.4	38
93	Stimuli responsive polymeric nanoparticles in regulated drug delivery for cancer. Polish Journal of Chemical Technology, 2012, 14, 57-64.	0.3	10
94	Validated HPTLC analysis method for quantification of variability in content of curcumin in Curcuma longa L (turmeric) collected from different geographical region of India. Asian Pacific Journal of Tropical Biomedicine, 2012, 2, S584-S588.	0.5	34
95	Visualization of Glutamine Transporter Activities in Living Cells Using Genetically Encoded Glutamine Sensors. PLoS ONE, 2012, 7, e38591.	1.1	51
96	Restructuring BODâ€‰:â€‰COD Ratio of Dairy Milk Industrial Wastewaters in BOD Analysis by Formulating a Specific Microbial Seed. Scientific World Journal, The, 2012, 2012, 1-7.	0.8	10
97	Application of loop-mediated isothermal amplification (LAMP)-based technology for authentication of Catharanthus roseus (L.) G. Don. Protoplasma, 2012, 249, 417-422.	1.0	21
98	Identification and Comparative Analysis of MicroRNAs Associated with Low-N Tolerance in Rice Genotypes. PLoS ONE, 2012, 7, e50261.	1.1	76
99	Comparative studies on antioxidant enzyme action and ion accumulation in soybean cultivars under salinity stress. Journal of Environmental Biology, 2012, 33, 9-20.	0.2	10
100	Modulation of glutathione and its related enzymes in plantsâ€™ responses to toxic metals and metalloidsâ€"A review. Environmental and Experimental Botany, 2011, 75, 307-307.	2.0	84
101	Sulfur starvation and restoration affect nitrate uptake and assimilation in rapeseed. Protoplasma, 2011, 248, 299-311.	1.0	24
102	Constitutive expression of high-affinity sulfate transporter (HAST) gene in Indian mustard showed enhanced sulfur uptake and assimilation. Protoplasma, 2011, 248, 591-600.	1.0	10
103	Nitrogen-efficient rice cultivars can reduce nitrate pollution. Environmental Science and Pollution Research, 2011, 18, 1184-1193.	2.7	99
104	Uptake-related parameters as indices of phytoremediation potential. Biologia (Poland), 2010, 65, 1004-1011.	0.8	41
105	Variability in Indian bread wheat (Triticum aestivum L.) varieties differing in nitrogen efficiency as assessed by microsatellite markers. Protoplasma, 2010, 242, 55-67.	1.0	15
106	Induction of phytochelatins and antioxidant defence system in Brassica juncea and Vigna radiata in response to chromium treatments. Plant Growth Regulation, 2010, 61, 97-107.	1.8	102
107	Effect of calcium against salinity-induced inhibition in growth, ion accumulation and proline contents in Cichorium intybus L. Journal of Environmental Biology, 2010, 31, 939-44.	0.2	34
108	Mercury-induced changes in growth variables and antioxidative enzyme activities in Indian mustard. Journal of Plant Interactions, 2009, 4, 131-136.	1.0	22

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109	Morphological changes and antioxidant defence systems in soybean genotypes as affected by salt stress. Journal of Plant Interactions, 2009, 4, 295-306.	1.0	12
110	Chromium-Induced Modulation in the Antioxidant Defense System During Phenological Growth Stages of Indian Mustard. International Journal of Phytoremediation, 2009, 12, 142-158.	1.7	22
111	Phytoremediation of Heavy Metals: Physiological and Molecular Mechanisms. Botanical Review, The, 2009, 75, 339-364.	1.7	235
112	Global Climate Change, Stress and Plant Productivity. , 2009, , 503-521.		49
113	Modulation of antioxidant defence system for arsenic detoxification in Indian mustard. Ecotoxicology and Environmental Safety, 2009, 72, 626-634.	2.9	126
114	Sulphur protects mustard (Brassica campestris L.) from cadmium toxicity by improving leaf ascorbate and glutathione. Plant Growth Regulation, 2008, 54, 271-279.	1.8	168
115	Genotypic Variation in the Phytoremediation Potential of Indian Mustard for Chromium. Environmental Management, 2008, 41, 734-741.	1.2	65
116	Responses of Components of Antioxidant System in Moongbean Genotypes to Cadmium Stress. Communications in Soil Science and Plant Analysis, 2008, 39, 2469-2483.	0.6	37
117	Genotypic variation of nitrogen use efficiency in Indian mustard. Environmental Pollution, 2008, 154, 462-466.	3.7	23
118	Ontogenic variation in response of<i>Brassica campestris</i>L. to cadmium toxicity. Journal of Plant Interactions, 2008, 3, 189-198.	1.0	50
119	Effect of Timing of Sulfur Fertilizer Application on Growth and Yield of Rapeseed. Journal of Plant Nutrition, 2005, 28, 1049-1059.	0.9	39
120	Role of sulphate transporter systems in sulphur efficiency of mustard genotypes. Plant Science, 2005, 169, 842-846.	1.7	33
121	Relationship between Soil Nitrate Content and Activities of NADH: and NAD(P)H:Nitrate Reductases in Indian Mustard. Biologia Plantarum, 2003, 46, 295-296.	1.9	0
122	Photosynthesis and Nitrogen-Use Efficiency. , 2002, , 23-34.		13
123	Biochemical Evaluation of Sulfur and Nitrogen Assimilation Potential of Mustard (Brassica juncea L.) Tj ETQq1 1 0.784314 rgBT /Overlock ... Biotechnology, 2001, 96, 167-172.	1.4	2
124	Interactive Effect of Sulphur and Nitrogen on the Oil and Protein Contents and on the Fatty Acid Profiles of Oil in the Seeds of Rapeseed (Brassica campestris L.) and Mustard (Brassica juncea L. Czern.) Tj ETQq0 0 0 rgBT /Overlock 10 ...	1.7	32
125	Photosynthesis and its related physiological variables in the leaves ofBrassicagenotypes as influenced by sulphur fertilization. Physiologia Plantarum, 2000, 110, 144-149.	2.6	48
126	Effect of sulphur application on lipid, RNA and fatty acid content in developing seeds of rapeseed (Brassica campestris L.). Plant Science, 2000, 150, 71-76.	1.7	47

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127	Effect of sulfur fertilisation on oil accumulation, acetyl-CoA concentration, and acetyl-CoA carboxylase activity in the developing seeds of rapeseed (Brassica campestris L.). Australian Journal of Agricultural Research, 2000, 51, 1023.	1.5	19
128	Physiological Investigation of the Impact of Nitrogen and Sulphur Application on Seed and Oil Yield of Rapeseed (Brassica campestris L.) and Mustard (Brassica juncea L. Czern. and Coss.) Genotypes. Journal of Agronomy and Crop Science, 1999, 183, 19-25.	1.7	31
129	Effect of split application of sulphur and nitrogen on growth and yield attributes of Brassica genotypes differing in time of flowering. Canadian Journal of Plant Science, 1999, 79, 175-180.	0.3	33
130	NADH: nitrate reductase and NAD(P)H: nitrate reductase activities in mustard seedlings. Plant Science, 1999, 143, 1-8.	1.7	32
131	Interactive Effect of Nitrogen and Sulphur on Growth and Yield of Rapeâ€seedâ€Mustard (<i>Brassica) Tj ETQq1 1 0.784314 rgBT /Over Crop Science, 1998, 181, 193-199.	1.7	38
132	Status of antioxidant defense system for detoxification of arsenic in Brassica juncea (L.). Ecoprint an International Journal of Ecology, 0, 22, 7-19.	0.1	4