# Vijay Pratap Singh

## List of Publications by Year in Descending Order



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| 215 papers | 11,568 citations | 42 h-index | 105 g-index |
| 229 ext. papers | 14,077 ext. citations | 4.9 avg, IF | 6.97 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 215 | Nanoparticles as a potential protective agent for arsenic toxicity alleviation in plants.. *Environmental Pollution*, **2022**, 118887 | 9.3 | 5 |
| 214 | Arsenite: the umpire of arsenate perception and responses in plants.. *Trends in Plant Science*, **2022**, | 13.1 | 1 |
| 213 | Application of zinc oxide nanoparticles as fertilizer boosts growth in rice plant and alleviates chromium stress by regulating genes involved in regulating oxidative stress.. *Chemosphere*, **2022**, 134554 | 8.4 | 3 |
| 212 | Heavy metal induced regulation of plant biology: Recent insights.. *Physiologia Plantarum*, **2022**, e13688 | 4.6 | 3 |
| 211 | Nano-priming: the impression on the hidden half. *Plant Stress*, **2022**, 100091 | | 2 |
| 210 | Nitric oxide and hydrogen peroxide independently act in mitigating chromium stress in Triticum aestivum L. seedlings: Regulation of cell death, chromium uptake, antioxidant system, sulfur assimilation and proline metabolism.. *Plant Physiology and Biochemistry*, **2022**, 183, 76-84 | 5.4 | 1 |
| 209 | Iron oxide nanoparticles impart cross tolerance to arsenate stress in rice roots through involvement of nitric oxide.. *Environmental Pollution*, **2022**, 119320 | 9.3 | 0 |
| 208 | Hydrogen sulfide manages hexavalent chromium toxicity in wheat and rice seedlings: The role of sulfur assimilation and ascorbate-glutathione cycle. *Environmental Pollution*, **2022**, 119509 | 9.3 | 0 |
| 207 | Silicon nano forms in crop improvement and stress management. *Chemosphere*, **2022**, 135165 | 8.4 | 1 |
| 206 | RIPK: a crucial ROS signaling component in plants.. *Trends in Plant Science*, **2021**, | 13.1 | 2 |
| 205 | Silica nanoparticles: the rising star in plant disease protection. *Trends in Plant Science*, **2021**, | 13.1 | 7 |
| 204 | Priming of tomato seedlings with 2-oxoglutarate induces arsenic toxicity alleviatory responses by involving endogenous nitric oxide. *Physiologia Plantarum*, **2021**, 173, 45-57 | 4.6 | 6 |
| 203 | Magnetopriming effects on arsenic stress-induced morphological and physiological variations in soybean involving synchrotron imaging. *Physiologia Plantarum*, **2021**, 173, 88-99 | 4.6 | 6 |
| 202 | Aluminum toxicity and aluminum stress-induced physiological tolerance responses in higher plants. *Critical Reviews in Biotechnology*, **2021**, 41, 715-730 | 9.4 | 16 |
| 201 | Nitric oxide (NO) and salicylic acid (SA): A framework for their relationship in plant development under abiotic stress. *Plant Biology*, **2021**, 23 Suppl 1, 39-49 | 3.7 | 12 |
| 200 | Ascorbate and glutathione independently alleviate arsenate toxicity in brinjal but both require endogenous nitric oxide. *Physiologia Plantarum*, **2021**, 173, 276-286 | 4.6 | 3 |
| 199 | Regulation of ascorbate-glutathione cycle by exogenous nitric oxide and hydrogen peroxide in soybean roots under arsenate stress. *Journal of Hazardous Materials*, **2021**, 409, 123686 | 12.8 | 23 |

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| 198 | Auxin metabolic network regulates the plant response to metalloids stress. *Journal of Hazardous Materials*, **2021**, 405, 124250 | 12.8 | 19 |
| 197 | Structural modifications of plant organs and tissues by metals and metalloids in the environment: A review. *Plant Physiology and Biochemistry*, **2021**, 159, 100-112 | 5.4 | 9 |
| 196 | Silicon crosstalk with reactive oxygen species, phytohormones and other signaling molecules. *Journal of Hazardous Materials*, **2021**, 408, 124820 | 12.8 | 18 |
| 195 | Silicon induces adventitious root formation in rice under arsenate stress with involvement of nitric oxide and indole-3-acetic acid. *Journal of Experimental Botany*, **2021**, 72, 4457-4471 | 7 | 20 |
| 194 | Mitigation of arsenate toxicity by indole-3-acetic acid in brinjal roots: Plausible association with endogenous hydrogen peroxide. *Journal of Hazardous Materials*, **2021**, 405, 124336 | 12.8 | 12 |
| 193 | Histochemical Techniques in Plant Science: More Than Meets the Eye. *Plant and Cell Physiology*, **2021**, 62, 1509-1527 | 4.9 | 2 |
| 192 | Nitric oxide and hydrogen sulfide: an indispensable combination for plant functioning. *Trends in Plant Science*, **2021**, 26, 1270-1285 | 13.1 | 23 |
| 191 | Understanding the Role of Gibberellic Acid and Paclobutrazol in Terminal Heat Stress Tolerance in Wheat. *Frontiers in Plant Science*, **2021**, 12, 692252 | 6.2 | 0 |
| 190 | Hydrogen sulfide (HS) underpins the beneficial silicon effects against the copper oxide nanoparticles (CuO NPs) phytotoxicity in Oryza sativa seedlings. *Journal of Hazardous Materials*, **2021**, 415, 124907 | 12.8 | 13 |
| 189 | Synergistic action of silicon nanoparticles and indole acetic acid in alleviation of chromium (Cr) toxicity in Oryza sativa seedlings. *Journal of Biotechnology*, **2021**, 343, 71-82 | 3.7 | 8 |
| 188 | Endogenous indole-3-acetic acid and nitric oxide are required for calcium-mediated alleviation of copper oxide nanoparticles toxicity in wheat seedlings. *Physiologia Plantarum*, **2021**, 173, 2262-2275 | 4.6 | 0 |
| 187 | Ethylene and hydrogen sulphide are essential for mitigating hexavalent chromium stress in two pulse crops. *Plant Biology*, **2021**, | 3.7 | 5 |
| 186 | Silicon and nitric oxide interplay alleviates copper induced toxicity in mung bean seedlings. *Plant Physiology and Biochemistry*, **2021**, 167, 713-722 | 5.4 | 0 |
| 185 | Exogenous addition of silicon alleviates metsulfuron methyl induced stress in wheat seedlings. *Plant Physiology and Biochemistry*, **2021**, 167, 705-712 | 5.4 | 1 |
| 184 | Implication of nitric oxide and hydrogen sulfide signalling in alleviating arsenate stress in rice seedlings. *Environmental Pollution*, **2021**, 291, 117958 | 9.3 | 7 |
| 183 | Ethylene needs endogenous hydrogen sulfide for alleviating hexavalent chromium stress in Vigna mungo L. and Vigna radiata L. *Environmental Pollution*, **2021**, 290, 117968 | 9.3 | 5 |
| 182 | Metalloids in plants: A systematic discussion beyond description. *Annals of Applied Biology*, **2020**, | 2.6 | 3 |
| 181 | Transgenic Strategies to Develop Resistant Plant Against the Pathogen and Pest **2020**, 259-290 | | 1 |

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| 180 | PSO-Based: MARL Approach for Frequency Regulation of Multi-area Power System. *Journal of Electrical Engineering and Technology*, **2020**, 15, 1529-1539 | 1.4 | 2 |
| 179 | Cytokinin alleviates cypermethrin toxicity in Nostoc muscorum by involving nitric oxide: Regulation of exopolysaccharides secretion, PS II photochemistry and reactive oxygen species homeostasis. *Chemosphere*, **2020**, 259, 127356 | 8.4 | 7 |
| 178 | Mitigation of chromium (VI) toxicity by additional sulfur in some vegetable crops involves glutathione and hydrogen sulfide. *Plant Physiology and Biochemistry*, **2020**, 155, 952-964 | 5.4 | 10 |
| 177 | Comparison of Key Mineral Elements in Wild Edible Fruits of Ziziphus Mauritiana and Z. Nummularia Using Atomic Absorption Spectrophotometer (AAS) and Flame Photometer. *International Journal of Fruit Science*, **2020**, 20, S987-S994 | 1.2 | 2 |
| 176 | Data on optimization of microprojectile bombardment parameters in development of salinity tolerant transgenic lines. *Data in Brief*, **2020**, 29, 105305 | 1.2 | |
| 175 | Additional calcium and sulfur manages hexavalent chromium toxicity in Solanum lycopersicum L. and Solanum melongena L. seedlings by involving nitric oxide. *Journal of Hazardous Materials*, **2020**, 398, 122607 | 12.8 | 18 |
| 174 | Involvement of nitrate reductase-dependent nitric oxide production in magnetopriming-induced salt tolerance in soybean. *Physiologia Plantarum*, **2020**, 168, 422-436 | 4.6 | 17 |
| 173 | Glutathione and hydrogen sulfide are required for sulfur-mediated mitigation of Cr(VI) toxicity in tomato, pea and brinjal seedlings. *Physiologia Plantarum*, **2020**, 168, 406-421 | 4.6 | 13 |
| 172 | Microbiome as Sensitive Markers for Risk Assessment of Pesticides **2020**, 89-108 | | 2 |
| 171 | Nitric oxide-mediated regulation of sub-cellular chromium distribution, ascorbate-glutathione cycle and glutathione biosynthesis in tomato roots under chromium (VI) toxicity. *Journal of Biotechnology* , **2020**, 318, 68-77 | 3.7 | 11 |
| 170 | Silicon and nitric oxide-mediated mechanisms of cadmium toxicity alleviation in wheat seedlings. *Physiologia Plantarum*, **2020**, | 4.6 | 26 |
| 169 | Silicon and plant growth promoting rhizobacteria differentially regulate AgNP-induced toxicity in Brassica juncea: Implication of nitric oxide. *Journal of Hazardous Materials*, **2020**, 390, 121806 | 12.8 | 29 |
| 168 | Exogenous nitric oxide requires endogenous hydrogen sulfide to induce the resilience through sulfur assimilation in tomato seedlings under hexavalent chromium toxicity. *Plant Physiology and Biochemistry*, **2020**, 155, 20-34 | 5.4 | 27 |
| 167 | A brief appraisal of ethylene signaling under abiotic stress in plants. *Plant Signaling and Behavior*, **2020**, 15, 1782051 | 2.5 | 19 |
| 166 | Dose dependent differential effects of toxic metal cadmium in tomato roots: Role of endogenous hydrogen sulfide. *Ecotoxicology and Environmental Safety*, **2020**, 203, 110978 | 7 | 9 |
| 165 | Ascorbic acid is essential for inducing chromium (VI) toxicity tolerance in tomato roots. *Journal of Biotechnology*, **2020**, 322, 66-73 | 3.7 | 10 |
| 164 | Full sunlight acclimation mechanisms in Riccia discolor thalli: Assessment at morphological, anatomical, and biochemical levels. *Journal of Photochemistry and Photobiology B: Biology*, **2020**, 210, 111983 | 6.7 | |
| 163 | Effect of Nitric Oxide on Seed Germination and Seedling Development of Tomato Under Chromium Toxicity. *Journal of Plant Growth Regulation*, **2020**, 1 | 4.7 | 7 |

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| 162 | Comparative sequence analysis across Brassicaceae, regulatory diversity in KCS5 and KCS6 homologs from Arabidopsis thaliana and Brassica juncea, and intronic fragment as a negative transcriptional regulator. *Gene Expression Patterns*, **2020**, 38, 119146 | 1.5 | 1 |
| 161 | Silicon tackles butachlor toxicity in rice seedlings by regulating anatomical characteristics, ascorbate-glutathione cycle, proline metabolism and levels of nutrients. *Scientific Reports*, **2020**, 10, 14078 | 4.9 | 11 |
| 160 | NO and ROS implications in the organization of root system architecture. *Physiologia Plantarum*, **2020**, 168, 473-489 | 4.6 | 6 |
| 159 | Nitric oxide in plants: an ancient molecule with new tasks. *Plant Growth Regulation*, **2020**, 90, 1-13 | 3.2 | 22 |
| 158 | Pesticides Usage, Uptake and Mode of Action in Plants with Special Emphasis on Photosynthetic Characteristics **2020**, 159-180 | | 3 |
| 157 | Microprojectile based particle bombardment in development of transgenic indica rice involving AmSOD gene to impart tolerance to salinity. *Plant Gene*, **2019**, 19, 100183 | 3.1 | 13 |
| 156 | Regulation of cadmium toxicity in roots of tomato by indole acetic acid with special emphasis on reactive oxygen species production and their scavenging. *Plant Physiology and Biochemistry*, **2019**, 142, 193-201 | 5.4 | 35 |
| 155 | Nitrogen alleviates salinity toxicity in Solanum lycopersicum seedlings by regulating ROS homeostasis. *Plant Physiology and Biochemistry*, **2019**, 141, 466-476 | 5.4 | 21 |
| 154 | Liquid assisted pulsed laser ablation synthesized copper oxide nanoparticles (CuO-NPs) and their differential impact on rice seedlings. *Ecotoxicology and Environmental Safety*, **2019**, 176, 321-329 | 7 | 24 |
| 153 | Revisiting the role of ROS and RNS in plants under changing environment. *Environmental and Experimental Botany*, **2019**, 161, 1-3 | 5.9 | 73 |
| 152 | New adventitious root formation and primary root biomass accumulation are regulated by nitric oxide and reactive oxygen species in rice seedlings under arsenate stress. *Journal of Hazardous Materials*, **2019**, 361, 134-140 | 12.8 | 57 |
| 151 | Analysis of chickpea gene co-expression networks and pathways during heavy metal stress. *Journal of Biosciences*, **2019**, 44, 1 | 2.3 | 1 |
| 150 | Interactive Effect of Silicon (Si) and Salicylic Acid (SA) in Maize Seedlings and Their Mechanisms of Cadmium (Cd) Toxicity Alleviation. *Journal of Plant Growth Regulation*, **2019**, 38, 1587-1597 | 4.7 | 29 |
| 149 | Avenues of the membrane transport system in adaptation of plants to abiotic stresses. *Critical Reviews in Biotechnology*, **2019**, 39, 861-883 | 9.4 | 32 |
| 148 | An Integrated Transcriptomic, Proteomic, and Metabolomic Approach to Unravel the Molecular Mechanisms of Metal Stress Tolerance in Plants **2019**, 1-28 | | 2 |
| 147 | Oocyte-specific deletion of Hdac8 in mice reveals stage-specific effects on fertility. *Reproduction*, **2019**, 157, 305-316 | 3.8 | 6 |
| 146 | Male Meiotic Studies in Six Species of Pedicularis L. from Churdhar and Adjoining Hills of Sirmaur District (H. P.), India. *Cytologia*, **2019**, 84, 233-236 | 0.9 | |
| 145 | IAPT chromosome data 30. *Taxon*, **2019**, 68, 1124-1130 | 0.8 | 3 |

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| 144 | Kinetin Alleviates UV-B-Induced Damage in Solanum lycopersicum: Implications of Phenolics and Antioxidants. *Journal of Plant Growth Regulation*, **2019**, 38, 831-841 | 4.7 | 10 |
| 143 | Effects of exogenously applied plant growth regulators on the physiology and anti-oxidant activity of wheat under water deficit condition. *Plant Physiology Reports*, **2019**, 24, 54-62 | 1.4 | 1 |
| 142 | Nitric oxide ameliorates aluminium toxicity in Anabaena PCC 7120: Regulation of aluminium accumulation, exopolysaccharides secretion, photosynthesis and oxidative stress markers. *Environmental and Experimental Botany*, **2019**, 161, 218-227 | 5.9 | 21 |
| 141 | Crosstalk between nitric oxide (NO) and abscisic acid (ABA) signalling molecules in higher plants. *Environmental and Experimental Botany*, **2019**, 161, 41-49 | 5.9 | 60 |
| 140 | Male meiosis in 18 species of 07 genera of the tribe Astereae (Asteraceae) from Western Himalaya. *Nucleus (India)*, **2018**, 61, 95-104 | 1.7 | |
| 139 | A segmental duplication in the common ancestor of Brassicaceae is responsible for the origin of the paralogs KCS6-KCS5, which are not shared with other angiosperms. *Molecular Phylogenetics and Evolution*, **2018**, 126, 331-345 | 4.1 | 9 |
| 138 | An investigation on involvement of the ascorbate-glutathione cycle in modulating NaCl toxicity in two cyanobacteria photoacclimatized to different photosynthetic active radiation. *Algal Research*, **2018**, 32, 70-78 | 5 | 7 |
| 137 | Induction of water deficit tolerance in wheat due to exogenous application of plant growth regulators: membrane stability, water relations and photosynthesis. *Photosynthetica*, **2018**, 56, 478-486 | 2.2 | 16 |
| 136 | Acquisition and Homeostasis of Iron in Higher Plants and Their Probable Role in Abiotic Stress Tolerance. *Frontiers in Environmental Science*, **2018**, 5, | 4.8 | 67 |
| 135 | Interaction of Copper Oxide Nanoparticles With Plants **2018**, 297-310 | | 12 |
| 134 | New and Varied Chromosome Reports in Twenty-Six Species of the Family Asteraceae from Cold Deserts of the Western Himalaya. *Cytologia*, **2018**, 83, 215-220 | 0.9 | 3 |
| 133 | Kinetin Regulates UV-B-Induced Damage to Growth, Photosystem II Photochemistry, and Nitrogen Metabolism in Tomato Seedlings. *Journal of Plant Growth Regulation*, **2018**, 37, 233-245 | 4.7 | 26 |
| 132 | Male Meiotic Studies in 29 Species of Lamiaceae from Sirmaur District of Himachal Pradesh, India. *Cytologia*, **2018**, 83, 235-243 | 0.9 | 4 |
| 131 | Nitric oxide alleviates silver nanoparticles (AgNps)-induced phytotoxicity in Pisum sativum seedlings. *Plant Physiology and Biochemistry*, **2017**, 110, 167-177 | 5.4 | 228 |
| 130 | Micro RNAs and nitric oxide cross talk in stress tolerance in plants. *Plant Growth Regulation*, **2017**, 83, 199-205 | 3.2 | 13 |
| 129 | Toxicity of aluminium on various levels of plant cells and organism: A review. *Environmental and Experimental Botany*, **2017**, 137, 177-193 | 5.9 | 235 |
| 128 | An Introduction to UV-B Research in Plant Science **2017**, 1-8 | | 1 |
| 127 | Oxidative Stress and Antioxidative Defence System in Plants in Response to UV-B Stress **2017**, 99-121 | | 4 |

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| 126 | Stimulation of Various Phenolics in Plants Under Ambient UV-B Radiation **2017**, 9-56 | | 6 |
| 125 | Distributed Multi-Agent System-Based Load Frequency Control for Multi-Area Power System in Smart Grid. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 5151-5160 | 8.9 | 73 |
| 124 | Transcriptional regulation of salinity stress in plants: A short review. *Plant Gene*, **2017**, 11, 160-169 | 3.1 | 30 |
| 123 | Understanding the plant and nanoparticle interface at transcriptomic and proteomic level: A concentric overview. *Plant Gene*, **2017**, 11, 265-272 | 3.1 | 81 |
| 122 | Reactive oxygen species signaling and stomatal movement: Current updates and future perspectives. *Redox Biology*, **2017**, 11, 213-218 | 11.3 | 77 |
| 121 | Sulphur alters chromium (VI) toxicity in Solanum melongena seedlings: Role of sulphur assimilation and sulphur-containing antioxidants. *Plant Physiology and Biochemistry*, **2017**, 112, 183-192 | 5.4 | 29 |
| 120 | Endogenous reduced ascorbate: an indicator of plant water deficit stress in wheat. *Indian Journal of Plant Physiology*, **2017**, 22, 365-368 | | 9 |
| 119 | Effects of Reactive Oxygen Species on Crop Productivity **2017**, 117-136 | | 6 |
| 118 | Role of Reactive Oxygen Species in Photophosphorylation and Damage to D1 Protein **2017**, 165-186 | | 2 |
| 117 | Reactive Oxygen Species and Antioxidants **2017**, 187-203 | | |
| 116 | Reactive Oxygen Species **2017**, 89-115 | | 4 |
| 115 | Comparative expression profiling of AtRAD5B and AtNDL1: Hints towards a role in G protein mediated signaling. *Gene Expression Patterns*, **2017**, 25-26, 167-174 | 1.5 | |
| 114 | Reactive Oxygen Species and Photosynthetic Functioning **2017**, 137-155 | | 3 |
| 113 | Differential accumulation of carotene and tissue specific expression of phytoene synthase () gene in banana ( sp) cultivars. *Journal of Food Science and Technology*, **2017**, 54, 4416-4426 | 3.3 | 8 |
| 112 | Development and characterization of novel microsatellite markers in Trillium govanianum: a threatened plant species from North-Western Himalaya. *3 Biotech*, **2017**, 7, 190 | 2.8 | 2 |
| 111 | New chromosome reports in Lamiaceae of Kashmir (Northwest Himalaya), India. *Protoplasma*, **2017**, 254, 971-985 | 3.4 | 11 |
| 110 | An overview on manufactured nanoparticles in plants: Uptake, translocation, accumulation and phytotoxicity. *Plant Physiology and Biochemistry*, **2017**, 110, 2-12 | 5.4 | 416 |
| 109 | Silicon nanoparticles more effectively alleviated UV-B stress than silicon in wheat (Triticum aestivum) seedlings. *Plant Physiology and Biochemistry*, **2017**, 110, 70-81 | 5.4 | 281 |

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| 108 | Generation Mechanisms of Reactive Oxygen Species in the Plant Cell **2017**, 1-22 | | 1 |
| 107 | The Regulation of Plant Development **2017**, 243-260 | | 4 |
| 106 | Nitric Oxide Ameliorates Zinc Oxide Nanoparticles Phytotoxicity in Wheat Seedlings: Implication of the Ascorbate-Glutathione Cycle. *Frontiers in Plant Science*, **2017**, 8, 1 | 6.2 | 759 |
| 105 | Differential Phytotoxic Impact of Plant Mediated Silver Nanoparticles (AgNPs) and Silver Nitrate (AgNO) on sp. *Frontiers in Plant Science*, **2017**, 8, 1501 | 6.2 | 89 |
| 104 | Uptake, Accumulation and Toxicity of Silver Nanoparticle in Autotrophic Plants, and Heterotrophic Microbes: A Concentric Review. *Frontiers in Microbiology*, **2017**, 8, 07 | 5.7 | 182 |
| 103 | Uncovering Potential Applications of Cyanobacteria and Algal Metabolites in Biology, Agriculture and Medicine: Current Status and Future Prospects. *Frontiers in Microbiology*, **2017**, 8, 515 | 5.7 | 177 |
| 102 | Silicon as a beneficial element to combat the adverse effect of drought in agricultural crops **2016**, 682-694 | | 21 |
| 101 | Development of novel SSR markers for evaluation of genetic diversity and population structure in Tribulus terrestris L. (Zygophyllaceae). *3 Biotech*, **2016**, 6, 156 | 2.8 | 7 |
| 100 | Meiotic and Ethnobotanical Studies on Rheum Species from Kashmir Himalaya. *Cytologia*, **2016**, 81, 295-300 | 0.9 | |
| 99 | Photoreceptors mapping from past history till date. *Journal of Photochemistry and Photobiology B: Biology*, **2016**, 162, 223-231 | 6.7 | 9 |
| 98 | Nitrogen modifies NaCl toxicity in eggplant seedlings: Assessment of chlorophyll a fluorescence, antioxidative response and proline metabolism. *Biocatalysis and Agricultural Biotechnology*, **2016**, 7, 76-86 | 4.2 | 26 |
| 97 | UV-B induces biomass production and nonenzymatic antioxidant compounds in three cyanobacteria. *Journal of Applied Phycology*, **2016**, 28, 131-140 | 3.2 | 19 |
| 96 | Role of salicylic acid-seed priming in the regulation of chromium (VI) and UV-B toxicity in maize seedlings. *Plant Growth Regulation*, **2016**, 78, 79-91 | 3.2 | 24 |
| 95 | LIB spectroscopic and biochemical analysis to characterize lead toxicity alleviative nature of silicon in wheat (Triticum aestivum L.) seedlings. *Journal of Photochemistry and Photobiology B: Biology*, **2016**, 154, 89-98 | 6.7 | 56 |
| 94 | Experimental Investigations of Abrasive Mixed Electro Discharge Diamond Grinding of Nimonic 80A. *Materials and Manufacturing Processes*, **2016**, 31, 1718-1723 | 4.1 | 14 |
| 93 | Salicylic acid influences biochemical characteristics of harvested tomato (Solanum lycopersicon L.) during ripening. *Indian Journal of Plant Physiology*, **2016**, 21, 50-55 | | 2 |
| 92 | Impact of Nanoparticles on Photosynthesis: Challenges and Opportunities. *Materials Focus*, **2016**, 5, 405-411 | | 69 |
| 91 | Chapter 4 Silicon: A Potential Element to Impart Resistance to Photosynthetic Machinery under Different Abiotic Stresses **2016**, 67-82 | | |

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| 90 | Silicon Nanoparticles More Efficiently Alleviate Arsenate Toxicity than Silicon in Maize Cultiver and Hybrid Differing in Arsenate Tolerance. *Frontiers in Environmental Science*, **2016**, 4, | 4.8 | 181 |
| 89 | Reactive Oxygen Species (ROS): Beneficial Companions of Plants' Developmental Processes. *Frontiers in Plant Science*, **2016**, 7, 1299 | 6.2 | 192 |
| 88 | Physiological and biochemical characterization of two Amaranthus species under Cr(VI) stress differing in Cr(VI) tolerance. *Plant Physiology and Biochemistry*, **2016**, 108, 12-23 | 5.4 | 23 |
| 87 | Anomalous Chromosomal Behaviour and Chromosomal Data in Some Members of Subclass Gamopetalae from District Hamirpur (H. P.), India. *Cytologia*, **2016**, 81, 25-34 | 0.9 | 1 |
| 86 | Assessment of Antioxidant Potential of Plants in Response to Heavy Metals **2016**, 97-125 | | 24 |
| 85 | Responses of photosynthesis, nitrogen and proline metabolism to salinity stress in Solanum lycopersicum under different levels of nitrogen supplementation. *Plant Physiology and Biochemistry* , **2016**, 109, 72-83 | 5.4 | 57 |
| 84 | Antioxidant System Against Active Oxygen Species in Cyanobacterium Aphanothece stagnina: Response to Excess Light Under Cadmium Stress. *Proceedings of the National Academy of Sciences India Section B - Biological Sciences*, **2015**, 85, 535-543 | 1.4 | 3 |
| 83 | Roles of osmoprotectants in improving salinity and drought tolerance in plants: a review. *Reviews in Environmental Science and Biotechnology*, **2015**, 14, 407-426 | 13.9 | 253 |
| 82 | Silicon nanoparticles (SiNp) alleviate chromium (VI) phytotoxicity in Pisum sativum (L.) seedlings. *Plant Physiology and Biochemistry*, **2015**, 96, 189-98 | 5.4 | 290 |
| 81 | Micronutrients and their diverse role in agricultural crops: advances and future prospective. *Acta Physiologiae Plantarum*, **2015**, 37, 1 | 2.6 | 91 |
| 80 | Morpho-anatomical and biochemical adapting strategies of maize ( Zea mays L.) seedlings against lead and chromium stresses. *Biocatalysis and Agricultural Biotechnology*, **2015**, 4, 286-295 | 4.2 | 90 |
| 79 | Investigating the roles of ascorbate-glutathione cycle and thiol metabolism in arsenate tolerance in ridged Luffa seedlings. *Protoplasma*, **2015**, 252, 1217-29 | 3.4 | 63 |
| 78 | Cytokinin enhanced biomass and yield in wheat by improving N-metabolism under water limited environment. *Indian Journal of Plant Physiology*, **2015**, 20, 31-38 | | 7 |
| 77 | Exogenous proline application ameliorates toxic effects of arsenate in Solanum melongena L. seedlings. *Ecotoxicology and Environmental Safety*, **2015**, 117, 164-73 | 7 | 70 |
| 76 | Hydrogen sulfide alleviates toxic effects of arsenate in pea seedlings through up-regulation of the ascorbate-glutathione cycle: Possible involvement of nitric oxide. *Journal of Plant Physiology*, **2015**, 181, 20-9 | 3.6 | 154 |
| 75 | Changing scenario in plant UV-B research:UV-B from a generic stressor to a specific regulator. *Journal of Photochemistry and Photobiology B: Biology*, **2015**, 153, 334-43 | 6.7 | 27 |
| 74 | NaCl-induced physiological and biochemical changes in two cyanobacteria Nostoc muscorum and Phormidium foveolarum acclimatized to different photosynthetically active radiation. *Journal of Photochemistry and Photobiology B: Biology*, **2015**, 151, 221-32 | 6.7 | 24 |
| 73 | Silicon-mediated alleviation of Cr(VI) toxicity in wheat seedlings as evidenced by chlorophyll florescence, laser induced breakdown spectroscopy and anatomical changes. *Ecotoxicology and Environmental Safety*, **2015**, 113, 133-44 | 7 | 121 |

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| 72 | Effect of Arsenic on Growth, Arsenic Uptake, Distribution of Nutrient Elements and Thiols in Seedlings of Wrightia arborea (Dennst.) Mabb. *International Journal of Phytoremediation*, **2015**, 17, 128-34 | 3.9 | 26 |
| 71 | Arsenic contamination, consequences and remediation techniques: a review. *Ecotoxicology and Environmental Safety*, **2015**, 112, 247-70 | 7 | 650 |
| 70 | Effect of the addition of conductive powder in dielectric on the surface properties of superalloy Super Co 605 by EDM process. *International Journal of Advanced Manufacturing Technology*, **2015**, 77, 99-106 | 3.2 | 39 |
| 69 | Effect of salinity stress on plants and its tolerance strategies: a review. *Environmental Science and Pollution Research*, **2015**, 22, 4056-75 | 5.1 | 509 |
| 68 | Cytogenetic Variation among Populations of Aster thomsonii C. B. Clarke from District Sirmaur, Himachal Pradesh (India). *Cytologia*, **2015**, 80, 81-87 | 0.9 | |
| 67 | Retrograde signaling between plastid and nucleus: A review. *Journal of Plant Physiology*, **2015**, 181, 55-66 | 3.6 | 32 |
| 66 | Assessment of terminal heat tolerance ability of wheat genotypes based on physiological traits using multivariate analysis. *Acta Physiologiae Plantarum*, **2015**, 37, 1 | 2.6 | 11 |
| 65 | Differential physiological and biochemical responses of two Vigna species under enhanced UV-B radiationPeer review under responsibility of The Egyptian Society of Radiation Sciences and Applications.View all notes. *Journal of Radiation Research and Applied Sciences*, **2015**, 8, 173-181 | 1.5 | 22 |
| 64 | Reference evapotranspiration under changing climate over the Thar Desert in India. *Meteorological Applications*, **2015**, 22, 425-435 | 2.1 | 31 |
| 63 | Heavy Metal Tolerance in Plants: Role of Transcriptomics, Proteomics, Metabolomics, and Ionomics. *Frontiers in Plant Science*, **2015**, 6, 1143 | 6.2 | 507 |
| 62 | Dimethoate modifies enhanced UV-B effects on growth, photosynthesis and oxidative stress in mung bean (Vigna radiata L.) seedlings: implication of salicylic acid. *Pesticide Biochemistry and Physiology*, **2014**, 116, 13-23 | 4.9 | 40 |
| 61 | Optimization of Parameters Using Conductive Powder in Dielectric for EDM of Super Co 605 with Multiple Quality Characteristics. *Materials and Manufacturing Processes*, **2014**, 29, 267-273 | 4.1 | 37 |
| 60 | Light intensity alters the extent of arsenic toxicity in Helianthus annuus L. seedlings. *Biological Trace Element Research*, **2014**, 158, 410-21 | 4.5 | 40 |
| 59 | Morpho-physiological traits associated with reproductive stage drought tolerance of rice (Oryza sativa L.) genotypes under rain-fed condition of eastern Indo-Gangetic Plain. *Indian Journal of Plant Physiology*, **2014**, 19, 87-93 | | 30 |
| 58 | Meiotic studies in some species of tribe Cichorieae (Asteraceae) from Western Himalayas. *Scientific World Journal, The*, **2014**, 2014, 673456 | 2.2 | 3 |
| 57 | Low and high doses of UV-B differentially modulate chlorpyrifos-induced alterations in nitrogen metabolism of cyanobacteria. *Ecotoxicology and Environmental Safety*, **2014**, 107, 291-9 | 7 | 11 |
| 56 | Cytology of the genus Artemisia (Anthemidae, Asteraceae) in the Western Himalayas. *Biologia (Poland)*, **2014**, 69, 1134-1141 | 1.5 | 9 |
| 55 | Hypothermia slows sequential and parallel steps initiated during caerulein pancreatitis. *Pancreatology*, **2014**, 14, 459-64 | 3.8 | 3 |

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| 54 | Plant Responses to Metal Stress: The Emerging Role of Plant Growth Hormones in Toxicity Alleviation **2014**, 215-248 | | 34 |
| 53 | Role of Macronutrients in Plant Growth and Acclimation: Recent Advances and Future Prospective **2014**, 197-216 | | 12 |
| 52 | The role of abscisic acid (ABA) in ethylene insensitive Gladiolus (Gladiolus grandiflora Hort.) flower senescence. *Acta Physiologiae Plantarum*, **2014**, 36, 151-159 | 2.6 | 18 |
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