**LAST 5 YEARS SCIENTIFIC PUBLICATIONS**

**Full-length Publications**

Rajput, V.D., H., Singh, R.K., Verma, K.K., Sharma, L., Quiroz-Figueroa, F.R., Meena, M., Gour, V.S., Minkina, T., Sushkova, S., Mandzhieva, S. 2021. Recent Developments in Enzymatic Antioxidant Defence Mechanism in Plants with Special Reference to Abiotic Stress. Biology, 10(4), 267. Q-1, IF-3.796 <https://doi.org/10.3390/biology10040267>

Ranjan, A., Rajput, V. D., Minkina, T., Bauer, T., Chauhan, A., and Jindal, T. (2021). Nanoparticles Induced Stress and Toxicity in Plants. *Environmental Nanotechnology, Monitoring & Management*, 100457. Q-1, <https://doi.org/10.1016/j.enmm.2021.100457>

Verma Y, Singh SK, Jatav HS, Rajput VD, Minkina T. (2021). Interaction of zinc oxide nanoparticles with soil: insights into the chemical and biological properties. Environmental Geochemistry and Health. Q-1, IF-3.47 <https://doi.org/10.1007/s10653-021-00929-8>

Panchariya, V., Bhati, V., Madhyastha, H., Madhyastha, R., Prasad, J., Sharma, P., Sharma, P., Harish, Saini, M. K., Rajput, V.D., Nakajima, Y., Kothari, S.L., and Gour, V.S. (2021). Chromatic intervention and biocompatibility assay for biosurfactant derived from *Balanites aegyptiaca* (L.) Del. *Scientific Reports* 11, 4186. Q-1, IF-3.99 <https://doi.org/10.1038/s41598-021-83573-7>

Burachevskaya, M., Minkina, T., Mandzhieva, S., Bauer, T., Nevidomskaya, D., Shuvaeva, V., Sushkova, S., Kizilkaya, R., Gülser, C., Rajput, V. (2021). Transformation of copper oxide and copper oxide nanoparticles in the soil and their accumulation by Hordeum sativum. *Environmental Geochemistry and Health*. Q-1, IF-3.47 <https://doi.org/10.1007/s10653-021-00857-7>

Lysenko, V., Kosolapov, A., Usova, E., Tatosyan, M., Varduny, T., Dmitriev, P., Rajput V., Krasnov, V., Kunitsina, A. (2021). Chlorophyll fluorescence kinetics and oxygen evolution in *Chlorella vulgaris* cells: blue vs. red light. *Journal of Plant Physiology*, 153392. Q-1, IF-3.013 <https://doi.org/10.1016/j.jplph.2021.153392>

Bezuglova, O.S., Minaeva, E.N., Morozov, I. V., Mandzhieva, S.S., Rajput, V.D., Boldyreva, V.E. (2021). Origin of the gypsum-bearing horizon of Calcic Chernozems in the South of Russia. *Eco. Env. & Cons.* 27 (2): 2021; pp. (396-402). Q-4.

Jatav, H., Singh, S., Jatav, S., Rajput, V.D., Sushkova, S., 2021. Feasibility of sewage sludge application in rice-wheat cropping system. *Eurasian Journal of Soil Science*, Q-3. <https://doi.org/10.18393/ejss.880677>

Kumar, S., Singh, R., Kumari, N. Karmakar, S., Behera M, Siddiqui AJ, Rajput VD, Minkina T, Bauddh K, Kumar N. (2021). Current understanding of the influence of environmental factors on SARS-CoV-2 transmission, persistence, and infectivity. *Environmental Science and Pollution Research* Q-1, IF-3.05. <https://doi.org/10.1007/s11356-020-12165-1>

Singhal, R.K., Chauhan, J., Jatav, H.S. Rajput, V.D., Singh, G.S. Bose B. (2021) Artificial night light alters ecosystem services provided by biotic components. *Biologia Futura* Q-3. <https://doi.org/10.1007/s42977-020-00065-x>

Chaplygin, V.A., Minkina, T.M., Mandzhieva, S.S., Nazarenko, O.G., Zimulina, I.V., Bauer, T.V., Litvinov, Yu. A. Rajput. V. (2021). Heavy metals in agricultural crops of Rostov region through the example of soft wheat (Triticum aestivum) . IOP Conf. Ser.: Earth Environ. Sci. 624 012204 <https://doi:10.1088/1755-1315/624/1/012204>

Verma, K. K., Song, X.-P., Verma, C. L., Malviya, M. K., Guo, D.-J., Rajput, V.D., Sharma, A., Wei, K.-J., Chen, G.-L., Solomon, S., Li, Y.-R. (2021). Predication of photosynthetic leaf gas exchange of sugarcane (*saccharum spp*) leaves in response to leaf positions to foliar spray of potassium salt of active phosphorus under limited water irrigation. *ACS Omega*. Q-1, IF- 2.87. <https://doi.org/10.1021/acsomega.0c05863>

Rajput V, Chaplygin, V., Gorovtsov, A., Fedorenko, A., Azarov, A., Chernikova, N., Barakhov, A., Minkina, T., Maksimov, A., Mandzhieva, S., and Sushkova, S. (2020). Assessing the toxicity and accumulation of bulk- and nano-CuO in *Hordeum sativum* L. *Environmental Geochemistry and Health*, Q-1, IF-3.47, <https://doi.org/10.1007/s10653-020-00681-5>

Rajput, V., Minkina, T., Semenkov, I., Klink, G., Tarigholizadeh, S., and Sushkova, S. (2020). Phylogenetic analysis of hyperaccumulator plant species for heavy metals and polycyclic aromatic hydrocarbons. *Environmental Geochemistry and Health*, 1-26. Q-1, IF-3.47, <https://doi.org/10.1007/s10653-020-00527-0>

Rajput V, Minkina V, Mazarji M, Shende S, Sushkova S, Mandzhieva S, Burachevskaya M, Chaplygin V, Singh A, Jatav H (2020) Accumulation of nanoparticles in the soil-plant systems and their effects on human health. *Annals of Agricultural Sciences*, 65, 137-143. Q-1, <https://doi.org/10.1016/j.aoas.2020.08.001>

RajputVD, Gorovtsov AV, Fedorenko GM, MinkinaTM, FedorenkoAG, LysenkoVS, SushkovaSS, MandzhievaSS, ElinsonMA (2020). The influence of application of anatomical parameters biochar and metal tolerant bacteria in polluted soil on morpho-physiological and of spring barley. *Environmental Geochemistry and Health*, Q-1, IF-3.47. <https://doi.org/10.1007/s10653-019-00505-1>.

Belyanovskaya, A.I., Laratte, B., Rajput, V.D., Perry, N., and Baranovskaya, N.V. (2020). The Innovation of the characterisation factor estimation for LCA in the USETOX model. *Journal of Cleaner Production*, 270, 122432. Q-1, IF-7.245, <https://doi.org/10.1016/j.jclepro.2020.122432>

Sushkova, S.N.,Yakovleva, E.V., Minkina, T.M., Gabov, D.N., Antonenko, E.M., Dudnikova, T.S., Barbashev, A.I., Minnikova, T.V., Kolesnikov, S.I., Rajput, V.D. (2020). Accumulation of benzo[a]pyrene in plants of different species and organogenic horizon of soils of steppe phytocenosis under technogenic pollution. *Bulletin of the Tomsk Polytechnic University, Geo Assets Engineering*, 331:12,200-214. [https://doi.org/10.18799 / 24131830/2020/12/2953](https://doi.org/10.18799%20/%2024131830/2020/12/2953) Q-3.

Chokheli, V.A.; Dmitriev, P.A.; Rajput, V.D.; Bakulin, S.D.; Azarov, A.S.; Varduni, T.V.; Stepanenko, V.V.; Tarigholizadeh, S.; Singh, R.K.; Verma, K.K.; Minkina, T.M. Recent Development in Micropropagation Techniques for Rare Plant Species. Plants 2020, 9, 1733. IF: 2.76 Q-1 <https://doi.org/10.3390/plants9121733>

Sharma, L.; Bohra, N.; Rajput, V.D.; Quiroz-Figueroa, F.R.; Singh, R.K.; Marques, G. Advances in Entomopathogen Isolation: A Case of Bacteria and Fungi. Microorganisms 2021, 9, 16. IF: 4.15 Q-1, <https://doi.org/10.3390/microorganisms9010016>

Sushkova, S., Minkina, T., Tarigholizadeh, S., Rajput, V., Fedorenko, A., Antonenko, E., Dudnikova, T., Chernikova, N., Yadav, BK., Batukaev, A. (2020). Soil PAHs contamination effect on the cellular and subcellular organelle changes of Phragmites australis Cav. *Environmental Geochemistry and Health*, Q-1, IF-3.47. <https://doi.org/10.1007/s10653-020-00735-8>

Bauer, T., Minkina, T., Sushkova, S., Rajput, V., Tereshenko, A., Nazarenko, A., Mandzhieva, S., and Sushkov, A. (2020). Mechanisms of copper immobilization in Fluvisol after the carbon sorbent applying. *Eurasian Journal of Soil Science*, 9, 356-361. Q-3, <https://doi.org/10.18393/ejss.785430>

Chaplygin, V. A., Rajput, V. D., Mandzhieva, S. S., Minkina, T. M., Nevidomskaya, D. G., Nazarenko, O. G., Kalinitchenko, V. P., Singh, R., Maksimov, A. Y., and Popova, V. A. (2020). Comparison of Heavy Metal Content in *Artemisia austriaca* in Various Impact Zones. *ACS Omega* 5, 23393-23400. Q-1, IF-2.87 <https://doi.org/10.1021/acsomega.0c03340>

Sushkova, S., Minkina, T., Chaplygin, V., Nevidomskaya, D., Rajput, V., Bauer, T., Mazarji, M., Bren, A. B., Popov, I., and Mazanko, M. (2020). Subcritical water extraction of organic acids from chicken manure. *Journal of the Science of Food and Agriculture*, 1-7. Q-1, IF-2.614, <https://doi.org/10.1002/jsfa.10768>

Verma, K. K., Song, X.-P., Zeng, Y., Li, D.-M., Guo, D.-J., Rajput, V. D., Chen, G.-L., Barakhov, A., Minkina, T. M., and Li, Y.-R. (2020). Characteristics of Leaf Stomata and Their Relationship with Photosynthesis in *Saccharum officinarum* Under Drought and Silicon Application. *ACS Omega*, 5, 24145-24153. Q-1, IF-2.87, <https://doi.org/10.1021/acsomega.0c03820>

Verma, K. K., Song, X. P., Li, D. M., Singh, M., Rajput, V. D., Malviya, M. K., Minkina, T., Singh, R. K., Singh, P., and Li, Y. R. (2020). Interactive Role of Silicon and Plant-Rhizobacteria Mitigating Abiotic Stresses: A New Approach for Sustainable Agriculture and Climate Change. *Plants*, 9(9), 1055, Q-1, IF-2.76, <https://doi.org/10.3390/plants9091055>

Verma, K.K.; Anas, M.; Chen, Z.; Rajput, V.D.; Malviya, M.K.; Verma, C.L.; Singh, R.K.; Singh, P.; Song, X.-P.; Li, Y.-R. (2020) Silicon Supply Improves Leaf Gas Exchange, Antioxidant Defense System and Growth in Saccharum officinarum Responsive to Water Limitation. *Plants*, 9, 1032. Q-1, IF-2.76, <https://doi.org/10.3390/plants9081032>

Fedorenko, A. G., Minkina, T. M., Chernikova, N. P., Fedorenko, G. M., Mandzhieva, S. S., Rajput, V. D., Burachevskaya, M. V., Chaplygin, V. A., Bauer, T. V., Sushkova, S. N., and Soldatov, A. V. (2020). The toxic effect of CuO of different dispersion degrees on the structure and ultrastructure of spring barley cells (*Hordeum sativum* distichum). *Environmental Geochemistry and Health*, 1-15. Q-1, IF-3.47, <https://doi.org/10.1007/s10653-020-00530-5>

Ghazaryan K., Movsesyan, H., Gevorgyan, A., Minkina, T., Sushkova, S., Rajput, V., and Mandzhieva, S. (2020). Comparative hydrochemical assessment of groundwater quality from different aquifers for irrigation purposes using IWQI: A case-study from Masis province in Armenia. *Groundwater for Sustainable Development*, 11, 100459. Q-1, <https://doi.org/10.1016/j.gsd.2020.100459>

Joshi, A., Kanthaliya, B., Rajput, V., Minkina, T., and Arora, J. (2020). Assessment of phytoremediation capacity of three halophytes: *Suaeda monoica*, *Tamarix indica* and *Cressa critica*. *Biologia Futura*, 71, 301-312. Q-3,

Burachevskaya M, Minkina T, Bauer T, Mandzhieva S, Gülser C, Kızılkaya R, Sushkova S, Rajput V (2020). Assessment of extraction methods for studying the fractional composition of Cu and Zn in uncontaminated and contaminated soils. *Eurasian Journal of Soil Science*, 2020, 9 (3) 231- 241. Q-3, <https://doi.org/10.18393/ejss.734601>

Chaplygin V, Mandzhieva S, Minkina T, Sushkova S, Barahov A, Nevidomskaya D, Kızılkaya R, Gülser C, Chernikova N, Mazarji M, Iljina L, Rajput V. (2020). Accumulating capacity of herbaceous plants of the Asteraceae and Poaceae families under technogenic soil pollution with zinc and cadmium. *Eurasian Journal of Soil Science*, 2020, 9 (2) 165 – 172. Q-3, <https://doi.org/10.18393/ejss.707659>.

Burachevskaya, M., Nevidomskaya, D., Tsitsuashvili, V., Rajput, V., and Bren, D. (2020). Lead compounds in bottom sediments of the Seversky Donets floodplain. *E3S Web Conf.* 169, 01004. <https://doi.org/10.1051/e3sconf/202016901004>

Medvedeva, A., Buryukova, O., Kucherenko, A., Ilchenko, Y., Chaplygin, V., Rajput, V. D., and Kizilkaya, R. (2020). Content of heavy metals in Haplic Chernozem under conditions of agrogenesis. *E3S Web Conf.* 169, 01024. <https://doi.org/10.1051/e3sconf/202016901024>

Chokheli VA, Kornienko IV, Kozlovsky BL, Rajput VD, Varduny TV, Lysenko VS. (2020) A comparative evaluation of genetic material from *quercus robur* L. Stem tissues of different age and living states. *Biocatalysis and Agricultural Biotechnology*, Q-2, <https://doi.org/10.1016/j.bcab.2020.101497>.

Rajput V, Minkina T, Ahmed B, Sushkova S,Singh R, Soldatov M, Laratte B, Fedorenko A, Mandzhieva S, Blicharska E, Musarrat J, Saquib Q, Flieger J, Gorovtsov A. (2019). "Interaction of Copper Based Nanoparticles to Soil, Terrestrial and Aquatic Systems: *Critical Review of the State of the Science and Future Perspectives*". *Reviews of Environmental Contamination and Toxicology,* Q-1, IF-5.767, <https://doi.org/10.1007/398_2019_34>

Gorovtsov AV, Minkina TM, Mandzhieva SS, Perelomov LV, Soja G, Zamulina IV, Rajput V, D, Sushkova SN, Mohan D, and Yao J. (2019). The mechanisms of biochar interactions with microorganisms in soil. *Environmental Geochemistry and Health*, Q-1, IF-3.47, <https://doi.org/10.1007/s10653-019-00412-5>

**Andrey G, Rajput V, Tatiana M, Saglara M, Svetlana S, Igora K, Grigoryevad T, Vasily C, Iraida A, Vladislav Z, Elena F, Hasmik M (2019). The role of biochar-microbe interaction in alleviating heavy metal toxicity in *Hordeum vulgare* L. grown in highly polluted soils. *Applied Geochemistry*,** (Q-1) IF-3.252 <https://doi.org/10.1016/j.apgeochem.2019.03.017>

Minkina T., Sushkova S., Yadav B.K., Rajput V., Mandzhieva S., Nazarenko O. (2019). Accumulation and transformation of benzo[a]pyrene in Haplic Chernozem under artificial contamination. *Environmental Geochemistry and Health*, Q-1, IF-3.47 <https://doi.org/10.1007/s10653-019-00362-y>

Rajput V., Minkina, T., Sushkova, S., Behal, A., Maksimov, A., Blicharska, E., Ghazaryan, K., Movsesyan, H., and Barsova, N. (2019). ZnO and CuO nanoparticles: a threat to soil organisms, plants, and human health. *Environmental Geochemistry and Health*, Q-1, IF-3.47, <https://doi.org/10.1007/s10653-019-00317-3>

**Konstantinova E, Minkina T, Sushkova S, Konstantinov A, Rajput V, Sherstnev A, (2019). Urban soil geochemistry of an intensively developing Siberian city: A case study of Tyumen, Russia. *Journal of Environmental Management,* 239:366-375,** Q-1, IF- 5.647 <https://doi.org/10.1016/j.jenvman.2019.03.095>

**Ghazaryan K.A., Movsesyan H.S., Minkina T.M., Sushkova S.N., Rajput V.D. (2019). The identification of phytoextraction potential of Melilotus officinalis and Amaranthus retroflexus growing on copper- and molybdenum-polluted soils. *Environmental Geochemistry and Health,*** Q-1, IF-3.47, <https://doi.org/10.1007/s10653-019-00338-y>

**Minkina T, Rajput V, Fedorenko G, Fedorenko A, Mandzhieva S, Sushkova S, Morin T, Yao J. (2019). Anatomical and ultrastructural responses of *Hordeum sativum* to the soil spiked by copper. *Environmental Geochemistry and Health,* 42, 45–58** Q-1, IF-3.47, <https://doi.org/10.1007/s10653-019-00269-8>

**Rajput V. (2019). Nano–Particles: An emerging concern. *Vigyan Pragati* pp 38-39. (In hindi).** <http://nopr.niscair.res.in/handle/123456789/47025>

**Rajput V. (2019). Nanoparticles: Can be dangerous in Food-Packing. *Vigyan Pragati* pp 58-59. (In hindi)** <http://nopr.niscair.res.in/handle/123456789/50595>

**Fedorenko GM, Fedorenko AG, Minkina TM, Mandzhieva SS, Rajput VD, Usatov AV, Sushkova SN (2018). Method for hydrophytic plant sample preparation for light and electron microscopy (studies on *Phragmites australis* Cav.), *MethodsX*,** (Q-1)<https://doi.org/10.1016/j.mex.2018.09.009>

**Rajput VD, Minkina T, Fedorenko A, Mandzhieva S, Sushkova S, Lysenko V, Duplii N, Azarov A, Chokheli V (2018). Destructive effect of copper oxide nanoparticles on ultrastructure of chloroplast, plastoglobules and starch grains in spring barley (*Hordeum sativum* Distichum). *International Journal of Agriculture and Biology*,** (Q2) **IF-0.802** <https://doi.org/10.17957/IJAB/15.0877>

**Chokheli V, Kagan D, Rajput V, Kozlovsky B, Sereda M, Shmaraeva A, Khibuhina T, Fedyaeva V, Shishlova Z, Dmitriev P, Varduny T, Kapralova O, Usatov A (2018) Genetic variability in cenopopulations of pedunculate oak (*Quercus robur*) in Rostov region, Russia, with the use of ISSR-markers. *International Journal of Agriculture and Biology*,** (Q2) **IF-0.802** <https://doi.org/10.17957/IJAB/15.0802>

**Rajput V**, Minkina T, Fedorenko A, Sushkova S, Mandzhieva S, Lysenko V, Duplii N, Fedorenko G, Dvadnenko K, Ghazaryan K (2018). Toxicity of copper oxide nanoparticles on spring barley (Hordeum sativum distichum). *Science of the Total Environment* 645, 1103-1113. Q-1, IF-6.55,   <https://doi.org/10.1016/j.scitotenv.2018.07.211>

Sushkova S, Deryabkina I, Antonenko E, Kizilkaya R, Rajput V, Vasilyeva G (**2018**). Benzo[a]pyrene degradation and bioaccumulation in artificial soil. Science of the Total Environment.15, 1386-1391 Q-1, IF-6.55, [https://doi.org/10.1016/j`.scitotenv.2018.03.287](https://doi.org/10.1016/j%60.scitotenv.2018.03.287)

Sushkova S, Minkina T, Deryabkina I, Rajput V, Antonenko E, Nazarenko O, Yadav BK, Hakki E, Mohan D (2018). Environmental pollution of soil with PAHs in energy producing plants zone. *Science of the Total Environment.* Q-1, IF-6.55, <https://doi.org/10.1016/j.scitotenv.2018.11.080>

Ghazaryan KA, Movsesyan HS, Khachatryan HE, Ghazaryan NP, Minkina TM, Sushkova SN,. Mandzhieva SS, Rajput VD (2018). Copper phytoextraction and phytostabilization potential of wild plant species growing in the mine polluted areas of Armenia. *Geochemistry: Exploration, Environment, Analysis,* (Q-2) IF-1.109 <https://doi.org/10.1144/geochem2018-035>

Gorovtsov A, Minkina TM, Zamulina IV, Mandzhieva SS, Sushkova SN, **Rajput VD (2018).** Ecological evaluation of polymetallic soils quality: the applicability of culture-dependent methods of studying microbial communities. Journal of Soils and Sediments, 1-12. Q-1, IF-2.76, <https://doi.org/10.1007/s11368-018-2019-y>

Minkina TM, Nevidomskaya DG, Shuvaeva VA, Soldatov AV, Tsitsuashvili VS, Zubavichus YV, **Rajput** **VD**, Burachevskaya MV (**2018**). Studying the transformation of Cu2+ ions in soils and mineral phases by the XRD, XANES, and sequential fractionation methods. Journal of Geochemical Exploration***,*** 184,365-371. (Q-1) IF-3.472 <https://doi.org/10.1016/j.gexplo.2016.10.007>

Sushkova S , Minkina T, Deryabkina I, Mandzhieva S, Zamulina I, Bauer T, Vasilyeva G, Antonenko E, Rajput V, Kızılkaya R (2018). Features of accumulation, migration, and transformation of benzo[a]pyrene in soil-plant system in a model condition of soil contamination. *Journal of Soils and Sediments* 18: 2361. Q-1, IF-2.76, <https://doi.org/10.1007/s11368-016-1634-8>

Rajput VD, Minkina T, Suskova S, Mandzhieva S, Tsitsuashvili V, Chapligin V, Fedorenko A (2018). Effect of copper nanoparticles (CuO NPs) on crop plants a mini review. *BioNanoScience*, 8(1) 36-42. (Q-3) <https://doi.org/10.1007/s12668-017-0466-3>

Rajput VD, Minkina T, Sushkova S, Tsitsuashvili V, Mandzhieva S, Gorovtsov A, Nevidomskyaya D, Gromakova N (2017). Effect of nanoparticles on crops and soil microbial communities. *Journal of Soils and Sediments*, 1-9. Q-1, IF-2.76, <https://doi.org/10.1007/s11368-017-1793-2>

Rajput VD, Minkina TM, Behal A, Sushkova SN, Mandzhieva S, Singh R, Gorovtsov A, Tsitsuashvili VS,. Purvis WO,Ghazaryan K A, Movsesyan HS (2017). Effects of zinc-oxide nanoparticles on soil, plants, animals and soil organisms: a review. *Environmental Nanotechnology, Monitoring & Management*, 9: 76-84 (Q-1) <https://doi.org/10.1016/j.enmm.2017.12.006>

Rajput VD, Yaning C, Ayup M, Minkina T, Sushkova S, Mandzhieva S (2017). Physiological and hydrological changes in *Populus euphratica* seedlings under salinity stress. *Acta Ecologica Sinica*, 37: 229-235. <https://doi.org/10.1016/j.chnaes.2017.02.005>

Sushkova S, Minkina T, Deryabkina I, Mandzhieva S, Zamulina I, Bauer T, Vasilyeva G, Antonenko E, Rajput VD (2017). Influence of PAH contamination on soil ecological status. *Journal of Soils and Sediments*, Q-1, IF-2.76, <https://doi.org/10.1007/s11368-017-1755-8>

Batukaeva A, Endovitsky A, Kalinichenko V, Mischenko N, Minkina T, Mandzhieva S, Sushkova S, Bakoyeve S, Rajput VD, Shipkova G, Litvinov Y (2017). Cadmium status in chernozem of the Krasnodar Krai (Russia) after the application of phosphogypsum. *Proceedings of the Estonian Academy of Sciences*, 66:4, 1–15. (Q-2) IF-0.51 <https://doi.org/10.3176/proc.2017.4.17>

Burachevskaya M V, Minkina TM, Mandzhieva SS, Bauer TV, Chaplygin VA, Sushkova SN, Orlović-Leko P, Mashtykova LY, Rajput VD (2017). Comparing two methods of sequential fractionation in the study of copper compounds in Haplic chernozem under model experimental conditions. *Journal of Soils and Sediments*, Q1, IF-2.76, <https://doi.org/10.1007/s11368-017-1711-7>

Karn SK., Satya E J, Rajput VD, Kumar S, Kumar A (2017). Modeling of simultaneous application of *Vibrio sp.* (SK1) and biochar amendment for removal of pentachlorophenol in soil. *Environmental Engineering Science*, (Q-2) IF-1.575 <https://doi.org/10.1089/ees.2016.0456>

Цицуашвили ВС, Минкина ТМ, Невидомская ДГ, Раджпут ВД, Манджиева СС, Сушкова СН, Бауэр ТВ, Бурачевская МВ (2017). ВОЗДЕЙСТВИЕ НАНОЧАСТИЦ МЕДИ НА РАСТЕНИЯ И ПОЧВЕННЫЕ МИКРООРГАНИЗМЫ (ОБЗОР ЛИТЕРАТУРЫ). *Вестник аграрной науки* Дона, N 3(39). С.93-100.

**Book (Monograph/textbook)**

Jatav, H.P., Singh, S.K., Rajput VD, Minkina, T., 2021. Sustainable Soil Fertility Management, Nova Science Publishers, Inc. 415 Oser Avenue, Suite N. Hauppauge, NY, 11788, USA, ISBN: 978-1-53619-055-7

**Book Chapters**

Shende S.S., Rajput V.D., Gorovtsov A.V., Harish, Saxena P., Minkina T.M., Chokheli V.A., Sushkova S.N., Kaur P., Kizilkaya R. (2021). Interaction of nanoparticles with microbes. In book: Pardeep et al. Plant-Microbes-Engineered Nano-particles (PM-ENPs) Nexus in Agro-Ecosystems. Springer Nature, <https://doi.org/10.1007/978-3-030-66956-0_12>

Rajput V, Singh A, Singh VK, Minkina T, Sushkova S (2021). Impact of Nanoparticles on Soil Resource, In BOOK: Nguyen et al. Nanomaterials for Soil Remediation, Elsevier, <https://doi.org/10.1016/B978-0-12-822891-3.00004-9>

Singh A, Rajput V, Mehrotra R, Pal N, Singh VK, Minkina T, Chokheli VA, Singh RK (2021). Modern sustainable techniques for enhancing crop production. In book: Jatav et al. ​Sustainable Soil Fertility Management, Nova Science Publishers, USA, ISBN: 978-1-53619-055-7. Page 1-28.

Jain R, Bohra N, Singh RK, Sharma L, Quiroz-Figueroa FR, Rajput V. (2021). Modern Sustainable Conservation Practices for Sustainable Soil Management. In book: In book: Jatav et al. ​Sustainable Soil Fertility Management, Nova Science Publishers, USA, ISBN: 978-1-53619-055-7. Page 1-22.

Singh AK, Rajput V, Singh AK, Sengar RS, Singh RK, Minkina T (2021) Transformation Techniques and Their Role in Crop Improvements: A Global Scenario of GM Crops. In BOOK- Singh et al. Policy Issues in Genetically Modified Crops. Elsevier, <http://dx.doi.org/10.1016/B978-0-12-820780-2.00023-6>

Chokheli V, Rajput V, Dmitriev P, Varduny T, Minkina T, Singh RK, Singh A (2021). Status and Policies of Genetically Modified Organisms in Russia. In BOOK- Singh et al. Policy Issues in Genetically Modified Crops. Elsevier, <http://dx.doi.org/10.1016/B978-0-12-820780-2.00003-0>

Gorovtsov A, Rajput V, Pulikova E, Gerasimenko A, Ivanov F, Vasilchenko N, Demidov A, Jatav H, Minkina T (2020). Soil Microbial Communities in Urban Environment. In series “Advances in Environmental Research. Volume 76, Nova Science Publishers, New York

Shende S, Rajput V, Gade A, Minkina T, Rai M, Singh SP. (2020). Impact of Nanomaterials on Human Health through/via Food Chain, In Book: Intellectual Property Issues in Nanotechnology, CRC <https://doi.org/10.1201/9781003052104-15>.

Shende S, Rajput V, Ingle A, Gade A, Minkina T, Rai M. (2020). Synthesis of Copper Nanomaterials by Microbes and Their Use in Sustainable Agriculture, <https://doi.org/10.4324/9780429276330-14>

Jatav, H. S., Sharma, L. D., Sadhukhan, R., Singh, S. K., Singh, S., Rajput, V. D., Parihar, M., Jatav, S. S., Jinger, D., Kumar, S., and Sukirtee (2020). An Overview of Micronutrients: Prospects and Implication in Crop Production. In "Plant Micronutrients: Deficiency and Toxicity Management" (T. Aftab and K. R. Hakeem, eds.), pp. 1-30. Springer International Publishing, Cham. <https://doi.org/10.1007/978-3-030-49856-6_1>

Jatav, H. S., Singh, S. K., Gautam, M. K., Khan, M., Kumar, S., Rajput, V. D., Khan, M. A., Jat, L. K., Parihar, M., Khatik, C. L., Jatav, G. K., Jatav, S. S., Chandra, K., and Parewa, H. P. (2020b). Zinc Solubilization and Mobilization: A Promising Approach for Cereals Biofortification. In "Advances in Plant Microbiome and Sustainable Agriculture: Functional Annotation and Future Challenges" (A. N. Yadav, A. A. Rastegari, N. Yadav and D. Kour, eds.), pp. 41-64. Springer Singapore, Singapore. <https://doi.org/10.1007/978-981-15-3204-7_3>

Jatav HS, Singh SK, Jatav SS, Rajput VD, Parihar M, Mahawer SK, Rajesh Kumar Singhal RK, Sukirtee. (2020). Importance of Biochar in Agriculture and Its Consequence, Applications of Biochar for Environmental Safety, Ahmed A. Abdelhafez and Mohammed H. H. Abbas, IntechOpen, <https://doi.org/10.5772/intechopen.93049>

Chokheli VA, Kozlovsky BL, Dmitriev PA, Kupriushkin DP, Kuropyatnikov MV, Rajput VD, Varduny TV, Ignatova MA, Tarik EP, Kornienko IV, Lysenko VS (2020). Complex Studies on the Quercus L. (Fagaceae) Genus Species During Their Introduction in the Botanical Garden of the Southern Federal University, Rostov-On-Don, Russia. Nova Science Publishers, New York

Rajput, VD, Minkina, T, Fedorenko, A, Fedorenko, G, Mandzhieva, S, Sushkova, S, Chernikova, N, Duplii, N, Azarov, A, and Usatov, A (2019). Interaction of CuO Nanoparticles with *Hordeum Sativum* Distichum in an Aquatic Medium and in the Soil. In "Recent Advances in Geo-Environmental Engineering, Geomechanics and Geotechnics, and Geohazards" (A. Kallel, Z. A. Erguler, Z.-D. Cui, A. Karrech, M. Karakus, P. Kulatilake and S. K. Shukla, eds.), pp. 25-27. Springer International Publishing, Cham (in Scopus). <https://doi.org/10.1007/978-3-030-01665-4_6>

Rajput VD, Minkina T, Sushkova S, Chokheli V, Soldatov M. (2019). Toxicity assessment of metal oxide nanoparticles on terrestrial plants. In *Analysis, Fate, and Toxicity of Engineered Nanomaterials in Plants*, volume 84 edited by Verma SK, Das AK, Elsevier (ISBN: 9780128198315) (in Scopus). <https://doi.org/10.1016/bs.coac.2019.09.003>

RajputVD, Minkina T, SushkovaSv, MandzhievaS, Fedorenko A, Lysenko V, Bederska–Błaszczyk M, Olchowik J, Elena A, Victor C (2018). Structural and ultrastructural changes in nanoparticles exposed plants. In book: Pudake NR, Nanoscience for Sustainable Agriculture. Springer Nature, (ISBN: 978-3-319-97852-9) (in Scopus). <https://doi.org/10.1007/978-3-319-97852-9_13>

Rajput VD, Minkina T, Fedorenko A, Tsitsuashvili V, Mandzhieva S, Sushkova S, Azarov A (2018). Metal oxide nanoparticles: applications and effects on soil ecosystems. In Jesper E. Lund (Ed.), Soil Contamination Sources, Assessment and Remediation, Nova Science Publishers, Inc, New York (2018), pp. 81-106 (ISBN: 978-1-53613-267-0).

Gorovtsov A, Rajput VD, Gorbov S, Vasilchenko N (2017). Bioindication-based approaches for sustainable management of urban ecosystems. Edited by: Singh, R, Kumar, S: Green technologies and environmental sustainability. pp 203-228 Springer Nature, <https://doi.org/10.1007/978-3-319-50654-8_9>