Investigating The Nanotechnology of Electromagnetic Irrigation in The Nano-Agricultural System

Afshin Rashid

July 31, 2024

Orcid : 0000_0003_2343_1631

Note: Magnetic water is generally water that passes through a magnetic eld cre- ated based on specic calculations, and therefore the water changes, improving its physical and chemical properties. Magnetic system can treat water salinity.

The implementation of low-pressure irrigation system with underground pipes and pressure irrigation system (drip and rain) provides the possibility of achieving water distribution ef- ciency in the eld up to 95% in suitable operating conditions. But due to impurities in water such as salt, carbonate, bicarbonate as well as calcium, magnesium, iron, manganese and biological suspended particles, pipes, nozzles, droppers are blocked and their useful life is greatly reduced. Irrigation water purication in agriculture has introduced a new method for electronic water purication, which is one of the physical methods of water purication. Magnetic water is generally water that passes through a magnetic eld created according to special calculations and as a result changes and improves its physical and chemical properties. Magnetic water is generally water that passes through a magnetic eld created based on spe- cic calculations and thus changes the water, improving its physical and chemical properties. The magnetic system can treat water salinity. Water molecules are composed of hydrogen and oxygen atoms, and these molecules are connected by hydrogen bonds, which are double or multiple bonds, and when water passes through a magnetic eld, these bonds The hydrogen is changed or separated. This separation requires the absorption of energy, which reduces the contact of the water bonds and also increases the electrical conductivity, which in turn dis- solves the salt crystals and turns them into the smallest particles and penetration. It facilitates them deep in the soil and also transforms into plant tissues.

Figure 2: Electromagnetic Irrigation in The Nano-Agricultural System

Due to the natural tolerance of plants and vegetables, the magnetic system can increase their tolerance to salinity because continuous irrigation with magnetic irrigation improves soil properties and fertility and makes arable soil permeable. It is excellent and removes excess salts and prevents their deposition on the surface and channels of the soil.

Conclusion:

Magnetic water is generally water that passes through a magnetic eld created based on specic calculations and thus changes the water, improving its physical and chemical properties. Magnetic system can treat water salinity.

(Santos, 2024)

(Harison, 2024)

(Investigation of electromagnetic irrigation nanotechnology in nano-agricultural system (PhD in nano-microelectronics) :: ( )() ;2021)

(Ghandosh, 2023)

References

Review of: \this mechanism, catalytic nanoparticles of metal alloys or transition metals (such as nickel, iron and cobalt) are considered spherical or oating on the substrate surface". (2024). Qeios. https://doi.org/10.32388/61mu28

Review of: \Nanostructures are materials or structures that have at least one dimension between 1 and 100 nanometers have". (2024). Qeios. https://doi.org/10.32388/f7hy6f

(2021). https://electronic-tarfand.blog.ir/post/Investigation%20of%20electromagnetic%20irrigation%20nanotechnology%20in%20nano-agricultural%20system.

H Y P E R L I N K

"https://electronic-tarfand.blog.ir/post/Investigation%20of%20electromagnetic%20irrigation%20nanotechnology%20in%20nano-agricultural%20system"HYPERLINK "https://electronic-tarfand.blog.ir/post/Investigation%20of%20electromagnetic%20irrigation%20nanotechnology%20in%20nano-agricultural%20system"https://electronic-tarfand.blog.ir/post/Investigation%20of%20electromagnetic%20irrigation%20nanotechnology%20in%20nano-agricultural%20system

Review of: \Some of the interesting and anti-exible properties of nanowires are due to their small scale". (2023). Qeios. https://doi.org/10.32388/4xrxpn