

Abstract Submitted
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Effect of Magnetic Field on Ion Transport in bacterial cells SAMINA MASOOD — We calculate the fluid parameters as a function of the constant static magnetic field. The ion transport is affected by the strength and the direction of the magnetic field. This effect can indicate unusual behavior of micro and nano systems. A possible explanation of the abnormal behavior is, therefore, investigated using quantum electrodynamics of many body systems. We have demonstrated the effect of magnetic field on fluid parameters through the transport of ions in the bacterial cells. We could experimentally observe an impact of this effect on the bacterial growth. However, it is still difficult to precisely estimate or compute this effect theoretically.

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