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## Construction and Characterization of Electron Cyclotron Resonance Oxygen Plasma for Tourmaline Treatment

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Generally, Plasma consists of ions, electrons and neutrals. Neutrals are the product produced much higher than other two products, but only ions and electrons are used for surface material modification. Electron cyclotron resonance is one of the techniques to apply external magnetic field in order to increase ions and electrons of produced plasma. This work aim to study influence of external magnetic field to a number of produced ions and electrons from a new construction of Electron Cyclotron Resonance for oxygen plasma. The assumption of increased ions and electrons density affect to advantage of plasma solid interaction, which is used for tourmaline treatment application. Plasma irradiation characterization will be used to investigate optical emission spectrum.

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