

ABSTRACT

The present disclosure provides a method for forming a magnetron, a magnetron, and a magnetron sputtering device. The forming method includes: obtaining, according to magnetic pole arrangement of the magnetron, horizontal magnetic field intensities of respective points on a magnetic arc line of the magnetron at any radius on a surface of a target material; obtaining, according to the horizontal magnetic field intensities of the respective points on the magnetic arc line at any radius on the surface of the target material and a relationship between the horizontal magnetic field intensities and corrosion probabilities of the target material, a corrosion probability at any radius on the surface of the target material; and determining, according to corrosion probabilities at a plurality of radii on the surface of the target material, the magnetic pole arrangement of the magnetron, such that it is unnecessary to perform magnetron sputtering experiments by using the target material to obtain corrosion data on the surface of the target material, thereby reducing design costs of the magnetron and shortening a design cycle of the magnetron.