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Abstract

In the present research, Cu-TiO_2 nanocomposite coatings were prepared via pulse plating using a copper sulfate bath with 5 g/L TiO_2 nanoparticles; the process was undertaken on a steel substrate at room temperature for 60 minutes. Accordingly, the effects of process parameters such as duty cycle, pulse frequency, and average current density on the microstructure of the coating were investigated using scanning electron microscopy (SEM)