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# Surface modification of aluminum alloy by electrolytic plasma processing

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Aluminum alloys are widely used lightweight materials in the transportation industry. For applications where wear and corrosion are of concerns, however, surface protection of aluminum alloys is often required. In this work, the surface of an aluminum alloy is modified by electrolytic plasma processing to enhance its performance. The effect of electrolyte and processing parameters on the microstructures, phase constitution, and the properties of the surface coating will be presented.