

Influence of Alternating Current Density on the Mechanical Behavior and Microstructure of PEO-Coated 7075 Aluminum Alloy

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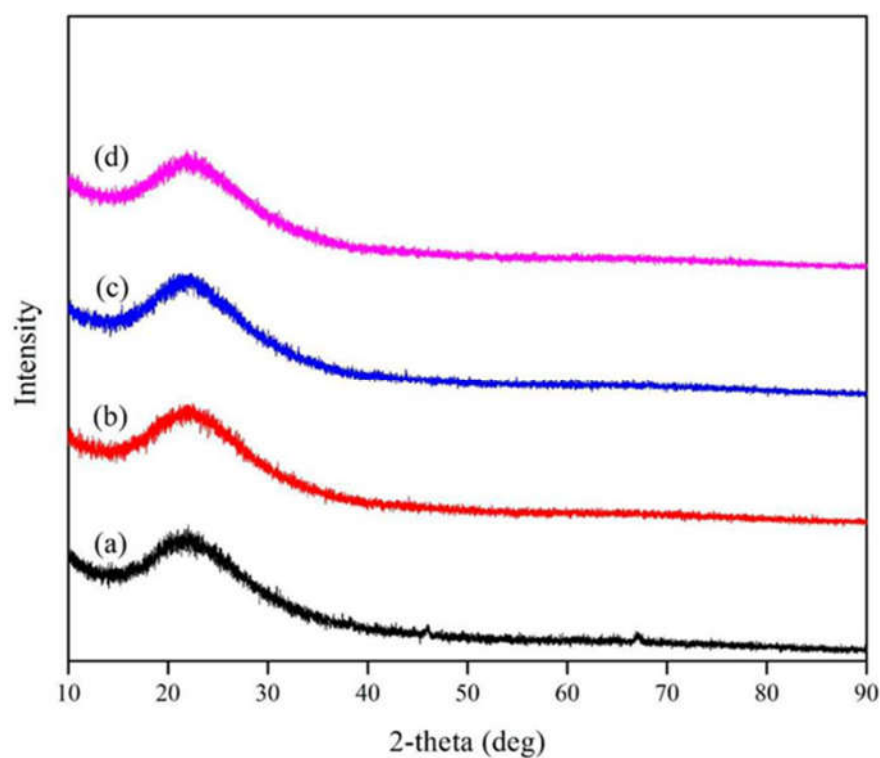


Figure S1. XRD pattern for PEO treatment of Al 7075 in 10 g l⁻¹ Na₂SiO₃, 5 g l⁻¹ KOH at a different current density (a) 8.8 A/dm², (b) 13.5 A/dm², (c) 17.8 A/dm² and (d) 22.3 A/dm².

Table S1. Electrochemical data for the untreated and PEO-coated specimens from

Samples	E_{corr} (V/Ag/AgCl)	i_{corr} (A/cm ²)	Pi (mm per year)
Substrate	-1.152	9.99×10^{-5}	2.27
8.8 A/dm ²	-0.63	1.38×10^{-5}	3.15×10^{-1}
13.5 A/dm ²	-0.32	1.30×10^{-6}	2.97×10^{-2}
17.8 A/dm ²	-0.34	1.73×10^{-6}	3.95×10^{-2}
22.3 A/dm ²	-0.52	1.28×10^{-5}	2.92×10^{-1}