

## عنوان مقاله:

FORMATION AND GROWTH OF TITANIUM ALUMINIDE LAYER AT THE SURFACE OF TITANIUM SHEETS  
IMMERSED IN MOLTEN ALUMINUM

## محل انتشار:

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## خلاصه مقاله:

Abstract: titanium sheets in pure molten aluminum at ۷۵۰ and X-Ray Diffraction Analysis results, TiAlintermetallic layer thickness increases slowly at primary stages. After that an enhanced growth rate occurs due to layercracking and disruption. Presumably, reaction starts with solving titanium into the molten aluminum causing intitanium super saturation and TiAlintermetallic layer which consequently leads to TiAlenergy of intermetallic layer formation and growth was developed by measuring titanium thickness decreases. In this work, kinetics of intermetallic compounds formation in Al-Ti system was studied by immersing ۸۵۰ oC and ۹۵۰ oC. According to Scanning Electron Microscopy<sup>۳</sup> is the only phase can form at the interface. Observations revealed that<sup>۳</sup> formation. At this stage, growth may be controlled by aluminum diffusion through<sup>۳</sup> formation at the interface of Ti-TiAl<sup>۳</sup>. Furthermore, activation

## کلمات کلیدی:

.Intermetallics, Kinetics, TiAl<sup>۳</sup>, Titanium Aluminide, Activation Energy

## لینک ثابت مقاله در پایگاه سیویلیکا:

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