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Education Information

Postgraduate, The University of Manchester, School of Materials, School of Materials, United Kingdom 2011 - 2015
Undergraduate, Fachhochschule Aalen-Hochschule für Technik, Mechanical Engineering, Mechanical Engineering, Germany 2007 - 2011

Foreign Languages

Turkish, C1 Advanced
French, A2 Elementary
German, C1 Advanced
English, C1 Advanced
Swedish, B2 Upper Intermediate
Arabic, A2 Elementary

Dissertations

Doctorate, Performance Characterisation of Duplex Stainless Steel in Nuclear Waste Storage Environment, The University of Manchester, School of Materials, School of Materials, 2016

Academic Titles / Tasks

Assistant Professor, Istanbul Technical University, Kimya-Metalurji, Metalurji Ve Malzeme Mühendisliği, 2021 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Time-resolved grazing-incidence X-ray diffraction measurement to understand the effect of hydrogen on surface strain development in super duplex stainless steel**
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II. **Lateral variation of the native passive film on super duplex stainless steel resolved by synchrotron**

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IV. **Real-Time Corrosion Monitoring of Aluminum Alloy Using Scanning Kelvin Probe Force Microscopy**
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X. **On the Volta potential measured by SKPFM - fundamental and practical aspects with relevance to corrosion science**
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XI. **Corrosion inhibition of aluminium alloy AA6063-T5 by vanadates: Local surface chemical events elucidated by confocal Raman micro-spectroscopy**
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XII. **Experimental and modelling study of the effect of tempering on the susceptibility to environment-assisted cracking of AISI 420 martensitic stainless steel**
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XVI. **Hydrogen embrittlement of super duplex stainless steel - Towards understanding the effects of microstructure and strain**
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XXII. **748 K (475 A degrees C) Embrittlement of Duplex Stainless Steel: Effect on Microstructure and Fracture Behavior**
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XXV. **Characterization of 475 degrees C Embrittlement of Duplex Stainless Steel Microstructure via Scanning Kelvin Probe Force Microscopy and Magnetic Force Microscopy**
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XXVI. **Atmospheric-Induced Stress Corrosion Cracking of Grade 2205 Duplex Stainless Steel-Effects of 475 degrees C Embrittlement and Process Orientation**
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XXX. **Correlative EBSD and SKPFM characterisation of microstructure development to assist determination of corrosion propensity in grade 2205 duplex stainless steel**
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Oernek C., Engelberg D. L.
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Engelberg D. L., Ornek C.
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XXXIII. **Correlative Tomography**
Burnett T. L., McDonald S. A., Gholinia A., Geurts R., Janus M., Slater T., Haigh S. J., Ornek C., Almuaili F., Engelberg D. L., et al.
SCIENTIFIC REPORTS, vol.4, 2014 (SCI-Expanded)

Articles Published in Other Journals

I. **475 degrees C Embrittlement of Duplex Stainless Steel-A Comprehensive Microstructure Characterization Study**
Oernek C., Burke M. G., Hashimoto T., Lim J. J. H., Engelberg D. L.
MATERIALS PERFORMANCE AND CHARACTERIZATION, vol.6, no.3, pp.409-436, 2017 (ESCI)

II. **Effect of "475°C embrittlement" on the corrosion behaviour of grade 2205 duplex stainless steel investigated using local probing techniques**
Örnek C., Engelberg D., Lyon S., Ladwein T.
Corrosion Management, no.115, pp.9-11, 2013 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

I. **Assessment of the influence of hydrogen on the microstructure of TIG welded grade 2205 duplex stainless steel**
Reccagni P., Örnek C., Lu Q., Gittos M., Engelberg D.
European Corrosion Congress, EUROCORR 2016, Montpellier, France, 11 - 15 September 2016, vol.1, pp.31-36

II. **On the effect of local strain and stress on environment-assisted cracking susceptibility of grade 2205 duplex stainless steel**
Örnek C., Engelberg D.
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investigated using local probing techniques
Örnek C., Engelberg D., Lyon S., Ladwein T.
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