



CORROSION SCIENCE

The Journal on Environmental Degradation of Materials and its Control

Editor-in-Chief: G. T. BURSTEIN, University of Cambridge, U.K.

An Official Journal of the Institute of Corrosion

CONTENTS

Letter

- A. SEYEUX, M. LIU, P. SCHMUTZ, G. SONG, 1883 ToF-SIMS depth profile of the surface film on pure magnesium formed by immersion in pure water and the identification of magnesium hydride

Papers

- K. ARAMAKI and T. SHIMURA 1887 Protection of passivated iron against corrosion in a 0.1 M NaNO₃ solution by coverage with an ultrathin polymer coating of carboxylate SAM
- R. NISHIMURA and O. M. ALYOUSIF 1894 A new aspect on intergranular hydrogen embrittlement mechanism of solution annealed types 304, 316 and 310 austenitic stainless steels
- C. A. HUANG and Y. C. CHEN 1901 The effect of water content on the electropolishing behavior of Inconel 718 alloy in perchloric-acetic acid mixtures
- J. KANG, Y. YANG and H. SHAO 1907 Comparing the anodic reactions of Ni and Ni-P amorphous alloy in alkaline solution
- T. JONSSON, B. PUJILAKSONO, 1914 An ESEM *in situ* investigation of the influence of H₂O on iron oxidation at 500 °C
- S. HALLSTRÖM, J. ÅGREN, J.-E. SVENSSON, L.-G. JOHANSSON and M. HALVARSSON 1925 Probability distribution of pitting corrosion depth and rate in underground pipelines: A Monte Carlo study
- F. CALEYO, J. C. VELÁZQUEZ, A. VALOR and J. M. HALLEN 1935 Corrosion inhibition of mild steel in 1 M HCl solution by henna extract: A comparative study of the inhibition by henna and its constituents (Lawsone, Gallic acid, α -D-Glucose and Tannic acid)
- A. OSTOVARI, S. M. HOSEINIEH, M. PEIKARI, S. R. SHADIZADEH and S. J. HASHEMI 1950 Stress corrosion cracking of gas-tungsten arc welds in continuous-cast AZ31 Mg alloy sheet
- N. WINZER, P. XU, S. BENDER, T. GROSS, W. E. S. UNGER and C. E. CROSS 1964 Corrosion monitoring of mild steel in sulphuric acid solutions in presence of some thiazole derivatives – Molecular dynamics, chemical and electrochemical studies
- K. F. KHALED and M. A. AMIN 1976 Investigation of the local response of the steel-concrete interface for corrosion measurement
- K. V. SUBRAMANIAM and M. BI 1985 Metal ion release from electric guitar strings in artificial sweat
- I. REŽIĆ, L. ĆURKOVIĆ and M. UJEVIĆ 1985 Metal ion release from electric guitar strings in artificial sweat

Contents continued on outside back cover

Continued from outside front cover

- S. K. SHUKLA and M. A. QURAISHI
- M. ZAHARESCU, L. PREDOANA,
A. BARAU, D. RAPS, F. GAMMEL,
N. C. ROSERO-NAVARRO, Y. CASTRO,
A. DURÁN and M. APARICIO
I. AHAMAD and M. A. QURAISHI
- C. G. SOARES, Y. GARBATOV, A. ZAYED and
G. WANG
W. APERADOR, R. MEJÍA DE GUTIÉRREZ and
D. M. BASTIDAS
M. GARCÍA-RUBIO, P. OCÓN,
A. CLIMENT-FONT, R. W. SMITH,
M. CURIONI, G. E. THOMPSON,
P. SKELDON, A. LAVÍA and I. GARCÍA
A. L. PULVIRENTI, E. J. BISHOP,
M. A. ADEL-HADADI and A. BARKATT
L. VELEVA, M. ACOSTA and E. MERAZ
G.-L. SONG
S. ZHOU, W. LI, P. HU, C. HONG and
L. WENG
R. LEIVA-GARCÍA, M. J. MUÑOZ-PORTERO
and J. GARCÍA-ANTÓN
Q. ZHANG, R. TANG, K. YIN, X. LUO and
L. ZHANG
K. F. KHALED and M. A. AMIN
- R. HAUSBRAND, M. STRATMANN and
M. ROHWERDER
J. MA and J. WEN
- C. ZHAO, Z. QI, X. WANG and Z. ZHANG
Y. WANG and J. LIU
- F. ZHANG, J. PAN and C. LIN
N. RAJASEKARAN and S. MOHAN
- N. PARVATHAVARTHINI, S. MULKI,
R. K. DAYAL, I. SAMAJDAR, K. V. MANI
and B. RAJ
G. MENG, L. WEI, T. ZHANG, Y. SHAO,
F. WANG, C. DONG and X. LI
- 1990 4-Substituted anilinomethylpropionate: New and efficient corrosion inhibitors for mild steel in hydrochloric acid solution
- 1998 SiO₂ based hybrid inorganic-organic films doped with TiO₂-CeO₂ nanoparticles for corrosion protection of AA2024 and Mg-AZ31B alloys
- 2006 Bis (benzimidazol-2-yl) disulphide: An efficient water soluble inhibitor for corrosion of mild steel in acid media
- 2014 Influence of environmental factors on corrosion of ship structures in marine atmosphere
- 2027 Steel corrosion behaviour in carbonated alkali-activated slag concrete
- 2034 Influence of molybdate species on the tartaric acid/sulphuric acid anodic films grown on AA2024 T3 aerospace alloy
- 2043 Solubilisation of nickel from powders at near-neutral pH and the role of oxide layers
- 2055 Atmospheric corrosion of zinc induced by runoff
- 2063 Effect of tin modification on corrosion of AM70 magnesium alloy
- 2071 Ablation behavior of ZrB₂-SiC-ZrO₂ ceramic composites by means of the oxyacetylene torch
- 2080 Evaluation of Alloy 146, 279, 900, and 926 sensitization to intergranular corrosion by means of electrochemical methods and image analysis
- 2092 Corrosion behavior of Hastelloy C-276 in supercritical water
- 2098 Dry and wet lab studies for some benzotriazole derivatives as possible corrosion inhibitors for copper in 1.0 M HNO₃
- 2107 Corrosion of zinc-magnesium coatings: Mechanism of paint delamination
- 2115 The effects of lanthanum on microstructure and electrochemical properties of Al-Zn-In based sacrificial anode alloys
- 2120 Fabrication and characterization of monolithic nanoporous copper through chemical dealloying of Mg-Cu alloys
- 2126 Corrosion of barium aluminosilicates by water-vapour: An investigation from first principles
- 2130 Localized corrosion behaviour of reinforcement steel in simulated concrete pore solution
- 2139 Preparation, corrosion and structural properties of Cu-Ni multilayers from sulphate/citrate bath
- 2144 Sensitization control in AISI 316L(N) austenitic stainless steel: Defining the role of the nature of grain boundary
- 2151 Effect of microcrystallization on pitting corrosion of pure aluminium

Contents continued on back matter

Indexed/Abstracted in Current Contents, Engng Ind Monthly & Author Index, PASCAL/CNRS Database, Corrosion Abstracts, Metals Abstracts, Chemical Abstracts, INSPEC Database, BMT Abstracts, Petroleum Abstracts, Aqua Abstr, Cam Sci Abstr, Chem Eng Abstr, Chem Haz in Indus, Edi Metal Abstr, Environ Per Bibl, Materials Science Citation Index, Applied Science & Technology Index, Wilson Applied Science & Technology Abstracts, Current Technology Index (CTI). Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®.

Available online at



0010-938X(200909)51:9;1-T