



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

Reviews

- M. LEBRINI, G. FONTAINE, L. GENGBRE, 1201 Corrosion protection of galvanized steel and electroplating steel by decanoic acid in aqueous solution: Electrochemical impedance spectroscopy, XPS and ATR-FTIR
 M. TRAISNEL, O. LERASLE and N. GENET
 J. ZHANG
 M. M. ANTONIJEVIĆ, S. M. Milić and
 M. B. PETROVIĆ

Papers

- L. M. PALOMINO, P. H. SUEGAMA,
 I. V. AOKI, M. F. MONTEMOR and H. G. DE
 MELO
 P. VOLOVITCH, C. ALLEY and K. OGLE
 A. GARCÍA-ROMERO, A. DELGADO,
 A. URRESTI, K. MARTÍN and J. M. SALA
 W. SUN, S. NEŠIĆ and R. C. WOOLLAM
 M.-C. ZHAO, P. SCHMUTZ, S. BRUNNER,
 M. LIU, G.-I. SONG and A. ATRENS
 M. SPAH, D. C. SPAH, B. DESHWAL, S. LEE,
 Y.-K. CHAE and J. W. PARK
 R. VEDALAKSHMI, V. SARASWATHY,
 H.-W. SONG and N. PALANISWAMY
 P. HENRY, J. TAKADOU and P. BERÇOT
 N. RYBAKOVA, M. SOUTO, H.-P. MARTINZ,
 Y. ANDRIYKO, W. ARTNER, J. GODINHO and
 G. E. NAUER
- 1207 A review of steel corrosion by liquid lead and lead–bismuth
 1228 Films formed on copper surface in chloride media in the presence of azoles
 1238 Electrochemical study of modified cerium–silane bi-layer on Al alloy 2024-T3
 1251 Understanding corrosion via corrosion product characterization: I. Case study of the role of Mg alloying in Zn–Mg coating on steel
 1263 Corrosion behaviour of several aluminium alloys in contact with a thermal storage phase change material based on Glauber's salt
 1273 The effect of temperature and ionic strength on iron carbonate ($FeCO_3$) solubility limit
 1277 An exploratory study of the corrosion of Mg alloys during interrupted salt spray testing
 1293 Thermodynamic studies on corrosion inhibition of aqueous solutions of amino/carboxylic acids toward copper by EMF measurement
 1299 Determination of diffusion coefficient of chloride in concrete using Warburg diffusion coefficient
 1308 Tribocorrosion of 316L stainless steel and TA6V4 alloy in H_2SO_4 media
 1315 Stability of electroplated titanium diboride coatings in high-temperature corrosive media

Contents continued on outside back cover

Continued from outside front cover

- M. C. S. S. MACEDO, I. C. P. MARGARIT-MATTOS, F. L. FRAGATA, J.-B. JORCIN, N. PÉBERE and O. R. MATTOS
 N. LIU, J. WANG, L. WANG, Y. WU and L. WANG
 W. LIU, F. CAO, L. CHANG, Z. ZHANG and J. ZHANG
 X. LI, S. DENG and H. FU
- S. LIU, N. XU, J. DUAN, Z. ZENG, Z. FENG and R. XIAO
 E.-S. M. SHERIF, J. H. POTGIETER, J. D. COMINS, L. CORNISH, P. A. OLUBAMBI and C. N. MACHIO
 S. J. YUAN and S. O. PEHKONEN
- M.-J. ZHOU, Z.-O. ZENG and L. ZHONG S. CANDAN
- D.-Q. ZHANG, J. LI, H. G. JOO and K. Y. LEE
 Md. Z. ALAM and D. K. DAS
- Y. S. DING, L. W. TSAY and C. CHEN
- M. A. ESPINOSA-MEDINA, G. CARBAJAL-DE LA TORRE, H. B. LIU, A. MARTÍNEZ-VILLA-FAÑE and J. G. GONZÁLEZ-RODRIGUEZ
 E. JAMALIZADEH, S. M. A. HOSSEINI and A. H. JAFARI
 Y.-M. ZHANG, X.-M. CHU, H. WANG, S.-Y. HE and D.-P. HE
 B. V. APPA RAO, Md. YAKUB IQBAL and B. SREEDHAR
 N. A. VU, A. CASTEL and R. FRANÇOIS
 X. F. LIU, J. ZHAN and Q. J. LIU
 C. Z. XU, S. M. JIANG, Z. B. BAO, J. GONG and C. SUN
Short Communication
 X. ZHANG, W. WANG and J. WANG
- 1322 Contribution to a better understanding of different behaviour patterns observed with organic coatings evaluated by electrochemical impedance spectroscopy
 1328 Electrochemical corrosion behavior of Mg-5Al-0.4Mn-xNd in NaCl solution
 1334 Effect of rare earth element Ce and La on corrosion behavior of AM60 magnesium alloy
 1344 Synergism between red tetrazolium and uracil on the corrosion of cold rolled steel in H₂SO₄ solution
 1356 Corrosion inhibition of carbon steel in tetra-n-butylammonium bromide aqueous solution by benzotriazole and Na₃PO₄
 1364 The beneficial effect of ruthenium additions on the passivation of duplex stainless steel corrosion in sodium chloride solutions
 1372 AFM study of microbial colonization and its deleterious effect on 304 stainless steel by *Pseudomonas* NCIMB 2021 and *Desulfovibrio desulfuricans* in simulated seawater
 1386 Photogenerated cathode protection properties of nano-sized TiO₂/WO₃ coating
 1392 An investigation on corrosion behaviour of pressure infiltrated Al-Mg alloy/SiC_p composites
 1399 Corrosion properties of Nd:YAG laser-GMA hybrid welded AA6061 Al alloy and its microstructure
 1405 Effect of cracking in diffusion aluminide coatings on their cyclic oxidation performance on Ti-based IMI-834 alloy
 1413 The effects of hydrogen on fatigue crack growth behaviour of Ti-6Al-4V and Ti-4.5Al-3V-2Mo-2Fe alloys
 1420 Hot corrosion behaviour of Fe-Al based intermetallic in molten NaVO₃ salt
 1428 Quantum chemical studies on corrosion inhibition of some lactones on mild steel in acid media
 1436 Fabrication of Al-Mg-Re foams and their corrosion resistance properties
 1441 Self-assembled monolayer of 2-(octadecylthio)benzothiazole for corrosion protection of copper
 1453 Effect of stress corrosion cracking on stress-strain response of steel wires used in prestressed concrete beams
 1460 The influence of tensile stress on electrochemical noise from aluminum alloy in chloride media
 1467 Isothermal oxidation behaviour of a gradient NiCoCrAlSiY coating deposited by arc ion plating on a Ni-based single crystal superalloy
 1475 A novel device for the wire beam electrode method and its application in the ennoblement study

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



www.sciencedirect.com



0010-938X(200906)51:6;1-4