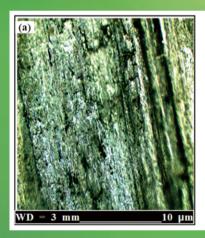
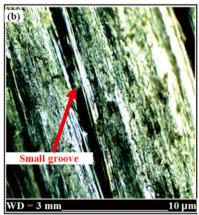


Journal of Surface Engineered Materials and Advanced Technology









Journal Editorial Board

ISSN 2161-4881 (Print) ISSN 2161-489X (Online)

http://www.scirp.org/journal/jsemat

......

Editor-in-Chief

Dr. Bouzid Menaa Fluorotronics Inc., USA

Editorial Board

Prof. Adnane Abdelghani National Institute of Applied Science and Technology, Tunisia

Dr. Vamsi Krishna Balla Central Glass and Ceramic Research Institute, India

Prof. David M. Bastidas Spanish Council for Scientific Research (CENIM-CSIC), Spain

Dr. Elena Binkauskiene Centre for Physical Science and Technology, Lithuania

Dr. Gerardino D'Errico University of Naples "Federico II", Italy

Prof. Eduardo Alfredo Favret Centro de Investigaciones en Recursos Naturales (CIRN), Argentina

Prof. Bolesław Grzegorz GireńPolish Academy of Sciences, PolandDr. Anming HuUniversity of Waterloo, CanadaProf. Ahmed IbrahimFarmingdale State College, USA

Prof. Mark James Jackson Purdue University, USA

Prof. Yuri P. Kalmykov University of Perpignan, France

Prof. Zhixin Kang Guangdong Key Laboratory for Advanced Metallic

Materials Processing, China

Dr. Hyunjung Kim Chonbuk National University, Korea (South)

Dr. Xuan Tuan Le MiQro Innovation Collaborative Centre (C2MI), Canada

Prof. Ioannis Liritzis University of the Aegean, Greece

Dr. Abdel Salam H. Makhlouf Central Metallurgical Research and Development Institute (CMRDI), Egypt

Prof. Francisco M. Márquez-Linares Universidad del Turabo, USA

Prof. Jukka Pekka Matinlinna The University of Hong Kong, Hong Kong (China)

Prof. Elena Dimitrova MilevaBulgarian Academy of Sciences, BulgariaDr. Faizal B. MustaphaUniversity Putra Malaysia, Malaysia

Prof. Hideo Nakajima Osaka University, Japan

Prof. K. A. Natarajan Indian Institute of Science, India

Prof. Takeo Oku The University of Shiga Prefecture, Japan

Dr. Gary R. Pickrell Virginia Polytechnic Institute and State University, USA

Dr. Vilas Pol Argonne National Laboratory (ANL), USA

Prof. Nicola PugnoPolitecnico di Torino, Italy

Dr. M. V. Reddy National University of Singapore (NUS), Singapore

Prof. Zhifeng RenBoston College Newton, USA

Prof. Maria RichertAGH University of Science & Technology, PolandProf. Juan M. RusoUniversity of Santiago de Compostela (USC), Spain

Prof. Cristina SatrianoUniversity of Catania, ItalyProf. Young-Seok ShonCalifornia State University, USA

Prof. Hiroaki TadaKinki University, JapanProf. Rafael TadmorLamar University, USAProf. Valentin ValtchevUniversity of Caen, France

Prof. Yaohua Zhu The Hong Kong Polytechnic University, Hong Kong (China)

Guest Reviewers

Li Chen Yuhang Cheng C. T. Liu



TABLE OF CONTENTS

Volume 2	Number 3	July 2012
Study on a N	Novel Composite Eco-Friendly Corrosion and Scale Inhibit	tor for Steel Surface in Simulated
Cooling Wat	ter	
D. F. Zeng,	W. Qin	137
Effect of Glo	ow-Discharge Air Plasma Treatment on Wettability of Syn	thetic Polymers
I. Krásný, I.	Kupská, L. Lapčík	142
Effect of Fill	ler Content and Alkalization on Mechanical and Erosion V	Wear Behavior of CBPD Filled
Bamboo Fib	per Composites	
A. Gupta, A	. Kumar, A. Patnaik, S. Biswas	149
Diamond Pa	articles Deposited among Nickel/Copper Particles in Energ	y Controlled CH ₄ /H ₂ RF
Discharge Pl	lasmas	
J. Emi, S. Ii	izuka	158
Improved Co	orrosion Resisting Property of Magnetism Iron Fiber by S	SiO ₂ Coating
D. Y. Niu, J.	. K. Yu, Q. Qiao, D. D. Wang, R. H. Liu.	163
Evaluate the	e Effects of Various Surface Roughness on the Tribological	Characteristics under Dry and
Lubricated (Conditions for Al-Si Alloy	
R. A. Al-Sa	amarai, Haftirman, K. R. Ahmad, Y. Al-Douri	167
Charge Tran	nsfer Properties in MEH-PPV/PS:MWCNTs Nanocomposite	s
N. Chehata,	O. Dhibi, A. Ltaief, A. Farzi, A. Bouazizi	174

The figure on the front cover is from the article published in Journal of Surface Engineered Materials and Advanced Technology, 2012, Vol. 2, No. 3, pp. 167-173 by Riyadh A. Al-Samarai, *et al.*

Copyright © 2012 SciRes.

Journal of Surface Engineered Materials and Advanced Technology (JSEMAT) Journal Information

SUBSCRIPTIONS

The *Journal of Surface Engineered Materials and Advanced Technology* (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$39 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright@2012 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assumes no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: jsemat@scirp.org





Journal of Surface Engineered Materials and Advanced Technology (JSEMAT)

http://www.scirp.org/journal/jsemat

Journal of Surface Engineered Materials and Advanced Technology (JSEMAT) is an international, specialized, English-language journal devoted to publication of original contributions concerning surface sciences, surface properties, techniques of characterization and generated applications.

It is an open-access, peer-reviewed journal describing scientific and technological advances that cover the basic sciences, engineering aspects and applied technology of surface chemistry, surface materials sciences and engineering studies for applications in nanotechnology, biomaterials, optics, environment, architectural restoration including all kind of materials surfaces.

Subject Coverage

The journal publishes the highest quality original full articles, communications, notes, reviews, special issues and books, covering both the experimental and theoretical aspects including but not limited to:

Adsorption Process and Principles

Advances in Adhesion Sciences

Interface Sciences and Applications

Intermolecular Interactions

Kinetics and Thermodynamics at Surfaces

Modeling Theory of Surface Chemistry

Single Molecule Force Spectroscopy

Surface Biocompatibility

Surface Characterization and Advanced Techniques

Surface Corrosion

Surface Crystallization

Surface Hydration at Solid/Liquid Interface

Surface Interactions at Bio-Interfaces

Surface Interactions at the Nanoscale

Surface Microscopy (SEM, AFM, High Speed AFM, STM...)

Surface Molecules Self-Assembly

Surface Nanopatterning

Papers are acceptable provided they report important findings, novel insights or useful techniques within the scope of the journal. All manuscript must be prepared in English, and are subjected to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by prints in hard copy. It will be available through http://www.scirp.org/journal/jsemat

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

E-mail: jsemat@scirp.org

Website and E-Mail

http://www.scirp.org/journal/jsemat

TABLE OF CONTENTS

Volume 2	Number 3	July 2012
Study on a No	ovel Composite Eco-Friendly Corrosion and Scale Inhib	itor
for Steel Su	rface in Simulated Cooling Water	
D. F. Zeng, W.	Qin	
Effect of Glov	v-Discharge Air Plasma Treatment on Wettability of Syr	thetic Polymers
I. Krásný, I. K	upská, L. Lapčík	
Effect of Fille	er Content and Alkalization on Mechanical and Erosion	Wear Behavior
of CBPD Fil	lled Bamboo Fiber Composites	
A. Gupta, A. K	Kumar, A. Patnaik, S. Biswas	
Diamond Par	ticles Deposited among Nickel/Copper Particles in Ener	gy Controlled
CH ₄ /H ₂ RF I	Discharge Plasmas	
J. Emi, S. Iizul	ka	
Improved Con	rrosion Resisting Property of Magnetism Iron Fiber by S	SiO ₂ Coating
D. Y. Niu, J. K	. Yu, Q. Qiao, D. D. Wang, R. H. Liu	163
Evaluate the l	Effects of Various Surface Roughness on the Tribologica	l Characteristics
under Dry a	and Lubricated Conditions for Al-Si Alloy	
R. A. Al-Sama	rai, Haftirman, K. R. Ahmad, Y. Al-Douri	
Charge Trans	sfer Properties in MEH-PPV/PS:MWCNTs Nanocompos	ites
N. Chehata, O.	. Dhibi, A. Ltaief, A. Farzi, A. Bouazizi	174