

# MRS SYMPOSIUM PROCEEDINGS

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## Advanced Structural Materials–2015

### EDITORS

José M. Herrera Ramírez  
Francisco C. Robles-Hernández  
Jorge López-Cuevas

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# **Advanced Structural Materials–2015**

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# **Advanced Structural Materials–2015**

Symposium held August 16-20, 2015, Cancun, México

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# CONTENTS

<b>Preface</b> . . . . .	<b>ix</b>
<b>Materials Research Society Symposium Proceedings</b> . . . . .	<b>xi</b>
<b>Friction Behaviour of Multilayered Graphene against Steel</b> . . . . .	<b>1</b>
A. Banerji, S. Bhowmick, M.J. Lukitsch, and A.T. Alpas	
<b>MAX Phases: Understanding of Erosion, Corrosion and Oxidation Resistance Properties in TiAlSiCN and TiCrSiCN Compositions</b> . . . . .	<b>9</b>
Alexander Manulyk	
<b>Production of Amorphous Alloys by Special Electrometallurgy Methods</b> . . . . .	<b>17</b>
V. Shapovalov, Y. Nikitenko, A. Manulyk, and D. Kalashnyk	
<b>Simulation of Heating Cycles for Large Steel Ingots</b> . . . . .	<b>23</b>
L.F. Romano Acosta, O. Zapata, I. Álvarez, R. Cerda, and L. Leduc Lezama	
<b>Mathematical and Physical Modeling of Three-phase Gas-stirred Ladles</b> . . . . .	<b>29</b>
Juan A. López, Marco A. Ramírez-Argáez, Adrián M. Amaro-Villeda, and Carlos González	
<b>Ab Initio Study of Weldability of a High-manganese Austenitic Twinning-induced Plasticity (TWIP) Steel Microalloyed with Boron</b> . . . . .	<b>35</b>
Humberto Hernández-Belmontes, Ignacio Mejía, and Cuauhtémoc Maldonado	
<b>Determination of Critical Stress for Dynamic Recrystallization of a High-Mn Austenitic TWIP Steel Micro-alloyed with Vanadium</b> . . . . .	<b>41</b>
Elvira García-Mora, Ignacio Mejía, Francisco Reyes-Calderón, and José M. Cabrera	
<b>Metallographic Characterization of a Ti-containing Low-density Fe-Mn-Al-C Steel in As-cast Condition</b> . . . . .	<b>47</b>
Ignacio Mejía, Gladys Y. Díaz-Martínez, and Arnoldo Bedolla-Jacuinde	

<b>Optimization of the Atmospheric Plasma Spray Parameters using Design of Experiments for Coatings on AISI 410 Stainless Steel . . . . .</b>	<b>.53</b>
E. Bautista Pérez, C.E. Cruz, Juan M. Salgado Lopez, and J.A. Toscano	
<b>Design and Characterization of a Magnetorheological Damper for Vibration Mitigation during Milling of Thin Components . . . . .</b>	<b>.65</b>
S. Puma-Araujo, D. Olvera-Trejo, A. Elías-Zuñiga, O. Martínez-Romero, and C.A. Rodríguez	
<b>Binder Microstructures Developed during the Hydration Process in the System Portland Cement – Calcium Aluminate Cement – Calcium Sulfate . . . . .</b>	<b>.71</b>
Andreea M. Moncea, Ana M. Panait, György Deák, and George Poteraş	
<b>Porous Silicon Nanostructured Materials for Sensing Applications: Molecular Assembling and Electrochemical or Optical Evaluation. . . . .</b>	<b>.77</b>
J. Márquez, M. De la Cruz-Guzmán, L.F. Cházaro, and G. Palestino	
<b>Wollastonite - Tricalcium Phosphate Glass-ceramics of Eutectic Composition Synthesized by the Glass-crystallization Method . . . . .</b>	<b>.83</b>
Jorge López-Cuevas, Martín I. Pech-Canul, Juan C. Rendón-Angeles, José L. Rodríguez-Galicia, and Carlos A. Gutiérrez-Chavarría	
<b>Effect of Mechanical Activation on the Synthesis of Ba-celsian and Sr-celsian using Precursor Mixtures Containing Coal Fly Ash . . . . .</b>	<b>.89</b>
Claudia M. Lopez-Badillo, Jorge López-Cuevas, Carlos A. Gutiérrez-Chavarría, José L. Rodríguez-Galicia, and Elia M. Múzquiz-Ramos	
<b>Synthesis of Biodegradable Copolymer of Poly(isobutyl vinyl ether)-co-Poly(<math>\epsilon</math>-Caprolactone) using Half-sandwich Metallocene Catalyst and their Application as Plasticizer for Poly(Vinyl Chloride) . . . . .</b>	<b>.95</b>
Víctor E. Comparán Padilla, Mildred Flores Guerrero, Marissa Pérez Álvarez, Hortensia Maldonado Textle, Odilia Pérez Camacho, and Gregorio Cadenas Pliego	

<b>Numerical Simulation of Rotary Forging Inconel 718 Superalloy Applied to Aeronautical Components. . . . .</b>	<b>101</b>
A. Loyda, G.M. Hernández-Muñoz, L.A. Reyes-Osorio, P. Zambrano, and F. Montemayor-Ibarra	
<b>Stress Reduction of Amorphous Silicon Deposited by PECVD. . . . .</b>	<b>109</b>
César B. Pérez and C. Reyes-Betanzo	
<b>Characterization of Residual Stress in a-SiC:H Deposited by RF-PECVD for Manufacturing of Membranes for Cell Culture. . . . .</b>	<b>117</b>
O. Gelvez-Lizarazo and C. Reyes-Betanzo	
<b>Effect of Ti Microaddition on Cavitation Behavior During Uniaxial Hot-tensile of Fe-22Mn-1.5Al-1.3Si-0.5C Austenitic TWIP Steel. . . . .</b>	<b>123</b>
Antonio E. Salas-Reyes, Ignacio Mejía, and José M. Cabrera	
<b>Experimental Determination of Continuous Cooling Transformation Diagrams of Hot-rolled Heat Treatable Steel Plates Using Quenching Dilatometry. . . . .</b>	<b>129</b>
Gerardo Altamirano-Guerrero, Emmanuel J. Gutiérrez-Castañeda, Omar García-Rincón, and Armando Salinas-Rodríguez	

## PREFACE

This volume is a compilation of papers that were presented at Symposium 6B, “Advanced Structural Materials” of the XXIV International Materials Research Congress, organized in collaboration with MRS, which was held from August 16-20, 2015 in Cancun, Quintana Roo, Mexico. The symposium was devoted to fundamental and technological applications of structural materials, and continued the tradition of providing a forum for scientists from various backgrounds with a common interest in the development and use of structural materials to come together and share their findings and expertise.

The authors of the abstracts submitted to the symposium come from countries such as Belgium, Brazil, Canada, Colombia, France, Germany, Hungary, India, Mexico, Romania, South Korea, Spain, United States of America, and Ukraine. The papers contained in this volume are a collection of the invited and contributed papers.

All papers have been thoroughly reviewed and edited to the standards of the Materials Research Society. We are grateful to all those referees who, by their comments and constructive criticism, helped to improve the final papers and to all the authors who made additional efforts to prepare their manuscripts.

The “Advanced Structural Materials” symposium has been held for the last 20 years with the objective of presenting overviews and recent investigations related to advanced structural metallic, ceramic, composite, and concrete materials along with their industrial applications. The topics include innovative processing, phase transformations, mechanical properties, oxidation resistance, modeling and the relationship between processing, microstructure and mechanical behavior.

The organizing committee gratefully acknowledges the enthusiastic cooperation of all symposium participants, as well as the kind acceptance of the editorial committee of Materials Research Society to publish these proceedings. We hope all readers will come to consider the “Advanced Structural Materials” symposium in Cancun as a suitable forum to present the results from their recent research and experience.

José M. Herrera Ramírez  
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October 2015



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