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Nicolas Saintier(Ecole Nationale Supérieure d'Arts et Metiers de Paris)  
Fodil Meraghni(Ecole Nationale Supérieure d'Arts et Metiers de Paris)  
Yves Chemisky(Arts et Metiers ParisTech)

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Joseph Fitoussi(Ecole Nationale Superieure d'Arts et Metiers de Paris)

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Frank Henning(Fraunhofer Institute for Chemical Technology (ICT))

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N/A

Edward David Mccarthy(National Institute of Standards and Technology(NIST))

Jae hyun Kim(National Institute of Standards and Technology(NIST))

Nathanael Alan Heckert(National Institute of Standards and Technology(NIST))

Stefan D. Leigh(National Institute of Standards and Technology(NIST))

Gale A Holmes(National Institute of Standards and Technology(NIST))

Jeffrey W. Gilman(National Institute of Standards and Technology(NIST))

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James Mackiewicz

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Peter Hine(University of Leeds)

Bushra Parveen(University of Bradford)

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1714

Tomi Herceg(Imperial College of Science, Technology and Medicine, University of London)

Mohd shukur Zainol abidin(Imperial College of Science, Technology and Medicine, University of London)

Clara Delfour(Institut Catholique d'Arts et Metiers Lille)

Emile Smith Greenhalgh(Imperial College of Science, Technology and Medicine, University of London)

Alexander Bismarck(Imperial College of Science, Technology and Medicine, University of London)

Milo S p Shaffer(Imperial College of Science, Technology and Medicine, University of London)

### **The netting analysis as a limit case of the laminated structure theory**

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Georges Verchery(Pluralis)

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Matthieu Salib(Institut Jean Lamour - UMR 7189 CNRS - Universite de Lorraine)

Mickael Mourot(Institut Jean Lamour - UMR 7189 CNRS - Universite de Lorraine)

Lilian Vautrot(Institut Jean Lamour - UMR 7189 CNRS - Universite de Lorraine)



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Moukrane Dehmas(Institut Jean Lamour - Universite de Lorraine)

Benoit Denand(Institut Jean Lamour - Universite de Lorraine)

Elisabeth Aeby-gautier(Centre National de la recherche scientifique CNRS)

Sabine Denis(Institut Jean Lamour - UMR 7189 CNRS - Universite de Lorraine)

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Michael Jerabek(Borealis Polyolefine GmbH)

Simon Gastl(Borealis Polyolefine GmbH)

Anna Maria Hartl(Johannes Kepler University Linz)

Martin Reiter(Johannes Kepler University Linz)

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Seong su Kim(Chonbuk National University)

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Hui yun Hwang(Andong National University)

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Seong su Kim(Chonbuk National University)

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Youqi Wang(Kansas State University)

Yuyang Miao(Kansas State University)

Chian-fong Yen

Harun Bayraktar(Albany Engineered Composites)

Jon Goering(Albany Engineered Composites)

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Xiasheng Sun(China Aviation Industry Corp)

Shuguang Li(University of Nottingham)

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Minoru Taya(University of Washington)

### **EFFECT OF EMBEDMENT LENGTH ON THE PERFORMANCE OF SHEAR-STRENGTHENED RC BEAMS WITH L-SHAPED CFRP PLATES** 1790

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Sébastien Thivierge(Ecole de Technologie Superieure)

Omar Chaallal(Ecole de Technologie Superieure)

Yixin Shao(McGill University)

### **PLY WAVINESS DETECTION AND MESH GENERATION FOR COMPOSITES BASED ON X-RAY COMPUTED TOMOGRAPHY** 1796

Yuri G Nikishkov(University of Texas at Arlington)

Gennadiy Nikishkov(University of Aizu)

Andrew Makeev(University of Texas at Arlington)

### **Processing effect on the damage tolerance of randomly-oriented strands thermoplastic composites** 1805

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Pascal Hubert(McGill University)

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- Realistic FEA modeling of 3D woven composites on mesoscale** 1813  
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Borys Drach(University of New Hampshire)  
Igor Tsukrov(University of New Hampshire)  
Harun Bayraktar(Albany Engineered Composites)  
Jon Goering(Albany Engineered Composites)
- CURE MONITORING OF CFRP: ELECTRICAL IMPEDANCE ANALYSIS** 1821  
Philippe Marguerès(Institut Clément Ader)  
Philippe A Olivier(Institut Clément Ader)  
Thierry Camps  
Sonia Sassi(Institut Clément Ader)  
Mahamadou Mounkaila
- EFFECT OF MORPHOLOGY ON FRACTURE TOUGHNESS OF THERMOPLASTIC/THERMOSET/CLAY HYBRID NANOCOMPOSITES** 1831  
Sina Chaeichian(Concordia University)  
Paula Wood-adams(Concordia University)  
Suong Hoa(Concordia University)
- A Multifunctional Microporous Polymer Nanocomposite with Graphene Nanoplatelets** 1839  
Diandra Rollins(Michigan State University)  
Lawrence T Drzal(Michigan State University)
- DAMAGE PHENOMENA OF FIBRE REINFORCED COMPOSITES UNDER VHCF-LOADING** 1848  
Ilja Koch(Technische Universität Dresden)  
Karl Schulte(Technische Universität Hamburg-Harburg)  
Maik Gude(Technische Universität Dresden)  
Werner A. Hufenbach(Technische Universität Dresden)  
Roman Koschichow(Technische Universität Dresden)  
Julia Knoll(Technische Universität Hamburg-Harburg)
- STABILITY OF t-ZrO<sub>2</sub> PARTICLES IN ALUMINA-ZIRCONIA COMPOSITES: PART. 1** 1854  
**COMPETITION BETWEEN SIZE AND STRAIN EFFECT**  
Camille Rabache(Ecole Centrale de Paris)

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Guillaume Bouchet

Guillaume De calan

Jean-michel Kiat(Ecole Centrale de Paris)

Nicolas Guiblin(Ecole Centrale de Paris)

Florence Porcher

### **IMPACT OF LAYUP RATE ON QUALITY OF FIBER STEERING/CUT-RESTART IN AUTOMATED FIBER PLACEMENT PROCESS** 1856

Jihua Chen(National Research Council Canada)

Teresa Chen-keat

Mehdi Hojjati(Concordia University)

Alexander J Vallee

Marc-andre Oceau(Natural Resources Canada)

Ali Yousefpour(National Research Council Canada)

### **SQUEEZE FLOW OF RANDOMLY-ORIENTED STRANDS THERMOPLASTIC COMPOSITES** 1864

Gilles-philippe Picher-martel(McGill University)

Arthur Levy(McGill University)

Pascal Hubert(McGill University)

### **Numerical and experimental analyses of multiple delaminations in curved composite laminates** 1873

Andrea Baldi(Polytechnic Institute of Milan)

Alessandro Airoldi(Polytechnic Institute of Milan)

Paolo Belotti(Polytechnic Institute of Milan)

Paolo Bettini(Polytechnic Institute of Milan)

Giuseppe Sala(Polytechnic Institute of Milan)

### **EXPERIMENTAL AND NUMERICAL STUDIES OF HYGROTHERMAL AGING OF BIO-COMPOSITE SHORT FIBER HEMP / POLYPROPYLENE** 1885

Karim Bensalem(University of Quebec at Trois-Rivieres)

Lotfi Toubal(University of Quebec at Trois Rivieres)

Jean-christophe Cuilliere(University of Quebec at Trois Rivieres)

Vincent Francois(University of Quebec at Trois-Rivieres)

Papa birame Gning(Universite de Bourgogne)

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- FORMING OF NONCRIMP FABRIC COMPOSITES WITH EMBEDDED CABLING** **1893**  
Alexander Stefanov Petrov(University of Massachusetts at Lowell)  
Jennifer L. Gorczyca(University of Massachusetts at Lowell)  
James A. Sherwood(University of Massachusetts at Lowell)  
Lisa Dangora(University of Massachusetts at Lowell)  
Cynthia Mitchell(University of Massachusetts at Lowell)
- MODELING OF MULTIPLE DELAMINATIONS IN SHELLS USING XFEM** **1901**  
Jim Brouzoulis(Chalmers University of Technology)  
Martin Fagerström(Chalmers University of Technology)
- REINFORCEMENT OF PARTIALLY CURED AEROSPACE STRUCTURES WITH B-STAGED PATCHES** **1910**  
Julia Studer(Fachhochschule Nordwestschweiz)  
Kunal Masania(Fachhochschule Nordwestschweiz)  
Clemens Dransfeld(University of Applied Sciences and Arts Northwestern Switzerland)  
Nicolas Eguemann(Cross Composite AG)
- A MESO-SCALE NUMERICAL APPROACH FOR DAMAGE AND FAILURE IN SHORT FIBRE REINFORCED CERAMICS** **1918**  
Alessandro Airoidi(Polytechnic Institute of Milan)  
Paolo Iavarone(Polytechnic Institute of Milan)  
Luca Di Iandro(Polytechnic Institute of Milan)  
Gabriele Imbalzano(Polytechnic Institute of Milan)  
Marco Orlandi(Brembo SGL Carbo Ceramic Brakes)  
Massimiliano Valle(Petroceramics spa)
- Recent Progress on Benchmarking Cracking and Damage Models for Fibre Reinforced Polymer Composites** **1930**  
Sam Kaddour(QinetiQ Ltd)  
Paul A Smith(University of Surrey)  
Michael John Hinton(National Composites Centre)  
Shuguang Li(University of Nottingham)

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<b>CHALLENGING LESSONS FROM THE SECOND WORLD-WIDE FAILURE EXERCISE (WWFE-II):</b>	<b>1941</b>
Sam Kaddour(QinetiQ Ltd) Michael John Hinton(National Composites Centre)	
<b>THE BEHAVIOUR OF MAGNETO-RHEOLOGICAL ELASTOMERS UNDER EQUI-BIAXIAL TENSION</b>	<b>1953</b>
Philip Harrison(University of Glasgow) Gerlind Schubert(University of Glasgow) Zaoyang Guo(Chongqing University)	
<b>FATIGUE LIFE ASSESSMENT OF INJECTION-MOLDED REINFORCED SHORT FIBRE THERMOPLASTICS: NOTCH EFFECTS</b>	<b>1964</b>
Carole Nadot-martin(Institut Pprime CNRS ISAE-ENSMA) Sylvie Castagnet(Institut Pprime CNRS ISAE-ENSMA) Andrea Bernasconi(Polytechnic Institute of Milan) Edoardo Conrado(Polytechnic Institute of Milan) Yves Nadot(Institut Pprime CNRS ISAE-ENSMA)	
<b>Design and structural feasibility study of a lightweight floor system for renovation</b>	<b>1966</b>
Sven De sutter(Vrije Universiteit Brussel) Tine Tysmans(Vrije Universiteit Brussel) Olivier Remy(Vrije Universiteit Brussel)	
<b>EFFECT OF FIBER VOLUME FRACTION AND PROCESS ORIENTATION ON MODULES OF POLYETHYLENE GLASS FIBER COMPOSITE FIBER</b>	<b>1975</b>
Amir Khorsand(University of Manitoba) Jayaraman Raghvan(University of Manitoba)	
<b>HIGH-PERFORMANCE EPOXY HYBRID NANOCOMPOSITES MODIFIED BY NANOCLAY AND PES</b>	<b>1982</b>
Boming Zhang(Beihang University) Yang Wang(Beihang University)	
<b>CONDUCTIVE POLYANILINE NANOCOMPOSITES: ELECTROCHROMIC BEHAVIOR, ELECTROCHEMICAL ENERGY STORAGE AND GIANT MAGNETORESISTANCE SENSOR</b>	<b>1990</b>

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John zhanhu Guo(Lamar University)

Huige Wei(Lamar University)

Hongbo Gu(Lamar University)

Jiahua Zhu(Lamar University)

Suying Wei(Lamar University)

### **CHARACTERIZING VISCOELASTIC PROPERTIES OF CURING EPOXY FROM PRE-GELATION TO FULL CURE** 1997

Ryan J Thorpe(Convergent Manufacturing Technologies Inc.)

Anoush Poursartip(University of British Columbia)

### **DEVELOPMENT AND PROCESSING OF INTERMEDIATE MATERIAL FOR CONTINUOUS FIBER REINFORCED THERMOPLASTIC COMPOSITES** 2003

Kazufumi Nakazawa(Kyoto Institute of Technology)

Toshihiro Motochika(Kyoto Institute of Technology)

Mitsuro Takagi(Kaji Group Co. Ltd)

Akio Ohtani(Gifu University)

Asami Nakai(Gifu University)

### **MODELING AND SIMULATION OF SLOTTED WAVEGUIDE ANTENNA STIFFENED STRUCTURES** 2012

Woon kyung Kim(Virginia Polytechnic Institute and State University (Virginia Tech))

Robert A Canfield(Virginia Polytechnic Institute and State University (Virginia Tech))

William G Baron(Air Force Research Laboratory)

James M Tuss(Air Force Research Laboratory)

Jason E Miller(Air Force Research Laboratory)

### **PREDICTION METHOD OF INTERNAL STRUCTURE FOR DESIGNING BRAIDED COMPOSITES WITH THERMOSET RESIN** 2020

Masaru Imamura(Kyoto Institute of Technology)

Ryo Morinaga(Kyoto Institute of Technology)

Akio Ohtani(Gifu University)

Asami Nakai(Gifu University)

### **Effect of foam shape and piezoelectric material properties on the electromechanical response of 3-3 piezoelectric foams** 2028

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Krishna S Challagulla(Laurentian University)

Jaspreet Singh(Laurentian University)

T.a. Venkatesh(State University of New York at Stony Brook)

### **MICROSTRUCTURE AND MECHANICAL PROPERTIES OF ISOTACTIC POLYPROPYLENE REINFORCED WITH TiO<sub>2</sub> NANOPARTICLES** **2036**

Ahmad Zohre vand(Ecole Polytechnique de Montreal)

Abdellah Ajjji(Ecole Polytechnique de Montreal)

Frej Mighri(Laval University)

### **CONSOLIDATION OF BRAID-BASED CFRP STRUCTURES** **2041**

Martina Bulat(Universitat Stuttgart)

Larissa Von wascinski(Universitat Stuttgart)

Peter Middendorf(Universitat Stuttgart)

Hartmut Roedel(Technische Universitat Dresden)

### **PIEZORESISTANCE CHARACTERIZATION OF PVDF-MWNT NANOCOMPOSITES** **2053**

Reza Rizvi(University of Toronto)

Hani E Naguib(University of Toronto)

### **NUMERICAL SIMULATION OF DYNAMIC YARN PULL-OUT PROCESS** **2061**

Habiburrahman Ahmadi(Kansas State University)

Youqi Wang(Kansas State University)

Yuyang Miao(Kansas State University)

Xiaojiang Jack Xin(Kansas State University)

Chian fong Yen(US Army Research Laboratory)

### **Rotordynamics of tapered composite driveshaft based on a Lagrangian finite element** **2069**

Majed Almuslmani(Concordia University)

Rajamohan Ganesan(Concordia University)

### **COUPLING OF PLANAR GROWTH AND MATRIX CRACKING IN MODE III DELAMINATION TOUGHNESS TESTING** **2081**

Allison Lynne Johnston(Syracuse University)

Barry D Davidson(Syracuse University)



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- ANALYSIS OF FLEXIBLE CLAMPING IN TENSILE TESTS OF MULTIDIRECTIONAL LAMINATES** 2092  
Faustino Mujika(Universidad del Pais Vasco)  
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