

The 6th International Congress on

3DMS

3D Materials Science 2022

June 26–29, 2022

Hyatt Regency Washington on Capitol Hill,
Washington, D.C., USA

TECHNICAL PROGRAM

TMS

This congress is sponsored by the TMS Structural Materials Division (SMD) and the Advanced Characterization, Testing, and Simulation Committee.

Sponsors:

 **xnovotech**



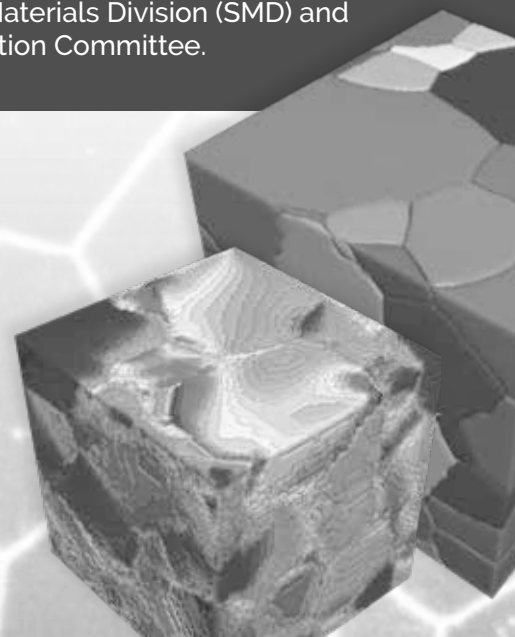
PROTO
MANUFACTURING



excillum

MATH
2 MARKET

www.tms.org/3DMS2022



SCHEDULE AT A GLANCE • *Current as of June 14, 2022* • *Subject to change.*

Sunday, June 26	Time	Location
Registration	5:30 p.m. - 7:30 p.m.	Columbia Wall
Welcome Reception	6:30 p.m. - 7:30 p.m.	Thornton - 11th Floor
Monday, June 27	Time	Location
Registration	7:30 a.m. - 5:00 p.m.	Columbia Wall
Continental Breakfast	7:30 a.m. - 8:30 a.m.	Columbia Foyer
Poster and Exhibition Installation	7:30 a.m. - 10:00 a.m.	Columbia Foyer
Plenary Session	8:20 a.m. - 9:20 a.m.	Columbia A&B
Technical Sessions	9:30 a.m. - 12:00 p.m.	Columbia A&B, Capitol A,B
- Exhibition and Break	10:40 a.m. - 11:10 a.m.	Columbia Foyer
Lunch	12:00 p.m. - 1:20 p.m.	On Your Own
Technical Sessions	1:20 p.m. - 4:20 p.m.	Columbia A&B, Capitol A,B
- Exhibition and Break	3:10 p.m. - 3:40 p.m.	Columbia Foyer
Poster Session and Reception	4:15 p.m. - 5:15 p.m.	Columbia Foyer
Tuesday, June 28	Time	Location
Registration	7:30 a.m. - 5:30 p.m.	Columbia Wall
Continental Breakfast	7:30 a.m. - 8:30 a.m.	Columbia Foyer
Plenary Session	8:20 a.m. - 9:20 a.m.	Columbia A&B
Technical Sessions	9:30 a.m. - 12:00 p.m.	Columbia A&B, Capitol A,B
- Exhibition and Break	10:40 a.m. - 11:00 a.m.	Columbia Foyer
Lunch	12:00 p.m. - 1:20 p.m.	On Your Own
Technical Sessions	1:20 p.m. - 5:40 p.m.	Columbia A&B, Capitol A,B
- Exhibition and Break	3:10 p.m. - 3:40 p.m.	Columbia Foyer
Congress Reception	5:45 p.m. - 6:30 p.m.	Congressional A&B
Congress Dinner	6:30 p.m. - 8:00 p.m.	Congressional A&B
Wednesday, June 29	Time	Location
Registration	8:00 a.m. - 12:30 p.m.	Columbia Wall
Continental Breakfast	7:30 a.m. - 8:30 a.m.	Columbia Foyer
Technical Sessions	8:20 a.m. - 11:10 a.m.	Columbia A&B, Capitol A,B
- Exhibition and Break	9:50 a.m. - 10:10 a.m.	Columbia Foyer
Closing Plenary Session	11:20 a.m. - 12:20 p.m.	Columbia A&B
Poster and Exhibition Removal	10:10 p.m. - 12:30 p.m.	Columbia Foyer

Monday Plenary

Monday AM
June 27, 2022

Room: Columbia A&B
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

8:20 AM Plenary

A Perspective on Serial Sectioning System Technology for Structural Materials Characterization: *Michael Uchic*¹; ¹Air Force Research Laboratory

9:05 AM Question and Answer Period

9:20 AM Break

3D Data Processing I: Workflows

Monday AM
June 27, 2022

Room: Columbia A&B
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

9:30 AM Invited

Galaxy Framework for Next-generation Data Reduction Strategies at CHESS: *Kelly Nygren*¹; *Matthew Miller*²; ¹Cornell High Energy Synchrotron Source; ²Cornell University

10:00 AM

Dual Energy XCT through Optimised Projection Fusion: *Oliver Helps*¹; *Philip Withers*²; *Alan Clarke*³; *Timothy Burnett*²; *Ian Nicholson*³; ¹University of Manchester & TWI; ²University of Manchester; ³TWI

10:20 AM

Alignment and Fusion of Multi-sensor Serial Section Data: *David Rowenhorst*¹; ¹Naval Research Laboratory

10:40 AM Break

11:10 AM

A Comparison of 3D Digital Microstructure Generation Techniques Applied to Biological Materials: *Carli Marsico*¹; *Donna Guillen*²; *Dwayne Arola*¹; ¹University of Washington; ²Idaho National Laboratory

11:30 AM

Development of 3D EBSD Serial Sectioning Workflows for Enhanced Local Orientation Analysis: *Gregory Sparks*¹; *Paul Shade*²; *Michael Uchic*²; *Stephen Niezgod*¹; *Simon Mason*¹; *Michael Mills*¹; *Mark Obstalecki*²; ¹The Ohio State University; ²Air Force Research Laboratory

4D Data Analysis I: Plasticity I

Monday AM
June 27, 2022

Room: Capitol B
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

9:30 AM Invited

In Situ High Energy X-ray Diffraction Study of the Elastoplastic Transition in a Polycrystalline Metastable β Ti Alloy: *Jishnu Bhattacharyya*; *Darren Pagan*; *Gergely Farkas*; *Kristián Máthis*; *Vahid Tari*; *S. Nair*¹; *Ricardo Lebensohn*; *Anthony Rollett*; *Sean Agnew*²; ¹Cornell High Energy Synchrotron Source; ²University of Virginia

10:00 AM

Application of a Laboratory-Based Multimodal X-ray Tomography to Study in 3D Correlations Between Grain Structure and Local Strain Distribution: *Masakazu Kobayashi*¹; *Yubin Zhang*²; *Jun Sun*³; *Jette Oddershede*³; *Dorte Jensen*²; *Runguang Li*²; *Hiroimi Miura*¹; ¹Toyohashi University of Technology; ²Technical University of Denmark; ³Xnovo Technology ApS

10:20 AM

Observing Bulk Plasticity in Ti-7Al by Topotomography: *Patrick Callahan*¹; *Jean-Charles Stinville*²; *Henry Proudhon*³; *McLean Echlin*⁴; *Wolfgang Ludwig*⁵; *Tresa Pollock*⁴; ¹US Naval Research Laboratory; ²University of Illinois Urbana-Champaign; ³MINES Paris; ⁴University of California Santa Barbara; ⁵University of Lyon

10:40 AM

Large Deformations of Metal Foams: Dynamic CT Results, Simulations, and Modeling: *Sebastian Rief*¹; *Martina Hümbert*¹; *Andreas Griebler*¹; *Erik Glatt*¹; *Wesley De Boever*²; ¹Math2Market GmbH; ²TESCAN XRE

Microstructure Characterization

Monday AM
June 27, 2022

Room: Capitol A
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

9:30 AM Invited

Porosity in L-PBF Additively Manufactured 316L: *Richard Fonda*¹; *Aeriel Leonard*²; *David Rowenhorst*¹; ¹Naval Research Laboratory; ²NRL / OSU

10:00 AM

Tribeam Tomography of a Novel CoNi-superalloy for Laser Additive Processing: *James Lamb*¹; *Andrew Polonsky*²; *McLean Echlin*²; *Kira Pusch*²; *Aurelien Botman*³; *Steven Randolph*⁴; *Remco Geurts*³; *Jorge Filevich*³; *Tresa Pollock*²; ¹Sandia National Laboratories; ²University of California, Santa Barbara; ³Thermo Fisher Scientific; ⁴Oak Ridge National Laboratory

10:20 AM

Defect Interrogation in Additive Manufactured Inconel 738 Turbine Blades: *Paul Brackman*¹; *Curtis Frederick*¹; *Andres Marquez-Rossy*²; *Michael Kirka*²; ¹Carl Zeiss; ²Oak Ridge National Laboratory

10:40 AM Break

11:10 AM

Noise, Sampling, and Phase: Understanding Spurious X-ray Signal: Matthew Andrew¹; Stephen Kelly¹; Andriy Andreyev²; Ravikumar Sanapala²; Robin White¹; William Harris¹; Hrishikesh Bale¹; William Fadgen¹; ¹Carl Zeiss RMS; ²Carl Zeiss X-ray Microscopy

11:30 AM

A Novel Approach for High-resolution Phase Analysis using Hybrid Machine Learning Segmentation of Multi-modal FIB-SEM Datasets and its Application for Analysis of Next Generation Wear-resistant Coatings: Jiri Dluhos¹; Hana Tesarová¹; Vendulka Bertschová¹; Frédéric Voisard²; Alexandre Migneault²; Nadi Braidy²; ¹TESCAN ORSAY Holding, a.s.; ²Université de Sherbrooke

3D Data Processing II: Leveraging Big Data

Monday PM
June 27, 2022

Room: Columbia A&B
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

1:20 PM Invited

Pushing the Limits of HEDM / 3DXRD: Hemant Sharma¹; Peter Kenesei¹; Jun-Sang Park¹; Jonathan Almer¹; ¹Argonne National Laboratory

1:50 PM

Robust, Automated Analysis of Intragranular Heterogeneity: Austin Gerlt¹; Donald Boyce²; Joel Bernier³; Mark Obstalecki⁴; Paul Shade⁴; Stephen Niezgodá¹; ¹The Ohio State University; ²Cornell University; ³Lawrence Livermore National Laboratory; ⁴United States Air Force

2:10 PM

Deep Learning-Based 3D Damage Quantification for Natural Cellular Solids: Ziling Wu¹; Ting Yang¹; Ling Li¹; Yunhui Zhu¹; ¹Virginia Tech

2:30 PM

Geometric Reconstruction and Volumetric Meshing Procedures for Mesoscale Level Finite Element Simulations: Ottmar Klaas¹; Adrian Loghin¹; Mark Beall¹; ¹Simmetrix Inc.

2:50 PM

Data-mining of In-situ TEM Experiments on CoCrFeMnNi Alloys: 4D Reconstruction of Dislocation Dynamics and Sampling of the Energy Landscape: Chen Zhang¹; Hengxu Song¹; Daniela Oliveros²; Marc Legros²; Stefan Sandfeld¹; ¹Forschungszentrum Jülich; ²CEMES-CNRS

3:10 PM Break

4D Data Analysis I: Plasticity II

Monday PM
June 27, 2022

Room: Capitol B
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

1:20 PM Invited

Multiscale Scattering Modeling from Deforming Titanium Alloy Polycrystals: Darren Pagan¹; Kenneth Peterson¹; Rachel Lim¹; Jacob Ruff²; ¹Pennsylvania State University; ²Cornell University

1:50 PM

Influence of Microtextured Regions on Early Plasticity in Ti64: Joseph Wendorf¹; James Lamb²; McLean Echlin¹; Samuel Hémerly³; Paul Dawson⁴; Tresa Pollock¹; ¹University of California, Santa Barbara; ²University of California Santa Barbara; ³Institut Pprime - ENSMA; ⁴Cornell University

2:10 PM

Imaging Microplasticity Events by Combining High Energy Diffraction Microscopy and Bragg Coherent Diffraction Microscopy: Matthew Wilkin¹; ¹Carnegie Mellon University

2:30 PM

Interpretation of Intragranular Strain Fields in High-energy Synchrotron X-ray Experiments via Finite Element Simulations and Analysis of Incompatible Deformation: Diwakar Naragani¹; Paul Shade²; William Musinski²; Mark Obstalecki²; Donald Boyce³; Armand Beaudoin³; Joel Bernier⁴; Darren Pagan⁵; ¹University of Dayton Research Institute; ²AFRL; ³Cornell University; ⁴Lawrence Livermore National Laboratory; ⁵Pennsylvania State University

2:50 PM

Correlative Investigation of Strain Localization by Combining SEM-DIC and 3D EBSD: Marie Charpagne¹; J.C. Stinville¹; A.T. Polonsky²; M.P. Echlin³; T.M. Pollock³; ¹University of Illinois; ²Sandia National Laboratories; ³University of California Santa Barbara

3:10 PM Break

3:40 PM

Implementing Nonlocal Ductile Damage into a Large Strain FFT-based Model for Predicting Failure in 3D Polycrystalline Materials: Carter Cocke¹; Hadi Mirmohammad¹; Owen Kingstedt¹; Miroslav Zecevic²; Ricardo Lebensohn²; Ashley Spear¹; ¹University of Utah; ²Los Alamos National Laboratory

4:00 PM

On the 3D Nature of Dislocation Lines and Core Structures in High Entropy Complex Alloys: Diana Farkas¹; Roberto Pasianot²; ¹Virginia Polytechnic Institute; ²CNEA Argentina

Additive Manufacturing I: Process Control and Monitoring

Monday PM
June 27, 2022

Room: Capitol A
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

1:20 PM Break

1:50 PM

Heat Transfer Modeling and Microstructure Evolution in Directed Energy Deposition Process for Al-0.5Sc-0.5Si Alloy: Amit Singh¹; Yasham Mundada¹; Priyanshu Bajaj²; Markus Wilms³; Eric Jäggle⁴; Dierk Raabe²; Amit Arora¹; ¹Indian Institute of Technology Gandhinagar; ²Max-Planck-Institut für Eisenforschung GmbH; ³Fraunhofer Institute for Laser Technology ILT; ⁴Universität der Bundeswehr München

2:10 PM

Global Local Modeling of Bead Formation and Geometry in Laser Bed Powder Melting Process Using a Comprehensive Multi-physics Simulation: Faiyaz Ahsan¹; Jafar Razmi¹; Leila Ladani¹; ¹Arizona State University

2:30 PM

Correlative Microscopy and Microstructural Characterization of Porosity Induced by Contouring in a Selective Laser Melted AA6061 Alloy: Hamidreza T-Sarraf¹; Sridhar Niverty¹; Arun Singaravelu¹; Nikhilesh Chawla¹; ¹Arizona State University

2:50 PM

Automated Post-processing and Surface Standardization of AM Components at Scale: *Konstantin Rybalcenko*¹; Luis Folgar¹; Rory Charlesworth²; Joseph Crabtree¹; ¹Additive Manufacturing Technologies; ²Additive Manufacturing Technologies Ltd.

3:10 PM Break

3:40 PM

4D Nanoscale Imaging of Powder Feedstock Processing for Additive Manufacturing: Stephen Kelly¹; *Hrishikesh Bale*¹; Jordan Kone¹; Kyle Tsakopoulos²; Danielle Cote²; ¹Carl Zeiss Microscopy Inc.; ²Worcester Polytechnic Institute

4:00 PM

Machine Learning Framework for Spiking Defect Detection in Electron Beam Welding: *Sanjib Jaypuria*¹; Bondada Venkatasainath¹; Santosh Gupta¹; Dilip Kumar Pratihari¹; Debalay Chakrabarti¹; ¹IIT Kharagpur

Tuesday Plenary

Tuesday AM
June 28, 2022

Room: Columbia A&B
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

8:20 AM Plenary

Towards Machine Learning-assisted Real-time Feedback and Guided Experiments: *Reeju Pokharel*¹; ¹Los Alamos National Laboratory

9:05 AM Question and Answer Period

9:20 AM Break

3D Data Processing III: Statistical Analyzes and Machine Learning

Tuesday AM
June 28, 2022

Room: Columbia A&B
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

9:30 AM Invited

Imposing Equilibrium on Measured 3-D Stress Fields Using Helmholtz Decomposition and FFT-based Optimization: *Ricardo Lebensohn*¹; Hao Zhou²; Peter Reischig³; Wolfgang Ludwig⁴; Kaushik Bhattacharya²; ¹Los Alamos National Laboratory; ²Caltech; ³InnoCryst Ltd; ⁴MATEIS, INSA Lyon

10:00 AM

Automated 4D Reconstruction and Data-mining of Dislocation structures From In-situ TEM Experiments: Synthetic Training Data generation and Customized Deep Learning Strategies: *Kishan Govind*¹; Marc Legros²; Stefan Sandfeld¹; ¹Institute for Advanced Simulation; ²CEMES-CNRS

10:20 AM

Using Deep Learning to Reconstruct Grains from Simulated Far-field Diffraction Data: *Ashley Lenau*¹; Yuefeng Jin²; Ashley Bucsek³; Stephen Niezgodar¹; ¹Ohio State University; ²University of Michigan; ³University of Michigan

10:40 AM Break

4D Data Analysis II: Thermo-Mechanical Processing

Tuesday AM
June 28, 2022

Room: Capitol B
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

9:30 AM Invited

Measurements of 3D Microstructures to Determine Grain Boundary Velocities in Polycrystal: *Gregory Rohrer*¹; Zipeng Xu¹; Aditi Bhattacharya¹; Robert Suter¹; ¹Carnegie Mellon University

10:00 AM

Influence of Grain Boundary Energy Anisotropy on the Evolution of Grain Boundary Network Structure During 3D Anisotropic Grain Growth: *Jose Nino*¹; Oliver Johnson¹; ¹Brigham Young University

10:20 AM

The Materials Oscilloscope: Thermo-mechanical Processing in a Synchrotron Beam: *Klaus-Dieter Liss*¹; ¹Guangdong Technion - Israel Institute of Technology

10:40 AM Break

11:00 AM

Development of the Cube Component (<100>) during Plane Strain Compression of Copper and its Importance in Recrystallization Nucleation: *Supriyo Chakraborty*¹; Chaitali Patil¹; Stephen Niezgodar¹; ¹The Ohio State University

11:20 AM

Recrystallization Boundary Migration in 3D: Chuanshi Hong¹; Yubin Zhang²; Wenjun Liu³; Runguang Li²; Eric Homer⁴; *Dorte Juul Jensen*²; ¹Shenyang National Laboratory for Materials Science, Institute of Metal Research, Chinese Academy of Sciences.; ²Technical University of Denmark; ³APS, Argonne National Laboratory; ⁴Brigham Young University

Additive Manufacturing II: Deformation Mechanisms

Tuesday AM
June 28, 2022

Room: Capitol A
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

9:30 AM Invited

Characterization of Microstructures and Deformation Mechanisms in Additively Manufactured 316L Stainless Steels: Jean-Baptiste Forien¹; Nicolas Bertin¹; Tatu Pinomaa²; Anssi Laukkanen²; Kirubel Teferra³; Margaret Wu¹; Marissa Linne¹; Sylvie Aubry¹; Nathan Barton¹; Y. Morris Wang⁴; *Thomas Voisin*¹; ¹Lawrence Livermore National Laboratory; ²VTT Technical Research Center of Finland; ³US Naval Research Laboratory; ⁴University of California Los Angeles

10:00 AM

Evaluation of an Improved Void Descriptor Function to Uniquely Characterize Three-dimensional Pore Networks and to Predict Failure Location in Additively Manufactured Metals: *Dillon Watring*¹; Jake Benzing²; Orion Kafka²; Li-Anne Liew²; Newell Moser²; John Erickson³; Nikolas Hrabe²; Ashley Spear³; ¹Naval Research Laboratory; ²National Institute of Standards and Technology; ³University of Utah

10:20 AM

Application of 3D Characterization for Mechanical Modelling of Additively Manufactured AlSiMg: *Andrew Polonsky*¹; Thomas Ivanoff¹; Nathan Heckman¹; Kyle Johnson¹; ¹Sandia National Laboratories

10:40 AM Break

11:00 AM

Plateau-Rayleigh Instability with a Grain Boundary Twist: *Omar Hussein*¹; Keith Coffman²; Shen Dillon³; Fadi Abdeljawad¹; ¹Clemson University; ²University of Illinois Urbana-Champaign; ³University of California, Irvine

11:20 AM

Understanding the Influence of Porosity and Defects on Mechanical Behavior in Additive Manufactured 316L Stainless Steel Using

In-situ X-ray Computed Tomography: *Ariel Murphy-Leonard*¹; *Dave Rowenhorst*¹; Richard Fonda¹; ¹Naval Research Laboratory

Emergent Characterization Techniques I: Diffraction

Tuesday PM
June 28, 2022

Room: Columbia A&B
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

1:20 PM Invited

Dictionary and Spherical Indexing of EBSD Data Sets: *Marc De Graef*¹; ¹Carnegie Mellon University

1:50 PM

Looking Deeper: A Realization of 3DXRD Microscopy with Enhanced Spatial Resolution: *Mustafacan Kutsal*¹; *Grethe Winther*¹; *Carsten Detlefs*²; *Henning Friis Poulsen*¹; ¹Technical University of Denmark; ²European Synchrotron Radiation Facility

2:10 PM

Helical Phylloaxis and Conventional Laboratory Diffraction Contrast Tomography (LabDCT) Acquisition Strategies for Characterization of 3D Grain Orientations: *Eshan Ganju*¹; *Eugenia Nieto*²; *Javier Llorca*²; *Nikhilesh Chawla*¹; ¹Purdue University; ²IMDEA Materials Institute

2:30 PM

Correlative Microscopy: 3D EBSD with fs-Laser Plasma FIB-SEM: *Bartłomiej Winiarski*¹; *Remco Geurts*¹; ¹Thermo Fisher Scientific

2:50 PM

First Use of a Coded Aperture for Depth Resolved Scattering of a Pink Beam: *Jon Tischler*¹; *Doga Gursoy*¹; *Dina Sheyfer*¹; *Wenjun Liu*¹; *Michael Wojcik*¹; ¹Argonne National Laboratory

3:10 PM Break

3:40 PM

Laboratory X-ray Diffraction Contrast Tomography-improved Grain Mapping by Reconstruction with Magnified Diffraction Spots: *Haixing Fang*¹; *Adam Lindkvist*¹; *Dorte Juul Jensen*¹; *Yubin Zhang*¹; ¹Technical University of Denmark

4:00 PM

Achieving Large Volume Grain Statistics with Laboratory Based Diffraction Contrast Tomography: *Hrishikesh Bale*¹; *Jun Sun*²; *Jette Oddershede*²; *Erik Lauridsen*²; ¹Carl Zeiss Microscopy Inc.; ²Xnovo Technology ApS

4:20 PM

A High-fidelity Analytical Model for Multi-peak Bragg Coherent Diffraction Imaging of Compact Crystalline Domains: *Siddharth Maddali*¹; *Stephan Hruszkewycz*¹; ¹Argonne National Laboratory

4:40 PM

The Development of a Laboratory-scale High-energy Diffraction Microscopy Instrument: *Ashley Bucsek*¹; *Robert Drake*²; *Kenneth Geauvreau*²; *Anasuya Adibhatla*³; ¹University of Michigan; ²Proto Manufacturing; ³Excillum

5:00 PM

Liquid MetalJet X-ray Sources for High Resolution Characterization: *Anasuya Adibhatla*¹; ¹Excillum Inc

5:20 PM

Examination of Dual Energy CT for Industrial X-ray: *Odani Kazunori*¹; ¹Shimadzu Corporation

4D Data Analysis III: Grain Boundary Structure

Tuesday PM
June 28, 2022

Room: Capitol B
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

1:20 PM Invited

Grain Boundary and Dislocation Structures in Metals Resolved by Transmission Electron Microscopy: *Kui Du*¹; *Chunyang Wang*¹; *Huichao Duan*¹; *Linglei Zhang*¹; ¹Institute of Metal Research

1:50 PM

Implicit Geometrical Measurement of Grain Structures with a Phase Field Representation: *Jin Zhang*¹; *Peter Voorhees*¹; ¹Northwestern University

2:10 PM

Thermal Microstructure Evolution of Deformed Mg Investigated in-situ by High-Energy Synchrotron Radiation: *Xiaojing Liu*¹; *Klaus-Dieter Liss*¹; ¹Guangdong Technion – Israel Institute of Technology

2:30 PM Break

3:40 PM

Fingerprints of Abnormal Grain Growth in a Three-Dimensional Microstructure: *Marcel Chlupsa*¹; *Eli Rotman*¹; *Jiwoong Kang*¹; *Ashwin Shahani*¹; ¹University of Michigan

4:00 PM

Calculating the Grain Boundary Inclination of Voxeled Grain Structures Using a Smoothing Algorithm: *Lin Yang*¹; *Floyd Hilty*²; *Vivekanand Muralikrishnan*¹; *Kenneth Silva-Reyes*¹; *Amanda Krause*¹; *Joel Harley*¹; *Michael Tonks*¹; ¹University of Florida; ²Pacific Northwest National Laboratory

4:20 PM

Methods for Characterizing 3D Grain Boundary Network Structures: Tools from Spectral Graph Theory: *Christopher Adair*¹; *Oliver Johnson*¹; ¹Brigham Young University

4:40 PM

3D Non-destructive Crystallographic Imaging of Peridotite with Lab-based X-ray Diffraction Contrast Tomography: *Jun Sun*¹; *Florian Bachmann*¹; *Jette Oddershede*¹; *Erik Lauridsen*¹; ¹Xnovo Technology

Solidification/Phase Transformations

Tuesday PM
June 28, 2022

Room: Capitol A
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

1:20 PM Invited

Quantitative Observation of Dendritic Growth in Metallic Alloys by Time-Resolve and In-situ Tomography: Takuya Kawarasaki¹; Taka Narumi¹; Tomohiro Takaki²; Hideyuki Yasuda⁴; ¹Kyoto University; ²Kyoto Institute of Technology

1:50 PM

Eutectic Colony Evolution during Oscillatory Instability in Eutectic Solidification: Paul Chao¹; Ashwin Shahani¹; ¹University of Michigan

2:10 PM

Casting Design Optimization using FEA Utilizing ICME Predicted Local Properties: Jiten Shah¹; ¹PDA LLC

2:30 PM

Investigation of Grain Boundary Precipitation in Titanium Alloys using 3D FIB/SEM Tomography and 3D Phase Field Simulation: Dian Li¹; Rongpei Shi²; Yufeng Zheng⁴; ¹University of Nevada-Reno; ²Harbin Institute of Technology (Shenzhen)

2:50 PM

Formation of Three-phase Eutectic Grains on Primary Phases: Observations from Correlative Imaging: George Lindemann¹; Paul Chao¹; Ashwin Shahani¹; ¹University Of Michigan

3:10 PM Break

3:40 PM

In Situ Heating for Laboratory-Based Nanoscale X-ray Microscopy: Stephen Kelly¹; Robin White¹; Hrishikesh Bale¹; William Harris¹; William Fadgen¹; Sam Kalirai²; Martin Leibowitz²; Hooman Hosseinkhannazer³; ¹Carl Zeiss RMS; ²Carl Zeiss X-ray Microscopy; ³Norcada, Inc.

4:00 PM

Kinetic Pathway of Order-Order Transition in Diblock Copolymer by Time-resolved 3D Electron Microscopy: Hsiao-fang Wang¹; Hiroshi Jinnai¹; ¹Institute of Multidisciplinary Research for Advanced Materials, Tohoku University

4:20 PM

Automated Serial-sectioning Method using Electrolytic Etching and Precision Cutting for 3D Microstructure Observation of Additively Manufactured Alloy 718: Shunsaku Kawasaki¹; Norio Yamashita²; Shoan Mizuno³; Shinya Morita¹; Hideo Yokota²; ¹Tokyo Denki University; ²Riken Center for Advanced Photonics; ³NTS Co., Ltd.

4:40 PM

Numerical Simulation for Prediction of Gas Porosity and Microstructure in Solidifying Aluminium Alloy Using LBM-CA (Cellular Automata) Model: Wonjoo Lee¹; Yuhyeong Jeong¹; Howon Lee²; Seong-hoon Kang²; Jonghun Yoon¹; ¹Hanyang University; ²Korea Institute of Materials Science

5:00 PM

Investigation of Threshold Stress Level of Radially Re-precipitated Hydrides: A Phase-field Approach: Wooseob Shin¹; Kunok Chang¹; ¹KyungHee University

Emergent Characterization Techniques II: Tomography

Wednesday AM
June 29, 2022

Room: Columbia A&B
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

8:20 AM Invited

Multiple Modal X-ray Microtomography for Material Science: Tiqiao Xiao¹; Biao Deng²; Guohao Du²; Yanan Fu²; Han Guo²; Ke Li³; Guanyun Peng²; Fen Tao²; Honglan Xie²; Yanling Xue²; Fucheng Yu³; Guangzhao Zhou²; Haipeng Zhang³; ¹Shanghai Synchrotron Radiation Facility/Zhangjiang Laboratory, Shanghai Advanced Research Institute, Chinese Academy of Sciences; Shanghai Institute of Applied Physics, Chinese Academy of Sciences; University of Chinese Academy of Sciences; ²Shanghai Synchrotron Radiation Facility/Zhangjiang Lab, Shanghai Advanced Research Institute, Chinese Academy of Sciences; ³Shanghai Institute of Applied Physics, Chinese Academy of Sciences

8:50 AM

New Insights in Materials Characterization – spectral Computed Tomography: Wesley De Boever¹; Frederik Coppens¹; ¹Tescan

9:10 AM

X-ray Microscopy Analysis of Functionally Graded SiC Particle Reinforced Aluminum Matrix Composites Using Dual-energy Tomography: Eshan Ganju¹; Hamid Torbatarraf¹; Caitlin O'Brien¹; Meet Jaydeepkumar Oza²; Siddhartha Roy³; Tapas Laha⁴; Günter Schell²; Claudia Bucharsky²; Nikhilesh Chawla¹; ¹Purdue University; ²Karlsruhe Institute of Technology; ³Indian Institute of Technology Kharagpur; ⁴Indian Institute of Technology Kharagpur

9:30 AM

Atomic-resolution 3D Analysis of Pt-Ru Alloy Nanoparticles by Electron Tomography: Tomokazu Yamamoto¹; Koji Shigematsu¹; Kohei Kusada²; Hiroshi Kitagawa²; Syo Matsumura¹; ¹Kyushu University; ²Kyoto University

9:50 AM Break

10:10 AM

Visualizing and Analyzing 3D Dislocation Structures in Metals with Dark-field X-ray Microscopy: Leora Dresselhaus-Marais¹; ¹Stanford University

10:30 AM

Dynamic In-situ Imaging of Methane Hydrate Formation and Self-preservation in Porous Media: Viktor Nikitin¹; ¹Max IV Laboratory

10:50 AM Invited

In Operando 3D Characterization of Materials with Sub-15 nm Spatial Resolution Nano-tomography with the Transmission X-ray Microscope at APS: Vincent De Andrade¹; Alex Deriy²; Michael Wojcick¹; Sunil Bean¹; Deming Shu¹; Doga Gursoy¹; Viktor Nikitin¹; Francesco De Carlo¹; ¹Argonne National Laboratory

4D Data Analysis IV: Fatigue/Fracture

Wednesday AM
June 29, 2022

Room: Capitol B
Location: Hyatt Regency
Washington on Capitol Hill

Session Chair: TBD

8:20 AM Invited

TBA: MOHR: Dirk Mohr¹; Thomas Tancogne-Dejean¹; ¹ETH Zurich

8:50 AM

Searching for Life-limiting Localized Deformation in Inconel-718 using In-situ Cyclic Loading and High Energy X-rays: *Dalton Shadle¹; Kelly Nygren¹; Matthew Miller¹; ¹Cornell University*

9:10 AM

Sub-grain-level Fatigue Crack Growth Insights via High Energy X-ray Diffraction Microscopy: *William Musinski¹; Paul Shade¹; Mark Obstalecki¹; David Menasche²; Joel Bernier³; Sirina Safriet⁴; Peter Kenesei⁵; Jun-Sang Park⁶; ¹US Air Force Research Laboratory; ²Hamiltonian Group; ³Lawrence Livermore National Laboratory; ⁴University of Dayton Research Institute; ⁵Argonne National Laboratory*

9:30 AM

Quantifying Microscale Drivers for Fatigue Failure via Coupled Synchrotron X-ray Characterization and Simulations: *Sven Gustafson¹; Wolfgang Ludwig²; Paul Shade³; Diwakar Naragani¹; Darren Pagan⁴; Phil Cook²; Can Yildirim²; Carsten Detlefs²; Michael Sangid¹; ¹Purdue University; ²European Synchrotron Radiation Facility; ³Air Force Research Laboratory; ⁴Cornell High Energy Synchrotron Source*

9:50 AM Break**10:10 AM**

3D Aspects of Ice Compressive Failure During Ice-structure Interaction: *Rocky Taylor¹; ¹Memorial University*

10:30 AM

3D Characterization of Grain-scale Cyclic Twinning and Detwinning in Magnesium Alloys using High Energy X-ray Diffraction: *Duncan Greeley¹; Mohammadreza Yaghoobi; Katherine Shanks²; Darren Pagan; Veera Sundararaghavan; John Allison; ¹University of Michigan; ²Cornell High Energy Synchrotron Source, Cornell University*

10:50 AM

3D Characterization of Damage in Spalled Tantalum: *Toby Francis¹; Paul Rottmann²; Andrew Polonsky¹; Marie-Agathe Charpagne¹; McLean Echlin¹; William Lenthe³; Veronica Livescu⁴; David Jones⁴; George Gray⁴; Marc De Graef³; Tresa Pollock¹; ¹University of California, Santa Barbara; ²University of Kentucky; ³Carnegie Mellon University; ⁴Los Alamos National Laboratory*

11:10 AM Break

Functional Materials

**Wednesday AM
June 29, 2022**

**Room: Capitol A
Location: Hyatt Regency
Washington on Capitol Hill**

Session Chair: TBD

8:20 AM Invited

3D Mapping of Residual Stresses Using Synchrotron Micro-diffraction: *Yubin Zhang¹; ¹Technical University of Denmark*

8:50 AM

Multiscale 3-dimensional Imaging and Modelling in Energy Materials Research: *Stephen Kelly¹; Robin White¹; Hrishikesh Bale¹; William Harris¹; William Fadgen¹; Tobias Volkenandt¹; Andreas Griesser²; ¹Carl Zeiss RMS; ²Math2Market, GmbH*

9:10 AM

Amorphous-crystalline Nanostructural Nd-Fe-B Permanent Magnets using Laser Powder Bed Fusion: Metallurgy and Magnetic Properties: *Julan Wu¹; Nesma Aboutkhaier²; Michele Degano¹; Richard Hague¹; Ian Ashcroft¹; ¹University of Nottingham; ²Technology Innovation Institute*

9:30 AM

3D Phase Formation of 2D Materials Embedded Lunar Regolith During Sintering: *Jiaoli Li¹; Yanxiao Li¹; Congjie Wei¹; Mianqing Yang¹; Aditya Thakur²; Manuel Ortega²; Stefan Linke²; Frank Liou¹; Enrico Stoll³; Enrico Stoll³; Chenglin Wu¹; ¹Missouri University of S&T; ²Technische Universität Braunschweig; ³Technische Universität Berlin*

9:50 AM Break**10:10 AM**

A Review on Emulsion Polymerization Based Synthesis, Fabrication and Photonic Application of 3D P(St-MMA-AA) Photonic Crystals: *Ikhazuagbe Ifijen¹; Esther Ikhuria²; Gregory E. Onaiwua³; Udokpoh Nyakno¹; Aireguamen Aigbodion¹; Augustine Ighodaro⁴; Stanley Omorogbe¹; ¹Rubber Research Institute of Nigeria; ²University of Benin, Nigeria; ³Department of Physical Sciences, Benson Idahosa University, Edo State; ⁴Quantum pharmaceuticals, Quantum House, Durham United Kingdom*

10:30 AM

Investigation of Neutron-irradiated Microstructure of Fe-Cr System: A GPU Accelerated Phase-field Method: *Jeonghwan Lee¹; Bohyun Yoon¹; Wooseob Shin¹; Kunok Chang¹; ¹Kyunghee University*

10:50 AM Break

Wednesday Plenary

**Wednesday AM
June 29, 2022**

**Room: Columbia A&B
Location: Hyatt Regency
Washington on Capitol Hill**

Session Chair: TBD

11:20 AM Plenary

Dark Field X-ray Microscopy: *Henning Poulsen¹; ¹Denmark Technical University*

12:05 PM Question and Answer Period**12:20 PM Concluding Comments**

Poster Session

**Monday PM
June 27, 2022**

**Room: Columbia Foyer
Location: Hyatt Regency
Washington on Capitol Hill**

Calcium Oxalate Cluster Crystals Investigation of Ginseng Using Quantitative X-ray Micro-tomography: *Yanling Xue¹; Guohao Du¹; Tiqiao Xiao¹; ¹Shanghai Synchrotron Radiation Facility/Zhangjiang Laboratory, Shanghai Advanced Research Institute, Chinese Academy of Sciences*

Full-field X-ray Nanoimaging Beamline at SSRF: *Biao Deng¹; Fen Tao¹; Ling Zhang¹; Guohao Du¹; Tiqiao Xiao¹; ¹SSRF*

Sub-Second Three Dimensional Dynamic Imaging in Materials Application is Possible After the Relocation of X-ray Imaging Beamline at SSRF: *Guohao Du¹; Han Guo¹; Bian Deng¹; Honglan Xie¹; Tiqiao Xiao¹; ¹Shanghai Advanced Research Institute, CAS*

3D Characterization of Inhalation Drug Formulations Using X-ray Microscopy: *Hrishikesh Bale¹; Parmesh Gajjar²; Benjamin Tordoff¹; Philip Withers³; Darragh Murnane⁴; ¹Carl Zeiss Microscopy Inc.; ²The University of Manchester; ³Henry Royce Institute for Advanced Materials; ⁴University of Hertfordshire*

3D Strength Prediction of a Two-phase Material Using Two-point Statistics: *Mostafa Mahdavi*¹; Eric Hoar²; Steven Liang²; Hamid Garmestani²; ¹Georgia Institute of Technology ; ²Georgia Institute of Technology

Reliable Semiconductor Die Attach Process with Ag/Sn/Ag Sandwich Structure: *Jinseok Cho*¹; Sung Jin An¹; ¹Kumoh National Institute of Technology

Corrosion of Nb-1% Zr-0.1% C Alloy in Lead-Bismuth Eutectic: Santosh Gupta¹; *Sanjib Jaypuria*¹; ¹IIT Kharagpur

Generation of Synthetic Material Microstructures for Advanced Manufacturing Process Development: *Donna Guillen*¹; Tristan Ashton¹; William Harris²; ¹Idaho National Laboratory; ²Massachusetts of Institute of Technology

Residual Distortion Prediction through Fast Data Driven Model Approach in Additive Manufactured Components: *Anahita Imanian*¹; ¹Technical Data Analysis

Impact Mechanics Simulation of Laser Deposited High Entropy Alloys for Aerospace Applications: *Modupeola Dada*¹; Patricia Popoola¹; Ntombizodwa Mathe²; Samson Adeosun³; Olufemi Aramide¹; Smith Salifu¹; ¹Tshwane University of Technology; ²Council for Scientific and Industrial Research; ³University of Lagos, Akoka

Study the Initiation of Hot Cracking Phenomenon During the Processes of Laser Welding: *Guannan Tang*¹; Anthony Rollett¹; ¹Carnegie Mellon University

Virtual Indentation: Schematic Representation, Elementary Meshing, Material Models, Simulation Results: *Andrey Musienko*¹; ¹NRC «Kurchatov Institute» - CRISM «Prometey»

Multimodal Investigation of Particle Stimulated Nucleation in Cold Rolled AA5182 Aluminum Alloy: *Elisabeth Knipschildt*¹; Xiuchuan Lei²; Yubin Zhang¹; Søren Fæster¹; Wenjun Liu³; Robert Sanders²; Dorte Juul Jensen¹; ¹Technical University of Denmark - DTU; ²Chongqing University; ³Argonne National Laboratory

3D Non-destructive Characterization of Electrical Steels for Quantitative Texture Analysis with Lab-based X-ray Diffraction Contrast Tomography (DCT): Jun Sun¹; *Jette Oddershede*¹; Ivan Petryshynets²; Li Meng³; Ning Zhang³; Yang Li⁴; Florian Bachmann¹; Erik Lauridsen¹; ¹Xnovo Technology ApS; ²Slovak Academy of Sciences; ³Central Iron and Steel Research Institute; ⁴University of Science and Technology Beijing

Dissimilar Material Welding of CFRP-AA6061 using Vaporizing Foil Actuator Welding: *YuHyeong Jeong*¹; Wonju Lee¹; Hyung-gyu Kim¹; Jonghun Yoon¹; ¹Hanyang University

Synergistic Nanoscale Precipitation in Austenitic Steels as Revealed by Atom-Probe Tomography: *Colin Stewart*¹; Richard Fonda¹; Keith Knipling¹; Patrick Callahan¹; Paul Lambert²; ¹US Naval Research Laboratory; ²US Naval Surface Warfare Center, Carderock Division

In Operando Multimodal and Multiscale Study of Degradation and Sodium Storage Process in Sodium-ion Batteries: *Domenico Battaglia*¹; Anna Fedrigo²; Daniel Sørensen³; Salvatore De Angelis¹; Nikolaj Zangenberg⁴; Søren Schmidt⁵; Luise Kuhn¹; ¹Technical University of Denmark; ²ISIS neutron and muon source; ³Max IV Laboratory; ⁴Danish Technological Institute; ⁵European Spallation Source

Determination of Ligament Quality Factors in Additively Manufactured Lattice Structures Using In-situ Compression Testing Micro-CT: *Vincent DiNova*¹; Holly Flynn¹; Aaron Guckenberger¹; ¹Savannah River National Laboratory

Machine-learning Model to Identify and Classify Dislocations in Aluminum via 3D Dark Field X-ray Microscopy: *Pin-Hua Huang*¹; ¹Stanford University

Analysis of Fibers, Pores, and Mechanical Properties in μ CT-scan of a Long Fiber-reinforced Thermoplastic: Andreas Grießer¹; Aaron Widera¹; Martina Hübner¹; ¹Math2Market GmbH

Buried Within: Targeted 3D Multiscale Imaging and Analysis in Bulk Samples: *Stephen Kelly*¹; Robin White¹; Hrishikesh Bale¹; Sam Kalirai²; William Fadgen¹; William Harris¹; Tobias Volkenandt¹; ¹Carl Zeiss RMS; ²Carl Zeiss X-ray Microscopy

Combining Tomography and Scanning 3DXRD to Study Voids During Ductile Failure: *Bjarke Østergaard*¹; Mustafan Kutsal¹; Kim Nielsen¹; Henning Poulsen¹; Grethe Winther¹; ¹Technical University Of Denmark

(Title Needed from Author): *Wesley De Boever*¹; Jan Dewanckele¹; Frederik Coppens¹; ¹Tescan

- A**
- Abdeljawad, F6
 Aboulkhair, N8
 Adair, C6
 Adeosun, S9
 Adibhatla, A6
 Agnew, S3
 Ahsan, F4
 Aigbodion, A8
 Allison, J8
 Almer, J4
 Andrew, M4
 Andreyev, A4
 An, S9
 Aramide, O9
 Arola, D3
 Arora, A4
 Ashcroft, I8
 Ashton, T9
 Aubry, S5
- B**
- Bachmann, F6, 9
 Bajaj, P4
 Bale, H4, 5, 6, 7, 8, 9
 Barton, N5
 Battaglia, D9
 Beall, M4
 Bean, S7
 Beaudoin, A4
 Benzing, J5
 Bernier, J4, 8
 Bertin, N5
 Bertschová, V4
 Bhattacharya, A5
 Bhattacharya, K5
 Bhattacharyya, J3
 Botman, A3
 Boyce, D4
 Brackman, P3
 Braidy, N4
 Bucharsky, C7
 Bucsek, A5, 6
 Burnett, T3
- C**
- Callahan, P9
 Callahan, P3
 Chakrabarti, D5
 Chakraborty, S5
 Chang, K7, 8
 Chao, P7
 Charlesworth, R5
 Charpagne, M4, 8
 Chawla, N4, 6, 7
- Chlupsa, M6
 Choi, J9
 Clarke, A3
 Cocke, C4
 Coffman, K6
 Cook, P8
 Coppens, F7, 9
 Cote, D5
 Crabtree, J5
- D**
- Dada, M9
 Dawson, P4
 De Andrade, V7
 De Angelis, S9
 De Boever, W3, 7, 9
 De Carlo, F7
 Degano, M8
 De Graef, M6, 8
 Deng, B7, 8
 Deriy, A7
 Detlefs, C6, 8
 Dewanckele, J9
 Dillon, S6
 DiNova, V9
 Dluhos, J4
 Drake, R6
 Dresselhaus-Marais, L7
 Duan, H6
 Du, G7, 8
 Du, K6
- E**
- Echlin, M3, 4, 8
 Erickson, J5
- F**
- Fadgen, W4, 7, 8, 9
 Fæster, S9
 Fang, H6
 Farkas, D4
 Farkas, G3
 Fedrigo, A9
 Filevich, J3
 Flynn, H9
 Folgar, L5
 Fonda, R3, 6, 9
 Forien, J5
 Francis, T8
 Frederick, C3
 Fu, Y7
- G**
- Gajjar, P8
 Ganju, E6, 7
- Garmestani, H9
 Geauvreau, K6
 Gerlt, A4
 Geurts, R3, 6
 Glatt, E3
 Govind, K5
 Gray, G8
 Greeley, D8
 Griesser, A8
 Grießer, A3, 9
 Guckenberger, A9
 Guillen, D3, 9
 Guo, H7, 8
 Gupta, S5, 9
 GURSOY, D6, 7
 Gustafson, S8
- H**
- Hague, R8
 Harley, J6
 Harris, W4, 7, 8, 9
 Heckman, N6
 Helps, O3
 Hémerly, S4
 Hilty, F6
 Hoar, E9
 Homer, E5
 Hong, C5
 Hosseinkhannazer, H7
 Hrabe, N5
 Hruszkewycz, S6
 Huang, P9
 Hümbert, M3, 9
 Hussein, O6
- I**
- Ifijen, I8
 Ighodaro, A8
 Ikhuria, E8
 Imanian, A9
 Ivanoff, T6
- J**
- Jägle, E4
 Jaypuria, S5, 9
 Jensen, D3
 Jeong, Y7, 9
 Jinnai, H7
 Jin, Y5
 Johnson, K6
 Johnson, O5, 6
 Jones, D8
 Juul Jensen, D5, 6, 9

- K
- Kafka, O5
- Kalirai, S7, 9
- Kang, J6
- Kang, S7
- Kawarasaki, T7
- Kawasaki, S7
- Kazunori, O6
- Kelly, S 4, 5, 7, 8, 9
- Kenesei, P 4, 8
- Kim, H9
- Kingstedt, O4
- Kirka, M3
- Kitagawa, H7
- Klaas, O4
- Knipling, K9
- Knipschildt, E9
- Kobayashi, M3
- Kone, J5
- Krause, A6
- Kuhn, L9
- Kusada, K7
- Kutsal, M6, 9
- L
- Ladani, L4
- Laha, T7
- Lambert, P9
- Lamb, J3, 4
- Laukkanen, A5
- Lauridsen, E6, 9
- Lebensohn, R 3, 4, 5
- Lee, H7
- Lee, J8
- Lee, W7, 9
- Legros, M 4, 5
- Leibowitz, M7
- Lei, X9
- Lenau, A5
- Lenthe, W8
- Leonard, A3
- Liang, S9
- Li, D7
- Liew, L5
- Li, J8
- Li, K7
- Li, L4
- Lim, R4
- Lindemann, G7
- Lindkvist, A6
- Linke, S8
- Linne, M5
- Liou, F8
- Li, R3, 5
- Liss, K5, 6
- Liu, W 5, 6, 9
- Liu, X6
- Livescu, V8
- Li, Y8, 9
- Llorca, J6
- Loghin, A4
- Ludwig, W 3, 5, 8
- M
- Maddali, S6
- Mahdavi, M9
- Marquez-Rossy, A3
- Marsico, C3
- Mason, S3
- Mathe, N9
- Máthis, K3
- Matsumura, S7
- Menasche, D8
- Meng, L9
- Migneault, A4
- Miller, M3, 8
- Mills, M3
- Mirmohammad, H4
- Miura, H3
- Mizuno, S7
- Mohr, D7
- Morita, S7
- Moser, N5
- Mundada, Y4
- Muralikrishnan, V6
- Murnane, D8
- Murphy-Leonard, A6
- Musienko, A9
- Musinski, W4, 8
- N
- Nair, S3
- Naragani, D4, 8
- Narumi, T7
- Nicholson, I3
- Nielsen, K9
- Nieto, E6
- Niezgoda, S 3, 4, 5
- Nikitin, V7
- Nino, J5
- Niverty, S4
- Nyaknno, U8
- Nygren, K3, 8
- O
- O'Brien, C7
- Obstalecki, M 3, 4, 8
- Oddershede, J 3, 6, 9
- Oliveros, D4
- Omorogbe, S8
- Onaiwua, G8
- Ortega, M8
- Østergaard, B9
- Oza, M7
- P
- Pagan, D 3, 4, 8
- Park, J4, 8
- Pasianot, R4
- Patil, C5
- Peng, G7
- Peterson, K4
- Petryshynets, I9
- Pinomaa, T5
- Pokharel, R5
- Pollock, T 3, 4, 8
- Polonsky, A 3, 4, 6, 8
- Popoola, P9
- Poulsen, H 6, 8, 9
- Pratihari, D5
- Proudhon, H3
- Pusch, K3
- R
- Raabe, D4
- Randolph, S3
- Razmi, J4
- Reischig, P5
- Rief, S3
- Rohrer, G5
- Rollett, A3, 9
- Rotman, E6
- Rottmann, P8
- Rowenhorst, D3, 6
- Roy, S7
- Ruff, J4
- Rybalcenko, K5
- S
- Safriet, S8
- Salifu, S9
- Sanapala, R4
- Sanders, R9
- Sandfeld, S4, 5
- Sangid, M8
- Schell, G7
- Schmidt, S9
- Shade, P 3, 4, 8
- Shadle, D8
- Shahani, A6, 7
- Shah, J7
- Shanks, K8
- Sharma, H4
- Sheyfer, D6
- Shigematsu, K7

Shin, W	7, 8
Shi, R	7
Shu, D	7
Silva-Reyes, K	6
Singaravelu, A	4
Singh, A	4
Song, H	4
Sørensen, D	9
Sparks, G	3
Spear, A	4, 5
Stewart, C	9
Stinville, J	3, 4
Stoll, E	8
Sundararaghavan, V	8
Sun, J	3, 6, 9
Suter, R	5
T	
Takaki, T	7
Tancogne-Dejean, T	7
Tang, G	9
Tao, F	7, 8
Tari, V	3
Taylor, R	8
Teferra, K	5
Tesarová, H	4
Thakur, A	8
Tischler, J	6
Tonks, M	6
Torbatisarraff, H	7
Tordoff, B	8
Tsaknopoulos, K	5
T-Sarraff, H	4
U	
Uchic, M	3
V	
Venkatasainath, B	5
Voisard, F	4
Voisin, T	5
Volkenandt, T	8, 9
Voorhees, P	6
W	
Wang, C	6
Wang, H	7
Wang, Y	5
Watrings, D	5
Wei, C	8
Wendorf, J	4
White, R	4, 7, 8, 9
Widera, A	9
Wilkin, M	4
Wilms, M	4
Winiarski, B	6
Winther, G	6, 9
Withers, P	3, 8
Wojcick, M	7
Wojcik, M	6
Wu, C	8
Wu, J	8
Wu, M	5
Wu, Z	4
X	
Xiao, T	7, 8
Xie, H	7, 8
Xue, Y	7, 8
Xu, Z	5
Y	
Yaghoobi, M	8
Yamamoto, T	7
Yamashita, N	7
Yang, L	6
Yang, M	8
Yang, T	4
Yasuda, H	7
Yildirim, C	8
Yokota, H	7
Yoon, B	8
Yoon, J	7, 9
Yu, F	7
Z	
Zangenberg, N	9
Zecevic, M	4
Zhang, C	4
Zhang, H	7
Zhang, J	6
Zhang, L	6, 8
Zhang, N	9
Zhang, Y	3, 5, 6, 8, 9
Zheng, Y	7
Zhou, G	7
Zhou, H	5
Zhu, Y	4