SCIENTIFIC PROGRAM

September 27th, 2023

	Opening and Keynote session I (Chair: Prof. Iain Todd)
9:00-9:15	Opening remarks (Dr. M.T. Pérez-Prado, Prof. J.M. Torralba, Prof. I. Todd)
9:15-9:45	ID45: Advanced laser powder bed fusion through adaptive processing parameters and in situ heat treatments, Prof. Roland Logé, EPFL, Switzerland
09:45-10:15	ID132: Directional recrystallization of additively manufactured superalloys, Prof. Z. Cordero, MIT, USA
10:15-10:45	ID168: Integrated multi-scale solutions for accelerated materials development in metal additive manufacturing, Prof. Behrang Poorganji, Morf3D Inc, USA

	Session 1 - Auditorium	**Session 2 - Room 1.A.01**
	Alloy Design (Chair: Prof. Eric Jägle)	**Composites** (Chair: Prof. Eduard Hryha)
11:00-11:20	ID62: Accelerating the design and deployment of tailored alloys for additive manufacturing, J. McKeown, Lawrence Livermore National Laboratory, USA	ID76: PBF-LB manufacturing and microstructural analysis of aluminium/TiC MMCs, R. Freundl, University of the Bundeswehr Munich, Germany
11:20-11:40	ID59: Nucleation burst in additively manufactured In718: what can be learned for alloy design from the ISRO-mediated nucleation mechanism?, J. Zollinger, Institute Jean Lamour, France	ID23: High-speed maser cladding of AlSi7Mg0.6 reinforced with SiC and TiC, P. Fichter, Inspire AG, ETH Zurich, Switzerland
11:40-12:00	ID120: High-throughput exploration of alloys for additive manufacturing using experimental and machine learning approaches, A. Hariharan, RWTH Aachen University, Germany	ID56: High strength hybrid ex-situ/in-situ reinforced (Ti+B4C)/Al-Cu-Mg metal matrix composite manufactured using laser powder bed fusion, S. Senol, KU Leuven, Belgium
12:00-12:20	**COFFEE BREAK**	

	In-operando analysis I (Chair: Prof. Atieh Moridi)	**Al alloys I** (Chair: Dr. Scott McCall)
12:20-12:40	ID164: Operando X-ray diffraction and imaging to study microstructure evolution during laser powder bed fusion, S. Van Petegem, Paul Scherrer Institute, Switzerland	ID124: Icosahedral short-range order: a design strategy for developing alloys in additive manufacturing, M. Buttard, University Grenoble-Alpes, SiMAP, France
12:40-13:00	ID11: X-ray diffraction techniques non-destructively quantify and classify defects in AM materials, G. Bruno, BAM, Federal Institute of Materials Research and Testing, Germany	ID15: An integrated computational-experimental approach for fast developing bespoke high-strength Al alloys for laser powder bed fusion, F. Bosio, Technology Innovation Institute, TII Abu Dhabi
13:00-13:20	ID12: Operando monitoring of multi-laser powder bed fusion process during high-speed synchrotron imaging, S. Hocine, University College London, UK	ID75: Development of high strength aluminium alloys leveraging rapid solidification during laser powder bed fusion, C.M. Cepeda-Jiménez, National Center for Metals Research (CENIM), Madrid, Spain
13:20-13:40	ID118: Experimental quantification of inward Marangoni convection and its impact on keyhole threshold in laser powder bed fusion, J. Yang, EMPA, Switzerland	ID151: Controlling additive manufacturing defects in conductive alloys, R. Snell, University of Sheffield, UK

13:40-14:40	**LUNCH**

	In-operando analysis II (Chair: Profs. Giovanni Bruno & Zach Cordero)	**Metallic glasses** (Chair: Prof. Julien Zollinger)
14:40-15:00	ID30: In-situ neutron studies on laser powder bed fusion of metals and alloys, S. Sumarli, Paul Sherrer Institute, Switzerland.	ID105: Improving the laser powder bed fusion processability of a metallic glass with remelting strategies, C. Pauzon, University Grenoble Alpes, CNRS, France.
15:00-15:20	ID98: Investigating phase evolution during additive manufacturing of Ti6Al4V via operando synchrotron X-ray powder diffraction, K.A Abdesselam, Polytechnic Institute Paris, France.	ID9: The effect of laser parameters on crystallization behavior of Zr-based Bulk metallic glass manufactured by laser powder bed fusion, S. Hadibeik, Montanuniversität Leoben, Austria.
15:20-15:40	ID146: Laser powder bed fusion (L-PBF) of Cu-25Cr composites - Insights gained from synchrotron X-ray computed microtomography, L. Varoto, University Grenoble-Alpes, SiMAP, France.	ID37: Laser powder bed fusion of soft magnetic metallic glasses, M. Rodríguez, IMDEA Materials Institute, Madrid, Spain.
15:40-16:00	ID111: In-situ detection of stochastic spatter-driven lack of fusion in laser powder bed fusion, C. Schwerz, Chalmers University of Technology, Sweden.	ID103: Laser powder bed fusion of Ti-based bulk metallic glass, H. Schönrath, University Duisburg-Essen, Germany.
16:00-16:20	ID114: Monitoring of cracking in nickel superalloys during laser powder bed fusion process with acoustic emission and operando X-ray radiography, R. Richter, EMPA, Switzerland.	ID104: Cooling rates during laser powder bed fusion of Cu47Ti34Zr11Ni8 bulk metallic glass, J. Wegner, University Duisburg-Essen, Germany.
16:20-16:40	ID113: High-speed X-ray diffraction study of solidification mode in powder bed fusion of hot-work tool steel, H. H. König, KTH Royal Institute of Technology, Sweden.	ID74: Selective laser melting of bulk metallic glasses for energy applications S. Sadanand, IMDEA Materials Institute, Madrid, Spain.
16:40-17:00	**COFFEE BREAK**	
17:00-20:00	**POSTER SESSION** **(Please see the complete list of posters at the end of this program)**	

September 28th, 2023

Keynote session II (Early career researchers)
(Chair: Prof. Katerina Christofidou)

8:30-9:00 ID167: Non-equilibrium dynamics in additive manufacturing through operando X-ray studies, Prof. A. Moridi, Cornell University, USA

9:00-9:30 ID172: Envisioning additive manufacturing with X-rays, Dr. Y. Chen, RMIT University, Australia & ESRF, France

9:30-10:00 ID166: Directed energy deposition of high strength aluminum alloys, Dr. M.L Montero, Royal Netherlands Aerospace Center, The Netherlands

	Session 1 - Auditorium	**Session 2 - Room 1.A.01**	**Session 3 - Room 0.A.07**
	Modelling, AI & simulaion I (Chair: Dr. Damien Tourret)	**Post-processing and characterization I** (Chair: Prof. Roland Logé)	**Powders I** (Chair: Prof. Jose Manuel Torralba)
10:10-10:30	ID123: Efficient simulation-based creation of a metamodel for conduction mode melting in laser powder bed fusion processing, L. Schlenger, EPFL, Switzerland	ID94: Process/microstructures/properties of additively manufactured metals at LLNL, T. Voisin, Lawrence Livermore National Laboratory, USA	ID141: Importance of powder manufacturing and properties on successful material development for AM: Case of Ni-based superalloys, E. Hryha, Chalmers University of Science and Technology, Sweden
10:30-10:50	ID43: Influence of bias and ways forward for effective data-driven approaches for metal additive manufacturing, R. Wong, Imperial College London, UK	ID63: In-situ and hierarchical investigation of alloys and components for additive manufacturing, K. Bugelnig, German Aerospace Center (DLR), Germany	ID170: Powder functionalization for improved processability and performance, R.Casati, Politecnico di Milano, Italy
10:50-11:10	ID117: Exploring vast alloy composition space: from Calphad database development to alloy optimization, A. Perron, Lawrence Livermore National Laboratory, USA	ID87: In-situ synchrotron diffraction study of heat treatment and tensile deformation of LPBF processed Ti-6Al-4V, P. Dhekne, KU Leuven, Belgium	

11:10-11:30 **COFFEE BREAK**

	Modelling, AI & simulaion II (Chair: Dr. Damien Tourret)	**Post-processing and characterization II** (Chair: Prof. Steven van Petegem)	**Powders II** (Chair: Prof. Mónica Campos)
11:30-11:50	ID31: On the influence of design on the fatigue performance of additively manufactured structured materials, D. Barba, Polytechnical University of Madrid, Spain	ID46: The influence of intrinsic additively manufactured component properties on subsequent brazed joint formation, F. Livera, University of Sheffield, UK	ID145: Microstructure and property design of silver nanoparticle-modified permanent magnet powder treated via laser powder bed fusion, P. Gabriel, University Duisburg-Essen, Germany
11:50-12:10	ID52: Integrated computational materials engineering (ICME) framework for the development of novel dispersion-strengthened (DS) alloys for additive manufacturing, F. Brasche, RWTH Aachen University, Germany	ID20: In-situ hot isostatic pressing combined with X-ray imaging and diffraction of laser powder bed fusion of Ti-6Al-4V, T. Mishurova, BAM, Federal Institute of Materials Research and Testing, Germany	ID147: The development of Nb Si core-shell powders for laser-based powder bed fusion, P.P. Bauer, German Aerospace Center (DLR), Germany
12:10-12:30	ID26: A material agnostic deep learning optimization framework for laser powder bed fusion additive manufacturing, T. Wilkinson, Polytechnic University of Madrid, Spain	ID90: Microstructural control of LPBF Inconel 718 through post processing of intentionally placed AM discontinuity distributions, E. Livera, University of Sheffield, UK	ID149: Novel alternative to powder recycling to tackle powder degradation in PBF-LB, L. Cordova, Chalmers University of Technology, Sweden
12:30-12:50	ID143: Understanding cracking during electron beam powder bed fusion of Ni-based superalloys, B. Wahlmann, Friedrich-Alexander Universität, Nürnberg, Germany	ID119: Characterization of laser-powder bed fusion Co-free Fe2Ni2MnCr high entropy alloys, R. Castellote-Álvarez, National Center for Metals Research (CENIM), Madrid, Spain	ID133: Using powder mixtures to develop high entropy alloys via in-situ alloying in PBF-LB/M and studying its phase evolution by annealing, V. Kumaran, Imdea Materials Institute, Madrid, Spain
12:50-13:10	ID80: Using machine learning to optimize laser powder bed fusion (L-PBF) parameters of metallic materials, F. Bahari-Sambran, National Center for Metals Research (CENIM), Madrid, Spain	ID181: Novel approach to manufacture metallic powders with tailored chemical composition for additive manufacturing, T. Choma, Amazemet, Poland	ID128: Ultrasonic atomization and L-DED application of a custom tool steel, G. Artola, Azterlan Basque Research and Technology Alliance, Spain
13:10-14:10	**LUNCH**		

	Ni-based alloys I (Chair: Prof. Behrang Poorganji)	**Steels I** (Chair: Prof. Manas Upadhyay)	**DED** (Chair: Dr. María Luz Montero-Sistiaga)
14:10-14:30	ID121: Microstructure tailoring of In738 using dual-laser LPBF strategies, F. Schulz, University of the Bundeswehr Munich, Germany	ID99: Manganese alloyed steels in additive manufacturing-prospects and challenges, T. Niendorf, University of Kassel, Germany	ID13: Development of advanced repair design concepts for turbine components, O. Tassa, Centro Sviluppo Materiali S.p.A., Italy
14:30-14:50	ID150: PBF-LB of a non-weldable Ni-base Superalloy: role of processing parameters on hot cracking, A.F.J. Hussain, Chalmers University of Technology, Sweden	ID16: Phases evolution in additive manufactured TRIP custom 17-4PH alloy: opportunities for energy absorption applications, D. Della Crociata, University of Notthingham, UK	ID47: Investigation of Microstructure and Magnetic Properties of Fe-3.5Si-1.5Al Ferritic Steel Fabricated via laser directed energy deposition, H. Ikehata, Toyota Central R&D Labs, Japan
14:50-15:10	ID122: Powder bed fusion by laser and electron beam of a magnetocaloric Ni-Mn-Sn Heusler alloy, S.K. Rittinghaus, University of Wupertal, Germany	ID96: Influence of lead/follower dual laser strategies on the microstructure of FeNi20 produced by LPBF, M. Villa Vidaller, University of the Bundeswehr Munich, Germany	
15:10-15:30	ID53: Microstructural grading through laser scanning parameter modification for L-PBFed IN939, I. Rodríguez-Barber, Imdea Materials Institute, Madrid, Spain	ID69: Crack mitigation for Custom 465® steel made via laser powder bed fusion, Z. Sun, Institute of Materials Research and Engineering, A*STAR, Singapore	ID6: Microstructure and mechanical properties of L-DED processed Fe-36Mn-9Al-7Ni (wt%) superelastic shape memory alloy, J. Park, Pusan National University, South Korea
15:30-15:50	ID155: Additive manufacturing of superalloy HAYNES® 282®: development of PBF-LB processing, post-AM heat treatment, and properties, S. Shaik, Chalmers University of Technology, Sweden	ID54: Additive manufacturing of a D2 tool steel modified with nickel (Ni): a promising material for mould and tooling, R. Batalha, ISQ, Portugal	ID34: Mechanical and microstructural characterization of a bimetallic material additively manufactured by using dual wire® laser directed energy deposition, A. Lázaro, Meltio, Spain.
15:50-16:10	**COFFEE BREAK**		

	Titanium alloys and Ni-based alloys II (Chair: Dr. Yunhui Chen)	**Steels II and Fe alloys** (Chair: Dr. Federico Bosio)	**AM processing advances** (Chair: Dr. Laura Cordova)
16:10-16:30	ID55: Microstructural control of additively manufactured Ti-6Al-4V upon in-situ selective laser heat treatment, R. Esmaelizadeh, EPFL, Switzerland		ID8: Negative thermal expansion behaviour of metallic metamaterials produced via multi-material L-PBF, I. Prestes, University of the Bundeswehr Munich, Germany
16:30-16:50	ID77: Processing of CP titanium in reactive CO2 and N2 atmospheres, E. Jägle, University of the Bundeswehr Munich, Germany	ID100: Development and processing of the 316LSi-Inconel718 multimaterial by laser metal deposition wired-based technology, J. Ureña, CETEMET, Spain	ID101: High-power processing of dense and crack-free tungsten using electron beam powder bed fusion, C. Medina, Freemelt, Sweden
16:50-17:10	ID5: Laser powder bed fusion of TNTZO β-Ti alloy: microstructure, mechanical properties and biocompatibility, P. Ibrahim, University of Birmingham, UK	ID110: Influence of processing regimes on the cracking morphology at the interface of 316L and a copper alloy in multi-material PBF-LB, A. Bulloch, University of Nottingham, UK	ID89: Composite extrusion modeling, a promising tool to manufacture a FeCrAlMoTiNi high entropy alloy, L. García de la Cruz, Carlos III University, Madrid, Spain
17:10-17:30	ID97: Effect of chemical microsegregation on the hot cracking sensitivity of nickel-based superalloys manufactured by L-PBF, E. Borges, Mines Paris, France	ID10: Steel-based multi-material configurations by EB-PBF, W. Sjöstrom, Mid Sweden University, Sweden	ID125: Experimental investigation of the properties of hybrid aluminium alloys manufactured using wire-DED plasma arc process, Z. Elsayed, Technical University of Munich, Germany
17:30-17:50	ID71: Improved strength properties of LPBF Inconel 718 through process optimization and thermomechanical treatment, G. Kasperovich, German Aerospace Center (DLR), Germany	ID95: Computer simulations and in-process monitoring for fabrication of Fe-based alloy single crystals by laser powder bed fusion, Y. Liu, Osaka University, Japan	ID91: Direct-ink writing of titanium with steel spaceholders for orthopedic implants, J. Misiaszek, Northwestern University, USA

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	Keynote session III (Chair: Prof. Christian Leinenbach)
8:30-9:00	ID73: From coupling a continuous wave laser with an SEM to enhancing mechanical performance of a DED stainless steel, Prof. M. Upadhyay, École Polytechnique, Paris, France
9:00-9:30	ID169: Design of high throughput techniques for functional additively manufactured medical devices, Prof. S. Cox, University of Birmingham, UK
9:30-10:00	ID173: 4D printing of metallic alloys towards novel shape morphing of medical devices, Prof. J. Molina-Aldareguia, IMDEA Materials Institute, Madrid, Spain

	Session 1 - Auditorium	**Session 2 - Room 0.A.07**
	Advanced alloys I (Chair: Prof. Jon Molina-Aldareguia)	**Metamaterials I** (Chair: Prof. Daniel Barba)
10:10-10:30	ID84: Additive manufacturing of oxide dispersion strengthened (ODS) Alloys, C. Leinenbach, EMPA, Switzerland	ID92: Multiaxial loading behaviour and toughness of meta-crystal, H.L. Wu, Imperial College London, UK
10:30-10:50	ID61: Evolution of microstructure in additively manufactured NiTi architectured materials, Z.Yan, Delft University of Technology, The Netherlands	ID25: Design dependent mechanical properties of additively manufactured cellular materials, C. Garrido, Polytechnic University of Madrid, Spain
10:50-11:10	ID38: Nitinol developments for laser powder bed fusion: towards materials with locally controlled properties, M. Fischer, Pint, France	ID29: Additive manufacturing of large surface area lattices as a basis for noble metal-free high entropy alloy electrocatalysts, R. Ortmann, Ruhr University Bochum, Germany
11:10-11:30	ID58: Evolution of microstructural heterogeneities in additively manufactured low-alloy steel, A. Turnali, RWTH Aachen University, Germany	ID57: Design and deformation behavior of high-manganese steel lattice structures processed by laser powder bed fusion for energy-absorption applications, D. Kibaroglu, RWTH Aachen University, Germany
11:30-11:50	**COFFEE BREAK**	

	Advanced alloys II (Chair: Prof. Jon Molina-Aldareguia)	**Metamaterials II** (Chair: Dr. Shruti Banait)
11:50-12:10	ID160: Role of manufacturing routes on microstructural features of CoNi-based high entropy superalloy, A. Mohammadzadeh, Imdea Materials Institute, Madrid, Spain	ID78: Exploring dynamic mechanical properties of AlSi10Mg lattice structures manufactured by selective laser melting via experimental and numerical analysis, N. Babacan, Sivas University of Science and Technology, Turkey
12:10-12:30	ID109: Assessing additive manufacturing processability of novel refractory high entropy alloys prior to powder manufacture, L. Farquhar, The University of Sheffield, UK	ID40: LPBF manufacturing of Inconel 625 small struts with an open architecture instrumented set-up. Influence of build strategy and strut size on resulting microstructures, J. Rodrigues da Silva, CNRS, France
12:30-12:50	ID60: Generating and Characterizing Functionally Graded Steel Microstructures by L-PBF, M. Linnenberg, Fraunhofer EMI, Germany	ID35: Design, processing, and mechanical performance of additively manufactured energy absorbing metamaterials, A. Cardeña, Polytechnic University of Madrid, Spain
12:50-14:00	**LUNCH**	
	Multi-material approaches (Chair: Dr. David San Martín)	**Al alloys II** (Chair: Prof. Kim Vanmeensel)
14:00-14:20	ID82: Multi-material laser powder bed fusion: investigation of Co-processability and process limitations, C. Pereira, ETH Zurich, Switzerland	ID165: Developing sustainable aluminum alloys designed for laser powder bed fusion (LPBF) using in-situ alloying, T. Alshammari, University of Birmingham, UK
14:20-14:40	ID64: Hybrid additive manufacturing of multi-material metallic structures by using a combination of metallic foils and powders, A. Jamili, EPFL, Switzerland	ID72: Mechanical properties of Al-Mn-Cr-Zr based alloys tailored for powder bed fusion-laser beam, S. Bengtsson, Chalmers University of Technology, Sweden
14:40-15:00	ID44: Functionally graded additive manufacturing of Inconel 625-CuCrZr: from process parameter optimization to microstructural evolution and mechanical properties, A. Zardoshtian, University of Waterloo, Canada	ID116: Al-Ce alloys for selective laser melting, S. McCall, Lawrence Livermore National Laboratory, USA
15:00-15:20	ID19: Multi-material additive manufacturing of copper-steel with tailored interfaces using laser powder bed fusion, G. Li, KU Leuven, Belgium	ID41: Comparative study of pulsed and continuous wave laser powder bed fusion of AlSi10Mg alloy, P. Hébrard, Arts et Métiers Institute of Technology, France
15:20-15:40	ID81: Solid-liquid additive manufacturing & induction melting fabrication of 316L reinforced Al & Cu metal-metal composites, A. Baganis, EMPA and EPFL, Switzerland	ID152: Manufacturing and producing nano-scale accurate surfaces in additive manufacturing, O. Dew, University of Sheffield, UK

POSTER SESSION (Chair: M.T. Pérez-Prado)
ID7: Control of interfacial defects in Fe-Ni multi-material structures fabricated by laser direct energy deposition through interface geometry, Q.Y. Jin, Pusan National University, South Korea
ID18: Effect of topology on dynamic strain aging of additively manufactured Inconel718 lattices, S. Sahoo, IMDEA Materials Institute, Madrid, Spain
ID28: Die steel-based powder for 3D-printing large products DAPTM-AM LTX, K. Izumi, Daido Steel Co., Japan
ID32: Effects of deposited bead layers and microstructure on additive manufacturing process conditions of Inconel718 alloy, S. Yang, Daegu University, South Korea
ID36: Development of highly-filled metal powder filament for fused filament fabrication, S. Rodríguez Álvarez, Carlos III University, Madrid, Spain
ID50: Microstructure and mechanical properties of an austenitic stainless steel 316L process by Wire Arc Additive Manufacturing, L.Mornier, Grenoble INP, France
ID65: Assessing hydrogen embrittlement in Inconel 625 fabricated via laser directed energy deposition, J.J. Lee, Dong-A University, Busan, South Korea
ID66: A study on the grain refinement of Inconel718-ZrO2 deposits fabricated by directed energy deposition, D.H. Jo, Dong-A University, Busan, South Korea
ID67: Compositional modification of an aluminum alloy 7075 via high frequency vibration and its processability on laser powder bed fusion, M. Varela & J.A. García-Ferreño, Fundación Idonial, Spain
ID79: Neutron imaging characterization of functionally graded structures build by laser powder bed fusion, A. Baganis, EMPA and EPFL, Switzerland
ID85: Microstructure control of additively manufactured Ni-based superalloy with high gamma prime volume fraction to improve high temperature mechanical properties, M. Taneike, Mitsubishi Heavy Industries, Ltd, Japan
ID88: Challenges in PBF-LB/M processing of Al5052 aluminium alloy, I. Smolina, Wroclaw University of Science and Technology, Poland
ID93: The effect of substrate surface and process parameters on the interface between substrate and AM part produced in PBF-LBT, T. M. Nandakishor, University of the Bundeswehr Munich, Germany

ID115: Relationship between process parameters and materials properties of an aluminium alloy customized for additive manufacturing, J. Haubrich, German Aerospace Center (DLR), Germany
ID127: Microstructure formation during laser powder bed fusion of Ti-22Al-25Nb, J. Gussone, German Aerospace Center (DLR), Germany
ID129: The Application of the LPBF process in manufacturing parts for automotive industry, A. Pawlak, Wroclaw University of Science and Technology, Poland
ID130: Metallic powder manufacture for conditioning cast iron as an AM substrate, O. Barrenetxea, AZTERLAN, Basque Research and Technology Alliance (BRTA), Spain
ID131: Investigating multi-material laser powder-bed fusion via operando synchrotron X-ray diffraction, A. Özsoy, Paul Scherrer Institute, Switzerland
ID137: A new class of high-strength aluminium alloy for additive manufacturing, F. Amirkhaniu, Brunel University London, UK
ID148: Influence of dislocation density and residual stress on recrystallization in LPBF 316L steel through neutron diffraction, C. Navarre, EPFL, Switzerland
ID156: Potential strategy for the development of pure copper via powder bed fusion-electron beam (PBF-EB) for thermal and electrical applications, A.B. Nagaram, Chalmers University of Technology, Sweden
ID158: Effect of heat treatment on martensitic transformation in L-PBF processed austenitic stainless steel, M. Jambor, Czech Academy of Sciences, Czech Republic
ID159: Design for additive manufacturing of lattice structures with asymmetric tilt grain boundaries, H.S. Lee, Dong-A University, South Korea
ID161: A unified treatment of alloy dependent material properties and process parameters for accurate solidification simulations for AM based on CALPHAD, A. Markström, Thermo-Calc Software AB, Germany
ID162: Ultrafast laser surface processing of additively manufactured IN718 superalloy, H. González-Barrio, UPV-EHU, Bilbao, Basque Country, Spain
ID175: The selective laser sintering: Modeling & optimization, H. Yaagoubi, Mohamed V University, Morocco
ID176: Investigation of laser beam attenuation and energy partitioning during coaxial laser directed energy deposition process, A. Aggarwal, EMPA, Switzerland

ID177: Do dislocations evolve during metal 3D printing? – an in situ synchrotron X-ray diffraction study, S. Gaudez, École Polytechnique, Palaiseau, France
ID179: Recrystallization mechanisms in an additively manufactured oxide dispersion strengthened superalloy, C. Carter, MIT, USA
ID180: Dynamic strain aging in additively manufactured Inconel 718 lattice structures, S. Banait, EPFL, Switzerland & IMDEA Materials Institute, Madrid, Spain ID 108: High hardness Ta doped eutectic high entropy alloy by wire arc additive manufacturing, A. Zavdoveev, University of Ukraine, Ukraine.