Parallel Session Schedule

FIELD 1：Additive Manufacturing (3D Printing)

Session 1(AM: Process Analysis Ⅰ): Tuesday Morning, Oct. 21, 9:00-10:25; Function room 22, Level 2

Chairman: Zhang Deliang

Type	No.	Paper title	First Name	Last Name
Invited Presentation		Energy-field Hybrid Laser Additive Manufacturing of Multi-material Graded Components	Guangyi	Ma
Keynote Speech	342	Understanding the sintering mechanism of multimodal powder feedstock for sinter-based additive manufacturing	Jai Sung	Lee
Oral Presentation	105	Effect of Laser Power on Microstructure and Properties of Al7(VCoNi)93 Medium Entropy Alloy Fabricated by Additive Manufacturing	Yinghao	Zhu
Oral Presentation	192	Effect of processing parameters on the densification, microstructure and mechanical characterization by selective laser melting of W-25%Re alloy	Yingying	Zhang

Session 2(AM: Process Analysis Ⅱ): Tuesday Morning, Oct. 21, 10:35-12:00; Function room 22, Level 2

Chairman: Zong Guisheng, 3D Printing Technology, Inc.

Oral Presentation	224	Wear performance improvement by B additions in filament-based material extrusion additively manufactured 316L alloys	Chanun	Suwanpreecha
Oral Presentation	226	Microstructural and mechanical characterisation of bimetallic 316L/17-4PH stainless steel fabricated via filament-based material extrusion additive manufacturing	Natthaphat	Parsompech

Oral Presentation	323	Nanoceramic decoration of metal powders for additive manufacturing by ultrafine bubble-assisted hetero-agglomeration	Mingqi	Dong

Session 3(AM: Material & Process Development Ⅰ): Tuesday Morning, Oct. 21, 13:30-15:00; Function room 22, Level 2
Chairman: Tang Huiping, Hangzhou City University

Invited Presentation		Nanoparticle Jetting of Zirconia Ceramics and Their Applications in Oral Products	Huiping	Tang
Keynote Speech	129	Additive Manufacturing of Segregation-free Fe-Cr-Co Magnetic Steel via Laser Powder Bed Fusion	Yuheng	Liu
Oral Presentation	106	Optimizing Cr7C3 Content in Ni3Al-Based Laser Cladding Coatings: Microstructure Evolution and Tribological Performance on 42CrMo Steel	Shiqin	Wei
Oral Presentation	107	Particle/liquid Refractive Index Coupling Introduced Light Penetration Effect Enabling High Thermal Conductivity of 3D Printing AlN	Maohang	Zhang

Session 4(AM: Material & Process Development Ⅱ): Tuesday Morning, Oct. 21, 15:10-17:00; Function room 22, Level 2
Chairman: Tang Huiping, Hangzhou City University

Keynote Speech	167	Process optimization of laser powder bed melting for the preparation of superhard M2 high-speed steel	Siyu	Xu
Oral Presentation	162	Rheological Performance Optimization of Aqueous YG8 Slurry for Direct Ink Writing Formation	Xiao-Fei	Li
Oral Presentation	228	Surface quality and wear performance of 316L stainless steel fabricated by MIM and MEX: effects of shot peening	Aphichat	Sakkaeo

Session 5(AM: Material & Process Development Ⅲ): Wednesday Morning, Oct. 22, 9:00-10:25; Function room 26, Level 2
Chairman: Cheng Jigui, Anhui University of Technology

Keynote Speech	52	Additive Friction Stir Deposition of AZ31B Magnesium Alloy: Microstructural Evolution, Mechanical Properties, and Thermo-Mechanical Modeling	Zhixin	Xia
Oral Presentation	275	Composition gradient structure governs scale-dependent mechanical properties in multi-materials integrated Additive Manufacturing	Yaojie	Wen
Oral Presentation	319	Electron Beam Point-Wise Fabrication of NiTi Coatings on Titanium Inspired by Additive Manufacturing Technique	Lei	Wang

Session 6(AM: Binder Jetting &Printed Materials and Analysis): Tuesday Morning, Oct. 21, 9:00-10:25; Function room 26, Level 2
Chairman: Zhao Lin, Central Iron & Steel Research Institute Co., Ltd.

Invited Presentation		Binder Jetting Manufacturing	Guisheng	Zong
Keynote Speech	6	DEM-based insights into mechanisms governing the print-bed characteristics in binder jet printing additive manufacturing	Abolfazl	Malti
Oral Presentation	43	Analysis of Microstructure and Mechanical Properties of Niobium Alloy Manufactured by Laser Beam-Powder Bed Fusion (LB-PBF) Process	SUGWAN	LEE

Session 7(AM: Printed Materials and Analysis Ⅰ): Tuesday Morning, Oct. 21, 10:35-12:00; Function room 26, Level 2
Chairman: Niu Zhibin, Tianjin University

Keynote Speech	22	Anodizing of 3D-printed AlSi10Mg Alloy and its Fatigue Property	Hirotaka	Kurita

Oral Presentation	241	Strong and ductile niobium-based refractory alloy via deformable zirconia nanoparticles	Jianan	Chen
Oral Presentation	299	Microstructure and mechanical properties of C-HRA-1 nickel-based superalloy by laser melting deposition	Shaobo	Ping
Oral Presentation	331	Preparation of Oxide Thermoelectric Films via Freeze-Dry Pulsated Orifice Ejection Method and Laser Powder Bed Fusion	Zhenxing	Zhou
Oral Presentation	341	Microstructure and properties of TiC/Mo composites via laser powder bed fusion	Wenjing	Yang

Session 8(AM: Printed Materials and Analysis Ⅱ): Tuesday Afternoon, Oct. 21, 13:30-15:00; Function room 26, Level 2
Chairman: Niu Zhibin, Tianjin University

Oral Presentation	243	Strong and ductile nanoscale Ti-1Fe dual-phase alloy via deformation twinning	Chang	Liu
Oral Presentation	200	Preparation of Cu-Cr-Zr-Nb alloys by selective laser melting with elemental powders	Xinyu	Yang
Oral Presentation	203	Vibration-Induced Separation of Dissimilar Mixed Metal Powders for Powder Bed Fusion Additive Manufacturing: A Digital Twin Science Study	Yuichiro	Koizumi
Oral Presentation	134	Effect of micro-strain and (100) texture intensity on corrosion behaviors of NiTi alloy via laser powder bed fusion	An	Yan

Session 9(AM: Printed Materials and Analysis Ⅲ): Tuesday Afternoon, Oct. 21, 15:10-17:00; Function room 26, Level 2
Chairman: Zong Guisheng,3D Printing Technology, Inc.

Oral Presentation	244	Development of strong and ductile titanium alloys with wear resistance and enhanced damping	Haiyue	Zhang

Oral Presentation	221	Metallurgical Strengthening Behavior in Heterogeneous Interface of NiWCo/Cu Fabricated by Additive Manufacturing	Chenxu	Lei
Oral Presentation	116	Microstructural characteristics and mechanical properties of hypereutectic Al-Si alloy fabricated by laser powder bed fusion	Asuka	Suzuki
Oral Presentation	179	Microstructural and Mechanical Characterization of MA6000 Samples with Different Y_2O_3 Contents Fabricated by L-PBF	jun-seo	Park

Session 10(AM: Modeling and Post-processing): Wednesday Morning, Oct. 22, 10:35-12:00; Function room 26, Level 2
Chairman: Niu Zhibin, Tianjin University

Keynote Speech	309	An Integrated CALPHAD-Based FEM Tool for Additive Manufacturing Simulation	Shan	Jin
Oral Presentation	340	Research on Additive Manufacturing and Hot Isostatic Pressing for Biomedical Pure Tantalum	Xin	Liu
Oral Presentation	372	A novel performance-aimed geometric tolerancing evaluation framework for topologically optimized models based on sensitivity analysis	Pengfei	Yan
Oral Presentation	190	A Novel Digital Tool for Additive Manufacturing: From LB-PBF to Sinter-Based Processes	Yan	Liu

FIELD 2：Powder forming and sintering

Session 11(Powder Injection Molding): Tuesday Morning, Oct. 21, 9:00-10:25; Function room 35+37, Level 3
Chairman: Yau Hung Chou, XGIMI(Ningbo) Intelligent Equipment Co., Ltd.

Invited Presentation		Development Status of POM Base Feedstock of PIM in Asia	Yau hung	Chou

Oral Presentation	333	Study on sintering behaviour of metal injection molded Ti-6Al-4V based on experimental and molecular dynamics	Haibo	Sun
Oral Presentation	135	Formation mechanism of W-coated Cu composite powders and the metal injection molding using polyoxymethylene-based binders	Xipeng	Ding
Oral Presentation	45	The Importance of the Particle Size Analysis of Powders in Metal-powder Injection Molding	Yau Hung	Chou
Oral Presentation	359	Defect Analysis of Metal Powder Injection Molding	Yau hung	Chou

Session 12(Press, Sinter& Secondary Operations I): Tuesday Morning, Oct. 21, 10：35-12:00; Function room 35+37, Level 3
Chairman: Chou Yau Hung, XGIMI(Ningbo) Intelligent Equipment Co., Ltd.

Invited Presentation	13	Process design of surface densification rolling of powder metal gears	Philipp	Scholzen
Keynote Speech		Sintering Mechanism and Application of SPS Technology	Jiuxing	Zhang
Oral Presentation	30	Influence of ultrasonic surface rolling process on surface integrity and internal porosity in selective laser melted CP-Ti	Xingyi	Li
Oral Presentation	32	Corrosion behavior of sintered duplex stainless steel manufactured from gas-atomized powders discarded from 3D printing	Yitong	Liu
Oral Presentation		Atomic-Scale Insights into Powder Metallurgy and Additive Manufacturing using Atom Probe Tomography	Florian	Vogel

Session 13(Press, Sinter& Secondary Operations Ⅱ): Tuesday Afternoon, Oct. 21, 13:30-15:00; Function room 35+37, Level 3
Chairman: Chen Gang, University of Science and Technology Beijing

Oral Presentation	76	Development of a "Zero-shrinkage" anaerobic sealant for powder metallurgical parts	Huangyong	Jiang
Oral Presentation	87	Microstructure and mechanical properties of ceramic nanoparticles dispersion-strengthened tungsten alloys	Fei	Lin
Oral Presentation	71	Gelcasting technology for large-scale complex-shaped titanium alloy components	Xin	Li
Oral Presentation	56	Simulation of a hot isostatic pressing furnace	Chang	Gao

Session 14(Press, Sinter& Secondary Operations Ⅲ): Tuesday Afternoon, Oct. 21, 15:10-17:00; Function room 35+37, Level 3
Chairman: Chen Gang, University of Science and Technology Beijing

Invited Presentation	163	Effect of initial relative density on liquid phase sintering behavior of Al powder using Al-Cu eutectic alloy powder: In-situ observations using microscopy and synchrotron X-ray computed tomography	Ryotaro	Kusunoki
Oral Presentation	178	Analysis of the reinforcement effect of TiN and WC content to improve the mechanical properties of Ti-Grade12	Hyun-Su	Kim
Oral Presentation	252	Development and evaluation of 17-4PH micro gears via high performance powder metallurgy	Tzu-Yao	Lin
Oral Presentation	352	Optimizing Heat Treatment and Alloying for Enhanced Performance ofAstalov® CrS PM Steel	Jie	Yang

Session 15(Press, Sinter& Secondary Operations Ⅳ): Wednesday Morning, Oct. 22, 9:00-10:25; Function room 35+37, Level 3
Chairman: Xu Kai, CISRI Hydrogen & Porous Technology Co., Ltd.

Invited Presentati	347	Fabrication of MXene-reinforced silver matrix composites	Weiwei	Zhou

on				
Oral Presentation	260	Effect of air oxidation time on microstructure of sintered Cr-Fe alloy	Shing-Yin	Liao
Oral Presentation	264	Investigation of nitrogen effects on Cr-Fe alloys during high-temperature sintering	Chih-Ching	Chung
Oral Presentation	399	Achieving strength-ductility balance in Cu matrix composite reinforced with double nanophase of CNT and intragranular in-situ TiC	Jingmei	Tao

Session 16(Press, Sinter& Secondary Operations Ⅴ): Wednesday Morning, Oct. 22, 10:35-12:00; Function room 35+37, Level 3
Chairman: Xu Kai, CISRI Hydrogen & Porous Technology Co., Ltd.

Oral Presentation	378	Benefits of high-performance mixes solution in consistency and efficiency of PM part production	Xiaolin	Huang
Oral Presentation		Interfacial bonding enhancement in laser cladded Ni45 coatings on martensitic stainless steel through CeO2 modification	Boliang	Hu
Oral Presentation		Multi-scale Mechanism of Sintering and Density Enhancement of Molybdenum Powder and Prediction Model	Chengfang	Chai
Oral Presentation	343	Microstructural and mechanical properties of oxide dispersion strengthened (ODS) ferritic steels fabricated by mechanical alloying and powder forging	Himanshu	Pal

FIELD 3：Refractory Metals＆Cemented Carbide

Session 17(Refractory Metals＆Cemented Carbide Ⅰ): Tuesday Morning, Oct. 21, 9:00-10:25; Function room 31+33, Level 3
Chairman: Wang Tiejun, CISRI Hydrogen & Porous Technology Co., Ltd.

Invited Presentation	267	Rare earth oxide turns molybdenum alloy into a feasible functional material	Jinshu	Wang

Oral Presentation		The recent development of tungsten-molybdenum alloy materials in China	Tiejun	Wang
Oral Presentation	29	Effect of FeCoNiMoW high entropy alloy binder on mechanical properties of high entropy (Ti,W,Mo,Nb,Ta)(C,N) based cermets	Houan	Zhang
Oral Presentation		With the tenacity of molybdenum， safeguard the flexibility of life—The Application of Molybdenum Alloys in the Medical Field	Di	Dong

Session 18(Refractory Metals＆Cemented Carbide Ⅱ): Tuesday Morning, Oct. 21, 10:35-12:00; Function room 31+33, Level 3
Chairman: Liu Bin, Central South University

Invited Presentation	83	High-Temperature Mechanical Properties and Irradiation Behavior of Tungsten-Rich Multiple Principle Element Alloys	Bin	Liu
Oral Presentation	113	Vacuum diffusion bonding Nb521 and GH3230 alloys via different interlayers	yuanyi	Peng
Oral Presentation	49	Study On Microstructure And Mechanical Properties Of Molybdenum Rhenium Alloy	Guangda	Wang
Oral Presentation	140	Creep Behavior and Life Prediction of Rhenium: A Multi-scale Investigation Integrating Constitutive Modeling and Machine Learning	Di	Zhang

Session 19(Refractory Metals＆Cemented Carbide Ⅲ): Tuesday Morning, Oct. 21, 13:30-15:00; Function room 31+33, Level 3
Chairman: Qin Yongqiang, Hefei University of Technology

Invited Presentation		Research on the irradiation resistance modification of tungsten materials for nuclear fusion reactors	Hongyu	Chen

Oral Presentation	272	Research on preparation and properties of CeO_2-modified WC-FeNiCo ultrafine-grained cemented carbides	Yongqiang	Qin
Oral Presentation	148	Interfacial structure evolution and fracture toughness of polycrystalline diamond with medium-entropy alloy binder	Tianxu	Qiu
Oral Presentation	288	High stress twining in High-Stacking-Fault-Enerey M6C carbides of M42 high speed steel	Qiangqiang	Yuan

Session 20(Refractory Metals＆Cemented Carbide Ⅳ): Tuesday Afternoon, Oct. 21, 15:10-17:00; Function room 31+33, Level 3
Chairman: Xiong Ning, ATTL Advanced Materials Co.,Ltd.

Oral Presentation	286	Synergistic ulti-obiective Optimization for Refractory High-Entropy Alloys	Ruixia	Sun
Oral Presentation	72	Nitride dispersion strengthened tungsten alloy based on in-situ synthesis	Xingyu	Li
Oral Presentation	114	The high temperature tensile properties and mechanisms of Re-0.1ZrO2	Wenqing	Ying

FIELD 4：HIP

Session 21(HIP materials): Tuesday Morning, Oct. 21, 9:00-10:25; Function room 24, Level 2
Chairman: Chen Hongxia, CISRI HIPEX Technology Co., Ltd.

Invited Presentation	366	Research Status and Industrial Application Progress of High Performance Silicon Nitride Ceramics	Weiru	Zhang
Invited Presentation	151	The Booster for Large-Scale High-Performance Powder Metallurgy Products ——Development of Ultra-Large Hot Isostatic Pressing Equipment	Hongxia	Chen
Oral Presentation	330	Complex effects of capsule structure and powder particle size on the mechanical properties of	Xiaosheng	Tian

		powder metallurgy Inconel 718 alloys		
Oral Presentation	41	The structure control of precipitates in heat-resistance steel and its mechanical properties	Peng	Zhang
Oral Presentation	410	Innovative Applications of Hot Isostatic Pressing (HIP) and Its Integration into the Product Value Chain	Tianshu	Zhang

Session 22(HIP Simulation): Tuesday Morning, Oct. 21, 10:35-12:00; Function room 24, Level 2
Chairman: Chen Hongxia, CISRI HIPEX Technology Co., Ltd.

Invited Presentation	186	Holistic Simulation Approaches for Hot Isostatic Pressing: Bridging Physics, Materials, and Digital Twins	Zhenghua	Yan
Invited Presentation	277	Digital twin of the PM-HIP manufacturing chain from powder filling and pre-consolidation to near-net-shape components	Yuanbin	Deng
Oral Presentation	401	Research on Numerical Simulation and Capsule Design and Manufacturing for Near Net Shaping Hot Isostatic Pressing	Chengjian	Zhang
Oral Presentation	271	Multiscale Simulation of Hot Isostatic Pressing in Iron and Steel Manufacturing: Advances in DEM-CFD Coupled Modeling	Guangming	Chen

Session 23(HIP materials and simulation Ⅰ): Tuesday Afternoon, Oct. 21, 13:30-15:00; Function room 24, Level 2
Chairman: Christoph Broeckmann, RWTH Aachen University

Oral Presentation	155	Influence of Hot Isostatic Pressing Temperature on Compositional Distribution Uniformity of Ni-Ti Alloyed Molybdenum Targets Fabricated via Powder Metallurgy	Zhanfang	Wu

Oral Presentation	398	Research on the microstructure and properties of "mechanics-shielding" integrated magnesium matrixed composite	Zunyan	Xu
Oral Presentation	409	The current situation and development trends of hot isostatic pressing (HIP)	Songtao	Meng
Oral Presentation	396	Strengthening and deformation mechanism of high-strength CrMnFeCoNi high entropy alloy prepared by powder metallurgy	Caiju	Li

Session 24(HIP materials and simulation Ⅱ): Tuesday Afternoon, Oct. 21, 15:10-17:00; Function room 24, Level 2
Chairman: Qi Wen, CISRI HIPEX Technology Co., Ltd.

Oral Presentation	403	Investigation of HIP-NNS for SAF2205 Duplex Stainless Steel	Pengjie	Zhang
Oral Presentation	402	Key Technologies and Industrial Application of Hot Isostatic Pressing in Near-Net-Shape Manufacturing of Maintenance-Free Wear-Resistant Roller Sleeves	Haonan	Zheng
Oral Presentation	411	Research Progress of Hot Isostatic Pressing Diffusion Bonding Between Steel and Dissimilar Materials	Haofeng	Li

FIELD 5：Metal Powder Preparation and Processes

Session 25(Metal Powder Preparation and Processes Ⅰ): Tuesday Afternoon, Oct. 21, 13:30-15:00; Function room 25, Level 2
Chairman: Yu Yang, Tiangong International Co., Ltd.

Invited Presentation		The principle of plasma milling and its application in materials synthesis	Min	Zhu
Oral Presentation	374	Co-manufacturing gas atomization technology for powder	Pengfei	Yan
Oral Presentati	23	Monitoring and Optimisation of Powder Outgassing for Sintering	ERIK	COX

on		and HIPing		
Oral Presentation	34	Producing ultrafine electrolytic copper powder	Roman	Voinkov

Session 26(Metal Powder Preparation and Processes Ⅱ): Tuesday Afternoon, Oct. 21, 15:10-17:00; Function room 25, Level 2
Chairman: Huang Zanjun, Advanced Technology & Materials Co., Ltd.

Invited Presentation		Technical and market development of PM high speed and tool steels in China	Yang	Yu
Keynote Speech		Development status of stainless steel powder industry for powder metallurgy	Lintao	Du
Oral Presentation	237	Controlled One-Pot Synthesis of Copper Nanospheres through Green Aqueous Reduction	Chengjun	Wang
Oral Presentation	304	Ultrasonic Atomization of Refractory Medium Entropy Alloys	Tomasz	Choma
Oral Presentation	38	Mechanical properties and applications of Cr-containing PM sintered steel	Jing	Yang

FIELD 6：Functional Materials & Magnetic Materials

Session 27(Functional Materials & Magnetic Materials Ⅰ): Tuesday Morning, Oct. 21, 9:00-10:25; Function room 25, Level 2
Chairman: Wencheng Chang, National Chung Cheng University

Invited Presentation		Rare earth based high-frequency soft magnetic material	Jinbo	Yang
Oral Presentation	88	High-performance Nd-saving hot-deformed permanent magnets	Jung-Goo	Lee
Oral Presentation	266	Dramatically improving thermoplasticity of by regulating γ′ phase	Hua	Zhang
Oral Presentation	82	Additive manufacturing of Mn-Cu alloys: microstructure and mechanical properties	Liying	Sun

Session 28(Functional Materials & Magnetic Materials Ⅱ): Tuesday Morning, Oct. 21, 10:35-12:00; Function room 25, Level 2
Chairman: Yang Jinbo, Peking University

Invited Presentation		Technological progress of weightless rare earth permanent magnet materials	Rui	Han
Invited Presentation	112	Improved soft magnetic properties of FeSi/FeSiCrBC compound powder core induced by enhanced magnetic coupling	Hongzhen	Li
Oral Presentation	168	Microstructure and properties of W-Cu functional graded materials prepared by combining tape casting with infiltration sintering method	Changcheng	Sang

Session 35(Functional Materials & Magnetic Materials Ⅲ): Wednesday Morning, Oct. 22, 10:35-12:00; Function room 31+33, Level 3
Chairman: Han Rui, Central Iron & Steel Research Institute Co., Ltd.

Oral Presentation	208	Radiation resistance of 9Cr oxide dispersion strengthened steels at different temperatures	Xiaosheng	Zhou
Oral Presentation	314	Design of high-performance Mo-Re alloys with customized mechanical properties through controlled microstructure and strategic second-phase additions	Yuhang	Song
Oral Presentation		Preparation of atomized FeSi alloy powder and study on magnetic properties of magnetic core	Boliang	Hu
Oral Presentation	368	Effect of dewaxing process on magnetic properties of SMC material	Le	Liu

FIELD 7：Metal Matrix Composites

Session 29(Metal Matrix Composites): Wednesday Morning, Oct. 22, 9:00-10:25; Function room 24, Level 2
Chairman: Yin Haiqing, University of Science and Technology Beijing

Oral Presentation	59	Enhanced High-Temperature Performance of Powder Metallurgy Al–Cu–Mg Alloy via Dispersoid Strengthening and Delayed θ′ Phase Precipitation	Yang	Li
Oral Presentation	60	Mechanical property and microstructure of in-situ (TiB+ TiC)/TA15 composites via adding B4C in TA15 powder	Zhaohong	Feng
Oral Presentation	394	Enhancing the mechanical and electrical properties in CNTs/Cu composites via chemical vapor deposition introducing ex-situ interfacial WC	Junqin	Feng
Oral Presentation	153	Achieving high strength and large recoverable strain by designing honeycomb-structural dual-shape-memory-alloy composite	Weisi	Cai
Oral Presentation	393	Break through the strength-ductility trade-off dilemma in titanium matrix composites via precipitation assisted interface tailoring and solid solution	Qiong	Lu

Session 30(Ceramic Matrix Composites): Wednesday Morning, Oct. 22, 10:35-12:00; Function room 24, Level 2
Chairman: Yin Haiqing, University of Science and Technology Beijing

Invited Presentation	180	Upcycling waste $MoSi_2$ into high-performance composite coatings for protecting refractory alloys across a wide temperature range	Peizhong	Feng
Oral Presentation	324	Design of Toughened TiB_2 via Reactive Sintering and DFT Simulations	Wondayehu Yeshewas	Alemu

FIELD 8: Energy Materials, Fundamentals and Materials Genome Engineering

Session 31(Fundamentals and Materials Genome Engineering): Wednesday Morning, Oct. 22, 9:00-10:25; Function room 25, Level 2
Chairman: Li Xiang, Research Institute of Advanced Materials (Shenzhen) Co., Ltd.

Invited Presentation	328	AI-Driven Multimodal Fusion Platform for Powder Metallurgy: Revolutionizing Material Design and Analysis	Shaohua	Su
Invited Presentation	282	Deep-thinking LLM agents for automated literature review and taxonomy in powder metallurgy	Xiang	Li
Oral Presentation	259	Research on Intelligent Design and Performance Influence Mechanism of Precipitation-Strengthened High-Strength, High-Ductility and Corrosion-Resistant High-Entropy Alloys	Youpeng	Song
Oral Presentation	212	Multi-Field Numerical Simulation of the 45 Carbon Steel Welding Process	Shaobo	Ping
Oral Presentation	339	CALPHAD Thermodynamic and Kinetic Simulations for Powder Metallurgy: Applications from Binder Design, Atomization to Sintering	Johan	Bratberg

Session 32(Energy Materials): Wednesday Morning, Oct. 22, 10:35-12:00; Function room 25, Level 2
Chairman: Lee Huei-Long, Porite Taiwan Co., Ltd.

Invited Presentation		Metal Hydrides and Application	Shumao	Wang
Oral Presentation		Optimization of Dehydrogenation and Mechanism of Rare Earth Nitrides in Aluminum Hydroxide	Shaolei	Zhao
Oral Presentation		Preparation and Application of W–Cu Conductive Pastes for HTCC	Wangzhi	Xu
Oral Presentation	161	Solid State Hydrogen Storage Materials and Devices: Current Advances and Challenges from Material Dynamic Response to System Integration Optimization	Hu	Gu

FIELD 9: Porous materials

Session 33(Porous materials): Wednesday Morning, Oct. 22, 9:00-10:25; Function room 22, Level 2
Chairman: Gu Hu, CISRI Hydrogen & Porous Technology Co., Ltd.

Invited Presentation		The Application and Development Trend of Porous Metal Materials in the Hydrogen Energy Field	Hu	GU
Oral Presentation	47	Short-Process Fabrication and Uniformity Control Technology for Large-Scale Porous Titanium Gas Diffusion Layer	Baoguang	Zhang
Oral Presentation	392	3D Microstructure and Corrosion Behavior of Porous Co-Al-Cr Intermetallic Fabricated via Rapid Low-Energy Self-Exothermic Reaction for Advanced Filtration Applications	Zhichao	Shang
Oral Presentation	61	Electrical resistance characteristics of Al2O3 fillers as a component in immersion heaters for Al alloys melting.	Kazuya	Maeda

FIELD 10：Powder Metallurgy Superalloy

Session 34(Powder Metallurgy Superalloy): Wednesday Morning, Oct. 22, 9:00-10:25; Function room 31+33, Level 3
Chairman: Zhang Lin, University of Science and Technology Beijing

Invited Presentation		The effect of Ta on Nickel-based Powder Metallurgy Superalloys	Haopeng	Zhang
Oral Presentation	67	The Mechanism of Oxygen Content on the Microstructure and Performance of FGH96 Alloy	Lin	Zhang
Oral Presentation	150	Microstructure Evolution and Mechanism of Nickel-based Powder Superalloy during Cooling after Hot Deformation	Hailiang	Huang
Oral Presentation	274	Investigation of the Dynamic Degassing Behavior of Argon-Atomized Nickel-Based Superalloy Powders	Qiang	Zhang