# FINAL PROGRAM

## Tuesday, 7 November [Day 2]

		10:30-12:30					
	New materials						
	Chair : B	enjamin Guennec(Toyama Prefectural Univ) & Takayuki Shira	aiwa(The University of Tokyo)				
	P-201	Assessment of the four-point bending fatigue properties of zirconia-reinforced Ti6AI-4V nanocomposite processed by laser powder bed fusion	Benjamin Guennec(Toyama Prefectural University)				
	P-202	Effect of Volume Fraction of Network Structure Composed of High-Entropy CrMnFeCoNi Alloy on Fatigue Crack Propagation in 304L Stainless Steel Compact	Arisa Ito(Shizuoka University)				
Phoen	P-203	Fatigue damage evaluation of coarse and fine grains in notched austenitic stainless steel with harmonic structure	Keisuke Fujita(Shizuoka University)				
	P-204	Retarded Crack Growth and Self Sensing Ability of Metal- Matrix Composites produced by High-Pressure Torsion	Valeria Lemkova(Saarland University)				
	P-205	Fatigue crack propagation of nano particles reinforced Al matrix composite	Qingqing Pu(Shanghai Jiao Tong University)				
	P-206	Fatigue behavior of accumulative roll bonded Cu/Nb laminate materials	Takayuki Shiraiwa(The University of Tokyo)				
		Biomaterials					
	Chair : T	ohikazu Akahori (Meijo Univ) & Liguo Zhao(Nanjing Univ of A	eronautics and Astronautics)				
	D1-201	Change in mechanical properties and surface morphology of alpha+beta type titanium alloy subjected to gas nitriding duplex treatment	Tohikazu Akahori (Meijo university)				
lia1	D1-202	Fatigue property evaluation of Ti-Ta Alloy Rods Using Spinal Fixation Model	Akane YANAGAWA(Sophia University)				
Dahl	D1-203	Evaluation of Corrosion, Wear and Tribocorrosion Properties of Ti-Ta Alloys	Shuta YAMAMURO(Sophia University)				
	D1-204	Effect of Angioplasty on Fatigue Resistance of Nitinol Stent in Femoropopliteal Artery	Liguo Zhao(Nanjing University of Aeronautics and Astronautics)				
		Additive Manufacturing 1					
	chair : Bo and Tech	<ul> <li>b Li(East China University of Science and Technology) &amp; Yajir Linology)</li> </ul>	ng Li(East China University of Science				
	D2-201	High cycle fatigue behavior of CoCrFeNi high entropy alloy manufactured with laser powder bed fusion	Bo Li(East China University of Science and Technology)				
32	D2-201 D2-202	High cycle fatigue behavior of CoCrFeNi high entropy alloy manufactured with laser powder bed fusion Fatigue Properties of WAAM-manufactured components	Bo Li(East China University of Science and Technology) Moritz Hupka(Clausthal University of Technology)				
Dahlia2	D2-201 D2-202 D2-203	High cycle fatigue behavior of CoCrFeNi high entropy alloy manufactured with laser powder bed fusion Fatigue Properties of WAAM-manufactured components Inferior fatigue resistance of additively-manufactured Ni- based superalloy 718 and its dominating factor	Bo Li(East China University of Science and Technology) Moritz Hupka(Clausthal University of Technology) Sungcheol PARK(Kyushu University)				
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	Chair : Carl Fischer(Fraunhofer Institute for Mechanics of Materials IWM) & Emiel Amsterdam(NLR)						
	C2-201	Finite element study on the influence of the phase shift on plasticity-induced crack closure and the crack tip opening displacement under thermomechanical fatigue loading	Carl Fischer(Fraunhofer Institute for Mechanics of Materials IWM)				
	C2-202	Mixed mode crack growth behaviour considering plasticity- induced and roughness-induced closure	Shuancheng Wang(Southwest Jiao tong University)				
2	C2-203	Improved Analytical Tool for Crack Closure Evolution after Overload and Underload	Radek Kubíček(Institute of Physics of Materials, Czech Academy of Sciences)				
	C2-204	Crack closure effects at negative load ratios	Gilbert HÉNAFF(University of Poitiers)				
	C2-205	On the strain energy release rate and fatigue crack growth rate in metallic alloys	Emiel Amsterdam(NLR)				

Cyclic deformation and crack initiation 1				
Chair : Aeriel Leonard(The Ohio State Univ) & Ulich Krupp(RWTH Aachen Univ)				
R1-201	Fatigue strength evaluation of 1180MPa class recycled steel	Nobuo NAGASHIMA(National for Materials Science)		
R1-202	Influence of Dislocation Interactions on Fatigue Crack Initiation in Additively Manufactured Nickel-Aluminum- Bronze Alloys	Aeriel Leonard(The Ohio State University)		

14:00-16:00					
	Japanese Activity for New Fatigue Curves and Fatigue Analysis 1				
Chair : M Itatani (T	Chair : Masahiro Takanashi (IHI Corporation) & Akihiko Hirano (Hitachi-GE Nuclear Energy Ltd) & Masao Itatani (Toshiba Energy Systems & Solutions Corporation)				
P-207	Overview of Japanese Activity for New Fatigue Curves and Fatigue Analysis	Takeshi Ogawa(Aoyama Gakuin University)			
P-208	Development of Best Fit Curves	Masanori TOYODA(Mitsubishi Heavy Industries, Ltd.)			
P-209	Definition of Fatigue Life in Best fit Curves and Large Components	Chihiro Narazaki(Toshiba Energy Systems & Solutions Corporation)			
P-210	Mean Stress Correction Method for Fatigue Analysis	Takuya OGAWA(Toshiba Energy Systems & Solutions Corporation)			
P-211	Investigation of Mean Stress Effect for Local Strain Behavior at Notch Root of Large-Scale Plate Specimen	Daiki Takagoshi(Mitsubishi Heavy Industries, Ltd.)			
P-212	Verification of SWT Method for Notched Components	Yuichiro NOMURA(Mitsubishi Heavy Industries, Ltd.)			
	Growth of short and long cracks 1				
Chair : T	Chair : Tilmann Beck(RPTU Kaiserslautern-Landau) & Takayuki Yonezawa(Nippon Steel Corporation)				
D1-207	Experimental and numerical investigations of the influence of grain orientation on the fatigue behavior of coarse-	Tilmann Beck(RPTU Kaiserslautern-			

D1-207	Experimental and numerical investigations of the influence of grain orientation on the fatigue behavior of coarse- grained nickel-based superalloys	Tilmann Beck(RPTU Kaiserslautern- Landau)				
D1-208	Fatigue Crack Extension Mode for 18Ni Martensitic Steel and Its Effect on Fatigue Limit	Shun KINO(Kyushu University)				
D1-209	Carbon content effect on fatigue crack extension behavior and extension mode in 18%Ni martensitic steels	Pengxu REN(Kyushu university)				
D1-210	Fatigue crack propagation behavior of Ferritic steels with different cyclic softening properties	Takayuki Yonezawa(Nippon Steel Corporation)				
	Additive Manufacturing 2					
Chair : Aditya Pandey( Indian Institute of Technology Roorkee) & Atsuhiro KOYAMA(Nagasaki University)						

2-207	A study on fatigue properties of wire-arc additively manufactured Inconel 718 alloy	Aditya Pandey( Indian Institute of Technology Roorkee)
2-208	A study on different heat-treatment cycles for additively manufactured Ni-based alloy and its fatigue properties	SUMIT CHOUDHARY (Indian Institute of Technology Roorkee)
2-209	The effect of surface modification on crack propagation properties and fatigue life on Ti-6AI-4V alloy formed by electron beam lamination	Yuya ARAKI(Sophia University)
2-210	Applicability of non-ideal powders in powder bed fusion processes - Fatigue life of additively manufactured structures	Julia Richter(University of Kassel)
2-211	Influence of Heat-treatment on Fatigue Properties of Super Duplex 2507 Stainless Steel produced by Directed Energy Deposition Process	Sébastien BALLÉSIO(Institut Polytechnique de Paris)
2-212	Influence of manufacturing history and resulting microstructure on the very high cycle fatigue behavior of additively manufactured samples	Leonhard Stampa(Technical Universit Dresden)

Non-destructive testing 1				
air : Zhe ZHANG(Tianjin University) & Norihiko Hana(Mitsubishi Electric Corporation)				
1-207	Mechanoresponsive luminogen (MRL)-based real-time and visible detection method for fatigue damage	Zhe ZHANG(Tianjin University)		
1-208	Self-heating and rapid fatigue limit prediction for angle-ply thermoplastic composites under tensile fatigue load based on the infrared thermography technology	Aijia Li(Northwest Polytechnical University)		
1-209	Using 3D energy-dispersive µLaue diffraction to study fatigue damage evolution in materials showing wavy and planar slip behaviour	Carolin Leidigkeit(University of Siegen		
1-210	Evaluation of fatigue strength of Cr-Mo steel based on dissipated energy measurement	Taichi Sugimoto(Kobe university)		
1-211	Crack shape identification from surface deformation using inverse analysis	Norihiko Hana(Mitsubishi Electric Corporation)		
1-212	Fatigue Crack Behavior of 304 Stainless Steels using Synchrotron X-ray Tomography and Diffraction: Influence of the Martensite Fraction and Role of Inclusions	Djamel KAOUMI(North Carolina State University, USA)		

Damage evaluation and fatigue design 1						
hair : Jie-WeiGao(Univ of Electronic Science and Technology of China) & Fabien Lefebvre(CETIM)						
C2-207	Damage tolerance assessment of heavy-duty freight railway axle steel with various-shape artificial defects	Jie-WeiGao(University of Electronic Science and Technology of China)				
C2-208	Fretting fatigue damage of axial interference fit structures subjected to fretting wear	Yiliang Shu(Beijing Jiaotong University)				
C2-209	Research on fatigue assessment method of high-speed train axle based on axle box acceleration	Ruiguo Yan(Beijing Jiaotong University)				
C2-210	An entropy-based approach to low cycle fatigue damage evolution for GH4169 at intermediate and elevated temperature	Shuyang Xia(Beihang University)				
C2-211	Proposition and Development of the General Relation between Tensile and Fatigue Strengths of Metallic Materials	Jianchao Pang(Institute of Metal Research, Chinese Academy of Sciences)				
02-212	Effect of internal defects of G20Mn5 cast steel on the fatigue strength	Fabien Lefebvre(CETIM)				

	Cyclic deformation and crack initiation 1		Cyclic deformation and crack initiation 2		Cyclic deformation and crack initiation 3				
	Chair : A	eriel Leonard(The Ohio State Univ) & Ulich Krupp(RWTH Aa	chen Univ)	Chair : Yabin Yan(East China University of Science and Technology) & Ankur Chauhan(Indian Institute of Science)		Chair : Jean-Bernard VOGT( University de Lille) & Lihe Qian(Yanshan University)			
	R1-201	Fatigue strength evaluation of 1180MPa class recycled steel	Nobuo NAGASHIMA(National Institute for Materials Science)	R1-207	In situ SEM experimental study on the fatigue failure of micro-single-crystal copper	Yabin Yan(East China University of Science and Technology)	R1-213	Low cycle fatigue of a fully pearlitic steel	Jean-Bernard VOGT( University de Lille)
	R1-202	Influence of Dislocation Interactions on Fatigue Crack Initiation in Additively Manufactured Nickel-Aluminum- Bronze Alloys	Aeriel Leonard(The Ohio State University)	R1-208	Dislocation networks in the (111) cell boundaries in fatigued near-[-111] copper single crystals	Bohan Wang(Tokyo Institute of Technology)	R1-214	Cyclic plasticity of a 9Ni steel	Jean-Bernard VOGT( University de Lille)
Ran1	R1-203	Notched High Cycle Fatigue and Macrozones in Ti-6AI-4V	Yan Gao(Imperial College London)	R1-209	Improvement of stress corrosion cracking resistance by low cycle fatigue of a CrNiMoV steel	Fang-Xin Yang(East China University of Science and Technology)	R1-215	Secondary orientation effects on the low cycle fatigue behaviors of rectangular-sectional Ni-based single crystal superalloys at medium and high temperatures	Shao-Shi RUI(Institute of Mechanics, CAS)
	R1-204	In situ observation and crystal plasticity simulation of internal fatigue crack initiation and propagation behavior around synthetic hard alpha inclusions embedded in Ti-6AI- 4V	Hongzhuo Liu(Beihang University)	R1-210	Cryoforged nanotwinned CoCrNi medium-entropy alloy with exceptional fatigue resistance at cryogenic temperature	Yu Xie(East China University of Science and Technology)	R1-216	Improved fatigue resistance of heterogeneous materials: suppress strain localization and damage accumulation	Lei Lu(Institute of Metal Research, CAS)
	R1-205	A novel micromechanism-based fatigue model for FCC single crystal combining crystal plasticity with CDM	Ao Li(Beihang University)	R1-211	Elucidation of small fatigue crack initiation behavior on polycrystal Ti-22V-4AI	Koki Hirazumi(Okayama University)	R1-217	Nanostructure; 316L stainless steel; Low-cycle fatigue life; Ductility; Cumulative plastic strain	Nairong Tao(Institute of Metal Research, Chinese Academy of Sciences)
	R1-206	Initiation and Growth of Short Fatigue Cracks in Tempered Martensitic and Bainitic Steels	Ulich Krupp(RWTH Aachen University)	R1-212	Low-cycle fatigue response of an equiatomic CrFeNi multi- principal element alloy	Ankur Chauhan(Indian Institute of Science)	R1-218	Effect of Al on the Low-Cycle Fatigue Properties of Fe-Mn- C TWIP Steel	Lihe Qian(Yanshan University)
		Creep 1						Creep 2	
	Chair : K	ohei FUKUCHI(Akita University) & Oliver Jordan(RPTU Kaise	rslautern-Landau)				Chair : S	Shiyu Suzuki(JAXA) & Tuan Duc Nguyen(Siemens Energy)	
	R2-201	Characterization of low-cycle fatigue fracture surfaces of aluminum alloys at high-temperature using fractal dimension analysis	Kohei FUKUCHI(Akita University)				R2-213	Transition from crack retardation to acceleration under high temperature dwell-fatigue loading in a wrought Ni-base superalloy	Shiyu Suzuki(JAXA)
	R2-202	Acceleration of Creep-Fatigue Damage in Ni-Base Superalloy due to Viscoelasticity at Elevated Temperature by Considering Local Stress	Le XU(Tohoku University)				R2-214	Evaluation of fatigue and creep-fatigue damage levels on the basis of engineering damage mechanics approach	Li Sun(East China University of Science and Technology)
Ran2	R2-203	Cold dwell fatigue response of aero-engine component titanium alloys: Influence of hold time and peak stress	Jianke QIU(Institute of Metal Research, Chinese Academy of Sciences)		FATIGUE2026 presentation		R2-215	Acceleration Mechanism of Intergranular Cracking of Stainless Steel SUS316LN at Elevated Temperature Caused by Local Strain Energy Around Grain Boundaries	Ayane Yasumura(Tohoku University)
	R2-204	Molecular Dynamics Analysis of the Acceleration Mechanism of the Degradation of Grain Boundary Strength in Alloy GH4169 Caused by δ-Phase Precipitation	Takuto Kudo(Tohoku University)			R2-216	Cyclic deformation behaviors and damage mechanisms in P92 steel under creep-fatigue: Effects of hold condition and oxidation	Kang-Kang Wang(East China University of Science and Technology)	
	R2-205	Modified Kitagawa-Takahashi Approach for Improved Lifetime Prediction under Creep-Fatigue Loading of Polycrystalline Gas Turbine Components	Oliver Jordan(RPTU Kaiserslautern- Landau)			R2-217	Numerical Analysis of P91 notched specimen by damage- coupled inelastic constitutive model	Daisuke Kashiwagi(Tokyo University of Science, JAPAN)	
	R2-206	Probabilistic Modelling of creep-fatigue interaction in polycrystalline Nickel-base alloy based on the Kitagawa- Takahashi diagram	Tuan Duc Nguyen(Siemens Energy)						

Solutions	Corporation)						
P-213	Effect of Machined Surface Finish on Fatigue Life of Carbon Steel	Yun Wang(Hitachi, Ltd.)					
P-214	Fatigue crack initiation and growth behavior of specimen with machined surface layer under low cycle fatigue regime	Shota Hasunuma(Aoyama Gakuin University)					
P-215	QA Sheet for Variability Factors in Fatigue Life of S-N Curve –Introduction of Activity for Development of "Fatigue Knowledge Platform' in JWES (1) –	Nao Fujimura(Hokkaido University)					
P-216	QA Sheet for Fatigue Analysis of Weld Joint –Introduction of Activity for Development of "Fatigue Knowledge Platform' in JWES (2) –	Hideaki Nishikawa(National Institute for Materials Science)					
P-217	QA Sheet for Difference between Post Construction Code for Pressure Vessel and Damage Tolerance Design of Aircraft –Introduction of Activity for Development of "Fatigue Knowledge Platform' in JWES (3) –	Yuka Miyata(Hitachi-GE Nuclear Energy Ltd)					
P-218	Status of Codification for New Fatigue Curves and Fatigue Analysis	Seiji Asada(Mitsubishi Heavy Industries, Ltd.)					
	Growth of short and long crack	cs 2					
Chair : Yi	SHI(Shanghai Jiao Tong University) & Shigeru HAMADA(Kyu	ushu Universitv)					
D1-213	Investigation of defect induced crack and fatigue crack growth behavior of a P/M nickel based superalloy and corresponding life prediction	Yi SHI(Shanghai Jiao Tong University)					
D1-214	In-situ Observation of Fatigue Crack Propagation in Soda- Lime Glass with Vickers Indentation-induced Initial Crack under Four-Point Bending	Hibiki KOMINE(Shizuoka University)					
D1-215	Intrinsic fatigue resistance and the influence of material defects	Mirco Chapetti(National University of Mar del Plata)					
D1-216	Investigation of the influence of physical notch parameters on fatigue life and fatigue life scatter in EN AW-2618A	Jan Radners(Fraunhofer Institute for Mechanics of Materials IWM)					
D1-217	Fatigue short crack propagation in a Ni alloy manufactured by Laser powder bed fusion	Li Jianghua(Institute of Mechanics, Chinese Academy of Sciences)					
D1-218	D1-218 Fatigue Crack Extension by Damage Accumulation Shigeru HAMADA(Kyushu University)						
Additive Manufacturing 3							
Chair : Ja	akob Blankenhagen(Technical University of Munich) & Koji Ta	kahashi(Yokohama National University)					
D2-214	Cyclic plastic material behavior of novel high manganese austenitic stainless steel Printdur? HSA additively manufactured by PBF-LB/M	Jakob Blankenhagen(Technical University of Munich)					
D2-215	Effect of Heat Treatment on Fatigue Life of Ti-6AI-4V Alloy with Additively Manufactured Layer and Conventional Wrought Layer	Atsuhiro KOYAMA(Nagasaki University)					
D2-216	Process Parameters and Fatigue Crack Initiation in Cold Spray	Hamid Jahed(University of Waterloo)					
D2-217	An assessment of the high-temperature fatigue properties of additively manufactured nickel-based alloys	Tomáš Kruml(Institute of Physics of Materials, CAS)					
D2-218	Microstructure modification to increase resistance to fatigue crack propagation in titanium alloys made by wire based directed energy deposition process	Xiang Zhang(Coventry University)					
D2-219	Combined Effect of Shot and Laser Peening on Fatigue Strength of Additively Manufactured Aluminum Alloy	Koji Takahashi(Yokohama National University)					
D2-220	Anisotropic Fatigue Properties of Laser Additive Manufactured (LAMed) Ni-based Superalloys	ZhenanZhao(Zhejiang University)					
	Non-destructive testing 2						
Unair : P	aul Dario I OASA CAIZA(Karlsruhe Institute of Technology) &	Stephanie DESCHANEL (INSA-Lyon)					

16:30-18:30/18:50 Japanese Activity for New Fatigue Curves and Fatigue Analysis 2

air · Motoki Nakane (Hitachi-GE N

hair : Pa	: Paul DarioTOASA CAIZA(Karlsruhe Institute of Technology) & Stéphanie DESCHANEL (INSA-Lyon)			
:1-213	Real time fatigue crack detection on welded specimens by applying inductive Thermography. Simulation and experimental results	Paul DarioTOASA CAIZA(Karlsruhe Institute of Technology)		
31-214	Evaluation of Fatigue Strength by Dissipated Energy of Dissimilar FSW Joints of Aluminum Alloy and Steel sheets.	Tenyu Hidaki(Kobe university)		
1-215	POD modeling of a flexible array eddy current NDT method for near-surface cracks in the tenon-groove structure of a turbine disk and its application for damage tolerance assessment	Hongzhuo Liu(Beihang University)		
:1-216	Metalayer-based piezoelectric transducer for unidirectional excitation and reception of SH guided wave	Yuehao Du(Southwest Jiaotong University)		

Damage evaluation and fatigue design 2				
nair : Bastian Blinn(RPTU Kaiserslautern) & Masayuki Karnaya(Institute of Nuclear Safety System, Inc.)				
2-213	Analysis of the defect tolerance of bainitic 100Cr6 with high retained austenite content	Bastian Blinn(RPTU Kaiserslautern)		
2-214	Cyclic indentation - A new method to estimate the fatigue strength by considering the cyclic deformation behavior	Bastian Blinn(RPTU Kaiserslautern)		
2-215	Study on fatigue damage of axle excited by High Frequency	Ziyu Dong(Beijing Jiaotong University)		
2-216	A Study of Rate Process Analysis on the Rotating Bending Fatigue Limit of Carbon Steel	Mai FUKAMI(University of Toyama)		
2-217	Mean stress sensitivity for carbide-rich PM tool steels	Lennart Mirko Scholl(RWTH Aachen University)		
2-218	Influence of Pre-strain on the Fatigue Strength of Stainless Steel	Masayuki Kamaya(Institute of Nuclear Safety System, Inc.)		
Cyclic deformation and crack initiation 3				
air : Jean-Bernard VOGT( University de Lille) & Lihe Qian(Yanshan University)				
		Is an Demonstrative OCT/ Using the de		

	Chair : Aeriel Leonard(The Ohio State Univ) & Ulich Krupp(RWTH Aachen Univ)			Science)			Chair : Jean-Bernard VOGT( University de Lille) & Lihe Qian(Yanshan University)		
	R1-201	Fatigue strength evaluation of 1180MPa class recycled steel	Nobuo NAGASHIMA(National Institute for Materials Science)	R1-20	In situ SEM experimental study on the fatigue failure of micro-single-crystal copper	Yabin Yan(East China University of Science and Technology)	R1-213	Low cycle fatigue of a fully pearlitic steel	Jean-Bernard VOGT( University de Lille)
	R1-202	Influence of Dislocation Interactions on Fatigue Crack Initiation in Additively Manufactured Nickel-Aluminum- Bronze Alloys	Aeriel Leonard(The Ohio State University)	R1-20	B Dislocation networks in the (111) cell boundaries in fatigued near-[-111] copper single crystals	Bohan Wang(Tokyo Institute of Technology)	R1-214	Cyclic plasticity of a 9Ni steel	Jean-Bernard VOGT( University de Lille)
Ran1	R1-203	Notched High Cycle Fatigue and Macrozones in Ti-6AI-4V	Yan Gao(Imperial College London)	R1-20	Improvement of stress corrosion cracking resistance by low cycle fatigue of a CrNiMoV steel	Fang-Xin Yang(East China University of Science and Technology)	R1-215	Secondary orientation effects on the low cycle fatigue behaviors of rectangular-sectional Ni-based single crystal superalloys at medium and high temperatures	Shao-Shi RUI(Institute of Mechanics, CAS)
	R1-204	In situ observation and crystal plasticity simulation of internal fatigue crack initiation and propagation behavior around synthetic hard alpha inclusions embedded in Ti-6AI- 4V	Hongzhuo Liu(Beihang University)	R1-21	o Cryoforged nanotwinned CoCrNi medium-entropy alloy with exceptional fatigue resistance at cryogenic temperature	Yu Xie(East China University of Science and Technology)	R1-216	Improved fatigue resistance of heterogeneous materials: suppress strain localization and damage accumulation	Lei Lu(Institute of Metal Research, CAS)
	R1-205	A novel micromechanism-based fatigue model for FCC single crystal combining crystal plasticity with CDM	Ao Li(Beihang University)	R1-21	1 Elucidation of small fatigue crack initiation behavior on polycrystal Ti-22V-4AI	Koki Hirazumi(Okayama University)	R1-217	Nanostructure; 316L stainless steel; Low-cycle fatigue life; Ductility; Cumulative plastic strain	Nairong Tao(Institute of Metal Research, Chinese Academy of Sciences)
	R1-206	Initiation and Growth of Short Fatigue Cracks in Tempered Martensitic and Bainitic Steels	Ulich Krupp(RWTH Aachen University)	R1-21	2 Low-cycle fatigue response of an equiatomic CrFeNi multi- principal element alloy	Ankur Chauhan(Indian Institute of Science)	R1-218	Effect of AI on the Low-Cycle Fatigue Properties of Fe-Mn- C TWIP Steel	Lihe Qian(Yanshan University)
		Creen 1						Croop 2	
	Chair : Ko	ohei FUKUCHI(Akita University) & Oliver Jordan(RPTU Kaise	erslautern-Landau)				Chair : Shiyu Suzuki(JAXA) & Tuan Duc Nguyen(Siemens Energy)		
	R2-201	Characterization of low-cycle fatigue fracture surfaces of						Transition from crack retardation to acceleration under high	
		aluminum alloys at high-temperature using fractal dimension analysis	Kohei FUKUCHI(Akita University)				R2-213	temperature dwell-fatigue loading in a wrought Ni-base superalloy	Shiyu Suzuki(JAXA)
	R2-202	aluminum alloys at high-temperature using fractal dimension analysis Acceleration of Creep-Fatigue Damage in Ni-Base Superalloy due to Viscoelasticity at Elevated Temperature by Considering Local Stress	Kohei FUKUCHI(Akita University) Le XU(Tohoku University)				R2-213 R2-214	temperature dwell-fatigue loading in a wrought Ni-base superalloy Evaluation of fatigue and creep-fatigue damage levels on the basis of engineering damage mechanics approach	Shiyu Suzuki(JAXA) Li Sun(East China University of Science and Technology)
Ran2	R2-202 R2-203	aluminum alloys at high-temperature using fractal dimension analysis Acceleration of Creep-Fatigue Damage in Ni-Base Superalloy due to Viscoelasticity at Elevated Temperature by Considering Local Stress Cold dwell fatigue response of aero-engine component titanium alloys: Influence of hold time and peak stress	Kohei FUKUCHI(Akita University) Le XU(Tohoku University) Jianke QIU(Institute of Metal Research, Chinese Academy of Sciences)		FATIGUE2026 presentati	ion	R2-213 R2-214 R2-215	temperature dwell-fatigue loading in a wrought Ni-base superalloy Evaluation of fatigue and creep-fatigue damage levels on the basis of engineering damage mechanics approach Acceleration Mechanism of Intergranular Cracking of Stainless Steel SUS316LN at Elevated Temperature Caused by Local Strain Energy Around Grain Boundaries	Shiyu Suzuki(JAXA) Li Sun(East China University of Science and Technology) Ayane Yasumura(Tohoku University)
Ran2	R2-202 R2-203 R2-204	aluminum alloys at high-temperature using fractal dimension analysis Acceleration of Creep-Fatigue Damage in Ni-Base Superalloy due to Viscoelasticity at Elevated Temperature by Considering Local Stress Cold dwell fatigue response of aero-engine component titanium alloys: Influence of hold time and peak stress Molecular Dynamics Analysis of the Acceleration Mechanism of the Degradation of Grain Boundary Strength in Alloy GH4169 Caused by &-Phase Precipitation	Kohei FUKUCHI(Akita University) Le XU(Tohoku University) Jianke QIU(Institute of Metal Research, Chinese Academy of Sciences) Takuto Kudo(Tohoku University)		FATIGUE2026 presentati	ion	R2-213 R2-214 R2-215 R2-216	temperature dwell-fatigue loading in a wrought Ni-base superalloy Evaluation of fatigue and creep-fatigue damage levels on the basis of engineering damage mechanics approach Acceleration Mechanism of Intergranular Cracking of Stainless Steel SUS316LN at Elevated Temperature Caused by Local Strain Energy Around Grain Boundaries Cyclic deformation behaviors and damage mechanisms in P92 steel under creep-fatigue: Effects of hold condition and oxidation	Shiyu Suzuki(JAXA) Li Sun(East China University of Science and Technology) Ayane Yasumura(Tohoku University) Kang-Kang Wang(East China University of Science and Technology)
Ran2	R2-202 R2-203 R2-204 R2-205	aluminum alloys at high-temperature using fractal dimension analysis Acceleration of Creep-Fatigue Damage in Ni-Base Superalloy due to Viscoelasticity at Elevated Temperature by Considering Local Stress Cold dwell fatigue response of aero-engine component titanium alloys: Influence of hold time and peak stress Molecular Dynamics Analysis of the Acceleration Mechanism of the Degradation of Grain Boundary Strength in Alloy GH4169 Caused by δ-Phase Precipitation Modified Kitagawa-Takahashi Approach for Improved Lifetime Prediction under Creep-Fatigue Loading of Polycrystalline Gas Turbine Components	Kohei FUKUCHI(Akita University) Le XU(Tohoku University) Jianke QIU(Institute of Metal Research, Chinese Academy of Sciences) Takuto Kudo(Tohoku University) Oliver Jordan(RPTU Kaiserslautern- Landau)		FATIGUE2026 presentati	ion	R2-213 R2-214 R2-215 R2-216 R2-216	temperature dwell-fatigue loading in a wrought Ni-base superalloy Evaluation of fatigue and creep-fatigue damage levels on the basis of engineering damage mechanics approach Acceleration Mechanism of Intergranular Cracking of Stainless Steel SUS316LN at Elevated Temperature Caused by Local Strain Energy Around Grain Boundaries Cyclic deformation behaviors and damage mechanisms in P92 steel under creep-fatigue: Effects of hold condition and oxidation Numerical Analysis of P91 notched specimen by damage- coupled inelastic constitutive model	Shiyu Suzuki(JAXA) Li Sun(East China University of Science and Technology) Ayane Yasumura(Tohoku University) Kang-Kang Wang(East China University of Science and Technology) Daisuke Kashiwagi(Tokyo University of Science, JAPAN)

## FINAL PROGRAM

## Wednesday, 8 November [Day 3]

14:00-16:00/16:20

Growth of short and long cracks 3

	10:30-12:30										
	Japanese Activity of Fatigue design and Evaluation Committee in Society of Automotive engineers of Japan										
	Chair : Toshiaki Nakamaru(Nissan Motor Co., LTD) & Hiroaki Kawamura(Toyota motor corporation)										
	P-301	Activities of Fatigue design and Evaluation Committee in Society of Automotive engineers of Japan	Toshiaki Nakamaru(Nissan Motor Co., LTD)								
enix	P-302	Evaluation of Fatigue Characteristics of CFRP Bonding Materials by Urethane Adhesive	Masayuki Osada(Hiroshima University)								
Pho	P-303	Investigation of the Effects of Adherend Materials and Epoxy Adhesive Properties on the Fatigue Strength	Hiroaki Kawamura(Toyota motor corporation)								
	P-304	Investigation of the effects of adhesive edge shape and Adherend stiffness on fatigue strength of adhesive bonded specimens	Masashi Inoue(Toyota Industries Corporation)								
		Experimental techniques, corro	sion								
	Choir I C	etherine MARRI//Inversity de Teuleures) & Demier DESCAC									

		/					
	Experimental techniques, corro	sion					
Chair : Catherine MABRU(University de Toulouse) & Damien DESGACHES(AIRBUS Atlantic)							
D1-301	Contribution of the self-heating method in the characterization of the fatigue damage of materials with defects resulting from additive manufacturing	Catherine MABRU(University de Toulouse)					
D1-302	Study on Mechanical Properties of Anode Material for Lithium ion Batteries in Water	Shiori Tagai(Tokyo City University)					
D1-303	Effect of cyclic hardening on stress corrosion cracking behavior of NiCrMoV steel welded joints	Yuhui Huang(East China University of Science and Technology)					
D1-304	Investigation of Fatigue Crack Growth Behavior in Fine Particle Peened 7075 Aluminum Alloy using Digital Image Correlation	Yuichi ONO(Tottori University)					
D1-305	Effect of Corrosive Environment on Fatigue Strength Characteristic of Magnesium Alloy Ultrafine Wire	Yuta Sakamoto(The University of Electro- Communications)					
D1-306	New coating to prevent premature corrosion of aircraft structure	Damien DESGACHES(AIRBUS Atlantic)					

Hydrogen embrittlement									
Chair : Ar	Aman Arora (Kyushu University) & Daniel Osorio(University of Stuttgart)								
D2-301	Development of an experimentally informed model for fatigue crack initiation in metals due to hydrogen	Aman Arora (Kyushu University)							
D2-302	Influence of the interaction hydrogen/microstructure on low- cycle fatigue behavior and fatigue crack growth in a precipitation-hardened nickel-based superalloy.	Achraf Radi(University of Technology of Compiègne)							
D2-303	Some impact of hydrogen concentration and distribution on low cycle fatigue behavior of an alpha titanium alloy	Larissa Caroline Martins Moreira(La Rochelle University)							
D2-304	Review of the antagonists' processes of hydrogen on physical mechanisms of plasticity and their consequences on fatigue behavior of fcc metals	Xavier FEAUGAS (La Rochelle University)							
D2-305	Experimental investigation of hydrogen embrittlement on the tensile and low-cycle fatigue properties of an X52 steel	Carl Fischer(Fraunhofer Institute for Mechanics of Materials IWM)							
	Chair : Ar D2-301 D2-302 D2-303 D2-304 D2-305	Hydrogen embrittlement           Chair : Aman Arora (Kyushu University) & Daniel Osorio(University of St           D2:301         Development of an experimentally informed model for fatigue crack initiation in metals due to hydrogen           D2:302         cycle fatigue behavior and fatigue crack growth in a precipitation-hardened nickel-based superalloy.           D2:303         Some impact of hydrogen concentration and distribution on low cycle fatigue behavior of an alpha titanium alloy           D2:304         Review of the antagonists' processes of hydrogen on physical mechanisms of plasticity and their consequences on fatigue behavior of fac metals           D2:305         Experimental investigation of hydrogen embrittlement on the tensile and low-cycle fatigue properties of an X52 steel							

air : Yali Yang (Shanghai University of Engineering Science) & Committee							
P-307	The Cyclic R-Curve for Predicting Growth and Arrest of Short Cracks	Keisuke Tanaka(Nagoya University)					
P-308	Study on fatigue propagation shape of surface crack	Yali Yang (Shanghai University of Engineering Science)					
P-309	Influence of exposure to moist air on the fatigue striation formation in a 7175 7351 alloy	Gilbert HÉNAFF(University of Poitiers)					
P-310	A physically small crack growth model based on CTOD	Lu Han(Beihang University)					
	Additive Manufacturing 4						
hair : Le	nair : Lea Strauss(University of the Bundeswehr Munich) & Fabien Szmytka(Institut Polytechnique de Paris)						
		nytka(institut Polytechnique de Pans)					
01-307	Fatigue Life Prediction of PBF-LB AISi10Mg based on Roughness and Residual Stress	Lea Strauss(University of the Bundeswehr Munich)					
01-307 01-308	Fatigue Life Prediction of PBF-LB AlSi10Mg based on Roughness and Residual Stress Defects tolerance and fatigue limit prediction in additive manufactured titanium alloy Ti6Al4V	Lea Strauss(University of the Bundeswehr Munich) Abdul KhadarSyed(Coventry University)					
01-307 01-308 01-309	Fatigue Life Prediction of PBF-LB AlSi10Mg based on Roughness and Residual Stress Defects tolerance and fatigue limit prediction in additive manufactured titanium alloy Ti6Al4V Structure Integrity Analysis of Additive Manufactured Cabin Door: Design-Manufacture-Fatigue behavior	Lea Strauss(University of the Bundeswehr Munich) Abdul KhadarSyed(Coventry University) Yu'e MA(Northwestern Polytechnical University)					
01-307 01-308 01-309 01-310	Fatigue Life Prediction of PBF-LB AlSi10Mg based on Roughness and Residual Stress Defects tolerance and fatigue limit prediction in additive manufactured titanium alloy Ti6Al4V Structure Integrity Analysis of Additive Manufactured Cabin Door: Design-Manufacture-Fatigue behavior Fatigue damage evolution and tolerance in additive manufactured metals	Lea Strauss(University of the Bundeswehr Munich) Abdul KhadarSyed(Coventry University) Yu'e MA(Northwestern Polytechnical University) Alexander Koch(TU Dortmund University)					
01-307 01-308 01-309 01-310 01-311	Fatigue Life Prediction of PBF-LB AISi10Mg based on Roughness and Residual Stress         Defects tolerance and fatigue limit prediction in additive manufactured titanium alloy Ti6Al4V         Structure Integrity Analysis of Additive Manufactured Cabin Door: Design-Manufacture-Fatigue behavior         Fatigue damage evolution and tolerance in additive manufactured metals         Microstructurally Small Fatigue Crack Initiation and Growth Behaviors of Additively-Manufactured Alloy 718	Lea Strauss(University of the Bundeswehr Munich) Abdul KhadarSyed(Coventry University) Yu'e MA(Northwestern Polytechnical University) Alexander Koch(TU Dortmund University) Hideaki Nishikawa(National Institute for Materials Science)					
01-307 01-308 01-309 01-310 01-311 01-312	Fatigue Life Prediction of PBF-LB AISi10Mg based on Roughness and Residual Stress         Defects tolerance and fatigue limit prediction in additive manufactured titanium alloy Ti6AI4V         Structure Integrity Analysis of Additive Manufactured Cabin Door: Design-Manufacture-Fatigue behavior         Fatigue damage evolution and tolerance in additive manufactured metals         Microstructurally Small Fatigue Crack Initiation and Growth Behaviors of Additively-Manufactured Alloy 718         High-cycle and Low-cycle Fatigue of a Laser-Powder Direct Energy Deposition manufactured Inconel 625	Lea Strauss(University of the Bundeswehr Munich) Abdul KhadarSyed(Coventry University) Yu'e MA(Northwestern Polytechnical University) Alexander Koch(TU Dortmund University) Hideaki Nishikawa(National Institute for Materials Science) Fabien Szmytka(Institut Polytechnique de Paris)					

air : H	air : Hsin ShenHo(Zhengzhou University) & Yoshihiko UEMATSU(Gifu University)						
2-307	Effects of tightening torque on vibration fatigue performance of single-lap joints: modal parameter analyses	Hsin ShenHo(Zhengzhou University)					
2-308	Evaluation of Fatigue Properties of Adhesive Bond joint with Laser Patterning Surface Treatment	Ryuta Yotsutani(Hiroshima University)					
2-309	Effect of Plate Thickness Ratio on the Fatigue Strength Properties of Friction Stir Spot Welds of Aluminum Alloy	Yuki NOSE(Hiroshima University)					
2-310	Influencing Factors on Fatigue Strength of SPR joint in Magnesium Alloy	Yukio MIYASHITA(Nagaoka University of Technology)					
2-311	Fatigue Strength of Linear Friction Welded Joints for S55C Steel Plates	Noboru KONDA(Ryukoku University)					
2-312	Fatigue Behavior of Al/steel Dissimilar Friction Stir Welds and the Effect of Die Press Working	Yoshihiko UEMATSU(Gifu University)					
2-313	Fatigue performance of A356/6082 dissimilar aluminum alloys butt joint	Mei ZHANG(Shanghai University)					

		Surface engineering 1								
	Chair : Shirin FALAKBOLAND(RPTU Kaiserslautern) & Koichiro NAMBU(Osaka Sangyo University)									
	C1-301	Influence of organically modified sol-gel SiO2 coating on the VHCF behavior of austenitic stainless steel AISI 904L	Shirin FALAKBOLAND(RPTU Kaiserslautern)							
	C1-302	Improvement in Fatigue Strength by Ball Burnishing of Aluminum Alloy with a Surface Defect	Kohei Wakamatsu(Yokohama National University)							
	C1-303	Effect of Residual Stress on Internal Crack Initiation and Propagation of Induction Heated and Quenched AISI4140 Steel with Different Hardened Layer Depths	Tomofumi Aoki(Keio University) Nao Fujimura(Hokkaido University) <sup>3</sup> Tong Zhu(RPTU Kaiserslautern-Landau)							
	C1-304	Controlling Factors of Scanning Cyclic Press on the Surface Modification of Magnesium Alloy								
	C1-305	Fatigue behavior of metastable and stable austenitic stainless steels with different surface morphologies								
	C1-306 Effect of Surface Roughness on Fatigue Strength of Aluminum and Magnesium Alloys University) University									
Ī		Fatigue modelling and simulation	on 1							
	Chair - Thomas Ebhott/Endurica LLC) & Mauro Mardia/Bundesanstalt für Materialforschung und «prüfung)									

	Chair : Tl	omas Ebbott(Endurica LLC) & Mauro Madia(Bundesanstalt für Materialforschung und -prüfung)					
	C2-301	Life Prediction and Virtual Qualification of an Elastomeric Engine Mount	Thomas Ebbott(Endurica LLC)				
	C2-302	Vibration fatigue life prediction of 60Si2Mn fastener clips based on CDM theory and ML model.	Yifei Dong(Beihang University)				
Cosmos2	C2-304	Deep Learning-enabled Cyclic Deformation Modeling of Single Crystal Ni-based Superalloy Considering the Effect of Microstructure State	Long TAN(Beihang University)				
	C2-305	Determination of the Kitagawa-Takahashi diagram for the EA4T railway axle steel by means of the cyclic R-curve method	Mauro Madia(Bundesanstalt für Materialforschung und -prüfung)				
	C2-306	Microstructure-induced cracking and life prediction of Inconel 713C superalloy for very high cycle fatigue at elevated temperatures	Xiaolong LI (East China University of Science and Technology)				

 R2-305
 High and very high cycle fatigue properties of pearlitic rail steel R350HT
 Bernd M. SCHÖNE Natural Resources

 R2-306
 Crack Initiation and Propagation of Cruciform Specimens in Ultrasonic Fatigue Testing
 Luis Reis(IDMEC)

Bernd M. SCHÖNBAUER(University of Natural Resources and Life Sciences)

Cyclic deformation and crack initiation 4				Cyclic deformation and crack initiation 5				Cyclic deformation and crack initiation 6			
	Chair : Vi Chinese	iet Duc LE(Arts et Métiers Institute of Technology) & Zhefeng Z Academy of Sciences)	Zhang(Institute of Metal Research,	Chair : Constanze Backes(RPTU Kaiserslautern) & Lei Xu(Institute of Metal Research, Chinese Academy of Sciences)				Chair : Shuxin Chang(Southwest Jiaotong University) & Committee			
	R1-301	Investigation of the torsional fatigue crack initiation mechanisms in the cast AIS7Mg0.3 aluminum alloy using combined 3D X-ray CT and diffraction contrast tomography in a synchrotron beamline	Viet Duc LE(Arts et Métiers Institute of Technology)	R1-30	Influence of mechanical fatigue on magnetic properties of electrical steels	Constanze Backes(RPTU Kaiserslautern)	R1-314	Experimental investigation of early strain localizations on ferrite-pearlite steel under cyclic loading.	agesh Narasimha Prasad(Univ. Lille)		
	R1-302	Fatigue damage and temperature evolution under anisotropic cyclic deformation in a single crystal Ni-base superalloy using notched specimens	Putt Thanakun(Tokyo Institute of Technology)	R1-30	Influence of different temperatures on the fatigue behavior of fully ferritic high chromium steel	Patrick Lehner(RPTU Kaiserslautern)	R1-315	Multi-mechanism constitutive model for uniaxial ratchetting of Yu extruded AZ31 magnesium alloy at room temperature	Lei(Southwest Jiaotong University)		
Ran1	R1-303	Phase-field simulation on the martensitic transformation/reorientation toughening behaviors of single crystal NITi shape memory alloy	Junyuan Xiong(Southwest Jiaotong University)	R1-30	Cyclic Simple Shear Properties of Single- and Poly-crystalline Fe and Fe?3wt%Si alloys	Mamoru HAYAKAWA(Nippon Steel Corporation)	R1-316	Cyclic responses and damage evolution of ultra-high strength Fe steel under low-cycle fatigue	inong Gao(Beijing Institute of chnology)		
	R1-304	Analysis and modeling of the strain distribution and evolution during a fatigue test in ULCF and LCF. Application on a friction stir welded specimen from steel and aluminum	Paul DarioTOASA CAIZA(Karlsruhe Institute of Technology)	R1-31	Effect of Lüders strain localization on notch fatigue of medium manganese steels	Xiangbo Hu(Hunan university)	R1-317	Mechanism-based assessment of profiles made from directly Ale recycled hot extruded EN AW-6060 aluminum chips	exander Koch(TU Dortmund hiversity)		
	R1-305	A review on the fatigue cracking of twin boundaries: crystallographic orientation and stacking fault energy	Zhefeng Zhang(Institute of Metal Research, Chinese Academy of Sciences)	R1-31	Evaluation of Fatigue Properties of CFRF and Experimental Elucidation of Damage Growth Mechanism	Yuta Koga(Waseda University)	R1-318	Phase transformation and ratchetting behavior of medium manganese steel under asymmetrical cyclic stressing: Sh experiments, phase-field simulations and meso-mechanical un constitutive model	uxin Chang(Southwest Jiaotong niversity)		
	R1-306	Low-cycle fatigue of CrCoNi medium-entropy alloy with different grain sizes	Linlin Li(Institute of Metal Research, Chinese Academy of Sciences)	R1-31	Achieving superior fatigue strength in a powder-metallurgy titanium alloy via in-situ globularization during hot isostatic pressing	Lei Xu(Institute of Metal Research, Chinese Academy of Sciences)					
		Very high cycle fatigue 1			Very high cycle fatigue 2						
	Chair : Lu	uis Reis(IDMEC) & Bernd M. SCHÖNBAUER(University of Nat	tural Resources and Life Sciences)	Chair : Yoshinobu Shimamura(Shizuoka University) & Tao Wu(Nanjing University of Aeronautics and Astronautics)							
	R2-301	Different Axial/Shear Stress Ratios under Tension/Torsion UFT	Luis Reis(IDMEC)	R2-30	Effect of Mean Torsional Stress on Torsional Fatigue Strength in the Very High Cycle Regime for Spring and Bearing Steels	Yoshinobu Shimamura(Shizuoka University)					
2	R2-302	Effects of microstructure refinement and metallic adhesion on the sub-surface fatigue crack propagation process in Ti6Al4V alloy	Hiroyuki OGUMA(National Institute for Materials Science)	R2-30	Study and modeling of Fatigue Properties at Very Large Cycles from Self-heating Tests under Cyclic Loads	Théo SEVEDE(IRDL)					
Ran	R2-303	20 kHz cantilever fatigue testing of high strength precision strip steels in different load conditions	Mohamed Sadek(Karlstad University)	R2-30	A naturally initiated internal fatigue crack growth process in beta titanium alloy using in situ synchrotron radiation multiscale computed tomography	Gaoge Xue(Hokkaido University)		Journals' Meeting			
	R2-304	Fatigue assessment in the HCF and VHCF regimes of PM- HIPed Inconel 625	Faezeh Javadzadeh Kalahroudi(Karlstad University)	R2-310	Physics-informed neural networks for very high cycle fatigue	Mingliang Zhu(East China University of Science and Technology)					

Surface engineering z							
Chair : Yang Liu(Northeastern University) & Kiyotaka MASAKI(Saitama Institute of Technology)							
High Temperature Stability Mechanism of Fatigue Resistance of Warm Laser Shock Peened IN718 Superalloy	Yang Liu(Northeastern University)						
Effect of Multifunction Cavitation on Rotating Bending Fatigue Properties of Low Alloy Steel Rods	Keisuke Ono(Shizuoka University)						
Evaluation of the effect of stress ratio and compressive residual stress on the fatigue properties of shot-peened AISI4140 specimens, considering residual stress relaxation	Motoaki Hayama(Keio university )						
Effect of Gas Carburizing on Axial Fatigue Strength of SCM420H Steel	Takayuki Komoriya(The University of Electro-Communications)						
Residual stress relaxation in Inconel718 cold expanded hole under loading at elevated temperature	Moad FATMI(University of Technology of Troyes)						
Surface Crack Propagation Behaviour of Peening Treated A2024 Alloy	Kiyotaka MASAKI(Saitama Institute of Technology)						
	High Temperature Stability Mechanism of Fatigue Resistance of Warm Laser Shock Peened IN718 Superalloy Effect of Multifunction Cavitation on Rotating Bending Fatigue Properties of Low Alloy Steel Rods Evaluation of the effect of stress ratio and compressive residual stress on the fatigue properties of shot-peened AISI4140 specimens, considering residual stress relaxation Effect of Gas Carburizing on Axial Fatigue Strength of SCM420H Steel Residual stress relaxation in Inconel718 cold expanded hole under loading at elevated temperature Surface Crack Propagation Behaviour of Peening Treated A2024 Alloy						

Fatigue modelling and simulation 2								
Chair : Pa	Chair : Pascale KANOUTE(ONERA) & Wenyi Yan(Monash University)							
C2-307	Multiaxial Fatigue Criteria for the Fatigue Life Assessment of Metallic Assemblies	Pascale KANOUTE(ONERA)						
C2-308	Crack Closure and Fatigue Crack Growth under Variable Amplitude Loading	Andrei Kotousov(The University of Adelaide)						
C2-309	A mesoscopic damage model for the low-cycle fatigue of an extruded magnesium alloy	Ziyi Wang(Southwest Jiaotong University)						
C2-310	A Simple and Accurate Fatigue Life Prediction Method under Variable Loading	Shoma Ueda(Tokyo City University)						
C2-311	Modelling the influence of clustered defects on HCF properties of Ni-based superalloys	Arjun Kalkur MATPADI RAGHAVENDRA(Centre des Materiau						
C2-312	Numerical Study on Rolling Contact Fatigue Cracks in Curved Railway Tracks	Wenyi Yan(Monash University)						

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Cyclic deformation and crack initiation 4				Cyclic deformation and crack initiation 5			Cyclic deformation and crack initiation 6			
	Chair : Viet Duc LE(Arts et Métiers Institute of Technology) & Zhefeng Zhang(Institute of Metal Research, Chinese Academy of Sciences)			Chair : Constanze Backes(RPTU Kaiserslautern) & Lei Xu(Institute of Metal Research, Chinese Academy of Sciences)				Chair : Shuxin Chang(Southwest Jiaotong University) & Committee		
	R1-301	Investigation of the torsional fatigue crack initiation mechanisms in the cast AIS7Mg0.3 aluminum alloy using combined 3D X-ray CT and diffraction contrast tomography in a synchrotron beamline	Viet Duc LE(Arts et Métiers Institute of Technology)	R1-3	Influence of mechanical fatigue on magnetic properties of electrical steels	Constanze Backes(RPTU Kaiserslautern)	R1-31	Experimental investigation of early strain localizations on ferrite-pearlite steel under cyclic loading.     Nagesh Narasimha Prasad(Univ. Lille)		
	R1-302	Fatigue damage and temperature evolution under anisotropic cyclic deformation in a single crystal Ni-base superalloy using notched specimens	Putt Thanakun(Tokyo Institute of Technology)	R1-3	Influence of different temperatures on the fatigue behavior of fully ferritic high chromium steel	Patrick Lehner(RPTU Kaiserslautern)	R1-31	5 Multi-mechanism constitutive model for uniaxial ratchetting of extruded AZ31 magnesium alloy at room temperature Yu Lei(Southwest Jiaotong University)		
Ran1	R1-303	Phase-field simulation on the martensitic transformation/reorientation toughening behaviors of single crystal NITi shape memory alloy	Junyuan Xiong(Southwest Jiaotong University)	R1-3	9 Cyclic Simple Shear Properties of Single- and Poly-crystallin Fe and Fe?3wt%Si alloys	e Mamoru HAYAKAWA(Nippon Steel Corporation)	R1-31	6 Cyclic responses and damage evolution of ultra-high strength steel under low-cycle fatigue		
	R1-304	Analysis and modeling of the strain distribution and evolution during a fatigue test in ULCF and LCF. Application on a triction stir welded specimen from steel and aluminum	Paul DarioTOASA CAIZA(Karlsruhe Institute of Technology)	R1-3	Effect of Lüders strain localization on notch fatigue of medium manganese steels	Xiangbo Hu(Hunan university)	R1-31	7 Mechanism-based assessment of profiles made from directly Alexander Koch(TU Dortmund University)		
	R1-305	A review on the fatigue cracking of twin boundaries: crystallographic orientation and stacking fault energy	Zhefeng Zhang(Institute of Metal Research, Chinese Academy of Sciences)	R1-3	Evaluation of Fatigue Properties of CFRF and Experimental Elucidation of Damage Growth Mechanism	Yuta Koga(Waseda University)	R1-31	8 Phase transformation and ratchetting behavior of medium experiments, phase-field simulations and meso-mechanical constitutive model		
	R1-306	Low-cycle fatigue of CrCoNi medium-entropy alloy with different grain sizes	Linlin Li(Institute of Metal Research, Chinese Academy of Sciences)	R1-3	Achieving superior fatigue strength in a powder-metallurgy 2 titanium alloy via in-situ globularization during hot isostatic pressing	Lei Xu(Institute of Metal Research, Chinese Academy of Sciences)				
		Very high cycle fatigue 1			Very high cycle fatigue 2					
	Chair : Lu	ir : Luis Reis(IDMEC) & Bernd M. SCHÖNBAUER(University of Natural Resources and Life Sciences)		Chair : Yoshinobu Shimamura(Shizuoka University) & Tao Wu(Nanjing University of Aeronautics and Astronautics)						
	R2-301	Different Axial/Shear Stress Ratios under Tension/Torsion UFT	Luis Reis(IDMEC)	R2-3	Effect of Mean Torsional Stress on Torsional Fatigue Strength in the Very High Cycle Regime for Spring and Bearing Steels	Yoshinobu Shimamura(Shizuoka University)				
2	R2-302	Effects of microstructure refinement and metallic adhesion on the sub-surface fatigue crack propagation process in Ti6Al4V alloy	Hiroyuki OGUMA(National Institute for Materials Science)	R2-3	8 Study and modeling of Fatigue Properties at Very Large Cycles from Self-heating Tests under Cyclic Loads	Théo SEVEDE(IRDL)				
Ran	R2-303	20 kHz cantilever fatigue testing of high strength precision strip steels in different load conditions	Mohamed Sadek(Karlstad University)	R2-3	A naturally initiated internal fatigue crack growth process in beta titanium alloy using in situ synchrotron radiation multiscale computed tomography	Gaoge Xue(Hokkaido University)		Journals' Meeting		
							1			

Gang Zhu(East China University of Science and Technology) Tao Wu(Nanjing University of Aeronautics and Astronautics)

 R2-311
 Interior microstructure induced cracking of a NiCr20TiAl alloy at elevated temperature

 R2-312
 A VHCF Life Prediction Method Based on Surface Crack Density for FRP

16:30-18:30/18:50								
Growth of short and long cracks 4								
Chair : Motoki Sakaguchi(Tokyo Institute of Technology) & Xiaoguang Yang(Beihang University)								
P-313	Fatigue crack propagation in a single crystal and a two- dimensional polycrystalline Ni-base superalloys	Motoki Sakaguchi(Tokyo Institute of Technology)						
P-314	Quantitative analysis of fatigue damage of Inconel 718 after creep-fatigue fracture based on micro-pillar tests	Ji Wang(East China University of Science and Technology)						
P-315	A Study on Fatigue Crack Propagation in Steel Rail Weld Zones Based on Damage Mechanics and Cohesive Zone Model	Chenhao Ji(Beihang University)						
P-316	Effect of sustained load on fatigue crack growth behavior of FGH96 at elevated temperature	Zhifang WANG(Beihang University)						
P-317	Consideration on short crack propagation resistance in SM490 steels with different $\Delta$ Kth	Yoshihiro HYODO(JFE Steel Corporation)						
P-318 Small Crack Growth Behaviors and Its Interaction with Microstructures In A Ni-Based P/M Superalloy At High Temperature Xiaoguang Yang(Beihang University)								
Additive Manufacturing 5								

Chair : Ri	ui Fu(Harbin Institute of Technology) & Baris Telmen(Institut Po	lytechnique de Paris)			
D1-313	High-Cycle and Very-High-Cycle Fatigue Behavior and Life Prediction of Ti-6AI-4V Fabricated by Laser Powder Bed Fusion	Rui Fu(Harbin Institute of Technology)			
D1-314	Low-cycle fatigue of conventional and additively manufactured IN939 superalloy	Tomáš BABINSKY(Institute of Physics of Materials, Czech Academy of Sciences)			
D1-315	Coupling effects of microstructure and defects on fatigue properties of 3D-printed Ti-6AI-4V	Zhenjun Zhang(Institute of Metal Research, Chinese Academy of Sciences)			
D1-316	Cyclic Strain Localization in Fatigued 316L Stainless Steel Manufactured Additively using Selective Laser Melting (SLM)	Jiří MAN(Institute of Physics of Materials, Czech Academy of Sciences)			
D1-317	Influence of the defect tolerance on the fatigue strength of additively manufactured AISi10Mg	Bastian Blinn(RPTU Kaiserslautern)			
D1-318	Assessment of cyclic resistance on stainless steel 316L based cylindrical structures repaired by metal additive manufacturing methods	Baris Telmen(Institut Polytechnique de Paris)			
D1-319	Enhancing the Fatigue Performance of Additively Manufactured AISi10Mg Alloy Using A Novel Chemo- mechanical Surface Treatment	Jidong Kang(CanmetMATERIALS)			

Case studies and industrial applications							
hair : Marcel Krochmal(University of Kassel) & Taizo MAKINO(Nippon Steel Corporation)							
D2-314	On the fatigue properties of a S550MC+100Cr6 cladded steel in different fatigue regimes	Marcel Krochmal(University of Kassel)					
D2-315	Fatigue behavior of an Off-highway axle subjected to a variable amplitude strain-based load spectrum derived from field tests	Jacopo Pelizzari(University of Padua)					
D2-316	Evaluation of Fatigue Strength of Full-scale Induction- hardened Axles for Railway Vehicles and Its Estimation under Very-High-Cycle Regime	Taizo MAKINO(Nippon Steel Corporation)					
D2-317	Double-sided ultrasonic surface rolling process for improving the surface integrity and vibration fatigue resistance of thin- walled blade-like samples	Zhang Kaiming(East China University of Science and Technology)					
D2-319	Study of impact-sliding composite fretting corrosion of heat exchanger tubes in different concentrations of NaCl solution	Guorui Zhu(Tianjin Uninversity)					

Surface engineering 3							
Chair : Verônica VELLOSO(Sao Paulo State University) & Chang Ye(Zhengzhou University)							
C1-313	Study of the Ti-6AI-4V fatigue behavior superficially treated by plasma immersion ion implantation (PIII) combined with shot peening as pre and post treatment	Verônica VELLOSO(Sao Paulo State University)					
C1-314	Low-cycle fatigue investigation of Cr/CrN multilayer coated Ti- 6AI-4V alloy with equiaxed microstructure	Martin Ferreira Fernandes(Sao Paulo State University)					
C1-315	Effect of Nitrided-Fine Particle Peening on Formation of Nitrided Layer and Fatigue Properties of Titanium Alloys	Ryuichi Tachigaya(Shizuoka University)					
C1-316	Effect of Fine Iron-Sulfide Particle Peening on Rotating Bending Fatigue Properties of Low Alloy Steel	Shotaro NOGUCHI(Shizuoka University)					
C1-317	Effect of Oxide Films on Fatigue Properties of Anodically Oxidized Aluminum Alloys	Takeshi ANDO( Hiroshima University)					
C1-318	Improving the fatigue performance of Ti64 using electropulsing-assisted ultrasonic peening	Chang Ye(Zhengzhou University)					
	Fatigue modelling and simulation	on 3					
Chair : Andris Freimanis(VTT Technical Research Center of Finland) &Huang Yuan(Tsinghua University)							
C2-313	Fatigue modelling of martensitic steel for engine components	Andris Freimanis(VTT Technical Research Center of Finland)					
C2-314	A fast Neuber-type Finite Element simulator to calibrate a multi- mechanism HCF model of alloys with process-induced pores	Abhishek Palchoudhary(Mines Paris, PSL University)					
C2-315	FFT-based Crystal Plasticity Simulation of Cyclic Loading of SLM AlSi10Mg	Manoj Singh Bisht(Indian Institute of Technology Roorkee)					
C2-316	Creep Rate of Anode Material for Lithium-ion Batteries under High Temperature Environment	Kairi Shiraishi(Tokyo City University)					
C2-317	Investigation of Simple Mechanical Model for Fatigue Life Prediction of Anode Material for Lithium-ion Batteries	Masaya Ueda(Tokyo City Univercity)					

### **FINAL PROGRAM**

## Friday, 10 November [Day 5]

	8:00-10:00 Thermo-mechanical fatigue 1			10:30-12:30 Thermo-mechanical fatigue 2			14:00-16:00 Creek growth threebolds			
	Chair : \	air : Vincent Maurel(Mines Paris, PSL University) & Xu Chen(Tianjin University)			Chair : Mi Wang(Beihang University) & Lu ZHANG(Nanjing University of Aeronautics and Astronautics)			Chair : Hisao Matsunaga(Kyushu University) & Salim ÇALIŞKAN(Turkish Aerospace)		
	D1-501	Anisotropic thermomechanical fatigue assessment of nickel- base single crystal alloys	Jiawei Xu(Tsinghua University)	D1-507 A CTOE	D-based fatigue crack growth model under high ature and dwell time	Mi Wang(Beihang University)	D1-513	Quantitative Evaluation of the Sliding-mode Crack-closure Affecting the Shea-mode Fatigue Crack-growth Threshold in Ni-based Superallov 718	Hisao Matsunaga(Kyushu University)	
	D1-502	Role of temperature gradient in thermo-mechanical fatigue analyzed through micro-cracks growth	Vincent Maurel(Mines Paris, PSL University)	D1-508 A comp electron	arison of the thermomechanical fatigue behavior of -beam-melted and conventional Inconel 718	Stefan Guth(Karlsruhe Institute of Technology)	D1-514	Fatigue crack propagation behavior of Inconel 718 superalloy aged with different temperature/stress coupled fields	Lei WANG(Northeastern University)	
Dahlia1	D1-503	Crack Growth Behavior of 316LN Stainless Steel under Thermomechanical and Isothermal Fatigue Loading	Yiming Zheng(Tianjin University)	D1-509 for meta repaired	ment of a thermal fatigue characterization protocol al alloys, adapted to characterize the strength of 1 structures	Nicolas Thurieau(Institut Polytechnique de Paris)	D1-515	In-situ scanning electron microscopy observation of crack closure of non-propagating fatigue crack in Fe alloy	Atsushi Takayama(Nippon Steel Corporation)	
	D1-504	Material characterization of pearlitic railway steels exposed to simultaneous thermal and mechanical cycling	Erika Steyn(Chalmers University of Technology)	D1-510 metallur mechan	eformation and fracture mechanisms of powder- gy nickel-based superalloy under thermo- ical fatigue	Lu ZHANG(Nanjing University of Aeronautics and Astronautics)	D1-516	Fatigue Limit Evaluation of Ni-based Superalloy 718, Considering the Competition between Opening- and Shear- mode Fatigue Crack-growth	Yuya Tanaka(Fukuoka University)	
	D1-505	Thermomechanical fatigue behavior of 316LN stainless Steel	Xu Chen(Tianjin University)	D1-511 Constitu cycle ar compor	utive Modelling of alloys under high temperature low- ad thermal- mechanical fatigue: a key issue in ent design	Luc REMY(Mines Paris, PSL University)	D1-517	Investigation of failure analysis for AISI 4340 steels on near threshold region	Salim ÇALIŞKAN(Turkish Aerospace)	
				Life prediction methodology coffuers development 2			Effective factors			
	Chair : N	Marcos Pereira(Pontifical Catholic University of Rio de Janeiro)	& Marion Bartsch(German Aerospace Co	Chair : Tiago Cas Science and Tech	tro(Pontifical Catholic University of Rio de Janeiro) & nology)	Yongzhen ZHANG(Institute of Corrosion	Chair : N Polytech	Asatoshi Kuroda(Kumamoto University) & Wandong Wang(S Inical University)	chool of Aeronautics, Northwestern	
	D2-501	Investigation on Fatigue Life Estimation of GH4169 Superalloy at Elevated Temperature Based on Thermodynamic Entropy Generation	Liangliang ZUO(Beihang University)	D2-507 On the i capabili	nfluence of mean stresses on the predictive ty of the elliptical curve method	Tiago Castro(Pontifical Catholic University of Rio de Janeiro)	D2-513	Separate Effects of Surface Roughness and Residual Stress on Fatigue Limit of Austenitic Stainless Steels	Masatoshi Kuroda(Kumamoto University)	
	D2-502	Modelling the effect of a superficial defect over the fatigue- life structural steels: a modified version of the S-N curve	Marcos Pereira(Pontifical Catholic University of Rio de Janeiro)	D2-508 Machine hybrid n	e learning-based fatigue life prediction of metal Is: Perspectives of physics-informed and data-driven nethods	Haijie Wang(East China University of Science and Technology)	D2-514	Influence of manufacturing process, heat treatment and microstructure on fatigue properties of carbide-rich high- speed steels	Lennart Mirko Scholl(RWTH Aachen University)	
Dahlia2	D2-503	Multiscale Modeling Strategy for Accurately Predicting Fatigue Life of Steels	YOO CHAN(Korea University)	D2-509 Prediction	on of fatigue crack growth life under complex mental loads via cycle-by-cycle algorithm and XFEM	Zhiying Chen(Tsinghua University)	D2-515	Bidirectional Transformation: A Novel Approach to Enhance Fatigue Durability of Steel	Fumiyoshi Yoshinaka(National Institute for Materials Science)	
	D2-504	A Physics-informed Neural Network for Probabilistic Fatigue Life Prediction under Constant Amplitude Loading with Overloads	Shan Jiang(Minzu University of China)	D2-510 On the ineural r	ntegration of domain knowledge and branching network for fatigue life prediction with small samples	Lei GAN(Harbin Institute of Technology)	D2-516	Fatigue crack growth behavior of metallic plates reinforced with bonded and prestressed retarders	Wandong Wang(School of Aeronautics, Northwestern Polytechnical University)	
	D2-505	Probabilistic estimation of the Woehler and Goodman-Haigh curves by considering the stress ratio effect	Paul DarioTOASA CAIZA(Karlsruhe Institute of Technology)	D2-511 Method regard t ?CT and	ology for pore detection and classification with o fatigue of PBF-LB/M-manufactured 316L using d machine learning algorithms	Johannes Diller(Technical University of Munich)	D2-517	An analytical approach to evaluate fatigue behaviour of notched specimens in VHCF: challenges, accomplishments and limitations	Abilio Jesus (University of Porto)	
	D2-506	High Temperature Fatigue Tests on Small-scale Specimens Extracted from High Pressure Turbine Blades for Calibrating an Efficient Lifetime Model	Marion Bartsch(German Aerospace Center)	D2-512 Prediction D2-512 Based of Correlation	on of Corrosion Fatigue Crack Growth Rate in Alloys on Quantitative Expression of Data Nonlinear ion	Yongzhen ZHANG(Institute of Corrosion Science and Technology)	D2-518	Influence of Metallurgical Variables on Corrosion Fatigue Strength of Structural Steels	Ryuichiro Ebara (Fukuoka University)	
		Very high cycle fatigue 3			Very high cycle fatigue 4			Very high cycle fatigue 5		
	Chair : A	nja Weidner(TU Bergakademie Freiberg) & Chong Wang(Sic	nuan University)	Chair : Yuki Naka for Materials Scie	Chair : Yuki Nakamura(National Institute of Technology, Toyota College) & Yoshiyuki Furuya(National Institute for Materials Science)			Elen Regitz(RPTU Kaiserslautern) & Yevgen GORASH(Univer	sity of Strathclyde)	
	C1-501	Very high cycle fatigue at RT and elevated temperatures on additively manufactured materials	Anja Weidner(TU Bergakademie Freiberg)	C1-507 Constru High Str	ction of Probabilistic Model on Interior Crack ion and Propagation in Very High Cycle Fatigue of renoth Steels	Yuki Nakamura(National Institute of Technology, Toyota College)	C1-513	Microstructural changes during fatigue loading in the very high cycle regime of the metastable austenitic steel AISI 347 at 573 K	Elen Regitz( RPTU Kaiserslautern)	
	C1-502	Contribution of self-heating measurements under cyclic loading to the study of VHCF properties at high temperature of aldud head auromalian	Alexis MION(Institut Polytechnique de Paris)	C1-508 Fatigue	Mechanism for an Additively Manufactured um Alloy up to Very-High-Cycle Regime	Xiangnan PAN( Institute of Mechanics, Chinese Academy of Sciences)	C1-514	Mechanism of nanograin formation and crack initiation for very high cycle fatigue of titanium alloys	Chengqi Sun(Institute of Mechanics, Chinese Academy of Sciences)	
Cosmo	C1-503	Nanograin formation mechanism under fatigue loadings in additively manufactured Ti-6AI-4V alloy	Weiqian Chi(Beijing Jiaotong University)	C1-509 Localize	ed oxidation assisting microcrack initiation in a LPSO ed Mg-RE alloy up to very-high-cycle-fatigue regime	Yao Chen(Kyushu University)	C1-516	Effects of Induction hardening and Press-Fitting on Very High Cycle Fatigue Properties of Railway Axle Steel	Makoto AKAMA(Osaka Sangyo University)	
	C1-504	Very high cycle fatigue properties of bearing steels at elevated temperature	Suraj More(University of Natural Resources and Life Sciences)	C1-510 Charact PEKK n	erizing the very high cycle fatigue behavior of CF- naterial under ultrasonic cyclic bending loads	Aravind Premanand(University of Freiburg)				
	C1-505	Factors in ODA-like Morphology on the Fracture Surface in Beta Titanium Alloys	Rajshree Awasthi(Hokkaido University)	C1-511 New fat	igue limits in gigacycle fatigue of high-strength	Yoshiyuki Furuya(National Institute for Materials Science)				
	C1-506	Thermodynamic Investigation on the Crack Growth Behavior at Very High Cycle Fatigue Regime	Chong Wang(Sichuan University)	D2-213 Very Hig Titaniun	gh Cycle Fatigue of Laser Additively Manufactured n and Nickel Alloys	Yao CHEN (Sichuan University)				
	Fatigue modelling and simulation 4			Fatigue modelling and simulation 5				Fatigue modelling and simulat	ion 6	
	Chair : F	Franck MOREL(Arts et Métiers Institute of Technology) &Daiya	ng Gao(Nanjing University of Science and	Chair : Kazuki Shibanuma(The University of Tokyo) & Larissa Duarte(Bundesanstalt für Materialforschung und - ortifung)			Chair : Abel Santos (University of Porto) & Yongtao Bai(Chongqing University)			
	C2-501	Modelling Cyclic Deformation and Fatigue Crack Growth through Coupling of Phase Field and Viscoplasticity	Liguo Zhao(Nanjing University of Aeronautics and Astronautics)	C2-507 Multisca	ale Modeling Strategy for Accurately Predicting Life of Steels	Kazuki Shibanuma(The University of Tokyo)	C2-513	A unified approach for the fatigue categorization of cold- formed mild steel details	Abel Santos (University of Porto)	
	C2-502	Process-performance-prediction integration oriented to fatigue life improvement: implementation in high- temperature structures based on dual-scale modeling approach	Kai-Shang LI(East China University of Science and Technology)	C2-508 A Bridgi Crack C Steels	ng Strategy between Microscopic and Macroscopic rowth Simulations for Predicting Fatigue Strength of	Hongchang ZHOU(The University of Tokyo)	C2-514	A continuum damage mechanics-based machine learning approach for thermal fatigue life prediction of aluminum alloy	Zhixin Zhan(Beihang University)	
352	C2-503	Physics-based modelling of HCF variability in carburized steels	Franck MOREL(Arts et Métiers Institute of Technology)	C2-509 An elast	toplastic constitutive model for effect of loading on ratcheting and cyclic hardening behavior	Jiawei Bai(School of Aerospace Science and Technology)	C2-515	Studying the Fatigue Strength in the VHCF Regime of an Epoxy used for Fiber-Reinforced Polymers	Malo Rosemeier(Fraunhofer Institute for Wind Energy Systems IWES)	
Cosmo	C2-504	Phase-Field and Crystal Plasticity Coupling Model Investigation of Grain Growth under Fatigue Loading	Wei Peng(East China University of Science and Technology)	C2-510 Fatigue high ent	behavior and cyclic slip irreversibility of AlCoCrFeNi ropy alloys: A molecular dynamics simulation study	Dongxing Pan(Hunan university)	C2-516	Comprehensive Comparison between two different fatigue modeling methods for welded hollow spherical joints	Yongtao Bai(Chongqing University)	
	C2-505	Molecular Dynamics Analysis of the Effect of Strain Rate on the Acceleration of the Degradation of the Crystallinity of a Grain Boundary under Creep-Fatigue Loads at Elevated Temperature	TakumaYamawaki(Tohoku University)	C2-511 A Bridgi Crack C Steels	ng Strategy between Microscopic and Macroscopic rowth Simulations for Predicting Fatigue Strength of	Yun-Jae Kim(Korea University)	C2-517	Incorporation of Notch Size Effect Correction Factors into the Correlation Parameter between Fatigue Strength Diagrams of Smooth and Notched Specimens and Induction of Master Diagrams as Base Data for Estimation of Fatigue Strength of Machine Parts and Structural Elements	Hiroshi MATSUNO(Sojo University)	
	C2-506	Spectral method for fatigue life estimation of notched metallic structures under broad-band random vibration loadings	Daiyang Gao(Nanjing University of Science and Technology)	C2-512 Fatigue propaga	assessment procedure based on effective crack tion data and cyclic R-curve	Larissa Duarte(Bundesanstalt für Materialforschung und -prüfung)				
		Eiber compositor			Cyclic deformation and crask init	ation 7		Cuclic deformation and creek init	ation 8	
	Chair : S	Sylvie Castagnet(University of Poitiers) & Andreas Baumann(L	sibniz-Institut für Verbundwerkstoffe Gmb	Cyclic deformation and crack initiation 7 Chair : Zhengguan Lu(Institute of Metal Research, Chinese Academy of Sciences) & Marek Smaga(RPTU Kaiserslautern)			Chair :W	ei Li(Beijing Institute of Technology) & Zhenlei Li(Beihang Un	iversity)	
	R1-501	Fatigue Properties of Short Fiber Reinforced Polyamides exposed to acid environment	Sylvie Castagnet(University of Poitiers)	R1-507 Effect o very hig 6AI-4V	f thermal induced porosity on high-cycle fatigue and h-cycle fatigue behaviors of hot-isostatic-pressed Ti- owder components	Zhengguan Lu(Institute of Metal Research, Chinese Academy of Sciences)	R1-514	In-site Mesoscopic Tension and Fatigue Properties of Proton Exchange Membrane for Fuel Cell	Wei Li(Beijing Institute of Technology)	
	R1-502	Evaluation of Fatigue Properties of Injection Molded Plates of Short Glass Fiber Reinforced Composites Based on Matrix Phase Stress	Kenichi Shimizu(Meijo University)	R1-508 Effect o powder	f powder size on fatigue properties of Ti-6AI-4V compact using hot isostatic pressing	Jie Wu(Institute of Metal Research, Chinese Academy of Sciences)	R1-515	Study on the effects of inclusions on the fatigue properties of bearing steels	Peng Zhang(Institute of Metal Research, Chinese Academy of Sciences)	
Ran1	R1-503	Fatigue crack evolution of thermoplastic-based fiber metal laminates under application-related temperatures	Selim Mrzljak(TU Dortmund University)	R1-509 Creep-f	atigue crack initiation criterion for crystallographic ns based on damage mechanics descriptions	Run-Zi Wang(Tohoku University)	R1-516	Crystallographic mechanism of fatigue failure of zirconium alloys	Conghui Zhang(Xi'an University of Architecture and Technology)	
	R1-504	Fatigue damage evolution and damage tolerance of composite structures	Selim Mrzljak(TU Dortmund University)	R1-510 Dynami Bearing	c Evolution and Crystal Plasticity Study of GCr15 Steel Damage under Cyclic Loading	Liu Tengyuan(Institute of Metal Research, Chinese Academy of Sciences)	R1-517	High Frequency High Cycle Bending Fatigue Failure Mechanism of Blade-like Specimen at High Stress Ratio under Biaxial Tension-bending Load	Zhenlei Li(Beihang University)	

R1-505	Correlating composite fatigue to its matrix properties	Andreas Baumann(Leibniz-Institut für Verbundwerkstoffe GmbH)	R1-5′	11 Non-uniform cyclic temperature field induced deformation behavior of IN718 in thermal gradient mechanical fatigue	Shaochen BAO(Beihang University)	R1-518	Improving the fatigue defect tolerance of steels by Cu precipitates	Dietmar Eifler (RPTU Kaiserslautern)
R1-506			R1-5′	12 Fatigue behavior of metastable Fe-based austenites	Marek Smaga(RPTU Kaiserslautern)			

Variable amplitude loads, multiaxial and mixed mode fatigue 1			Variable amplitude loads, multiaxial and mixed mode fatigue 2			
chair : Matus Margetin(Slovak University of Technology in Bratislava) & Michael Marx(Saarland University)			chair : Christian Kontermann(TU Darmstadt) & Peter Haefele(University of Applied Sciences Esslingen)			
R2-501	Application of energy-based damage accumulation rule for fatigue monitoring of structure under variable amplitude loading	Matus Margetin(Slovak University of Technology in Bratislava)	R2-507	Crack Initiation and Relaxation Behavior of a 1Cr-Cast Steel under Multiaxial High Temperature Loading	Christian Kontermann(TU Darmstadt)	
R2-502	Micromechanical study of low-cycle fatigue behavior of additively manufactured Inconel 718 superalloy at ambient and elevated temperatures	Xin Zhang(Harbin Institute of Technology)	R2-508	Fatigue behaviors and life evaluation of AISI 304 under multiaxial non-proportional random loading	Yu-Chen WANG(Ritsumeikan University)	
R2-503	Strain distribution of a fir-tree tenon/mortise structure under combined high and low cycle fatigue loads	Han Yan Dr.(Beihang University)	R2-509	Fatigue Life Estimation Method Using Equivalent Stress Amplitude by Smith-Watson-Topper Method for SCM440	Naoki Hashimoto(Hiroshima University)	
R2-504	An in-situ SEM investigation on fatigue crack growth mechanism under single overload	Lindong Chai(Beihang University)	R2-510	Investigation of the test evaluation for the determination of multiaxial material properties	Alexander Linn(Clausthal University of Technology)	
R2-505	Fatigue of metallic glasses after an overload as a first step to fatigue under variable amplitude loading	Michael Marx(Saarland University)	R2-511	Influence of cut edge and notch on electric steel strip under constant and variable amplitude loading	Peter Haefele(University of Applied Sciences Esslingen)	
R2-506	An iso-damage model based on residual S-N curves to consider fatigue damage accumulation under HCF-VHCF loads	Tao Liang(Beihang University)				