

State	Paper No.	Presentation Type	Session Title	PaperTitle	Date	Time	Session Room
ThP1	P00275	Poster	Poster-1	The Molecular Dynamic Simulation of Graphite with Stacking Phenomena: Relation between Stacking and Bond Energy	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00272	Poster	Poster-1	Modification of the Johnson-Cook Model for the Strain Rate Effect on Tensile Properties of 304, 316 Austenitic Stainless Steels	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00258	Poster	Poster-1	Failure Behavior of Pipe Elbows under Displacement- and Load-controlled Cyclic Loads	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00255	Poster	Poster-1	Assessment of C'-Integral and Creep COD Rate for Welded Pipe with Strength Mismatch at High Temperature	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00254	Poster	Poster-1	Application of Artificial Neural Network to Multi-Variables Regression for Estimations of J-integral for Surface Cracked Pipes	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00248	Poster	Poster-1	Simple J-integral estimations of welded pipes with a circumferential internal semi-elliptical surface crack	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00238	Poster	Poster-1	Impact Behavior of Bulletproof Biocomposites: Experiments and FE Simulations	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00235	Poster	Poster-1	A Research of Concrete De-bonding Evaluation for Containment Liner Plate in the Nuclear Power Plant Using Ultrasonic Lamb Wave Approach	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00232	Poster	Poster-1	Nondestructive Evaluation of Polymer Coating with an Optimum Designed Ultrasonic Delay Line	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00231	Poster	Poster-1	A Study on Analysis of Guided Wave Modes that Varies with Curvature	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00230	Poster	Poster-1	Lamb Wave Propagation in an Unidirectional CFRP plate: Comparison of FEM Simulation, Experiments and Analytical Calculation	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00229	Poster	Poster-1	An Experimental Study on Second Harmonic Nonlinear Ultrasonic Guided Wave for Fatigued and Shot Peening Spring Rod	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00226	Poster	Poster-1	A Highly Sensitive Aptasensor for Detection of VEGF <sub>165</sub> using CNT/PANI Nanocomposite	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00225	Poster	Poster-1	Structural Integrity Assessment of Reactor Vessel Considering Beyond Design Basis Earthquake	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00219	Poster	Poster-1	Experimental Method for Observing Corrosion Pit of Austenitic Stainless Steel using Notched Bar Specimen	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00209	Poster	Poster-1	Preparation of Highly Aligned Nanofiber Micropatterns by Electrospinning	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00200	Poster	Poster-1	Crack Growth Analysis of Nuclear Safety 1 Component Subject to Sequential Severe Seismic Loads Considering Accumulated Plastic Strains	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00198	Poster	Poster-1	Evaluation of cavitation impact via material pitting and pile-up behavior	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00189	Poster	Poster-1	Numerical Analysis of Small Punch Test for the Characterization of Hydrogen Embrittlement Behaviour of Metallic Materials	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00187	Poster	Poster-1	Assessment of Acceptance Level for the Scratches on the Internal Pressure Pipes for ITER to Application of Blanket System	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00185	Poster	Poster-1	Fracture Behaviour Analysis of Complex Crack using Strain based Ductile Tearing Simulation	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00165	Poster	Poster-1	Machine Learning Algorithm based Real Time Fault Detection for Rolling Bearing	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00162	Poster	Poster-1	Investigation of Crack Tip Deformation under LCF Loading Condition Considering Crack Growth	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00160	Poster	Poster-1	Study on Crack-Tip Stress Field under Creep-Fatigue Loading Condition	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00157	Poster	Poster-1	Ta-Ni Thin Film Alloys as Copper Diffusion Barrier for Advanced Interconnects	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00156	Poster	Poster-1	Study of Structural and Mechanical Property Changes in W-based Alloys under He-ion Irradiation	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00142	Poster	Poster-1	Structural Integrity Assessment of Gas Pipelines Using a Simplified Ductile Damage Model	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00129	Poster	Poster-1	Thermophysical and Thermomechanical Characteristics on Wet-layup Fiber Reinforced Polymer Composite using Thermogravimetric Analysis for Application of Unmanned Surface Vehicle	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00117	Poster	Poster-1	Impact Absorption Characteristics of Stacked Woodpile Metamaterials According to Mechanical Properties and Geometry	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00106	Poster	Poster-1	Development of a Biomimetic Expandable Drill	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00074	Poster	Poster-1	Evaluation of Vibrational Damage to Plastic Joining Part in a Vehicle	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00072	Poster	Poster-1	Hydrogen Transport Properties of polymers for Hydrogen Infrastructures at Low Temperatures	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00058	Poster	Poster-1	Structural Reliability Assessment of Buried Pipeline under Combined Stresses	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00046	Poster	Poster-1	A Study on the Selection of Representative Volume Element Size for the Evaluation of the Effective Properties of CNT/PVDF Fiber	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00042	Poster	Poster-1	Study for Reducing Stress Concentration of Spinner Discharge Hole for Glass Wool Fabrication by Axial Angle change	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00032	Poster	Poster-1	Creep Rupture Behaviour for Alloy 690 Steam Generator Tubes	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00027	Poster	Poster-1	Paper Based Thermo-electrochemical Cell for Changeable Output Voltage and Power with Origami	Nov. 5, 2020	13:40-15:40	Lobby
ThP1	P00026	Poster	Poster-1	Isothermal State Heat Energy Conversion for Thermal Energy Harnessing	Nov. 5, 2020	13:40-15:40	Lobby

State	Paper No.	Presentation Type	Session Title	PaperTitle	Date	Time	Session Room
FrP1	P00286	Poster	Poster-2	Assessment of Maximum temperature of coated vertical micro probe	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00279	Poster	Poster-2	A study for Conceptual design review of redundant Object Detection System with LiDARs used in Autonomous Construction Equipment	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00273	Poster	Poster-2	Weld Residual Stress Analysis of Ring-Stiffened Pressure Vessel using 3D Finite Element Method	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00271	Poster	Poster-2	Evaluation the Effect of Surface Roughness on the Tungsten Sputtering Yield using LAMMPS.	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00269	Poster	Poster-2	Light-Weight Design of Automotive Wheel Carrier by Using Finite Element Analysis	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00262	Poster	Poster-2	Investigation of Characteristic Change in Austenitic Stainless Steel by Electric Discharge Machining	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00256	Poster	Poster-2	Feasibility Study on Implementation Mechanismsfor Simultaneous Center-Opening of Cylinder-in-Ball Valve	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00247	Poster	Poster-2	Design of Wide-width Impeller Assembly with Lightweight based on Topology Optimization	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00246	Poster	Poster-2	Artificial Neural Network Modelling of Sliding Wear	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00241	Poster	Poster-2	Low Cycle Fatigue Assessment for API X70 Pipeline Using Coffin-Manson Curve and Fracture Strain Curve	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00240	Poster	Poster-2	J-integral and CTOD Relations in Pipelines with a Semi-Elliptical Surface Crack under Axial Displacement	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00233	Poster	Poster-2	Material Characterization Study of the Additive Manufactured Product by Ultrasonic Waves	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00228	Poster	Poster-2	Effect of Specimen Geometry and Size on Fracture Resistance of SM490A Notch Defects under Tension and Bending condition	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00227	Poster	Poster-2	A Numerical Model of Hammer-peening for Turbine Rotor Straightening in Power Plant Industry	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00216	Poster	Poster-2	Optimization of Hammer Peening Process for Straightening Steam Turbine Rotor	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00205	Poster	Poster-2	A Study on Structural Optimization and Fatigue Life according to Composite Material Mechanical Properties for Weight Lightening and Durability of Wind Turbine Blade	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00202	Poster	Poster-2	Study on Failure Behavior of Single Lap Composite Bolted Joints Based on Mesoscale Progressive Failure Analysis	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00192	Poster	Poster-2	Design and characterization of mechanical metamaterials for stretchable electronics	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00188	Poster	Poster-2	Effect of Surface Finish on Hydrogen Embrittlement of Steels during In-situ SP Test under High-pressure Gas Environments	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00178	Poster	Poster-2	Evaluation of Relative Importance of Metallurgical Conditions Affecting Tensile Properties Using Artificial Neural Network	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00164	Poster	Poster-2	Thermal Ratcheting on the Reactor Vessel of the TRU Burning Fast Reactor Subjected to Cyclic Movement of the Temperature Distribution	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00163	Poster	Poster-2	Calculation of the Coupled Added Mass of Multibody system Immersed in Viscous Fluids	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00158	Poster	Poster-2	Analysis of Pipe Vibration Frequency Characteristics for prior recognition of Pipe defect	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00152	Poster	Poster-2	Big Data Accumulation and Application Study of Tailor Welded Blank for Automotive Reinforcement Side Outer Using Finite Element Analysis	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00149	Poster	Poster-2	Effect of Hot-Stamping on the Properties Change of Compound Layer in Coated High Strength Steel Plate	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00148	Poster	Poster-2	Fatigue Behaviour of Needle Peened Offshore Structure Steel F690 by New Threshold Stress Intensity Equation	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00143	Poster	Poster-2	Terahertz wave inspection on detecting foreign materials on composite panels of honeycomb sandwiches	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00139	Poster	Poster-2	Prediction of Plastic Crack Opening Displacement for Dissimilar Metal Welded Pipes with a Complex Crack	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00104	Poster	Poster-2	Dimensionless Number Study of Stress Distribution in Elbow Pipe Section through FEM Method	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00103	Poster	Poster-2	A Basic Study on the Metal 3D Printing of Inconel 718 with Curved Shape	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00101	Poster	Poster-2	Evaluation and Mechanical Properties of TiC Particles dispersed Ti Matrix Composite with Graphite Powder Sheet	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00098	Poster	Poster-2	Analysis of Crack Growth Rates Observed in the Steam Generator Tube Using ECT.	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00083	Poster	Poster-2	Automatic Detection of Defect from Ultrasonic Inspection Image of Composites Used in Launch Vehicle	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00077	Poster	Poster-2	Characteristics of Assembly Force of Trap-type Snap-fit for Interior Parts of a Vehicle	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00070	Poster	Poster-2	Effect of the Shape of Table on the Impact Pulse for Free Fall Drop Tester	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00066	Poster	Poster-2	Non-destructive Testing Method for Solder Failures Based on Time Domain Thermal Transient Analysis	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00039	Poster	Poster-2	Triple-Junction Morphology Classification And Dihedral Angle Distribution During 2D Grain Growth	Nov. 6, 2020	09:00-11:00	Lobby
FrP1	P00131	Poster	Poster-2	Investigation on the Effect of Weld Geometry and Welding Material on the Finite Element Analysis under Dynamic Loads on Seismic-Critical Location of Nuclear Safety Class 1 Components	Nov. 6, 2020	09:00-11:00	Lobby