

24th European Conference on Fracture ECF24 Zagreb (Croatia) 2024

24th European Conference on Fracture – ECF24 was held in Zagreb (Croatia), August 26-30, 2024.

Chairman

Prof. Željko Božić, University of Zagreb

Co-Chairmen

Prof. Željko Domazet, University of Split

Prof. Robert Basan, University of Rijeka

Organizing Committee

Dr. Marijan Andrić, University of Zagreb

Dr. Emanuele Vincenzo Arcieri, University of Bergamo

Jelena Filipović, University of Zagreb

Dr. Tea Marohnić, University of Rijeka

Prof. Katarina Monkova, Technical University in Kosice

Iva Rački, University of Zagreb

Prof. Milan Vrdoljak, University of Zagreb

Prof. Goran Vukelić, University of Rijeka



VIDEO-PRESENTATIONS

Presentation title	Authors	DOI
MULTISCALE MODELLING - FROM ATOMS TO COMPONENTS	Schmauder, Siegfried	https://doi.org/10.53254/ESISTUBE.ECF24.1
RECENT ADVANCES IN UNDERSTANDING THE GIGACYCLE FATIGUE STRENGTH OF A CAST ALUMINUM ALLOY AND A TITANIUM ALLOY	Palin-Luc, Thierry; Messenger, Alexandre; Hébrard, Louis; Ranc, Nicolas; Buffière, Jean-Yves	https://doi.org/10.53254/ESISTUBE.ECF24.2
INTEGRITY AND SHAPE CONTROL OF COLD SPRAY ADDITIVE MANUFACTURED DEPOSITS	Bagherifard, Sara	https://doi.org/10.53254/ESISTUBE.ECF24.3
SCIENTIFIC DISSEMINATION IN STRUCTURAL INTEGRITY: FROM THE DAWN OF CIVILIZATION TO WEB 3.0	Iacoviello, Francesco	https://doi.org/10.53254/ESISTUBE.ECF24.4
COMBINING NON-EXTENSIVE STATISTICAL MECHANICS WITH NATURAL TIME ANALYSIS TO PREDICT ENTRANCE OF MECHANICALLY LOADED SYSTEMS INTO THEIR CRITICAL STAGE	Kourkoulis, Stavros	https://doi.org/10.53254/ESISTUBE.ECF24.5
LOCAL FATIGUE APPROACHES: A TOOL FOR THE TRANSFERABILITY BETWEEN MATERIALS AND STRUCTURAL COMPONENT SCALES	de Jesus, Abílio	https://doi.org/10.53254/ESISTUBE.ECF24.6
DAMAGE TOLERANCE AND STRUCTURAL INTEGRITY OF ADDITIVE MANUFACTURED ENGINEERING COMPONENTS – CHALLENGES AND OPPORTUNITIES	Das, Raj; Afroz, Laboni; Easton, Mark; Qian, Ma	https://doi.org/10.53254/ESISTUBE.ECF24.7
MECHANICAL FAILURES AND MATERIAL DEGRADATION IN MARINE ENVIRONMENT	Vukelić, Goran	https://doi.org/10.53254/ESISTUBE.ECF24.8
ENGINEERING FAILURE ANALYSIS AS A TOOL FOR PROCESS IMPROVEMENT	Clegg, Richard Edward	https://doi.org/10.53254/ESISTUBE.ECF24.9
A WEAKEST-LINK APPROACH FOR CRACK INITIATION MODELING INFORMED BY CRYSTAL PLASTICITY	Sayer, Niklas; Markus, Fried; Münstermann, Sebastian	https://doi.org/10.53254/ESISTUBE.ECF24.10
THE EFFECT OF HEAT AND MECHANICAL TREATMENTS ON THE NITI SMA TENSILE BEHAVIOUR	Di Cocco, Vittorio; Bellini, Costanzo; Iacoviello,	https://doi.org/10.53254/ESISTUBE.ECF24.11

Presentation title	Authors	DOI
	Francesco; Natali, Stefano	
EXPERIMENTAL INVESTIGATION OF LOADING DIRECTION EFFECTS ON THE MECHANICAL AND FRACTURE PROPERTIES OF THE SHOT-EARTH 772	Scorza, Daniela; Carpinteri, Andrea; Ronchei, Camilla; Zanichelli, Andrea; Vantadori, Sabrina	https://doi.org/10.53254/ESISTUBE.ECF24.12
FATIGUE LIFE ASSESSMENT OF SHIP PROPULSION SHAFTING DUE TO TORSIONAL AND BENDING VIBRATION	Marijančević, Alen; Braut, Sanjin; Žigulić, Roberto; Skoblar, Ante	https://doi.org/10.53254/ESISTUBE.ECF24.13
SIMULATION OF COMBINED DUCTILE-BRITTLE FRACTURE FOR API X80 UNDER IMPACT LOADING	Seo, Ki-Wan; Kim, Jae-Yoon; Kim, Yun-Jae; Kim, Ki-Seok	https://doi.org/10.53254/ESISTUBE.ECF24.14
FRACTURE MECHANICS ANALYSIS OF HYDROGEN-EMBRITTLERD API X52 STEEL PIPE USING SMALL PUNCH TEST DATA	Kim, Jae-Yoon; Seo, Ki-Wan; Kim, Yun-Jae; Kim, Ki-Seok	https://doi.org/10.53254/ESISTUBE.ECF24.15
A NON-LOCAL GURSON MODEL WITH TWO FRACTURE-MECHANISM ASSOCIATED LENGTH SCALES: SUPPORTED BY NUMERICAL ANALYSES AND EXPERIMENTS	Wang, Shuyue; Faleskog, Jonas	https://doi.org/10.53254/ESISTUBE.ECF24.16
SHIELDING EFFECT ON TENSILE PARALLEL EDGE CRACKS	Ferrian, Francesco; Sapora, Alberto; Cornetti, Pietro; Ayatollahi, Majid	https://doi.org/10.53254/ESISTUBE.ECF24.17
FATIGUE LIFE PREDICTION OF ABS/GRAPHENE NANOPATELETS 3D-PRINTED COMPOSITE PARTS	Hassani Fard, Soran; Behdinan, Kamran	https://doi.org/10.53254/ESISTUBE.ECF24.18
MULTISCALE ANALYSIS OF HETEROGENEOUS DEFORMATION AND DAMAGE BEHAVIOURS OF WELDED JOINTS	LING, Chao; GAN, Lifeng; ZHU, Baoyin; BUSSO, Esteban Pedro; Li, Dongfeng	https://doi.org/10.53254/ESISTUBE.ECF24.19
FATIGUE CRACK GROWTH AND CRACK TIP CYCLIC PLASTICITY OF 304L STAINLESS STEEL AT HIGH ΔK	Gillet, Martin Michel Jacques; Davies, Catrin Mair	https://doi.org/10.53254/ESISTUBE.ECF24.20
INVESTIGATION OF THE CORRELATION BETWEEN FATIGUE BEHAVIOR AND FATIGUE CRACK GROWTH IN SHORT FIBER REINFORCED POLYMERS	Afsharnia, Reza; Pinter, Gerald; Stadler, Gabriel	https://doi.org/10.53254/ESISTUBE.ECF24.21
MICROMECHANICS-BASED MODELLING OF POROUS DUCTILE SOLIDS WITH NON-UNIFORM VOID SIZE DISTRIBUTIONS	Dæhli, Lars Edvard Blystad; Morin, David Didier; Hopperstad, Odd Sture	https://doi.org/10.53254/ESISTUBE.ECF24.22
SIMULATION OF THE MECHANICAL BEHAVIOUR OF A NANOBEAM	Ronchei, Camilla; Carpinteri, Andrea;	https://doi.org/10.53254/ESISTUBE.ECF24.23

Presentation title	Authors	DOI
CONTAINING TWO EDGE CRACKS: A NONLOCAL ANALYTICAL MODEL	Scorza, Daniela; Zanichelli, Andrea; Vantadori, Sabrina	
MIXED MODE FRACTURE TOUGHNESS OF R260MN RAIL STEEL USING COMPACT TENSION SHEAR SPECIMENS	Hengeveld, Sjoerd; Leonetti, Davide; Snijder, Bert; Maljaars, Johan	https://doi.org/10.53254/ESISTUBE.ECF24.24
A NEW DUCTILE FRACTURE MODEL OF S690 HIGH STRENGTH STEEL UNDER COMBINED TENSION AND SHEAR ACTIONS	Li, Mengfei; Ho, Ho Cheung; Chung, Kwok Fai	https://doi.org/10.53254/ESISTUBE.ECF24.25
FRACTURE MECHANICS ACCOUNTING FOR THE MECHANISMS OF CRACK INITIATION AND GROWTH FOR NEAT AND GLASS SYNTACTIC POLYPROPYLENE USING TOMOGRAPHY 3D IMAGING	Laiarinandrasana, Lucien; Blassiau, Sébastien; Ovalle, Cristian	https://doi.org/10.53254/ESISTUBE.ECF24.26
DOUBLE EDGE NOTCHED TENSION TESTING OF PET/PA BLENDS	Schön, Claudio G; Silva, Carlos F.; Ferreira, Nicolas W.; Santos, Alessandra F	https://doi.org/10.53254/ESISTUBE.ECF24.27
AGEING EFFECT ON THE FRACTURE BEHAVIOUR OF CARBOXYL TERMINATED POLYBUTADIENE SOLID COMPOSITE PROPELLANTS	Martinez, Mario; Lopez, Raul; Rodriguez, Jesus; Salazar, Alicia	https://doi.org/10.53254/ESISTUBE.ECF24.28
QUASI-BRITTLE POLYMERIC CELLULAR MATERIALS ANALYZED WITH THE EQUIVALENT LINEAR ELASTIC FRACTURE MECHANICS FORMALISM	Wetta, Maxime; Kopp, Jean-Benoit; Fournier, Vincent; Le Barbenchon, Louise; Viot, Philippe	https://doi.org/10.53254/ESISTUBE.ECF24.29
ADHESION AND FRACTURE ENERGIES IN POLYACRYLAMIDE/ALGINATE HYDROGELS	Reinhards, Carlos; Martinez, Mario; Rico, Alvaro; Salazar, Alicia; Rodriguez, Jesus	https://doi.org/10.53254/ESISTUBE.ECF24.30
MIXED-MODE BENDING TESTS ON ADHESIVE JOINTS USING A DUAL-ACTUATOR LOAD FRAME AND OPTICAL FIBER STRAIN MEASUREMENT	Kididane, Ihssane; Kozakova, Kamila; Ladwig, Niklas; Marzi, Stephan	https://doi.org/10.53254/ESISTUBE.ECF24.31
THE DETERMINATION OF THE MODE II FRACTURE RESISTANCE OF STRUCTURAL ADHESIVE JOINTS USING G AND J APPROACHES	Blackman, Bamber R.K.; Sun, Fengzhen; Lissner, Maria; Petrinic, Nik	https://doi.org/10.53254/ESISTUBE.ECF24.32
EVALUATION METHODS OF ADHESIVELY BONDED DCB TESTS	Aydin, Lea; Marzi, Stephan	https://doi.org/10.53254/ESISTUBE.ECF24.33

Presentation title	Authors	DOI
USING OPTICAL FIBRE STRAIN MEASUREMENT		
A 4-ENF TEST IN MODE III APPLIED TO ADHESIVE JOINTS	Geisel, Lukas Dominik; Marzi, Stephan	https://doi.org/10.53254/ESISTUBE.ECF24.34
CHARACTERIZATION OF RUBBER-METAL ADHESION UNDER DYNAMIC LOADING THROUGH LAP-SHEAR GEOMETRY	Schieppati, Jacopo; Kerschbaumer, Roman Christopher; Pinter, Gerald; Fasching, Michael; Schwarz, Thomas	https://doi.org/10.53254/ESISTUBE.ECF24.35
CLOSED-FORM ANALYSIS OF CRACK INITIATION IN LAYERED SYSTEMS UNDER THERMAL LOADING	Linn, Debora; Becker, Wilfried	https://doi.org/10.53254/ESISTUBE.ECF24.36
UNIFIED DEFINITION OF STRESS INTENSITY FACTORS AT A SHARP 3D JOINTED CORNER AND PREDICTION OF CRACK EXTENSION	Ikeda, Toru; Ikegiri, Gunma; Koganemaru, Masaaki	https://doi.org/10.53254/ESISTUBE.ECF24.37
EXPERIMENTAL INVESTIGATION OF THE FATIGUE DAMAGE MECHANISMS IN SHORT GLASS FIBRE REINFORCED RECYCLED POLYPROPYLENE FILLED WITH MINERAL FILLER	Resente, Andrea; Ricotta, Mauro; Trivellin, Fiorella; Meneghetti, Giovanni	https://doi.org/10.53254/ESISTUBE.ECF24.38
HOW DATA ANALYSIS LEADS TO APPARENT SCATTER IN FATIGUE DELAMINATION GROWTH TESTS — A ROUND ROBIN INVESTIGATION	Pascoe, John-Alan; Amkies, Roy; Arhant, Mael; Aydin, Lea; Banks-Sills, Leslie; Boul Boul, Idriss; Marzi, Stephan; Mega, Mor; Rifkind, Shira; Singh, Anuwadita; Suman, Siddharth	https://doi.org/10.53254/ESISTUBE.ECF24.39
MULTISCALE MODELLING OF FIBER BRIDGING IN DELAMINATION OF UD-LAMINATES UNDER MIXED-MODE LOADING	Grosselle, Riccardo; Lindgaard, Esben; L.V. Bak, Brian	https://doi.org/10.53254/ESISTUBE.ECF24.40
FRACTURE TESTING OF COMPLEX, NEW POLYMER-BASED MATERIALS: CHALLENGES AND POTENTIAL APPROACHES	Blackman, Bamber R.K.; Brunner, Andreas J.; Warnet, Laurent	https://doi.org/10.53254/ESISTUBE.ECF24.41
ADVANCED CHARACTERIZATION OF BASALT FIBER REINFORCED COMPOSITES USING ENERGY METHODS	Totaro, Martina; Risitano, Giacomo; Corigliano, Pasqualino; Di Bella,	https://doi.org/10.53254/ESISTUBE.ECF24.42

Presentation title	Authors	DOI
	Guido; D'Andrea, Danilo	
DEVELOPMENT OF A DAMAGE-DEPENDENT MODIFIED MATERIAL MODEL FOR ENHANCED DESCRIPTION OF TRANSIENT MATERIAL BEHAVIOR	Korschinsky, Tim; Möller, Benjamin; Kiel, Marvin; Hecht, Matthias	https://doi.org/10.53254/ESISTUBE.ECF24.43
FLOW FORMING TO IMPROVE FATIGUE LIFE OF ORTHOPEDIC IMPLANTS	Mechter, Mohamed Akram; Gadour, Mina; Romain, Léa; Brochu, Myriam	https://doi.org/10.53254/ESISTUBE.ECF24.44
FATIGUE RESISTANCE PREDICTION MODEL APPLIED TO 410NIMO STAINLESS STEEL WELDS	Constantineau, Cédric; Deschênes, Pierre-Antony; Brochu, Myriam	https://doi.org/10.53254/ESISTUBE.ECF24.45
NOVEL INDICATOR & INNOVATIVE METHOD FOR ONSET DAMAGE DETECTION IN VERY HIGH CYCLE FATIGUE TESTS (VHCF)	Gomez-Mancilla, Julio C.	https://doi.org/10.53254/ESISTUBE.ECF24.46
EXPLORING THE IMPACT OF HETEROGENEOUS YIELDING ON DUCTILE FAILURE IN ALUMINIUM ALLOYS	Morin, David; Dæhli, Lars Edvard Blystad; Hopperstad, Odd Sture	https://doi.org/10.53254/ESISTUBE.ECF24.47
EVALUATION OF CRACK FRONT GEOMETRY BY STRAIN FIELD CLASSIFICATION USING NEURAL NETWORKS	Chianese, Giovanni; Pucillo, Giovanni Pio; Leonetti, Davide	https://doi.org/10.53254/ESISTUBE.ECF24.48
MICROSTRUCTURAL, MECHANICAL AND FRACTURE BEHAVIOUR OF A GO REINFORCED MORTAR AT DIFFERENT CURING TIMES	Zanichelli, Andrea; Carpinteri, Andrea; Ronchei, Camilla; Scorza, Daniela; Vantadori, Sabrina	https://doi.org/10.53254/ESISTUBE.ECF24.49
MULTIAXIAL FATIGUE STRENGTH ASSESSMENT OF 42CRMO4 STEEL SPECIMENS BASED ON AN ELASTIC-PLASTIC STRAIN ENERGY DENSITY APPROACH	Pelizzoni, Sofia; Campagnolo, Alberto; Meneghetti, Giovanni	https://doi.org/10.53254/ESISTUBE.ECF24.50
FRACTURE TOUGHNESS TESTING OF SUB-SIZED SPECIMENS FOR ASSESMENT OF TEMPERATURE AND STRAIN-RATE SENSITIVITY OF REACTOR PRESSURE VESSEL STEEL	Sargeant, Ben Michael Brian; Davies, Catrin Mair; Hooper, Paul	https://doi.org/10.53254/ESISTUBE.ECF24.51
MODELLING THE EFFECT OF CARBIDE POPULATION AND BAINITIC GRAIN SIZE ON THE FRACTURE TOUGHNESS OF THREE FORGED LOW ALLOY STEELS	BEMFICA, Cainã; VINCENT, Ludovic; MARINI, Bernard; MATHIEU, Jean-Philippe; JOLY, Pierre	https://doi.org/10.53254/ESISTUBE.ECF24.52

Presentation title	Authors	DOI
FATIGUE AND FRACTURE BEHAVIOR OF HIGH-STRENGTH LATH MARTENSITIC STEEL	Iordachescu, Mihaela; Santos, Patricia; Valiente, Andres	https://doi.org/10.53254/ESISTUBE.ECF24.53
COMPUTATIONAL FRAMEWORK FOR FATIGUE ANALYSIS OF METALS WITH NONCONSTANT CYCLIC STRESS-STRAIN CURVE	Szlosarek, Robert; Salvi, Chinmay; Nitzsche, Pia; Henkel, Sebastian; Biermann, Horst; Kröger, Matthias	https://doi.org/10.53254/ESISTUBE.ECF24.54
FRACTURE BEHAVIOR OF SIMULATED HEAT AFFECTED ZONES IN S690QL HIGH STRENGTH STEEL	Tomerlin, Damir; Kozak, Dražan; Vuherer, Tomaž; Enzinger, Norbert; Poletti, Maria Cecilia; Gubelj, Nenad	https://doi.org/10.53254/ESISTUBE.ECF24.55
NUMERICAL AND EXPERIMENTAL INVESTIGATION OF FATIGUE CRACK GROWTH IN ANGLED STRUCTURAL COMPONENTS	Dömling, Ferdinand; Paysan, Florian; Breitbarth, Eric	https://doi.org/10.53254/ESISTUBE.ECF24.56
EXPERIMENTAL AND NUMERICAL INVESTIGATION ON CRACK PROPAGATION IN HIGH STRENGTH STEELS AND CONVENTIONAL STEELS	Manjunatha, Monisha; Marin Perez, Jonatan; Comlekci, Tugrul; Mackenzie, Donald; Gorash, Yevgen	https://doi.org/10.53254/ESISTUBE.ECF24.57
ON THE ASSESSMENT OF DYNAMIC FRACTURE TOUGHNESS OF FERRITIC DUCTILE CAST IRON USING THE MASTER CURVE CONCEPT	Baer, Wolfram; Holzwarth, Marcel; Mayer, Uwe	https://doi.org/10.53254/ESISTUBE.ECF24.58
FIRST RESULTS FOR THE INVESTIGATION OF THE MASTER CURVE CONCEPT FOR FERRITIC DUCTILE CAST IRON USING C(T)-SPECIMENS	Holzwarth, Marcel; Baer, Wolfram; Mayer, Uwe; Weihe, Stefan	https://doi.org/10.53254/ESISTUBE.ECF24.59
EVALUATION OF DYNAMIC FRACTURE TOUGHNESS VALUES OF DUCTILE CAST IRON AT -40 °C	Ulbrich, Michael	https://doi.org/10.53254/ESISTUBE.ECF24.60
INVESTIGATING FRACTURE BEHAVIOUR OF SINGLE-CELL LATTICE MATERIALS VIA XFEM: VOXEL-BASED APPROACH	Paygozar, Bahman; Gorguluarslan, Recep M.	https://doi.org/10.53254/ESISTUBE.ECF24.61
CONSTANT- AND VARIABLE-AMPLITUDE FATIGUE BEHAVIOUR OF ADDITIVELY MANUFACTURED ALS110MG SPECIMENS	Califano, America; Giannella, Venanzio; Berto, Filippo; Sepe, Raffaele	https://doi.org/10.53254/ESISTUBE.ECF24.62

Presentation title	Authors	DOI
THICKNESS EFFECT ON FRACTURE TOUGHNESS OF THIN AUSTENITE STAINLESS STEEL SHEET	Mohtadifar, Negar; Colla, Marie-Stéphane; Kaniadakis, Antonio; Nguyen, Van Dung; Noels, Ludovic; Jacques, Pascal; Pardoen, Thomas	https://doi.org/10.53254/ESISTUBE.ECF24.63
HIGH-CYCLE FATIGUE DESIGN CURVES OF MILD- AND HIGH-STRENGTH STEELS FOR OFFSHORE APPLICATIONS	Mendes, Paulo; Correia, José; Mourão, António; Dantas, Rita; de Jesus, Abílio; Fantuzzi, Nicholas	https://doi.org/10.53254/ESISTUBE.ECF24.64
FATIGUE CRACK GROWTH UNDER LARGE SCALE YIELDING FOR MULTIAXIAL LOADING	LE GOFF, Camille; ZANCHI, Toma; MONSAVOIR, Alban; RAOULT, Ida; ARNAUD, Pierre; BESSON, Jacques; MAUREL, Vincent	https://doi.org/10.53254/ESISTUBE.ECF24.65
TEMPERATURE-CORRECTED ELECTRICAL RESISTANCE IN FATIGUE LIFE PREDICTION METHODS FOR HIGHER TESTING FREQUENCIES	Ziman, Jonas Anton; Maul, Moritz; Weber, Fabian; Otto, Johannes Leon; Walther, Frank; Starke, Peter	https://doi.org/10.53254/ESISTUBE.ECF24.66
ALLOYING IMPACTS ON AUSTENITE STABILITY AND FATIGUE CRACK PROPAGATION IN MEDIUM CARBON DIRECT QUENCHED AND PARTITIONED STEELS	Ghosh, Sumit; Kumar, Gaurav; Pallaspuro, Sakari; Somani, Mahesh; Mishra, Sushil; Gokhale, Amol; Kömi, Jukka	https://doi.org/10.53254/ESISTUBE.ECF24.67
METHOD FOR PREDICTING CRACK SIZE USING AMPLITUDE CHANGE IN TITANIUM ALLOY UNDER BENDING VIBRATION	Sakamoto, Junji; Tada, Naoya; Uemori, Takeshi	https://doi.org/10.53254/ESISTUBE.ECF24.68
EFFECT OF SALT FLUXING DURING LIQUID TREATMENT ON THE DISPERSION OF THE TENSILE PROPERTIES OF AN ALSI9CU3(FE) ALLOY	Milani, Veronica; Angella, Giuliano; Timelli, Giulio	https://doi.org/10.53254/ESISTUBE.ECF24.69
INITIATION AND PROPAGATION IN FATIGUE LIFETIME ASSESSMENT OF STEEL WELD ENDS FOR OFF-ROAD VEHICLES USING THE PEAK STRESS METHOD	Meneghetti, Giovanni; Pelizzari, Jacopo; Campagnolo, Alberto; Dengo, Carlo	https://doi.org/10.53254/ESISTUBE.ECF24.70

Presentation title	Authors	DOI
ASSESSING THE FATIGUE LIMIT OF WELDED JOINTS: AN EFFICIENT APPROACH USING THE CYCLIC R-CURVE AND THE PEAK STRESS METHOD	Vecchiato, Luca; Meneghetti, Giovanni	https://doi.org/10.53254/ESISTUBE.ECF24.71
GAS TUNGSTEN ARC WELDING OF LOW CARBON STEEL WITH NI-CR AND MEDIUM MN STAINLESS STEELS	Khedr, Mahmoud; Ibrahim, I. Reda; Mahmoud, Tamer; Hamada, Atef	https://doi.org/10.53254/ESISTUBE.ECF24.72
INFLUENCE OF GTAW AND SMAW TECHNIQUES ON THE MECHANICAL BEHAVIOR OF S275JR LOW CARBON MANGANESE STEEL WELDED JOINTS	Khedr, Mahmoud; Abdelghany, Ahmed; Abdelalim, Hamed; Gaafer, Ahmed; Ibrahim, I. Reda	https://doi.org/10.53254/ESISTUBE.ECF24.73
INDENTATION BEHAVIOR OF ADDITIVELY MANUFACTURED 316L STAINLESS STEEL WELDED BY TUNGSTEN INERT GAS AND LASER WELDING TECHNIQUES	Elsayed, Mohamed; Khedr, Mahmoud; Järvenpää, Antti; Gaafer, Ahmed; Hamada, Atef	https://doi.org/10.53254/ESISTUBE.ECF24.74
HYDROGEN EFFECTS ON NANOINDENTATION SOFTENING AND HARDENING IN IRON	Taketomi, Shinya; Taniguchi, Toshiki; Yamamoto, Hiroki; Hagihara, Seiya; Tsurekawa, Sadahiro; Matsumoto, Ryosuke	https://doi.org/10.53254/ESISTUBE.ECF24.75
INCORPORATING HYDROGEN ATOMS INTO MOLECULAR DYNAMIC SIMULATION CELL FILES	BALTACIOĞLU, MEHMET FURKAN; BAL, BURAK	https://doi.org/10.53254/ESISTUBE.ECF24.76
LOCAL CRACK ARRESTABILITY OF HYDROGEN-RELATED INTERGRANULAR FRACTURE IN AS-QUENCHED MARTENSITIC STEEL	Shibata, Akinobu; Gutierrez-Urrutia, Ivan; Nakamura, Akiko; Moronaga, Taku; Okada, Kazuho; Madi, Yazid; Besson, Jacques; Hara, Toru	https://doi.org/10.53254/ESISTUBE.ECF24.77
BENEFICIAL IMPACTS OF SOLUTE HYDROGEN AGAINST EMBRITTLEMENT IN FE-CR-NI AUSTENITIC STEELS	Ogawa, Yuhei; Takakuwa, Osamu; Tsuzaki, Kaneaki; Shibata, Akinobu	https://doi.org/10.53254/ESISTUBE.ECF24.78
FIRST-PRINCIPLES STUDY ON THE HYDROGEN ABSORPTION ENERGY IN FE-CR-NI SYSTEMS: DIS-SYNERGY EFFECT OF CR AND NI ATOMS	Moriyama, Junichiro; Takakuwa, Osamu; Yamaguchi, Masatake	https://doi.org/10.53254/ESISTUBE.ECF24.79
ROLE OF SHOT PEENING IN HYDROGEN EMBRITTLEMENT	Eskinja, Magdalena; Winter, Gerald;	https://doi.org/10.53254/ESISTUBE.ECF24.80

Presentation title	Authors	DOI
RESISTANCE OF TEMPERED MARTENSITIC STEELS	Schnideritsch, Holger; Klarner, Jürgen; Mori, Gregor	
MICROSTRUCTURAL ORIGINS OF ENHANCED RESISTANCE TO H-ASSISTED FATIGUE CRACK GROWTH IN AUSFORMED AND TEMPERED MARTENSITIC STEELS	Varanasi, Rama Srinivas; Koyama, Motomichi; Redarce, Timothee; Kobayashi, Kosei; Kakinuma, Hiroshi; Shibata, Akinobu; Matsunaga, Hisao; Akiyama, Eiji	https://doi.org/10.53254/ESISTUBE.ECF24.81
THE ROLE OF MARTENSITE IN HYDROGEN EMBRITTLEMENT OF POST-PROCESSED L-PBF 316L STAINLESS STEEL	Deconinck, Liesbet; Ferreirós, Pedro A.; Que, Zaiqing; Johnsen, Roy; Lu, Xu	https://doi.org/10.53254/ESISTUBE.ECF24.82
SIMULATION OF HYDROGEN EMBRITTLEMENT IN PIPELINE STEELS	Lopes-Pinto, Daniella; Osipov, Nikolay; Madi, Yazid; Besson, Jacques	https://doi.org/10.53254/ESISTUBE.ECF24.83
EFFECT OF HYDROGEN GAS BLENDING RATIOS WITH METHANE ON HYDROGEN EMBRITTLEMENT BEHAVIOR OF X65 PIPELINE STEEL	Rahimi, Sina; Depover, Tom; Verbeken, Kim; Piperopoulos, Elpida; Proverbio, Edoardo	https://doi.org/10.53254/ESISTUBE.ECF24.84
EVOLUTION OF TENSILE TESTING METHODOLOGIES FOR HYDROGEN EMBRITTLEMENT IN AUSTENITIC STEELS: A COMPARATIVE STUDY	Nietzke, Jonathan; Konert, Florian; Freitas, Tomás; Krzysch, Zephanja; Campari, Alessandro; Sobol, Oded	https://doi.org/10.53254/ESISTUBE.ECF24.85
TESTING GASEOUS HYDROGEN EMBRITTLEMENT IN STEEL USING SUB-SIZED FRACTURE TOUGHNESS SPECIMENS	Meirelles Santana, Luciano; Lopes Pinto, Daniella; Furtado, Jader; Marchais, Pierre-Jean; Bourguignon, Francis; Meddour, Abdennour; Besson, Jacques; Madi, Yazid	https://doi.org/10.53254/ESISTUBE.ECF24.86
EXPLORING THE IMPACT OF HYDROGEN EMBRITTLEMENT PHENOMENON ON THE BALLISTIC PROPERTIES OF MATERIALS	BALTACIOĞLU, MEHMET FURKAN; ÇETİN, BARIŞ; BAL, BURAK	https://doi.org/10.53254/ESISTUBE.ECF24.87
THE EFFECT OF LOW-TEMPERATURE TEMPERING ON HYDROGEN DIFFUSION AND	Latypova, Renata; Claeys, Lisa; Verbeken, Kim;	https://doi.org/10.53254/ESISTUBE.ECF24.88

Presentation title	Authors	DOI
TRAPPING IN DIRECT-QUENCHED MARTENSITIC STEEL	Depover, Tom; Kömi, Jukka; Pallaspuro, Sakari	
MECHANISM-BASED DESIGN OF HYDROGEN EMBRITTLEMENT RESISTANT ALLOYS AND STRUCTURES	Moshtaghi, Masoud	https://doi.org/10.53254/ESISTUBE.ECF24.89
UNIFIED HELP+HEDE MODEL FOR THE SYNERGY OF HYDROGEN EMBRITTLEMENT MECHANISMS IN METALS: REVIEW AND NEW INSIGHTS	Djukic, Milos B.; Bakic, Gordana; Rajcic, Bratislav; Sedmak, Aleksandar; Behvar, Alireza; Haghshenas, Meysam; Wasim, Muhammad; Lee, Hsiao Wei; Basaran, Cemal	https://doi.org/10.53254/ESISTUBE.ECF24.90
INTERPRETATION OF HYDROGEN-ASSISTED FATIGUE CRACK GROWTH IN FERRITE-PEARLITE STEEL FOCUSING ON THE THERMALLY-ACTIVATED HYDROGEN-DISLOCATION INTERACTION	Takakuwa, Osamu; Ogawa, Yuhei	https://doi.org/10.53254/ESISTUBE.ECF24.91
ABOUT THE IMPLICATION OF THE HYDROGEN-METALLURGICAL DEFECTS INTERACTIONS IN THE MECHANISMS OF HYDROGEN-INDUCED INTERGRANULAR FRACTURE OF NICKEL-BASED ALLOYS.	Oudriss, Abdelali; Ben Jedidia, Yasmine; Murugan, Siva Pasard; Feaugas, Xavier	https://doi.org/10.53254/ESISTUBE.ECF24.92
HYDROGEN-INDUCED INTERGRANULAR FRACTURE IN NICKEL	Ding, Yu; Zhang, Zhiliang; He, Jianying	https://doi.org/10.53254/ESISTUBE.ECF24.93
AN INVESTIGATION ON HYDROGEN EMBRITTLING MECHANISMS IN MARTENSITIC ADVANCED HIGH-STRENGTH STEELS	Belardini, Carlo Maria; Monelli, Bernardo Disma; Depover, Tom; Macoretta, Giuseppe; Berto, Filippo; Valentini, Renzo	https://doi.org/10.53254/ESISTUBE.ECF24.94
HYDROGEN DIFFUSION BEHAVIOR IN TEMPERED MARTENSITIC STEEL : EFFECT OF STATIC LOADING	Ajito, Saya; Kakinuma, Hiroshi; Hojo, Tomohiko; Koyama, Motomichi; Hara, Takuya; Omura, Tomohiko; Akiyama, Eiji	https://doi.org/10.53254/ESISTUBE.ECF24.95

Presentation title	Authors	DOI
HYDROGEN EMBRITTLEMENT BEHAVIORS OF A286 IN HIGH PRESSURE GASEOUS HYDROGEN AND PRE-CHARGED HYDROGEN	Fukunaga, Akihiko	https://doi.org/10.53254/ESISTUBE.ECF24.96
FATIGUE CRACK GROWTH RATE UNDER IN-SITU ELECTROCHEMICAL HYDROGEN CHARGING IN A 42CRMO4 STEEL: INFLUENCE OF ELECTROLYTE AND FREQUENCY	Arniella Guzmán, Víctor; Llera, Marcos Manuel; Álvarez, Guillermo; Belzunce, Francisco Javier; Rodríguez, María Cristina	https://doi.org/10.53254/ESISTUBE.ECF24.97
INVESTIGATION OF HYDROGEN DAMAGE EFFECTS ON 22MNB5 STEELS USING ION IMPLANTATION	Schön, Claudio G; Borges, Doris F L; Fabrim, Zacarias E; Silva, Renata O; Djukic, Milos B; Fichtner, Paulo F P	https://doi.org/10.53254/ESISTUBE.ECF24.98
ASSESSMENT OF HYDROGEN EMBRITTLEMENT SUSCEPTIBILITY IN STRUCTURAL STEELS THROUGH THE SMALL PUNCH TEST	Álvarez, Guillermo; Llera, Marcos Manuel; Otero, Sara; Díaz, Andrés; Belzunce, Francisco Javier; Rodríguez, Cristina	https://doi.org/10.53254/ESISTUBE.ECF24.99
PRACTICAL APPLICATION OF FRACTURE MECHANICS DATA FROM HYDROGEN EMBRITTLEMENT AND STRESS CORROSION TESTING	Jackson, Joshua E; Arechiga, Tiffany C; Tod, Craig M; Djukic, Milos B; Fahimi, Bryan	https://doi.org/10.53254/ESISTUBE.ECF24.100
HYDROGEN EMBRITTLEMENT PROPERTIES OF MICROALLOYED TRIP-AIDED MARTENSITE-BAINITIC FERRITE STEELS	Hojo, Tomohiko; Kobayashi, Junya; Sugimoto, Koh-ichi; Nagasaka, Akihiko	https://doi.org/10.53254/ESISTUBE.ECF24.101
THE CRUCIAL STEP FOR THE OCCURRENCE OF HYDROGEN EMBRITTLEMENT IN GASEOUS ENVIRONMENTS: FROM MOLECULAR H ₂ TO ATOMIC H	Cheng, Frank	https://doi.org/10.53254/ESISTUBE.ECF24.102
HYDROGEN INTERACTION WITH AN EQUIATOMIC FEMNCOCRNI HIGH ENTROPY ALLOY	Barati Rizi, Mohammadhossein; Claeys, Lisa; Verbeken, Kim; Depover, Tom	https://doi.org/10.53254/ESISTUBE.ECF24.103
THE EFFECT OF HYDROGEN ON THE MICRO-MECHANICAL BEHAVIOUR OF ALPHA TITANIUM	Kapci, Mehmet Fazil; Alvaro, Antonio; Lu, Xu	https://doi.org/10.53254/ESISTUBE.ECF24.104
COMPREHENSIVE INVESTIGATION OF HYDROGEN-INDUCED	Chen, Tingshu; Su, Hang; Wang, Sui;	https://doi.org/10.53254/ESISTUBE.ECF24.105

Presentation title	Authors	DOI
INTERGRANULAR CRACKING IN A COCRNI MEDIUM ENTROPY ALLOY FABRICATED VIA LASER POWDER BED FUSION	Wang, Chaoming; Fu, Anqing	
DEVELOPING A HYBRID HIGH-ENTROPY ALLOY-STEEL TO MITIGATE HYDROGEN EMBRITTLEMENT	Armendariz, Lorea; Zafra, Alfredo; Gordo-Burgoa, Olaia; Hurtado, Iñaki; Guraya, Teresa; Martínez- Pañeda, Emilio	https://doi.org/10.53254/ESISTUBE.ECF24.106
DISLOCATION CELLS EXPLAIN THE HIGH HYDROGEN EMBRITTLEMENT SUSCEPTIBILITY OF ADDITIVELY MANUFACTURED INCONEL 718	Zafra, Alfredo; Santos Maldonado, Claudia; Pham, Minh-Son; Martínez- Pañeda, Emilio	https://doi.org/10.53254/ESISTUBE.ECF24.107
HYDROGEN INDUCED INTERGRANULAR FRACTURE OF NICOCHR MEDIUM ENTROPY ALLOYS UNDER IN-SITU HYDROGEN CHARGING CONDITION	Su, Hang; Chen, Tingshu; Wang, Chaoming; Wang, Sui; Fu, Anqing	https://doi.org/10.53254/ESISTUBE.ECF24.108
MODELLING OF HYDROGEN-INDUCED FAILURE IN POLYCRYSTALLINE MATERIALS THROUGH A STRAIN GRADIENT CRYSTAL PLASTICITY FRAMEWORK	Tatli, Berkehan; Günay, Enes; Yalçinkaya, Tuncay	https://doi.org/10.53254/ESISTUBE.ECF24.109
NUMERICAL MODELLING AND EXPERIMENTAL CHARACTERIZATION OF HYDROGEN EMBRITTLEMENT OF PIPELINE STEEL	Schultheiss, Niels; Trautmannsberger, Reiner; Münstermann, Sebastian; Nonn, Aida	https://doi.org/10.53254/ESISTUBE.ECF24.110
DEVELOPMENT OF HYDROGEN VIDEO IMAGING SYSTEM FOR ANALYZING HYDROGEN DIFFUSION BEHAVIORS IN POLYCRYSTALLINE METALS	Kakinuma, Hiroshi; Ajito, Saya; Hojo, Tomohiko; Koyama, Motomichi; Akiyama, Eiji	https://doi.org/10.53254/ESISTUBE.ECF24.111
STRATEGIZING FOR HYDROGEN EMBRITTLEMENT BY PROTECTING THE WEAKEST MICROSTRUCTURAL ELEMENT	Elkot, Mohamed Naguib; Sun, Binhan; Ponge, Dirk; Raabe, Dierk	https://doi.org/10.53254/ESISTUBE.ECF24.112
INSIGHTS INTO HYDROGEN-DEFECT INTERACTION IN NANOSTRUCTURED MATERIALS AT LARGE STRAINS	Kapp, Marlene; Zawodzki, Michael; Zak, Stanislav; Moshtaghi, Masoud; Loder, Bernd; Mori, Gregor; Eckert, Jürgen; Pippan,	https://doi.org/10.53254/ESISTUBE.ECF24.113

Presentation title	Authors	DOI
	Reinhard; Renk, Oliver	
MECHANISM-BASED PREDICTIVE MODEL FOR HYDROGEN EMBRITTLEMENT CONSIDERING EFFECT OF PLASTICITY ON DECOHESION	Yu, Haiyang; He, Jianying; Zhang, Zhiliang	https://doi.org/10.53254/ESISTUBE.ECF24.114
THE IMPACT OF HYDROGEN ON THE PLASTICITY OF FCC METALS AND ALLOYS BASED ON NANO-INDENTATION INVESTIGATION	FEAUGAS, Xavier; OUDRISS, Abdelali; BEN JEDIDIA, Yasmine; MURUGAN, Siva	https://doi.org/10.53254/ESISTUBE.ECF24.115
ENVIRONMENT INDUCED EMBRITTLEMENT BEHAVIOR OF HIGH-ENTROPY ALLOYS	Luo, Hong; Pan, Zhimin; Zhao, Qiancheng	https://doi.org/10.53254/ESISTUBE.ECF24.116
LIMITATIONS OF HYDROGEN DETECTION AFTER 150 YEARS OF HYDROGEN DAMAGE RESEARCH IN METALLURGY	Tunes, Matheus A.; Tichy, Stefan; Scheiblehner, David; Sprung, Andreas; Gerold, Eva; Willenshofer, Patrick; Samberger, Sebastian; Kremmer, Thomas M.; Weißensteiner, Irmgard; Dummitraschewitz, Philip; Antrekowitsch, Helmut; Uggowitzer, Peter J.; Djukic, Milos B.; Pogatscher, Stefan	https://doi.org/10.53254/ESISTUBE.ECF24.117
AN OVERVIEW OF THE EFFECT OF NANO/MICRO SIZED PARTICLES IN HYDROGEN EMBRITTLEMENT IN ALUMINUM BASED STRUCTURES	Safyari, Mahdieh; Moshtaghi, Masoud	https://doi.org/10.53254/ESISTUBE.ECF24.118
HYDROGEN EMBRITTLEMENT IN NICKEL ALLOYS: SOME INSIGHTS	Lu, Xu; Johnsen, Roy	https://doi.org/10.53254/ESISTUBE.ECF24.119
EXPERIMENTAL AND SIMULATION APPROACHES TO HYDROGEN EMBRITTLEMENT BEHAVIOUR OF ADDITIVELY MANUFACTURED ALLOYS AND STRUCTURES	Moshtaghi, Masoud	https://doi.org/10.53254/ESISTUBE.ECF24.120
EVALUATION OF HYDROGEN-INDUCED CRACKING BY USING WEDGE-LOADED COMPACT TENSION SPECIMENS	Jabbari Mostahsan, Amirhossein; Silvayeh, Zahra; Auer, Peter; Stippich, Jennifer; Drexler,	https://doi.org/10.53254/ESISTUBE.ECF24.121

Presentation title	Authors	DOI
	Andreas; Domitner, Josef	
OXYGEN INHIBITION OF GASEOUS HYDROGEN EMBRITTLEMENT IN STEEL: EXPERIMENTS AND SIMULATIONS	Fernandez-Pison, Pilar; Sellam, Quentin; Meirelles Santana, Luciano; Lopes Pinto, Daniella; Farrugia, Vincent; Madi, Yazid; Besson, Jacques	https://doi.org/10.53254/ESISTUBE.ECF24.122
STATE-OF-THE-ART FATIGUE TESTING APPROACHES FOR QUALIFICATION AND REPURPOSING THE EXISTING HYDROGEN INFRASTRUCTURES	Lipiäinen, Kalle; Moshtaghi, Masoud	https://doi.org/10.53254/ESISTUBE.ECF24.123
HYDROGEN INDUCED FRACTURE TOUGHNESS DEGRADATION IN THE HEAT-AFFECTED ZONE OF A PIPELINE STEEL	De Pue, Laura; Vandorpe, Sarah; Jubica, Jubica; Claeys, Lisa; Vasheghani Farahani, Behzad; Depover, Tom; Verbeken, Kim; De Waele, Wim	https://doi.org/10.53254/ESISTUBE.ECF24.124
HYDROGEN EMBRITTLEMENT IN L485 PIPELINE MATERIALS: COMPARATIVE INSIGHTS BETWEEN EXCAVATED AND STOCK CONDITIONS	Jubica, Jubica; Claeys, Lisa; De Pue, Laura; De Waele, Wim; Depover, Tom; Verbeken, Kim	https://doi.org/10.53254/ESISTUBE.ECF24.125
CHARACTERIZATION METHODOLOGY OF PIPELINE WELD JOINTS UNDER HYDROGEN GAS USING MINIATURE SPECIMENS.	BELKACEMI, Said; BESSON, Jacques; BERTIN, Maxime; MEDDOUR, Abdennour; MADI, Yazid	https://doi.org/10.53254/ESISTUBE.ECF24.126
IMPROVING HYDROGEN EMBRITTLEMENT RESISTIVITY OF ULTRA-HIGH STRENGTH WIRE ROD STEEL FOR FASTENER PRODUCTION	Elsayed, H.; Galler, M.; Vallant, R.; Sommitsch, C.	https://doi.org/10.53254/ESISTUBE.ECF24.127
HYDROGEN-ASSISTED FATIGUE AND FRACTURE IN PIPELINE STEELS: MYTHS AND GENERAL TRENDS	San Marchi, Chris; Agnani, Milan; León-Cázares, Fernando D.; Wheeler, Robert W.; Ronevich, Joseph A.	https://doi.org/10.53254/ESISTUBE.ECF24.128
VARIOUS STRENGTH PROPERTIES OF PIPELINE STEEL X60 IN HYDROGEN GAS ENVIRONMENT	Matsunaga, Hisao; Yanase, Yukinori;	https://doi.org/10.53254/ESISTUBE.ECF24.129

Presentation title	Authors	DOI
	Sunaba, Toshiyuki; Kubota, Masanobu	
INFLUENCE OF HYDROGEN CONTENT IN THE GAS BLEND ON THE DAMAGE TOLERANCE OF A CNG TANK	WALTER, Romain; BENOIT, Guillaume; BERTHEAU, Denis; BOUTEAU, Gaspard; HENAFF, Gilbert	https://doi.org/10.53254/ESISTUBE.ECF24.130
CRITICAL PARAMETERS FOR HYDROGEN ENTRY INTO STEEL FROM A BLEND OF NATURAL GAS AND GASEOUS HYDROGEN	Kuchťáková, Klára; Rudomilova, Darya; Šefl, Václav; Prošek, Tomáš	https://doi.org/10.53254/ESISTUBE.ECF24.131
APPLICABILITY OF API 5CT STEELS FOR HYDROGEN UNDERGROUND STORAGE	Pichler, Stefanie; Loder, Bernd; Mori, Gregor	https://doi.org/10.53254/ESISTUBE.ECF24.132
HYDROGEN EMBRITTLEMENT OF AUSTENITIC STAINLESS STEELS AT SUBZERO, ROOM AND ELEVATED TEMPERATURES IN HIGH PRESSURE HYDROGEN GAS	Pilhagen, Johan; Sefer, Birhan; Rydgren, Pontus; Fuertes, Nuria; Navalles, Eduard; Edin, Emil; Nordin, Lars Olof	https://doi.org/10.53254/ESISTUBE.ECF24.133
FURTHER INSIGHTS INTO RELATIONS BETWEEN ALUMINIUM ALLOYS AND HYDROGEN	Peguet, Lionel; Daniélou, Armelle; Warner, Tim; Whelchel, Ricky	https://doi.org/10.53254/ESISTUBE.ECF24.134
THE EFFECT OF HYDROGEN GAS ON TENSILE AND FATIGUE PROPERTIES OF HIGH STRENGTH CARBON STEELS	Navalles I Martínez, Eduard; Sefer, Birhan; Fuertes Casals, Núria; Antti, Marta-Lena; Åkerfeldt, Pia; Virolainen, Esa; Klar Jaans, Caroline	https://doi.org/10.53254/ESISTUBE.ECF24.135
IMPROVED HYDROGEN EMBRITTLEMENT RESISTANCE OF 316 STAINLESS STEEL PRODUCED USING DIRECT ENERGY DEPOSITION	Rodoni, Esteban; Jimenez-Mena, Norberto; Sapanathan, Thaneshan; Claeys, Lisa; Depover, Tom	https://doi.org/10.53254/ESISTUBE.ECF24.136
MULTI-MODAL 3D IMAGE-BASED SIMULATION OF PROPAGATION BEHAVIOR OF INTERGRANULAR CRACKS IN AL-ZN-MG ALLOY	Higa, Ryota; Fujihara, Hiro; Toda, Hiroyuki; Ebihara, Kenichi; Mayama, Tsuyoshi; Uesugi, Masayuki; Takeuchi, Akihisa	https://doi.org/10.53254/ESISTUBE.ECF24.137
ON THE MECHANICAL PROPERTIES OF LASER POWDER BED FUSION	Nabizada, Ali; Claeys, Lisa;	https://doi.org/10.53254/ESISTUBE.ECF24.138

Presentation title	Authors	DOI
316L CONTAINING POROSITIES AND CHARGED VIA GASEOUS HYDROGEN	Jacques, Pascal J; Depover, Tom; Verbeken, Kim	
THE INFLUENCE OF MICROSTRUCTURE ON HYDROGEN EMBRITTLEMENT ABOUT HIGH STRENGTH SPRING STEEL	Sunako, Manami; Mizumoto, Masataka; Ooi, Azusa; Tada, Eiji	https://doi.org/10.53254/ESISTUBE.ECF24.139
MEASURING HYDROGEN EMBRITTLEMENT IN ADDITIVELY MANUFACTURED STEEL STRUCTURES USING HOLLOW TENSILE TEST SPECIMEN	Brumm, Jannik; Odermatt, Anton; Passing, Maximilian; Jepsen, Julian; Klassen, Thomas; Kashaev, Nikolai	https://doi.org/10.53254/ESISTUBE.ECF24.140
SCREENING OF MECHANICAL DEGRADATION OF COMBUSTION ENGINE AND EXHAUST METALLIC MATERIALS IN HIGH PRESSURE AND HIGH TEMPERATURE HYDROGEN GAS ENVIRONMENT	Sefer, Birhan; Rydgren, Pontus; Fuertes, Nuria; Navalles, Eduard; Israelsson, Niklas; Edin, Emil; Nordin, Lars Olof	https://doi.org/10.53254/ESISTUBE.ECF24.141
EFFECTS OF TEMPERATURE AND HYDROGEN ON FATIGUE PROPERTIES OF AUSTENITIC STAINLESS STEEL	HENAFF, Gilbert	https://doi.org/10.53254/ESISTUBE.ECF24.142
DUAL NATURE OF RETAINED AUSTENITE ON MECHANICAL PROPERTIES OF ADVANCED HIGH STRENGTH STEELS WITH AND WITHOUT HYDROGEN	Javaheri, Vahid; Ghassemali, Ehsan; Surki Aliabad, Roohallah; Gosh, Sumit; Sadeghpour, Saeed; Kömi, Jukka	https://doi.org/10.53254/ESISTUBE.ECF24.143
EFFECT OF HYDROGEN ON PLASTICITY IN ADVANCED HIGH STRENGTH STEELS USED IN AUTOMOTIVE APPLICATIONS	Ståhlkrantz, Adam; Sefer, Birhan; Nyyssönen, Tuomo; Oja, Olli	https://doi.org/10.53254/ESISTUBE.ECF24.144
EFFECT OF HIGH-PRESSURE HYDROGEN GAS AT ROOM AND HIGH TEMPERATURE ON THE MECHANICAL PERFORMANCE OF CONVENTIONAL AND ADDITIVELY MANUFACTURED NI-BASE ALLOYS	Palmert, Frans; Chen, Zhe; Sefer, Birhan; Rydgren, Pontus; Fuertes, Nuria; Navalles, Eduard; Edin, Emil; Nordin, Lars Olof	https://doi.org/10.53254/ESISTUBE.ECF24.145
INSIGHTS INTO HYDROGEN-ASSISTED FATIGUE CRACK GROWTH IN CARBON STEEL GRADES: A MACHINE LEARNING APPROACH	Rohani Raftar, Hamidreza; Safyari, Mahdieh; Moshtaghi, Masoud	https://doi.org/10.53254/ESISTUBE.ECF24.146

Presentation title	Authors	DOI
ASSESSING FRACTURE SURFACES AND MICROSTRUCTURES OF STAINLESS STEEL 321 TESTED IN HYDROGEN GAS	Anilkumar, Vishnu; Nyborg, Lars; Cao, Yu	https://doi.org/10.53254/ESISTUBE.ECF24.147
THE EFFECT OF PRECIPITATE CHEMISTRY ON HYDROGEN TRAPPING: A DFT STUDY ON (Ti,V)(C,N)	Hammer, Philipp; Ecker, Werner; Romaner, Lorenz; Galler, Matthew; Razumovskiy, Vsevolod I.	https://doi.org/10.53254/ESISTUBE.ECF24.148
HYDROGEN ASSISTED TOUGHNESS REDUCTION IN A PIPELINE STEEL ASSESSED BY SINGLE EDGE NOTCHED TENSION TESTS	Cauwels, Margo; Depraetere, Robin; De Waele, Wim; Hertelé, Stijn; Verbeken, Kim; Depover, Tom	https://doi.org/10.53254/ESISTUBE.ECF24.149
ENHANCING PIPELINE SAFETY FOR GASEOUS HYDROGEN TRANSPORT: ASSESSING THE IMPACT OF OPERATIONAL VARIABLES AND ALLOY CHARACTERISTICS ON THE PROBABILITY OF FAILURE DUE TO HYDROGEN-INDUCED MATERIAL DEGRADATION	Giannini, Leonardo; Alvaro, Antonio; Paltrinieri, Nicola	https://doi.org/10.53254/ESISTUBE.ECF24.150
THE APPLICABILITY OF THE HOLLOW SPECIMEN TECHNIQUE FOR TESTING OF VARIOUS METALS UNDER HIGH PRESSURE HYDROGEN ATMOSPHERES	Konert, Florian; Nietzke, Jonathan; Freitas, Tomás; Campari, Alessandro; Sobol, Oded	https://doi.org/10.53254/ESISTUBE.ECF24.151
TRAPPING EFFECTS ON HYDROGEN EMBRITTLEMENT IN A 2205 DUPLEX STAINLESS STEEL	Díaz, Andrés; Rodríguez-Aparicio, Rubén; Medina, Luis; Arniella, Víctor; Peral, Luis Borja; Cuesta, Isidoro Iván; Alegre, Jesús Manuel	https://doi.org/10.53254/ESISTUBE.ECF24.152
MICROPIT FORMATION UNDER ROLLING CONTACT FATIGUE OF BEARINGS THROUGH CRYSTAL PLASTICITY MODELLING	Han, X.Q.; Li, S.X.; Lu, Siyuan; Jin, Y.S.	https://doi.org/10.53254/ESISTUBE.ECF24.153
ROLE OF AIR HUMIDITY IN RESIDUAL FATIGUE LIFETIME OF RAILWAY AXLE	Nahlik, Lubos; Pokorny, Pavel; Vojtek, Tomas; Dlhý, Pavol; Fajkos, Rostislav; Peter, Ondrej; Hutar, Pavel	https://doi.org/10.53254/ESISTUBE.ECF24.154
EFFECT OF RESIDUAL STRESSES ON THE CRACK GROWTH	Avgustinovic, Deni; Maierhofer, Jürgen	https://doi.org/10.53254/ESISTUBE.ECF24.155

Presentation title	Authors	DOI
BEHAVIOUR IN WHEELSET AXLES UNDER MIXED-MODE LOADING CONDITIONS		
PREDICTION OF FATIGUE LIFE AND SHORT CRACK GROWTH RATE BASED ON CRYSTAL PLASTICITY FINITE ELEMENT METHOD	Qian, Guian; Zhang, Jiamei; Zhang, Ningyu; Li, Ruiyang	https://doi.org/10.53254/ESISTUBE.ECF24.156
EXPERIMENTAL STUDY OF FATIGUE CRACK GROWTH AND CLOSURE AT NEGATIVE LOAD RATIO	ASSELIN, Théotime; ANCELET, Olivier; BENOIT, Guillaume; HAMON, Florence; HENAFF, Gilbert	https://doi.org/10.53254/ESISTUBE.ECF24.157
MULTISCALE MODEL SIMULATIONS FOR ANALYSING FATIGUE STRENGTH OF AUSTENITIC STAINLESS STEELS WITH BIMODAL HARMONIC STRUCTURES	Zhou, Hongchang; Liu, Zijie; Kikuchi, Shoichi; Shibamura, Kazuki	https://doi.org/10.53254/ESISTUBE.ECF24.158
THE CRACK GROWTH THRESHOLD IS NOT A CONSTANT VALUE	Pokorny, Pavel; Vojtek, Tomas; Kubicek, Radek; Jambor, Michal; Nahlik, Lubos; Hutar, Pavel	https://doi.org/10.53254/ESISTUBE.ECF24.159
SHAPE MEMORY-BASED LATTICE META-MATERIAL: THE ANALYSIS OF THE OCTET TRUSS CELL	Corda, Carolina; Armentani, Enrico; Gao, Chao; Bertolin, Chiara	https://doi.org/10.53254/ESISTUBE.ECF24.160
A NUMERICAL MODEL TO SIMULATE INELASTIC CYCLIC BEHAVIOR OF HIGH-STRENGTH WUF-W CONNECTIONS	Han, Sang Whan; Cho, EunSeon; Park, Sung Yul	https://doi.org/10.53254/ESISTUBE.ECF24.161
ACCURATE MODELLING OF THE ANTIPLANE CRACK TIP SOLUTIONS FOR CRACKS PROPAGATING ALONG SPRING INTERFACES	Tavara, Luis; Vazquez-Sanchez, Alberto; Muñoz-Reja, Mar; Mantic, Vladislav	https://doi.org/10.53254/ESISTUBE.ECF24.162
CONVERGENCE ANALYSIS OF REALIZATIONS IN PROBABILISTIC FRACTURE MECHANICS: A STUDY ON XLPR CODE	Park, Sang Hyuk; Yoon, Seok Jun; Huh, Nam Su; Kim, Dong Jun; Kim, Jong Sung	https://doi.org/10.53254/ESISTUBE.ECF24.163
PERFORMANCE EVALUATION OF ARTIFICIAL NEURAL NETWORKS DEVELOPED FOR ESTIMATION OF FATIGUE BEHAVIOR OF STEELS	Marohnić, Tea; Basan, Robert	https://doi.org/10.53254/ESISTUBE.ECF24.164
DENDRITIC CRACK INITIATION AND PROPAGATION IN CERAMIC SOLID ELECTROLYTES OF SOLID-STATE LITHIUM METAL BATTERIES	Hu, Bingkun; Ning, Ziyang; Bruce, Peter G.; Marrow, T. James	https://doi.org/10.53254/ESISTUBE.ECF24.165

Presentation title	Authors	DOI
NOVEL CANTILEVER BENDING BASED METHOD FOR ASSESSING THE EFFECTS OF SUBSTRATE ROUGHNESS AND COATING THICKNESS ON THE INTERFACE FRACTURE ENERGY OF A CERAMIC/METAL SYSTEM	Abbas, Saim; Mallick, Sudhanshu; Sampath, Sanjay; Jaya, Balila Nagamani	https://doi.org/10.53254/ESISTUBE.ECF24.166
CRACK INITIATION DURING THERMAL SHOCK IN MULTI-MATERIAL CERAMIC COMPOSITES MODELLED BY A STRESS-ENERGY CRITERION	Papšík, Roman; Ševeček, Oldřich; Bermejo, Raúl	https://doi.org/10.53254/ESISTUBE.ECF24.167
FINITE ELEMENT MODELLING OF REFRACTORIES FRACTURE PROCESS ZONE WITH GRADIENT ENHANCED DAMAGE MODELS	Ali, Zain; Jin, Shengli; Gruber, Dietmar	https://doi.org/10.53254/ESISTUBE.ECF24.168
ENGINEERING OF FRACTURE TOUGHNESS OF AMORPHOUS SILICA BY EXCESS ELECTRONS AND HOLES	Matsunaga, Wataru; Shichino, Seiya; Takahashi, Takumi; Hirakata, Hiroyuki	https://doi.org/10.53254/ESISTUBE.ECF24.169
ALGORITHM FOR PREDICTING CRACK PATH TRAJECTORY BASED ON ITERATIVE COHESIVE ELEMENT INSERTION WITH ADAPTIVE MESH REFINEMENT IN THE CONTEXT OF TWO PHASE TOPOLOGY OPTIMIZATION	Uremović, Domagoj; Buljak, Vladimir	https://doi.org/10.53254/ESISTUBE.ECF24.170
FRACTURE PROPERTIES OF INTERLOCKING STRUCTURE BY SICKLE JOINT PRINTED WITH A STEREOLITHOGRAPHY 3D PRINTER	Arai, Masayuki; Saito, Yukiho; Fujita, Hayato; Meng, Yuxian	https://doi.org/10.53254/ESISTUBE.ECF24.171
ENHANCING THE FATIGUE PERFORMANCE OF ADDITIVELY MANUFACTURED ALSI10MG ALLOY USING A NOVEL CHEMO-MECHANICAL SURFACE TREATMENT	Waqas, Muhammad; Kang, Jidong; Inal, Kaan; Diaz, Agustin	https://doi.org/10.53254/ESISTUBE.ECF24.172
RAPID MODELING OF SLM FORMED 316L BLOCKS WITH THE MODIFIED INHERENT STRAIN METHOD FOR RESIDUAL STRESS PREDICTION	Geng, Luyang; Chen, Yi; Zhang, Bo; Gong, Jianming	https://doi.org/10.53254/ESISTUBE.ECF24.173
DIFFUSION OF MOISTURE IN VOIDS OF ADDITIVELY MANUFACTURED COMPOSITES: EFFECT OF CAPILLARY SHAPE	Li, Boyu; Baxevanakis, Konstantinos; Silberschmidt, Vadim	https://doi.org/10.53254/ESISTUBE.ECF24.174

Presentation title	Authors	DOI
INVESTIGATION OF THE FEASIBILITY AND STRUCTURAL INTEGRITY OF 316L PARTS PRODUCED VIA MATERIAL EXTRUSION ADDITIVE MANUFACTURING	Spiller, Saveria; Razavi, Nima	https://doi.org/10.53254/ESISTUBE.ECF24.175
THE EFFECT OF SURFACE TREATMENT ON THE FATIGUE LIFE OF TOPOLOGY OPTIMIZED ALUMINIUM 2139-AM FRONT WING ATTACHMENTS MANUFACTURED ADDITIVELY BY PBF-LB/M	Köckritz, Jenny; Kögler, Dominik; Szlosarek, Robert; Langenhan, Stefan; Kröger, Matthias	https://doi.org/10.53254/ESISTUBE.ECF24.176
THE EVALUATION OF THE FRACTURE CHARACTERISTICS OF METAL-CERAMIC COMPOSITES PRODUCED BY ADDITIVE MANUFACTURING	Farrokhtar, Masoomah; Bolzon, Gabriella; Biasetto, Lisa; Gastaldi, Vanessa	https://doi.org/10.53254/ESISTUBE.ECF24.177
FATIGUE CRACKING IN ADDITIVELY MANUFACTURED TITANIUM ALUMINIDES	Filippini, Mauro	https://doi.org/10.53254/ESISTUBE.ECF24.178
TOWARDS THE DESIGN OF AN AS-BUILT CAD MODEL OF STRUT-BASED LATTICES FOR STRUCTURAL INTEGRITY ASSESSMENT OF AM COMPONENTS	Murchio, Simone; Laurenti, Marcello; Benedetti, Matteo; Berto, Filippo	https://doi.org/10.53254/ESISTUBE.ECF24.179
ANISOTROPY OF GYROID AND STOCHASTIC LATTICE STRUCTURES UNDER TENSILE LOADING	Järvenpää, Antti Viljami; Araya, Miguel; Rautio, Timo	https://doi.org/10.53254/ESISTUBE.ECF24.180
DYNAMIC AND STATIC MECHANICAL PROPERTIES OF 3D PRINTED CERAMIC ELEMENTS	Jiménez Guerrero, Adriano; Hortigón Fuentes, Beatriz; Vázquez Vicente, Enrique; Rivera Gómez, Carlos; Galán Marín, Carmen	https://doi.org/10.53254/ESISTUBE.ECF24.181
ENHANCING FATIGUE BEHAVIOUR OF PBF-LB IN718 THROUGH SURFACE QUALITY OPTIMIZATION	Jaskari, Matias; Rautio, Timo; Järvenpää, Antti	https://doi.org/10.53254/ESISTUBE.ECF24.182
THE EFFECT OF BUILD STRATEGY ON THE RESIDUAL STRESS DISTRIBUTION IN ADDITIVELY MANUFACTURED DUPLEX STAINLESS STEEL PRESSURE VESSELS	Odermatt, Anton Emil; Al-Hamdany, Nowfal; Abreu Faria, Guilherme; Degener, Sebastian; Kashaev, Nikolai	https://doi.org/10.53254/ESISTUBE.ECF24.183
EFFECT OF TEMPERATURE ON MECHANICAL PROPERTIES OF ADDITIVELY MANUFACTURED	Suzuki, Shiyu; Tsushima, Natsuki	https://doi.org/10.53254/ESISTUBE.ECF24.184

Presentation title	Authors	DOI
ALSI10MG AND ITS LATTICE STRUCTURE		
CORROSION FAILURE IN BIOLOGICAL FLUIDS OF LASER-MELTED SURFACE OF AISI 321 STAINLESS STEEL	Dikova, Tsanka Dimitrova; Panova, Natalina; Parushev, Ivaylo; Dzhendov, Dzhendo	https://doi.org/10.53254/ESISTUBE.ECF24.185
FISH-SCALE ENABLED SEQUENTIAL RUPTURE FOR DYNAMIC ICE REMOVAL	Wang, Feng; Xiao, Senbo; Zhang, Zhiliang; He, Jianying	https://doi.org/10.53254/ESISTUBE.ECF24.186
STRUCTURAL INTEGRITY ASSESMENT OF HUMAN TOOTH STRUCTURE	Momčilović, Nikola; Petrović, Ana; Kosić, Boris; Ninković, Neda; Opačić-Galić, Vanja	https://doi.org/10.53254/ESISTUBE.ECF24.187
FRACTURE SIMULATION OF CORTICAL BONE AT MICROSCALE USING COHESIVE ZONE MODEL AND PHASE FIELD MODEL	Quiñonero-Moya, Antonio Ramón; Infante-García, Diego; Belda, Ricardo; Giner, Eugenio	https://doi.org/10.53254/ESISTUBE.ECF24.188
THE EFFECT OF THREAD LENGTH IN CANCELLOUS BONE FIXATION UNDER SHEAR LOADING: A BIOMECHANICAL STUDY	Langourani- Kosteletou, Paraskevi; Chelidonis, Gerasimos; Pasiou, Ermioni D.; Savidou, Olga; Kourkoulis, Stavros K.	https://doi.org/10.53254/ESISTUBE.ECF24.189
SIMPLIFIED ANALYSIS OF VERY LOW CYCLE FATIGUE CRACK GROWTH IN CIRCUMFERENTIAL SURFACE CRACKED PIPE SUBJECTED TO FOUR-POINT BENDING BY REFERENCE STRESS METHOD	Takanashi, Masahiro; Hojo, Kiminobu; Itatani, Masao; Nakane, Motoki; Yashirodai, Kenji; Takahashi, Yukio; Okada, Hiroshi	https://doi.org/10.53254/ESISTUBE.ECF24.190
EXPERIMENTAL OBSERVATIONS ON FATIGUE DAMAGE IN L-PBF 316L STEEL AT DIFFERENT STAGES OF THE LOW CYCLE FATIGUE LIFETIME	Pelegatti, Marco; Brůža, Jaromír; Šiška, Filip; Jambor, Michal; Beltrami, Marco; Salvati, Enrico; Man, Jiří	https://doi.org/10.53254/ESISTUBE.ECF24.191
MITIGATING INTERFERING MODES IN CRUCIFORM SPECIMENS FOR RELIABLE ULTRASONIC FATIGUE TESTING: A FINITE ELEMENT AND DIC APPROACH	Montalvao, Diogo; Safari, Sina; Chidzikwe, Weston; da Costa, Pedro	https://doi.org/10.53254/ESISTUBE.ECF24.192

Presentation title	Authors	DOI
	Rodrigues; Reis, Luis; Freitas, Manuel	
PORE-BASED PREDICTION OF CRACK INITIATION LIFE IN VERY HIGH CYCLE FATIGUE	Zhang, Ningyu; Hong, Youshi; QIAN, Guian	https://doi.org/10.53254/ESISTUBE.ECF24.193
THE INFLUENCE OF A THERMOMECHANICAL TREATMENT ON THE VHCF-LIMIT OF A HIGH-STRENGTH BEARING STEEL	Sippel, Jan; Kerscher, Eberhard	https://doi.org/10.53254/ESISTUBE.ECF24.194
FATIGUE LIFE ESTIMATION OF NOTCHES USING AVERAGE STRAIN ENERGY DENSITY	Klusák, Jan; Kozáková, Kamila	https://doi.org/10.53254/ESISTUBE.ECF24.195
DESCRIPTION OF CRACK PROPAGATION IN DUCTILE MATERIALS UNDER NON-PROPORTIONAL LOADING CONDITIONS PART I: MODELLING OF DEFORMATION-INDUCED PLASTIC ANISOTROPY	Gibb, Alwin; Tsakmakis, Aris; Vormwald, Michael	https://doi.org/10.53254/ESISTUBE.ECF24.196
DESCRIPTION OF CRACK PROPAGATION IN DUCTILE MATERIALS UNDER NON-PROPORTIONAL LOADING CONDITIONS PART II: PHASE FIELD MODELLING OF CRACK PROPAGATION	Tsakmakis, Aris; Gibb, Alwin; Vormwald, Michael	https://doi.org/10.53254/ESISTUBE.ECF24.197
FATIGUE CRACK PROPAGATION AT HOLE EDGES OF NICKEL-BASED SINGLE-CRYSTAL ALLOYS UNDER THERMOMECHANICAL LOADING	Sun, Jingyu	https://doi.org/10.53254/ESISTUBE.ECF24.198
EMPLOYING A CONTINUUM DAMAGE MODEL TO PREDICT THE FATIGUE LIFE THROUGH ABAQUS	Jalaei, Mohammad Hossein; Pelizzoni, Sofia; Meneghetti, Giovanni; Campagnolo, Alberto; Ottosen, Niels Saabye; Ristinmaa, Matti; Vaara, Joonas; Frondelius, Tero; Kouhia, Reijo	https://doi.org/10.53254/ESISTUBE.ECF24.199
BIAXIAL FATIGUE UNDER TENSION-TORSION UFT	Reis, Luis; Lopes, Henrique; R. da Costa, Pedro; Montalvão, Diogo; Freitas, Manuel	https://doi.org/10.53254/ESISTUBE.ECF24.200
EFFECT OF STRESS STATE AND LOAD RATIO ON THE RATCHET	Kim, Sang Eon; Kim, Jin Weon; Lee, Su	https://doi.org/10.53254/ESISTUBE.ECF24.201

Presentation title	Authors	DOI
DEFORMATION OF NUCLEAR STRUCTURAL MATERIAL	Yeong; Kim, Jong Sung	
ON THE APPLICATION OF MACHINE LEARNING ALGORITHMS FOR THE PREDICTION OF THE FATIGUE RESPONSE OF ADDITIVELY MANUFACTURED PARTS	Centola, Alessio; Ciampaglia, Alberto; Berto, Filippo; Paolino, Davide; Tridello, Andrea	https://doi.org/10.53254/ESISTUBE.ECF24.202
A NUMERICAL MODEL FOR BENDING FATIGUE LIFE PREDICTION IN GEARS WITH ARBITRARY TOOTH PROFILE	Trumbić, Niko; Čular, Ivan; Basan, Robert; Vučković, Krešimir	https://doi.org/10.53254/ESISTUBE.ECF24.203
IMPROVED FATIGUE BEHAVIOR IN HIGH SPEED STEELS BY TRANSFORMATION-INDUCED CRACK CLOSURE	Walch, Lukas; Klünsner, Thomas; Hohenwarter, Anton; Pippan, Reinhard; Cordill, Megan J.; Marsoner, Stefan; Hackl, Alfred; Leitner, Harald; Ressel, Gerald	https://doi.org/10.53254/ESISTUBE.ECF24.204
LINEAR ELASTIC AND ELSTIC-PLASTIC FRACTURE MECHANICS ANALYSIS BY ISOGEOMETRIC ANALYSIS	Okada, Hiroshi; Tsuchiyama, Yuhi; Sunaoka, Yusuke; Otoguro, Yuto	https://doi.org/10.53254/ESISTUBE.ECF24.205
A COMPUTATIONAL MODEL FOR INTERFACE AND PHASE-FIELD DYNAMIC QUASI-BRITTLE FRACTURE OF SOLIDS	Vodička, Roman	https://doi.org/10.53254/ESISTUBE.ECF24.206
FINITE ELEMENT MODELING FOR PREDICTING SIF FOR MODE I IN BRITTLE MATERIAL (WC+CO) UNDER UNIAXIAL COMPRESSION OR UNIAXIAL DISPLACEMENT	Yifrach, Yitzchak	https://doi.org/10.53254/ESISTUBE.ECF24.207
INDENTATION SIZE EFFECTS IN NANOSCRATCH TESTS THROUGH A SIZE-DEPENDENT CRYSTAL PLASTICITY FRAMEWORK	Günay, Enes; Yalçinkaya, Tuncay	https://doi.org/10.53254/ESISTUBE.ECF24.208
S-VERSION FEM-BASED STRATEGY FOR PREDICTING HIGH-SPEED CRACK PROPAGATION BEHAVIOUR IN 3D STRUCTURES	HE, TIANYU; FURUHASHI, FUMIHITO; MORITA, NAOKI; MITSUME, NAOTO; SHIBANUMA, KAZUKI	https://doi.org/10.53254/ESISTUBE.ECF24.209
MINIMIZATION OF THE TOTAL ENERGY UNDER STRESS CONDITION APPLIED FOR A VERSATILE ANALYSIS OF CRACK	Ambikakumari Sanalkumar, Karthik; Mantic, Vladislav; Muñoz-Reja, Mar; Távara, Luis	https://doi.org/10.53254/ESISTUBE.ECF24.210

Presentation title	Authors	DOI
ONSET AND PROPAGATION IN COMPLEX SCENARIOS		
PREDICTING THE PROBABILITY OF GLASS BREAKAGE IN LARGE-FORMAT PHOTOVOLTAIC MODULES	Springer, Martin; Silverman, Timothy; Bosco, Nick	https://doi.org/10.53254/ESISTUBE.ECF24.211
FRACTURE TOUGHNESS DETERMINATION BY LOCAL APPROACH MODELLING OF SMALL PUNCH TEST	Kulcsár, Benedek; Bézi, Zoltán; Ungár, Péter; Kiss, László	https://doi.org/10.53254/ESISTUBE.ECF24.212
MODELLING OF INTER- AND TRANS-GRANULAR CRACK PROPAGATION BY HIGH ORDER PHASE-FIELD METHOD	Kumar, Manish; Salvati, Enrico	https://doi.org/10.53254/ESISTUBE.ECF24.213
A NEW ARTIFICIAL NEURAL NETWORK MODEL FOR PREDICTING FATIGUE LIMIT AND FRACTURE TOUGHNESS VALUES OF SOME STAINLESS STEELS	Ivković, Djordje; Arsić, Dušan; Adamović, Dragan; Sedmak, Aleksandar; Mandić, Vesna; Delić, Marko; Mitrović, Andjela	https://doi.org/10.53254/ESISTUBE.ECF24.214
GENERATION OF ARTIFICIAL TRAJECTORIES FOR CAD PIPELINE THROUGH POPULATION BASED GENETIC GENERATIVE ARTIFICIAL INTELLIGENCE	Laurenti, Marcello; Murchio, Simone; Benedetti, Matteo; Berto, Filippo	https://doi.org/10.53254/ESISTUBE.ECF24.215
A CONFIGURATIONAL FORCE BASED ANALYSIS OF CREEP CRACK GROWTH	Kolednik, Otmar; Predan, Jozef; Kegl, Marko; Gubelj, Nenad	https://doi.org/10.53254/ESISTUBE.ECF24.216
CREEP BEHAVIOR OF TITANIUM-ALUMINUM ALLOY USING MINIATURE TESTING APPROACH	He, Lei; Itoh, Takamoto	https://doi.org/10.53254/ESISTUBE.ECF24.217
EFFECT OF MICROSTRUCTURE ON MECHANICAL CREEP PROPERTIES OF AUSTENITIC STAINLESS STEELS	BEN BETTAIEB, Marwa; RENAULT-LABORNE, Alexandra; VINCENT, Ludovic; MORGENEYER, Thilo F.; DEPINOY, Sylvain	https://doi.org/10.53254/ESISTUBE.ECF24.218
ON HIGH-TEMPERATURE CREEP PROPERTIES OF THE NICKEL-BASED ALLOY 2.4842 AND THE IDENTIFICATION PROCESS USING THE SMALL PUNCH TEST AND NONLINEAR OPTIMIZATION TECHNIQUES	Schirmer, Richard W.; Abendroth, Martin; Kiefer, Bjoern	https://doi.org/10.53254/ESISTUBE.ECF24.219

Presentation title	Authors	DOI
A GURSON-TYPE DAMAGE MODEL COMBINED WITH DISLOCATION MECHANISM BASED VISCOPLASTIC MODEL TO PREDICT CREEP LIFE FOR P91 STEEL	Wang, Lei; Yin, Jundong; Li, Dongfeng	https://doi.org/10.53254/ESISTUBE.ECF24.220
ELECTRONS AND HOLES ALTER INTRINSIC MATERIAL STRENGTH	Hirakata, Hiroyuki; Matsunaga, Wataru; Shimada, Takahiro	https://doi.org/10.53254/ESISTUBE.ECF24.221
FATIGUE CRACK INITIATION AND GROWTH IN STEELS CONTAINING A METASTABLE SECOND PHASE: NOTCH AND MICROSTRUCTURAL EFFECTS	Morales-Rivas, Lucia; Kerscher, Eberhard	https://doi.org/10.53254/ESISTUBE.ECF24.222
NANO-INDENTATION MODELING OF THE SINGLE CRYSTAL COPPER USING STRAIN-GRADIENT CRYSTAL PLASTICITY THEORY AND OPTIMIZATION ALGORITHM	Pham, Van-Thanh; Cha, Kyoon-Ho; Kim, Jong-Sung	https://doi.org/10.53254/ESISTUBE.ECF24.223
INVESTIGATION OF MICROSTRUCTURAL EVOLUTION IN PARIS LAW REGIME OF FATIGUE CRACK GROWTH RATE TESTED NANO-STRUCTURED BAINITE	Chhajed, Bhawesh; Kumar, Avanish; Singh, Aparna	https://doi.org/10.53254/ESISTUBE.ECF24.224
EFFECT OF COMPOSITION ON IMPACT TOUGHNESS OF NANO-PEARLITE	Singh, Rahul; Singh, Aparna	https://doi.org/10.53254/ESISTUBE.ECF24.225
INTEGRATED STUDY ON CR2ALC-COATED ZIRCONIUM FOR ACCIDENT-TOLERANT FUEL SYSTEMS	Pan, Boyu; Shen, Fuhui; Könemann, Markus; Münstermann, Sebastian	https://doi.org/10.53254/ESISTUBE.ECF24.226
LOAD PATH-DEPENDENT FATIGUE CAPABILITY OF FORWARD ROD-EXTRUDED CASE HARDENING STEEL 16MNCRS5	Lingnau, Lars Andree; Sauer, Lukas Maximilian; Walther, Frank	https://doi.org/10.53254/ESISTUBE.ECF24.227
NEW FORMULATED MODEL FOR DUCTILE DAMAGE ANALYSIS AND ITS COMPARISON TO GTN MODEL	Dixit, Saurabh; Anand, Sachit; Tiwari, Abhishek	https://doi.org/10.53254/ESISTUBE.ECF24.228
THE EFFECT OF SURFACE MODIFICATION ON FRETTING WEAR OF STEEL FOR ENGINE APPLICATION	Amanov, Auezhan; Usman, Ali; Kouhia, Reijo; Vippola, Minnamari	https://doi.org/10.53254/ESISTUBE.ECF24.229
FAR FIELD TENSION TO ADVANCE A FRETTING FATIGUE CRACK UNDER THE SHARP AND ROUNDED EDGE CONTACTS	Kim, Hyung-Kyu	https://doi.org/10.53254/ESISTUBE.ECF24.230

Presentation title	Authors	DOI
INVESTIGATION OF MICROSTRUCTURAL INFLUENCE ON GEAR CONTACT FATIGUE	Ren, Sicong; Biswas, Abhishek; Vallejo-Rodriguez, Luis; Anderson, Tom; Ronkainen, Helena; Lindroos, Matti; Laukkanen, Anssi	https://doi.org/10.53254/ESISTUBE.ECF24.231
APPLICATION OF SELF-HEATING METHOD TO ESTIMATE FATIGUE LIMIT OF 42CRMO4+QT STEEL UNDER FRETTING FATIGUE CONDITIONS	Nesládek, Martin; Matušů, Martin; Papuga, Jan	https://doi.org/10.53254/ESISTUBE.ECF24.232
NON-LOCAL CRACK INITIATION CRITERIA AND LIFETIME PREDICTION IN FRETTING-FATIGUE UNDER VARIABLE NORMAL LOADING CONDITIONS	Lare, Naansonou Patrick; Meray, Florian; Cosseron, Kevin; Guilhem, Yoann; Pommier, Sylvie	https://doi.org/10.53254/ESISTUBE.ECF24.233
INFLUENCE OF VOLUMETRIC LOCKING ON THE COMBINATION OF PLASTICITY AND PHASE FIELD MODELS FOR FRACTURE	Olivares Rodríguez, Pablo; Quintanas Corominas, Adrià; García García, Israel; Reinoso Cuevas, Jose; Martínez Pañeda, Emilio	https://doi.org/10.53254/ESISTUBE.ECF24.234
DIGITAL TWIN-BASED SIMULATIONS FOR THE EVALUATION OF SMALL-SCALE TENSILE SPECIMEN TESTS	Fekete, Tamás; Antók, Dániel; Tatár, Levente; Bereczki, Péter	https://doi.org/10.53254/ESISTUBE.ECF24.235
MACHINE LEARNING-BASED SEGMENTATION OF QUASI-BRITTLE FRACTURES IN 316L STAINLESS STEEL	Haboub, Amine; Da Silva, Jonas; Mohammad, Tariq; Farhat, Hanan	https://doi.org/10.53254/ESISTUBE.ECF24.236
EXPERIMENTAL AND NUMERICAL STUDIES ON SHEAR BAND FORMATION AT HIGH STRAIN RATES	Jentsch, Stefan; Stock, Daniel; Häcker, Ralf; Skrotzki, Birgit; Darvishi Kamachali, Reza; Klingbeil, Dietmar; Kindrachuk, Vitaliy	https://doi.org/10.53254/ESISTUBE.ECF24.237
SENSITIVITY ANALYSIS OF SPENT NUCLEAR FUEL CASKS ACCORDING TO BOUNDARY CONDITIONS AND PARAMETERS OF AIRCRAFT ENGINE CRASH ANALYSIS	Kim, SeokWoo; Kim, Jongsung; Hong, Seokpyo; Kim, DongJun	https://doi.org/10.53254/ESISTUBE.ECF24.238

Presentation title	Authors	DOI
MICROSTRUCTURAL INSIGHTS INTO EFFECTS OF PRESSURIZED WATER REACTOR ENVIRONMENT AND CYCLIC LOADING PARAMETERS ON THE LOW CYCLE FATIGUE BEHAVIOR OF 316L STAINLESS STEEL	Que, Zaiqing; Vainionpää, Aleks; Seppänen, Tommi	https://doi.org/10.53254/ESISTUBE.ECF24.239
THE EFFECT OF ALTERNATING WET-DRY CONDITIONS IN THE FATIGUE LIFE OF S355G10+M STEEL UNDER CORROSION-FATIGUE TESTING	Álvarez, Mario; Vergara, Ane; Escalero, Mikel; Olave, Mireia	https://doi.org/10.53254/ESISTUBE.ECF24.240
CORROSION FATIGUE CRACK TIP PH ESTIMATION OF 13CR-4NI MARTENSITIC STAINLESS STEEL	Barabi, Aidin; Deschênes, Pierre-Antony; Lacasse, Robert; Thibault, Denis; Trudeau, Michel; Brochu, Myriam	https://doi.org/10.53254/ESISTUBE.ECF24.241
INVESTIGATION OF METHODS FOR ESTIMATION OF FATIGUE PARAMETERS AND BEHAVIOR OF ALUMINUM AND TITANIUM ALLOYS	Basan, Robert; Marohnić, Tea; Marković, Ela; Božić, Željko	https://doi.org/10.53254/ESISTUBE.ECF24.242
MULTIAXIAL THERMOMECHANICAL FATIGUE BEHAVIOR OF 316LN STAINLESS STEEL	Yang, Jingyu; Li, Bingbing; Chen, Xu	https://doi.org/10.53254/ESISTUBE.ECF24.243
FRACTURE TOUGHNESS OF LOW- AND MEDIUM-CARBON MARTENSITIC-AUSTENITIC STEELS AND THEIR WELDS	Pallaspuuro, Sakari; Lindqvist, Sebastian; Hesse, Ann-Christin; Tóth, Tamás; Sainio, Johannes; Aho, Niko; Ghosh, Sumit; Kömi, Jukka	https://doi.org/10.53254/ESISTUBE.ECF24.244
MORSE-CODE INSPIRED ARCHITECTURE TO IMPROVE DAMAGE RESISTANCE OF 3D PRINTED PLA AND BRITTLE PMMA	Yadav, Deepesh; Jaya, BN	https://doi.org/10.53254/ESISTUBE.ECF24.245
DIGITAL TWIN FOR THE PREDICTION OF WEAR IN GEAR-BASED TRANSMISSIONS OF WIND TURBINES	García, Maite; Escalero, Mikel; Fernández del Rincón, Alfonso	https://doi.org/10.53254/ESISTUBE.ECF24.246
FRACTURE ANALYSIS OF STIFFENED LAMINATED COMPOSITE PLATES	Hsu, C.W.; Mittelstedt, C.; Hwu, Chyanbin	https://doi.org/10.53254/ESISTUBE.ECF24.247
DETERMINATION OF CFRP INTRALAMINAR FRACTURE PROPERTIES IN THE CALIBRATION OF A NON-LOCAL DAMAGE MODEL FOR CRASH APPLICATION	Falascetti, Maria Pia; Rondina, Francesco; Birnie Hernandez, Johan; Raimondi, Luca;	https://doi.org/10.53254/ESISTUBE.ECF24.248

Presentation title	Authors	DOI
	Troiani, Enrico; Donati, Lorenzo	
EVALUATION OF DAMAGE BEHAVIOR OF CFRP LAMINATES UNDER STATIC BENDING LOADS USING X-RAY MICRO TOMOGRAPHY	Tsuruta, Hideki; Woo, Myunghun; Fukushige, Shinya; Sakakibara, Yohei; Takanashi, Masahiro	https://doi.org/10.53254/ESISTUBE.ECF24.249
CHARACTERIZATION OF TEMPERATURE-DEPENDENT DEBONDING DAMAGE IN HIGHLY PARTICLE-FILLED THERMOPLASTIC COMPOSITES (HPFTC)	Kim, Kyung Ha; Kim, Ilhyun; Yoon, Seongho; Choi, Byoung-Ho; Lee, Sunyoung; Lee, Hyunseob	https://doi.org/10.53254/ESISTUBE.ECF24.250
THE EFFECT OF RESIDUAL STRESSES ON TRANSVERSE CRACKING IN CROSS-PLY COMPOSITE LAMINATES	García, Israel G.; Mantic, Vladislav	https://doi.org/10.53254/ESISTUBE.ECF24.251
DESIGN OF TOUGH INHOMOGENEOUS MATERIALS FOR BIAXIAL LOADING	Brescakovic, Drazen; Kolednik, Otmar	https://doi.org/10.53254/ESISTUBE.ECF24.252
NOVEL XPS LIGHTWEIGHT THERMOINSULATING CEMENT MORTAR: EXPERIMENTAL INVESTIGATION OF THE MECHANICAL BEHAVIOUR	Metaxa, Zoi S.; Kytinou, Violetta K.; Prokopiou, Vasilios D.; Zapis, Adamantis G.; Apostolidou, Eleni; Alexopoulos, Nikolaos D.	https://doi.org/10.53254/ESISTUBE.ECF24.253
A STUDY ON EVALUATION OF NON-PROPORTIONAL MULTIAXIAL LOADING EFFECT ON FATIGUE LIFE UNDER WIDE-RENGED MULTIAXIAL STRESS STATE	Itoh, Takamoto; He, Lei	https://doi.org/10.53254/ESISTUBE.ECF24.254
DISLOCATION MULTIPLICATION AND STRUCTURES IN MICRO-SIZED NICKEL SINGLE CRYSTAL UNDER LOW-AMPLITUDE CYCLIC LOADING	Sugisaka, Kota; Abe, Masataka; Sumigawa, Takashi	https://doi.org/10.53254/ESISTUBE.ECF24.255
HIGH TEMPERATURE FRACTURE TOUGHNESS TESTS ON P91 STEEL	Perez, Arthur Félix; Calvet, Tristan François; Wang, Yiqiang; Davies, Catrin Mair	https://doi.org/10.53254/ESISTUBE.ECF24.256
ELECTRICAL RESISTANCE-BASED FATIGUE DAMAGE ASSESSMENT OF STEELS	Sauer, Lukas Maximilian; Lingnau, Lars Andree; Otto, Johannes Leon; Walther, Frank	https://doi.org/10.53254/ESISTUBE.ECF24.257

Presentation title	Authors	DOI
A DISCUSSION ON ALTERNATIVE APPROACHES TO CT COUPON BASED K1C DETERMINATION PROVIDING RESULTS COMPARABLE WITH ASTM E 399	Iyengar, Parthasarathy; Mardaras, Jon; Olmo-Mora, Raul; Soe, Shwe	https://doi.org/10.53254/ESISTUBE.ECF24.258
COMMENTARY ON THE USE OF PUBLISHED FATIGUE CURVES AND CONDUCTING CONSTANT DISPLACEMENT KIH FRACTURE MECHANICS TESTING OF METALLIC MATERIALS	Holm, Mads; Bangsgaard, Ditte Bilgrav; Holdstock, Rian	https://doi.org/10.53254/ESISTUBE.ECF24.259
PREDICTING THE PENETRATION RATE OF DIAMOND CORE DRILLING USING P-WAVE VELOCITY	Kahraman, Sair; Malakni, Abdalrahim A.M.	https://doi.org/10.53254/ESISTUBE.ECF24.260
IN SITU 3D ANALYSIS FOR DEFORMATION-INDUCED MARTENSITIC TRANSFORMATION IN METASTABLE AUSTENITIC ALLOY BY SYNCHROTRON X-RAY	Iwano, Tatsuya; Takakuwa, Osamu; Hirayama, Kyosuke; Toda, Hiroyuki	https://doi.org/10.53254/ESISTUBE.ECF24.261
UAV-BASED THERMOGRAPHIC INSPECTION OF WIND TURBINE BLADES FOR STRUCTURAL INTEGRITY ASSESSMENT	Mesquita, Hugo; Sousa, Pedro J.; Dias, Susana; Domingues, Tiago; Tavares, Paulo J.; Moreira, Pedro M. G. P.	https://doi.org/10.53254/ESISTUBE.ECF24.262
CRACK DETECTION ON HIGH-RESOLUTION IMAGES OF STEEL BRIDGES	Kompanets, Andrii; Leonetti, Davide; Snijder, Bert	https://doi.org/10.53254/ESISTUBE.ECF24.263
EXTRACTION OF CREEP MATERIAL CONSTANTS FOR MOD.9CR-1MO WELDED JOINTS BY AUTOMATED INDENTATION CREEP TEST	Sakane, Masao; Makinose, Shota; Tokuda, Kenji; Itoh, Takamoto; He, Lei	https://doi.org/10.53254/ESISTUBE.ECF24.264
EFFECT OF THERMAL-EXPANSION MISMATCH ON THERMOMECHANICAL BEHAVIOUR OF COMPACTED GRAPHITE IRON	Cao, Minghua; Baxevanakis, Konstantinos; Silberschmidt, Vadim	https://doi.org/10.53254/ESISTUBE.ECF24.265
FATIGUE ANALYSIS OF AXISYMMETRIC CHIRAL CELLULAR STRUCTURES MADE OF 316L STAINLESS STEEL	Žnidarič, Žiga; Novak, Nejc; Nečemer, Branko; Glodež, Srečko	https://doi.org/10.53254/ESISTUBE.ECF24.266
UNDERSTANDING THE MIXED MODE FRACTURE BEHAVIOUR OF PRESSURELESS SILVER SINTERED JOINTS DESIGNED FOR POWER PACKAGES	Schoenmakers, Noud P.T.; Hoefnagels, Johan P.M.; Smits, Edsger C.P.; Sluis, Olaf v.d.	https://doi.org/10.53254/ESISTUBE.ECF24.267

Presentation title	Authors	DOI
EVALUATING QUASI-STATIC AND FATIGUE PERFORMANCE OF ALSI10MG SHEET-TPMS-BASED LATTICES: IMPACT OF SCALE, UNIT CELL SIZE AND WALL THICKNESS	Xu, Zhuo; Sarkar, Aritra; Branco, Ricardo; Borrego, Luis; Wronski, Sebastian; Razavi, Nima	https://doi.org/10.53254/ESISTUBE.ECF24.268
MICROMECHANICS MODELING OF CERAMIC MATRIX COMPOSITES CONSIDERING THE PROBABILITY OF CRACK DEFLECTION	Shimada, Takehiro; Watanabe, Tsubasa	https://doi.org/10.53254/ESISTUBE.ECF24.269
MACRO TO MICRO IN FRACTURE	Sherman, Dov	https://doi.org/10.53254/ESISTUBE.ECF24.270
YET ANOTHER DYNAMIC FRACTURE STUDY ON PMMA : COMPARATIVE ANALYSIS OF LOCAL AND GLOBAL TOUGHNESS AND FRACTURE ENERGY MEASUREMENTS.	FOURNIER, Vincent; GIRARDOT, Jeremie; KOPP, Jean Benoit	https://doi.org/10.53254/ESISTUBE.ECF24.271
BRITTLE FAILURE OF AN 18MND5 STEEL IN THE LOWER PART OF THE TRANSITION CURVE: EFFECT OF GEOMETRY AND TEMPERATURE	Catel, Emmanuelle; Dahl, Anna; Lorentz, Eric; Besson, Jacques	https://doi.org/10.53254/ESISTUBE.ECF24.272
EFFECTS OF HEAT TREATMENT ON FRACTURE TOUGHNESS AND BRITTLE FRACTURE INITIATION MECHANISM OF QUENCHED AND TEMPERED NUCLEAR PRESSURE VESSEL STEEL (A508-GRADE 3)	Papin, Julie; Delattre, Jean-Baptiste; Flament, Jean Luc; Marini, Bernard; Joly, Pierre; Mathieu, Jean-Philippe; Vincent, Ludovic; Gourgues-Lorenzon, Anne-Françoise	https://doi.org/10.53254/ESISTUBE.ECF24.273
MECHANICAL AND FRACTURE MECHANICS INVESTIGATIONS OF UNI-DIRECTIONALLY FIBRE-REINFORCED THERMOPLASTIC POLYMER TAPES	Lach, Ralf; Celevics, Stefanie; Jahn, Ivonne; John, Marianne; Teuscher, Nico; Tillner, Benjamin; Langer, Beate; Grellmann, Wolfgang	https://doi.org/10.53254/ESISTUBE.ECF24.274
BAYESIAN ANALYSIS OF FRACTURE OF POLYAMIDE 12 U-NOTCHED SPECIMENS	Gomez, Javier; Gómez-del-Río, Teresa; Rodríguez, Jesús	https://doi.org/10.53254/ESISTUBE.ECF24.275
INFLUENCE OF FDM PRINTING PARAMETERS ON THE COMPRESSIVE MECHANICAL PROPERTIES AND FRACTURE BEHAVIOR OF ABS MATERIAL	Delić, Marko; Mandić, Vesna; Aleksandrović, Srbislav; Arsić, Dušan; Ivković, Djordje; Adamović,	https://doi.org/10.53254/ESISTUBE.ECF24.276

Presentation title	Authors	DOI
	Dragan; Ratković, Nada	
A CONCURRENT MULTI-SCALE MODELING APPROACH FOR FRACTURE IN POLYMERS	Norouzi, Saeed; Müller-Plathe, Florian	https://doi.org/10.53254/ESISTUBE.ECF24.277
CHARACTERIZATION OF STRUCTURE-PROPERTY RELATIONSHIPS IN COMPRESSION MOLDED LINEAR LOW-DENSITY POLYETHYLENE (LLDPE) FILMS USING CROSS-FRACTIONATION CHROMATOGRAPHY (CFC)	Chae, Junkeun; Kim, Donguk; Han, Seong Bin; Hong, Seok Bin; Choi, Byoung-Ho	https://doi.org/10.53254/ESISTUBE.ECF24.278
LASER BEAM WELDING OF AERONAUTICAL AL-CU-LI SHEETS: QUASI-STATIC TENSILE MECHANICAL PERFORMANCE AND QUALITY ASSESSMENT OF WELDED JOINTS	Charalampidou, Margarita Christina; EXAMILIOTI, Theano; KASHAEV, Nikolai; KLUSEMANN, Benjamin; Alexopoulos, Nikolaos D.	https://doi.org/10.53254/ESISTUBE.ECF24.279
NUMERICAL SIMULATION OF CORROSION ATTACK ON AL-CU-LI 2198 ALLOY IN DIFFERENT AGEING TEMPERatures	Louka, Eleftheria-Sotiria; Papanikos, Paraskevas; Margaritis, Markos; Charalampidou, Christina-Margarita; ALEXOPOULOS, Nikolaos	https://doi.org/10.53254/ESISTUBE.ECF24.280
DEEP LEARNING-BASED APPROACH FOR MEASURING FGA ON VHCF FRACTURE SURFACES	LI, RUJUN; Zhang, Wei; Tridello, Andrea; Paolino, Davide; Peng, Yan	https://doi.org/10.53254/ESISTUBE.ECF24.281
FLEXING SPLITTED-FREQUENCY INDEXES (FSFI), A NOVEL METHOD & DAMAGE CHARACTERIZATION FOR 1-D VIBRATION-BASED SHM	Gomez-Mancilla, Julio C.	https://doi.org/10.53254/ESISTUBE.ECF24.282
PRELIMINARY STUDY OF TUNING MECHANICAL RESPONSE OF NONUNIFORM TRIANGULAR LATTICE MATERIAL VIA GRAPH NEURAL NETWORKS	Bonfanti, Giuseppe; Buccino, Federica; Vergani, Laura Maria; Gao, Chao	https://doi.org/10.53254/ESISTUBE.ECF24.283
DETERMINATION OF STRAIN-STRESS CURVES AND RELATED MATERIAL PROPERTIES THROUGH GENETIC ARTIFICIAL INTELLIGENCE	Laurenti, Marcello; Foti, Pietro; Tirillo', Jacopo; Berto, Filippo	https://doi.org/10.53254/ESISTUBE.ECF24.284
APPLICATION OF ARTIFICIAL INTELLIGENCE IN THE EVALUATION OF NDT IMAGING	Kulcsár, Benedek; Dudra, Judit; Zsíros, Zsombor; Margitai,	https://doi.org/10.53254/ESISTUBE.ECF24.285

Presentation title	Authors	DOI
	Péter; Pataki, Márton; Szávai, Szabolcs	
CRYSTAL PLASTICITY COUPLED COHESIVE INTERFACE SIMULATIONS OF INTERGRANULAR CRACKING IN NICKEL-BASED ALLOY 600	Shi, Puyu; Jivkov, Andrey; Engelberg, Dirk; Smith, Mike	https://doi.org/10.53254/ESISTUBE.ECF24.286
EVALUATING THE SENSITIVITIES OF CISCC FOR STAINLESS STEEL IN NUCLEAR WASTE STORAGE CANISTER ENVIRONMENTS	Blust, Sarah M.; Burns, James T.	https://doi.org/10.53254/ESISTUBE.ECF24.287
SERVICEABILITY ASSESSMENT OF EXISTING GAS PIPELINES OF UKRAINE UNDER HYDROGEN TRANSPORTATION	Zvirko, Olha	https://doi.org/10.53254/ESISTUBE.ECF24.288
HYDROGEN EMBRITTLEMENT OF Ti-6Al-4V MANUFACTURED WITH ELECTRON BEAM POWDER BED FUSION (PBF-EB)	Endrös, Paula; Razavi, Nima; Johnsen, Roy; Lu, Xu	https://doi.org/10.53254/ESISTUBE.ECF24.289
IMPACT OF HYDROGEN-MICROSTRUCTURE INTERACTIONS ON FRACTURE BEHAVIOR IN ADDITIVELY MANUFACTURED 718 ALLOY	Cozlin, Dylan; Medina, Frank; Diaz, Julio C.; Nabil, Shad T.; Oudriss, Abdelali; Feaugas, Xavier; Bouhattate, Jamaa	https://doi.org/10.53254/ESISTUBE.ECF24.290
FRACTURE BEHAVIOUR OF PIPELINE STEEL DEPENDING ON HYDROGEN CONTENT IN MATERIAL	Syrotyuk, Andriy; Dmytrakh, Ihor; Leshchak, Rostyslav; Malyk, Oleh	https://doi.org/10.53254/ESISTUBE.ECF24.291
INVESTIGATING THE COMPATIBILITY OF METALLIC MATERIALS WITH HYDROGEN GAS: IMPLICATIONS FOR SUSTAINABLE ENERGY SYSTEMS	MAKSOU, LOUIS; DELAUTRE, GUILLAUME; ABETINOT, FLORENT; BARJHOUX, PIERRE	https://doi.org/10.53254/ESISTUBE.ECF24.292
LOADING RATE DEPENDENCY OF MODE I FRACTURE STRENGTH OF EPOXY ADHESIVE JOINTS EVALUATED BY SHPB AND LASER SHOCK-WAVE ADHESION TESTS	Takagi, Aoi; Hosoya, Yuichi; Kasuya, Yuto; Yonezu, Akio	https://doi.org/10.53254/ESISTUBE.ECF24.293
MODELLING OF DUCTILE FRACTURE USING A MICRO-MECHANICALLY MOTIVATED MODEL	Næss, Håvard; Morin, David; Hopperstad, Odd Sture	https://doi.org/10.53254/ESISTUBE.ECF24.294
STRESS STATE IN WELDED JOINT SPECIMENS WITH MULTIPLE DEFECTS	Sedmak, Simon; Aranjelović, Mihajlo; Berto, Filippo; Dikić,	https://doi.org/10.53254/ESISTUBE.ECF24.295

Presentation title	Authors	DOI
	Stefan; Milovanović, Nikola	
DYNAMIC PROPAGATION OF INTERFACE CRACKS USING THE PRINCIPLE OF MINIMUM TOTAL ENERGY SUBJECTED TO A STRESS CONDITION (PMTE-SC)	Muñoz Reja, Mar; Vodička, Roman; Mantič, Vladislav; Távora, Luis	https://doi.org/10.53254/ESISTUBE.ECF24.296
GRADIENT SCALED PHASE FIELD METHODS TO PREDICT SIZE AND SHAPE EFFECT ON THE APPARENT STRENGTH OF MATERIALS	Asur Vijaya Kumar, Pavan Kumar; Pettermann, Heinz E; Paggi, Marco	https://doi.org/10.53254/ESISTUBE.ECF24.297
THE ROLE OF NEW ULTRASONIC EXAMINATION TECHNIQUES IN INTEGRITY ASSESSMENT OF PRESSURE VESSELS WITH DEFECTS	Opačić, Mirjana; Sedmak, Aleksandar; Sedmak, Simon; Milovanović, Nikola	https://doi.org/10.53254/ESISTUBE.ECF24.298
EXPERIMENTS AND NUMERICAL SIMULATIONS ON LOW-CYCLE DUCTILE DAMAGE AND FAILURE UNDER BIAxIAL BICYCLIC LOADING CONDITIONS	Gerke, Steffen; Wei, Zhichao; Brünig, Michael	https://doi.org/10.53254/ESISTUBE.ECF24.299
SIMULATION OF DUCTILE FRACTURE IN ALUMINIUM PLATES WITH AND WITHOUT RESIDUAL STRESSES USING FINITE ELEMENT DAMAGE ANALYSIS	Jun-Won, Park; Eui-Kyun, Park; Yun-Jae, Kim	https://doi.org/10.53254/ESISTUBE.ECF24.300
DAMAGE EVALUATION OF AN ALUMINUM ALLOY UNDER CRYOGENIC-IRRADIATION CONDITION	Kim, Tae-Yong; Chang, Yoon-Suk	https://doi.org/10.53254/ESISTUBE.ECF24.301
INFLUENCE OF CRACKS AND RESIDUAL STRESSES ON THE LIMIT LOAD OF THICK-WALLED CYLINDERS	Hadidimoud, Saeid; Gholampour, Amid	https://doi.org/10.53254/ESISTUBE.ECF24.302
NOTES ON GEOMETRY OF HELICOIDAL MODELING	Kureš, Miroslav; Navrátil, Dušan	https://doi.org/10.53254/ESISTUBE.ECF24.303
THERMODYNAMICALLY CONSISTENT FE SIMULATION OF FATIGUE CRACK PROPAGATION CONSIDERING CYCLIC PLASTICITY EFFECTS AND THE MECHANICS OF MATERIAL FORCES	Panic, Darko	https://doi.org/10.53254/ESISTUBE.ECF24.304
A NEW IMPLEMENTATION OF THE ITERATIVE PERTURBATION METHOD FOR FATIGUE CRACK GROWTH SIMULATION	David, Louis; Lazarus, Véronique	https://doi.org/10.53254/ESISTUBE.ECF24.305

Presentation title	Authors	DOI
A SIMPLE WAY TO DETERMINE THE CRACK PROPAGATION LIFE OF THREE-DIMENSIONAL CRACKS	de Moura Pinho, Raül	https://doi.org/10.53254/ESISTUBE.ECF24.306
MODELING OF THE FRAGMENTATION OF UO2 NUCLEAR PELLET DURING AN ACCIDENTAL SITUATION USING THE DISCRETE ELEMENT METHOD (DEM) COUPLED WITH COHESIVE ZONE MODEL (CZM)	Nusslé, Adrien; Dubois, Frédéric; Masson, Renaud; Monerie, Yann; Muller, Emmanuelle; Vanson, Jean-Mathieu	https://doi.org/10.53254/ESISTUBE.ECF24.307
NUMERICAL SIMULATION OF FATIGUE CRACK GROWTH IN HIGH PRESSURE TURBINE CASING	grbovic, aleksandar; kastratovic, gordana; videnovic, nenad; sedmak, aleksandar; sedmak, simon	https://doi.org/10.53254/ESISTUBE.ECF24.308
WEIGHT FUNCTION METHOD IN PRESSURISED THERMAL SHOCK ANALYSIS FOR THROUGH CLAD DEFECTS IN A REACTOR PRESSURE VESSEL	Antonchenko, Vitalii; Dubyk, Yaroslav; Ishchenko, Oleksii	https://doi.org/10.53254/ESISTUBE.ECF24.309
THE EFFECT OF CROSS-CONTAMINATIONS IN AL AND CU FEEDSTOCK ON LASER POWDER BED FUSION PARTS	Singer, Christopher; Horn, Max; Schlick, Georg; Schilp, Johannes; Zabihzadeh, Saba; Charalampidou, Christina-Margarita; ALEXOPOULOS, Nikolaos	https://doi.org/10.53254/ESISTUBE.ECF24.310
LOW-ENERGY LASER PEENING FOR STRUCTURAL INTEGRITY IMPROVEMENT OF THIN WELDED COMPONENTS	Sano, Yuji; Masaki, Kiyotaka; Mizuta, Yoshio; Tamaki, Satoshi; Hosokai, Tomonao	https://doi.org/10.53254/ESISTUBE.ECF24.311
FATIGUE LIFE EXTENDING BY INNOVATIVE LASER PEENING ON A2024-T3 ALUMINUM ALLOY	MASAKI, Kiyotaka; SANO, Tomokazu; SANO, Yuji	https://doi.org/10.53254/ESISTUBE.ECF24.312
EFFECTS OF LASER SHOCK PEENING WITHOUT COATING ON THIN CLAD AND UNCLAD AERONAUTICAL 2024-T3 ALUMINIUM ALLOY	Polese, Claudia; van Aswegen, Dean	https://doi.org/10.53254/ESISTUBE.ECF24.313
ENHANCING PROPERTIES OF WIRE ARC ADDITIVE MANUFACTURED ER5356 AL ALLOY WITH VIBRATION-ASSISTED DEPOSITION AND LASER SHOCK PEENING	Imširović, Mirza; Trdan, Uroš; Trdan, E. A.; Klobčar, Damjan; Nagode, Aleš; Čepon, Gregor; Berthe, Laurent	https://doi.org/10.53254/ESISTUBE.ECF24.314

Presentation title	Authors	DOI
IN SITU FULL-FIELD ELASTIC STRAIN MAPPING BY HR-EBSD OF A SHORT FATIGUE CRACK	Su, Xiao; Marrow, Thomas James	https://doi.org/10.53254/ESISTUBE.ECF24.315
IN-SITU OBSERVATION OF DEFORMATION MECHANISMS IN FINE-GRAINED NUCLEAR GRAPHITE BY HIGH TEMPERATURE DISC COMPRESSION	Williamson, Marcus; Whybrow, Rory; Michalik, Stefan; Reinhard, Christina; Marrow, Thomas James	https://doi.org/10.53254/ESISTUBE.ECF24.316
FRACTURE CHARACTERISTICS OF THE CRMNFECONI ALLOY: COARSE-GRAINED VS. NANOCRYSTALLINE GRAIN SIZE REGIME	Hohenwarter, Anton; Pillmeier, Simon; Pippan, Reinhard; Eckert, Jürgen	https://doi.org/10.53254/ESISTUBE.ECF24.317
MARTENSITE MICRO-PLASTICITY & DAMAGE, UNRAVELED BY NANO-TO MACRO-SCALE IN-SITU STRAIN MAPPING & CP MODELLING	Hoefnagels, Johan; Vermeij, Tijmen; Wijnen, Job; Rezazadeh, Vahid; Geers, Marc; Peerlings, Ron	https://doi.org/10.53254/ESISTUBE.ECF24.318
THE EFFECT OF PLASTICITY ON CLEAVAGE INITIATORS IN LOCAL APPROACH TO FRACTURE MODELLING	Ford, Michael; Jivkov, Andrey; James, Peter	https://doi.org/10.53254/ESISTUBE.ECF24.319
THE EFFECT OF T-STRESS ON FATIGUE CRACK GROWTH PATH STABILITY IN THIN-WALLED AA2024-T3 SHEETS	Schöne, Vanessa; Strohmann, Tobias; Breitbarth, Eric	https://doi.org/10.53254/ESISTUBE.ECF24.320
NUMERICAL MODELLING OF MICROPOROSITY EFFECTS ON THE MECHANICAL BEHAVIOUR OF TITANIUM SCAFFOLDS PRODUCED BY DIRECT INK WRITING	Slámečka, Karel; Skalka, Petr; Pokluda, Jaroslav	https://doi.org/10.53254/ESISTUBE.ECF24.321
FATIGUE OF METALLIC GLASSES AFTER AN OVERLOAD AS A FIRST STEP TO FATIGUE UNDER VARIABLE AMPLITUDE LOADING	Marx, Michael; Busch, Ralf; Motz, Christian	https://doi.org/10.53254/ESISTUBE.ECF24.322
MECHANISM OF FATIGUE FAILURE IN A SIMULATED RECYCLED 6082 AL-ALLOY	Sarkar, Aritra; Holmestad, Jon; Arbo, Siri Marthe; Nyhus, Bård; Razavi, Nima	https://doi.org/10.53254/ESISTUBE.ECF24.323
MICROSTRUCTURE-BASED TENSILE INDICATOR FOR ASSESSING HIGH-CYCLE AND VERY-HIGH-CYCLE FATIGUE OF TITANIUM ALLOYS WITH ADDITIVE AND CONVENTIONAL MANUFACTURING	PAN, Xiangnan; TAO, Zhiqiang; HONG, Youshi	https://doi.org/10.53254/ESISTUBE.ECF24.324

Presentation title	Authors	DOI
IN-DEPTH ANALYSIS OF NANOSCALE DEFORMATION MECHANISMS OF HOT-DIP GALVANIZED ZINC COATINGS BY USING IN-SITU SEM, EBSD & DIC	Slokker, Gert-Jan; König, Dennis; Mornout, Casper; Vermeij, Tijmen; Hoefnagels, Johan	https://doi.org/10.53254/ESISTUBE.ECF24.325
MICROSTRUCTURE BASED ANALYSIS OF PLASTICITY AND FAILURE OF DUAL PHASE STEELS	Çelikses, Eren; Yelek, İbrahim; Akbaş, Yasin; Tatlı, Berkehan; Erdogan, Can; Yalçinkaya, Tuncay	https://doi.org/10.53254/ESISTUBE.ECF24.326
MECHANICAL CHARACTERIZATION AND MODELING OF CYCLIC AND TIME DEPENDENT BEHAVIOR OF A SOFT 3D PRINTED PHOTOPOLYMER	Avanzini, Andrea; Battini, Davide; Bonometti, Silvio; Libonati, Flavia	https://doi.org/10.53254/ESISTUBE.ECF24.327
IMPACT OF MICRO AND MESOSTRUCTURE ON THE FAILURE RESISTANCE OF LASER POWDER BED FUSION-PROCESSED MATERIALS	Gludovatz, Bernd; Paul, Moses J; Kruzic, Jamie J; Ramamurty, Upadrasta	https://doi.org/10.53254/ESISTUBE.ECF24.328
EFFECT OF NOTCHES ON STATIC AND DYNAMIC BENDING OF 3D PRINTED PLA AND PLA REINFORCED WITH SHORT CARBON FIBERS	Valean, Estera; Marsavina, Liviu; Galatanu, Sergiu; Foti, Pietro; Berto, Filippo	https://doi.org/10.53254/ESISTUBE.ECF24.329
EFFECT OF DESIGN OPTIMIZATION AND MATERIAL SELECTION ON THE FATIGUE PERFORMANCE AND FRACTURE MECHANISM OF A CRANK ARM	Afkhami, Shahriar; Lipiäinen, Kalle; Komi, Erin; Pesonen, Tero; Moshtaghi, Masoud	https://doi.org/10.53254/ESISTUBE.ECF24.330
THE EFFECT OF INFILL DENSITY ON FRACTURE TOUGHNESS RESULTS OF PLA MATERIAL	Milovanović, Aleksa; Babinský, Tomáš; Milošević, Miloš; Sedmak, Aleksandar	https://doi.org/10.53254/ESISTUBE.ECF24.331
ON THE FRACTURE TOUGHNESS OF WIRE-ARC DIRECTED ENERGY DEPOSITED AA2024	Silmbroth, Mathias; Enzinger, Norbert; Klein, Thomas; Gludovatz, Bernd	https://doi.org/10.53254/ESISTUBE.ECF24.332
NUMERICAL MODEL FOR IN-PLANE FLEXURAL BEHAVIOUR SIMULATION OF TITANIUM LATTICE-CORED SHORT BEAMS	Bellini, Costanzo; Borrelli, Rosario; Di Cocco, Vittorio; Franchitti, Stefania; Iacoviello, Francesco; Mocanu, Larisa Patricia; Sorrentino, Luca	https://doi.org/10.53254/ESISTUBE.ECF24.333
EXPERIMENTAL AND NUMERICAL INVESTIGATION OF FRETTING	Glodek, Grzegorz; Gothivarekar,	https://doi.org/10.53254/ESISTUBE.ECF24.334

Presentation title	Authors	DOI
FATIGUE RESPONSE IN ADDITIVELY MANUFACTURED TI-6AL-4V	Sanjay; Van Hooreweder, Brecht; Talemi, Reza	
EFFECTS OF DEFECT AND MICROSTRUCTURE ON HIGH-CYCLE FATIGUE OF SLM TI-6AL-4V	Wen, Jian-Feng; Dong, Nai-Jian; Wang, Kang-Kang; Chen, Bo; Tu, Shan-Tung	https://doi.org/10.53254/ESISTUBE.ECF24.335
CYCLIC ELASTIC LOADING BEHAVIOR IN PRE-STRAINED LATTICE STRUCTURES	Senegaglia, Ivan; Macoretta, Giuseppe; Grossi, Tommaso; Monelli, Bernardo Disma	https://doi.org/10.53254/ESISTUBE.ECF24.336
A FRACTURE MECHANICS-BASED FATIGUE ASSESSMENT OF ADDITIVELY MANUFACTURED LATTICE STRUCTURES FROM A205 ALLOY POWDERS	Collini, Francesco; Beevers, Emilie; Celik, Berk Baris; Van Hooreweder, Brecht; Meneghetti, Giovanni	https://doi.org/10.53254/ESISTUBE.ECF24.337
FRACTURE-MECHANICAL ASSESSMENT OF THE EFFECT OF DEFECTS ON THE FATIGUE LIFE OF ADDITIVELY MANUFACTURED TITANIUM ALUMINIDES	Teschke, Mirko; Moritz, Juliane; Marquardt, Axel; Semjatov, Nick; Leyens, Christoph; Körner, Carolin; Walther, Frank	https://doi.org/10.53254/ESISTUBE.ECF24.338
A GENERAL PROBABILISTIC CONTROL VOLUME MODEL TO PREDICT FATIGUE PERFORMANCE WITH SPECIMEN SIZE EFFECT OF ALLOYS	Hong, Youshi; Tao, Zi-Qiang; Wang, Zibiao; Pan, Xiangnan; Qian, Guian	https://doi.org/10.53254/ESISTUBE.ECF24.339
EFFECTS OF POST-HEAT TREATMENT ON THE MECHANICAL PROPERTIES OF ADDITIVE MANUFACTURED 316L STAINLESS STEEL AND INCONEL 625 SUPER ALLOY	Rajashilpige, Yasith H.; Yildiz, Rasid A.; Malekan, Mohammad	https://doi.org/10.53254/ESISTUBE.ECF24.340
DAMAGE MECHANICS APPROACH FOR ADDITIVELY MANUFACTURED NICKEL-BASED SUPERALLOY	Yuan, Huang; Jin, Shenzhe	https://doi.org/10.53254/ESISTUBE.ECF24.341
EFFECT OF SERVICE TEMPERATURE ON THE FAILURE CHARACTERISTICS OF ADDITIVELY MANUFACTURED 13CR10NI2AL STAINLESS TOOL STEEL	Afkhami, Shahriar; Ghafouri, Mehran; Poutiainen, Ilkka; Pokka, Aki-Petteri; Javaheri, Vahid; Larkiola, Jari; Björk, Timo; Moshtaghi, Masoud	https://doi.org/10.53254/ESISTUBE.ECF24.342

Presentation title	Authors	DOI
ELEVATED TEMPERATURE FATIGUE BEHAVIOR OF NOTCHED SPECIMENS PRODUCED BY L-PBF IN INCONEL 718	Macoretta, Giuseppe; Monelli, Bernardo Disma; Berto, Filippo	https://doi.org/10.53254/ESISTUBE.ECF24.343
EXPERIMENTAL STUDY OF DIFFERENT MECHANICAL POST-TREATMENTS APPLIED ON ADDITIVELY MANUFACTURED 17-4PH STAINLESS STEEL PARTS.	Naim, Mahmoud; Chemkhi, Mahdi; Bousset, Julien; Alhussein, Akram	https://doi.org/10.53254/ESISTUBE.ECF24.344
INCUBATION TIME CONCEPT FOR CRACK PROPAGATION PROBLEMS	Petrov, Yuri; Kazarinov, Nikita; Utkin, Alexander	https://doi.org/10.53254/ESISTUBE.ECF24.345
INFLUENCE OF NOTCH WIDTH ON MODE II DYNAMIC FRACTURE TOUGHNESS OF TC4 ALLOY	Xu, Zejian; Fan, Changzeng	https://doi.org/10.53254/ESISTUBE.ECF24.346
IN-SITU CHARACTERISATION OF DYNAMIC FRACTURE IN AL2O3 USING ULTRA-FAST X-RAY PHASE CONTRAST RADIOSCOPY	HENRY, Quentin; KOPP, Jean-Benoit; LE BARBENCHON, Louise; LUKIC, Bratislav; GIRARDOT, Jérémie; COHEN, Amitay; RACK, Alexander; VIOT, Philippe	https://doi.org/10.53254/ESISTUBE.ECF24.347
THE DYNAMIC MINI THREE-POINT BENDING EXPERIMENTAL TECHNIQUE	Fan, Changzeng; Xu, Zejian; Cai, Zhicheng	https://doi.org/10.53254/ESISTUBE.ECF24.348
STRUCTURAL INTEGRITY ASSESSMENT OF A LIGHTWEIGHT BICYCLE FRAME: FINITE ELEMENT ANALYSIS AND EXPERIMENTAL TESTING	Arcieri, Emanuele Vincenzo; Baragetti, Sergio	https://doi.org/10.53254/ESISTUBE.ECF24.349
FRACTURE STRESS TRIAXIALITY OF TI-6AL-4V FOR COMPUTATIONAL DESIGN OF DAMAGE TOLERANT AERO ENGINES	Beecher Cotal, Carlos Alberto; Narayan, Sunny; Duchêne, Laurent; Medina, Carlos; Tuninetti, Víctor	https://doi.org/10.53254/ESISTUBE.ECF24.350
INFLUENCE OF THE IMPACT SPEED ON THE DAMAGE OF A 7075-T6 HOURGLASS SPECIMEN: A FINITE ELEMENT STUDY	Arcieri, Emanuele Vincenzo; Baragetti, Sergio; Bozic, Zeljko	https://doi.org/10.53254/ESISTUBE.ECF24.351
INFLUENCE OF PRIOR CORROSION ON THE FATIGUE BEHAVIOR IN A SIMULATED RECYCLED 6082 AL-ALLOY	Sarkar, Aritra; Tråstadkjølen, Simen Ulleberg; Wilson, Håvard; Nyhus, Bård; Razavi, Nima	https://doi.org/10.53254/ESISTUBE.ECF24.352

Presentation title	Authors	DOI
ENHANCEMENT OF MECHANICAL PROPERTIES OF HIGH-MN TWIP STEEL WITH FAST HEATING PROCESS: INSIGHTS INTO MICROSTRUCTURAL EVOLUTION AND PERFORMANCE OPTIMIZATION	Hamada Saleh, Atef Saad; Khosravifard, Ali; Jaskari, Matias; Järvenpää, Antti	https://doi.org/10.53254/ESISTUBE.ECF24.353
IMPACT OF STRAIN RATE-DEPENDENT MATERIAL MODELS ON CRASHWORTHINESS SIMULATIONS BY USING LS-DYNA	Aytimur, Elif Ezgi	https://doi.org/10.53254/ESISTUBE.ECF24.354
ON ANALYTICAL MODEL OF INTERFACE CRACK IN BONDING QUASI-BRITTLE MATERIAL BETWEEN DISTINCT ELASTIC MEDIA	Dudyk, Mykhailo; Kaminsky, Anatoly; Reshitnyk, Yuliia; Chornoivan, Yuri	https://doi.org/10.53254/ESISTUBE.ECF24.355
ENHANCING THE INTEGRITY OF A PIPING SYSTEM SUBJECTED TO LONG-TERM OPERATION AT HIGH-TEMPERATURE IN THE CREEP RANGE	LEE, Hyeong-Yeon; NAM, Ki-Ean; HA, Seung-Woo; YOON, Min-Su	https://doi.org/10.53254/ESISTUBE.ECF24.356
STRAIN RATE DEPENDENCE MEASUREMENT METHOD BASED ON BALL IMPACT AND INDENTATION TESTS	Ito, Kiyohiro; Ichikawa, Yuji	https://doi.org/10.53254/ESISTUBE.ECF24.357
FLEXURAL PROPERTIES OF HIGH-STRENGTH CONCRETE WITH VARIABLE COMPOSITION OF SYNTHETIC FIBERS AT ELEVATED TEMPERATURES	Hawileh, Rami Anton; Assad, Maha; Abdalla, Jamal; Selim, Ahmed; Mohamed, Abdulrahman; Madkour, Abdulrahman	https://doi.org/10.53254/ESISTUBE.ECF24.358
THE EFFECT OF ANCHOR'S INCLINATION ANGLE ON THE FLEXURAL ENHANCEMENT OF CFRP-STRENGTHENED RC BEAMS	Assad, Maha; Hawileh, Rami; Abdalla, Jamal	https://doi.org/10.53254/ESISTUBE.ECF24.359
PREDICTION OF THE COMPRESSIVE STRENGTH OF NORMAL CONCRETE WITH VARIABLE PERCENTAGES OF FLY ASH USING MACHINE LEARNING	Safieh, Hussam; Hawileh, Rami; Shaw, Sayan; Abdalla, Jamal	https://doi.org/10.53254/ESISTUBE.ECF24.360
INTEGRATING EXPERIMENTAL BOND-SLIP MODELS INTO FINITE ELEMENT MODELLING OF CFRP-STRENGTHENED CONCRETE PRISMS	Salameh, Aseel; Hawileh, Rami; Assad, Maha; Abdalla, Jamal	https://doi.org/10.53254/ESISTUBE.ECF24.361
INTRINSIC FRACTURE ENERGY OF 3D PRINTED CEMENT MORTAR	Huang, Zili; Nguyen, Giang D; Karakus,	https://doi.org/10.53254/ESISTUBE.ECF24.362

Presentation title	Authors	DOI
OBTAINED FROM SNAPBACK BEHAVIOUR IN INDIRECT TENSILE TESTING	Murat; Tung, Tran Thanh; Bui, Ha Hong	
MECHANICAL PERFORMANCE OF SUSTAINABLE PE-ECC USING GGBS AND DUNE SANDS	Shahin, Eyad Magdy; Abdalla, Jamal El-Din; Hawileh, Rami	https://doi.org/10.53254/ESISTUBE.ECF24.363
FAILURE CRITERION FOR THREAD-LIKE FIBERS IN THERMOELASTIC MEDIUM	Yasniy, Oleh; Korniiichuk, Andrii; Didych, Iryna; Tymoshchuk, Dmytro; Pasternak, Iaroslav	https://doi.org/10.53254/ESISTUBE.ECF24.364
MECHANICAL CHARACTERIZATION OF NYLON CF PRINTED BY FDM PROCESS USING ENERGY METHODS	D'Andrea, Danilo; Risitano, Giacomo; Corigliano, Pasqualino; Santonocito, Dario; D'Andrea, Davide	https://doi.org/10.53254/ESISTUBE.ECF24.365
COMPARISON OF GLOBAL AND LOCAL METHODS FOR EVALUATION OF THE MODE I ENERGY RELEASE RATE IN MULTI-DIRECTIONAL COMPOSITE DCB SPECIMENS SUBJECTED TO CYCLIC LOADING	Mega, Mor; Amkies, Roy; Magrafta, Yitzhak Hay; van der Panne, Mike; Pascoe, John-Alan	https://doi.org/10.53254/ESISTUBE.ECF24.366
THE HYBRIDIZATION EFFECT ON THE MECHANICAL AND PIEZORESISTIVE BEHAVIOR OF EPOXY NANOCOMPOSITES	Parente, João Miguel; silva, Abilio; Reis, Paulo	https://doi.org/10.53254/ESISTUBE.ECF24.367
ENHANCING CRACK RESISTANCE AND STRENGTH OF RECYCLED AGGREGATE CONCRETE WITH END-OF-LIFE TIRE STEEL FIBERS	Zia, Asad; Holly, Ivan; Prokop, Jaroslav	https://doi.org/10.53254/ESISTUBE.ECF24.368
EFFECTS OF RESIDUAL STRESS ON THE COMPRESSIVE STRENGTHS OF THERMALLY STRENGTHENED GLASS SPHERES	ZHOU, Fenghua; ZHANG, Jia; Li, Yulong; ZHENG, Yuxuan	https://doi.org/10.53254/ESISTUBE.ECF24.369
MULTI-SCALE RESIDUAL STRESS EVALUATION IN LASER-WELDED EUROFER97 STEEL FOR FUSION PLANT	Sui, Tan	https://doi.org/10.53254/ESISTUBE.ECF24.370
3D BULK RESIDUAL STRAIN EVALUATION USING NEUTRON BRAGG EDGE IMAGING STRAIN TOMOGRAPHY IN LASER-WELDED EUROFER97 STEEL FOR FUSION POWER PLANT	Zhu, Bin; Leung, Nathanael; Kockelmann, Winfried; London, Andrew; Gorley, Michael; Whiting, Mark; Wang, Yiqiang; Sui, Tan	https://doi.org/10.53254/ESISTUBE.ECF24.371

Presentation title	Authors	DOI
DEVELOPING A MACHINE LEARNING MODEL FOR PREDCTING THE CREEP RESPONSE IN SIMILAR FUSION REACTOR JOINTS	Steel, Brandon; Zhu, Bin; Sui, Tan; Zhang, Hannah; Wang, Yiqiang	https://doi.org/10.53254/ESISTUBE.ECF24.372
THE EFFECT OF HIGH HEAT FLUXES ON THE MICRORESIDUAL STRESS DISTRIBUTION FOR W ARMOUR USED IN FUSION REACTORS	Mohamed, Omar; Zhu, Bin; England, David; Wang, Yiqiang; Whiting, Mark; You, Jeong-Ha; Sui, Tan	https://doi.org/10.53254/ESISTUBE.ECF24.373
DEVELOPING CHARACTERISATION TECHNIQUES FOR ANALYSING RESIDUAL STRESS IN DISSIMILAR FUSION REACTORS JOINTS	England, David; Zhu, Bin; Zhang, Hannah; Cox, David; Calvet, Tristan; Davies, Catrin M.; Whiting, Mark J.; Wang, Yiqiang; Sui, Tan	https://doi.org/10.53254/ESISTUBE.ECF24.374
AN ANALYSIS OF FREQUENCY EFFECT IN FATIGUE DATA OF METAL ALLOYS WITH DIFFERENT CRYSTAL STRUCTURES	Dantas, Rita; Gomes, Vítor; Gouveia, Michael; G. A. Silva, Filipe; Correia, José; Lesiuk, Grzegorz; de Jesus, Abílio	https://doi.org/10.53254/ESISTUBE.ECF24.375
THE FRACTOGRAPHY OF HYDROGEN EMBRITTLED AND BASELINE AA2198-T8 AND AA2024-T3 SHEET, INCLUDING PRE-STRETCHING EFFECTS	Mostert, Roelof Johannes; Pretorius, C.C.E.; Charalampidou, Margarita Christina; Alexopoulos, Nikolaos	https://doi.org/10.53254/ESISTUBE.ECF24.376
COMPUTATIONAL WELDING MECHANICS BASED APPROACH FOR THE OPTIMIZATION OF PROCESS PARAMETERS IN LASER WELDING OF IN792 NICKEL BASE ALLOY	Ferro, Paolo; Varone, Alessandra; Angella, Giuliano; Cognini, Francesco; Barbieri, Giuseppe; Montanari, Roberto; Berto, Filippo; Bonollo, Franco	https://doi.org/10.53254/ESISTUBE.ECF24.377
THE BRITTLE FRACTURE OF BODIES WITH PARTIALLY HEALED SURFACE CRACKS	Shatskyi, Ivan; Perepichka, Vasyl; Dalyak, Taras	https://doi.org/10.53254/ESISTUBE.ECF24.378
FATIGUE LIMIT ASSESSMENT OF INTERACTING SMALL DEFECTS BY CYCLIC R-CURVE ANALYSIS	Fladischer, Stefan; Stoschka, Michael; Grün, Florian	https://doi.org/10.53254/ESISTUBE.ECF24.379
UNVEILING B-FADE: BAYESIAN-FATIGUE MODEL ESTIMATOR. OVERVIEW OF THE SOFTWARE PACKAGE AND ITS APPLICATION TO	Tognan, Alessandro; Salvati, Enrico	https://doi.org/10.53254/ESISTUBE.ECF24.380

Presentation title	Authors	DOI
THE PROBABILISTIC EVALUATION OF EL HADDAD CURVES		
COMPARATIVE ANALYSIS OF HIGH-CYCLE FATIGUE BEHAVIOR AND FAILURE MECHANISMS IN ULTRAHIGH-STRENGTH CRNIMOWMNV STEELS	Hamada, Atef Saad; Ali, Mohammed; Ghosh, Sumit; Jaskari, Matias; Allam, Tarek; Schwaiger, Ruth; Eissa, Mamdouh; Mattar, Taha	https://doi.org/10.53254/ESISTUBE.ECF24.381
FATIGUE LIFE ASSESSMENT OF COLD-FORMED ULTRA-HIGH STRENGTH STEEL SECTIONS	Yilmaz, Okan; Van Hoecke, Dennis	https://doi.org/10.53254/ESISTUBE.ECF24.382
FATIGUE BEHAVIOUR OF LPBF-PRODUCED M789 MARTENSITIC STEEL	Sanni, Kashim Ohinoyi; Brochu, Myriam; Cova, Matteo	https://doi.org/10.53254/ESISTUBE.ECF24.383
IMPORTANCE OF WELDED JOINT CHARACTERIZATION IN CONSTRUCTION DESIGNING	Petrović, Ana; Momčilović, Nikola; Đorđević, Branislav; Arandžević, Mihajlo; Sedmak, Simon; Milošević-Mitić, Vesna; Anđelić, Nina	https://doi.org/10.53254/ESISTUBE.ECF24.384
MEAN STRESS EFFECT AND FATIGUE CRACK GROWTH RATE DESCRIPTION IN S355 GRADE STEEL	Lesiuk, Grzegorz	https://doi.org/10.53254/ESISTUBE.ECF24.385
A NEW CONCEPT FOR LARGE-SCALE PRESSURE SYSTEMS STRUCTURAL INTEGRITY	Fekete, Tamás	https://doi.org/10.53254/ESISTUBE.ECF24.386
RISK BASED ASSESSMENT OF STRUCTURAL INTEGRITY – A CASE STUDY	Sedmak, Aleksandar; Sedmak, Simon; Kirin, Snežana; Opačić, Mirjana; Golubović, Tamara	https://doi.org/10.53254/ESISTUBE.ECF24.387
THE SELF-HEATING EFFECT ON HYBRID COMPOSITES	Reis, Paulo Nobre Balbis; Katunin, Andrzej; Wachla, Dominik	https://doi.org/10.53254/ESISTUBE.ECF24.388
THE EFFECT OF FIBER WAVINESS ON THE STIFFNESS OF A POLYMER COMPOSITE MATERIAL	Fedulov, Boris; Bondarchuk, Daria; Lomakin, Evgenii	https://doi.org/10.53254/ESISTUBE.ECF24.389
INTERLAMINAR FRACTURE PROPERTIES OF FLAX FIBRE BIOBASED COMPOSITES INTERLEAVED WITH PPS VEILS	Lowe, Robert; Prasad, Vishnu; Cosic, Petar;	https://doi.org/10.53254/ESISTUBE.ECF24.390

Presentation title	Authors	DOI
	Murphy, Neal; Ivankovic, Alojz	
FATIGUE STRENGTH OF LAMINATED BAMBOO LUMBER UNDER TENSILE LOADING	Franck, Pascal; Bletz-Mühldorfer, Oliver; Bathon, Leander; Scholz, Ronja; Walther, Frank	https://doi.org/10.53254/ESISTUBE.ECF24.391
ANALYSIS OF L-SHAPED FUNCTIONALLY GRADED VISCOELASTIC SHAFTS WITH LONGITUDINAL CRACK UNDER TORSION	Rizov, Victor Iliev	https://doi.org/10.53254/ESISTUBE.ECF24.392
DELAMINATION ANALYSIS OF A FIXED-ENDED MULTILAYERED BEAM UNDER TWISTED SUPPORT	Rizov, Victor Iliev	https://doi.org/10.53254/ESISTUBE.ECF24.393
AN OVERVIEW OF USING THE MINIMUM OF THREE EQUIVALENT (MOTE) IN THE ASSESSMENT OF FRACTURE TOUGHNESS BEHAVIOUR IN THE CONTEXT OF BS 7910 STANDARD	Sukpe, Paul U; Sorce, Fabian S; Davies, Catrin M; Cogswell, Daniel	https://doi.org/10.53254/ESISTUBE.ECF24.394
RADIATION EMBRITTLEMENT AND HARDENING OF WWER-1000 RPV BASE METAL	Zarazovskii, Maksym	https://doi.org/10.53254/ESISTUBE.ECF24.395
INFLUENCE ON ENDURANCE LIMIT AND CRACK GROWTH BEHAVIOR IN CORROSIVE ENVIRONMENT	Maierhofer, Jürgen; Gänsler, Hans-Peter; Pippan, Reinhard	https://doi.org/10.53254/ESISTUBE.ECF24.396
ADVANCED PTS ASSESSMENT FOR LONG-TERM OPERATION OF REACTOR PRESSURE VESSEL – APAL PROJECT	Szávai, Szabolcs; Dudra, Judit; Pištora, Vladislav; Cueto-Felgueroso, Carlos; Král, Pavel; Tiete, Ralf; Dillstrom, Peter; Mora, Diego	https://doi.org/10.53254/ESISTUBE.ECF24.397
EVALUATION OF SURFACE AND VOLUME DAMAGES UNDER HCF AND VHCF LOADING FOR QUENCHED AND TEMPERED STEELS	Raghuraman, Srinivasa Raghavan; Shrivastava, Ayushman; Weber, Fabian; Gramlich, Alexander; Krupp, Ulrich; Starke, Peter	https://doi.org/10.53254/ESISTUBE.ECF24.398
OBSERVATIONS AND OPTIMISATION OF PHASE FRACTIONS IN HARMONIC-STRUCTURE MATERIALS	Stähle, Per	https://doi.org/10.53254/ESISTUBE.ECF24.399
COMPONENT-ORIENTED CHARACTERIZATION OF THE	Dumitru, Mark; Commer, Martin;	https://doi.org/10.53254/ESISTUBE.ECF24.400

Presentation title	Authors	DOI
DAMAGE BEHAVIOR OF DUCTILE CAST IRON	Münstermann, Sebastian; Bührig-Polaczek, Andreas	
ESTIMATION METHOD OF FATIGUE PROPERTIES FROM HARDNESS MEASUREMENTS OF AN ANCIENT IRON BRIDGE	Gripp Oliveira, Iara; Rebelo, Carlos; Pardal, Juan; Correia, José	https://doi.org/10.53254/ESISTUBE.ECF24.401
NON-DESTRUCTIVE MEASUREMENTS OF MOISTURE CONTENT ACROSS CONCRETE WALLS OF A U-BOAT BUNKER FROM WWII (NORWAY)	Boccacci, Giulia; Frasca, Francesca; Bertolin, Chiara; Siani, Anna Maria	https://doi.org/10.53254/ESISTUBE.ECF24.402
A NUMERICAL MODEL FOR FATIGUE LIFE CALCULATIONS OF SURFACE HARDENED STEEL COMPONENTS	Marković, Ela; Basan, Robert; Marohnić, Tea	https://doi.org/10.53254/ESISTUBE.ECF24.403
INVESTIGATION OF THE EFFECTS OF CELL STRUCTURES ON MECHANICAL AND VIBRATION BEHAVIOURS	EYRİ, Büşra; ÇETİN, Bartu Türkcan; BOLAT, Fevzi Çakmak; YILMAZ, Taner	https://doi.org/10.53254/ESISTUBE.ECF24.404
THE EFFECT OF TEMPERATURE ON THE FRACTURE TOUGHNESS PROPERTIES OF AS-CAST DP800 STEEL SLABS	Taiwo, Oluwatobi Daniel; Farrugia, Didier; Davies, Catrin Mair	https://doi.org/10.53254/ESISTUBE.ECF24.405
EFFECT OF PROCESS PARAMETERS ON FINAL GEOMETRY AND QUALITY IN HOT TUBE SPINNING PROCESS	Erdem, Nagihan	https://doi.org/10.53254/ESISTUBE.ECF24.406
THE EFFECT OF OVER- AND UNDERLOADS ON FATIGUE LIMIT	Kärkkäinen, Kimmo; Vaara, Joonas; Vántänen, Miikka; Åman, Mari; Frondelius, Tero	https://doi.org/10.53254/ESISTUBE.ECF24.407
PHASE FIELD MODELING OF DYNAMIC FRACTURE USING A MODIFIED ASYNCHRONOUS VARIATIONAL INTEGRATOR	Jadhav, Deepak Balasaheb; Weinberg, Kerstin; Ortiz, Michael; Leyendecker, Sigrid	https://doi.org/10.53254/ESISTUBE.ECF24.408
ASSESSMENT OF THE STRUCTURAL PARAMETERS SIGNIFICANCE USING THE EXPERIMENT DESIGN IN THE PRODUCTION OF PRESSURE VESSELS HEADS	Vukojević, Nedeljko; Ištvančić, Zlatan; Hadžikadunić, Fuad; Hadžalić, Mustafa; Bajtarević-Jeleč, Amna	https://doi.org/10.53254/ESISTUBE.ECF24.409
THE MICROSTRUCTURE AND FRACTURE MODE OF PHYSICALLY SIMULATED HEAT-AFFECTED ZONES OF A WELD METAL USED	Gáspár, Marcell; Kovacs, Judit; Tervo, Henri; Kaijalainen, Antti; Javaheri,	https://doi.org/10.53254/ESISTUBE.ECF24.410

Presentation title	Authors	DOI
WITH 500 MPA OFFSHORE STEEL – PART 1: IMPACT TOUGHNESS TEST RESULTS	Vahid; Sainio, Johannes; Kömi, Jukka	
THE MICROSTRUCTURE AND FRACTURE MODE OF PHYSICALLY SIMULATED HEAT-AFFECTED ZONES OF A WELD METAL USED WITH 500 MPA OFFSHORE STEEL – PART 2: FRACTOGRAPHIES, INCLUSIONS AND MICROSTRUCTURES	Tervo, Henri; Gáspár, Marcell; Kovács, Judit; Kaijalainen, Antti; Javaheri, Vahid; Sainio, Johannes; Kömi, Jukka	https://doi.org/10.53254/ESISTUBE.ECF24.411
QUANTITATIVE FATIGUE FRACTURE ANALYSIS	von Bestenbostel, Wolfgang; Pradat, Francois	https://doi.org/10.53254/ESISTUBE.ECF24.412
THE QUANTITATIVE FRACTOGRAPHY IN THE DBT REGIME OF 9CR-1MO FERRITIC/MARTENSITIC STEEL	Soni, Swastik; Tiwari, Abhishek	https://doi.org/10.53254/ESISTUBE.ECF24.413
OPTIMIZATION OF TMCP PARAMETERS TO IMPROVE MECHANICAL PROPERTIES IN 201LN STAINLESS STEEL FOR CRYOGENIC APPLICATIONS	Abdelghany, Ahmed W.; Ghosh, Sumit; Nyo, Tun Tun; Smith, Ali; Hoffmann, Frank; Muratori, Marta; Mahesh, Mahesh	https://doi.org/10.53254/ESISTUBE.ECF24.414
APPLICATION OF CONFIGURATIONAL FORCE BASED CONCEPT OF MATERIAL INHOMOGENEITY TO ENHANCE CRACK RESISTANCE OF MATERIALS	Upadhyaya, Rohit; Tiwari, Abhishek	https://doi.org/10.53254/ESISTUBE.ECF24.415
REFERENCE TEMPERATURE DETERMINATION OF RPV STEEL ON SMALL-SIZED FRACTURE TOUGHNESS SPECIMENS	Zarazovskii, Maksym; Shukaev, Sergiy; Lukianenko, Kostiantyn	https://doi.org/10.53254/ESISTUBE.ECF24.416
OPTIMUM GLOBAL MIXTURE OF CEBS IN UNIAXIAL COMPRESSIVE STRENGTH RESPONSE	Valenzuela, Marian; Attia, Shady; Ciudad, Gustavo; Tuninetti, Víctor	https://doi.org/10.53254/ESISTUBE.ECF24.417
STRESS RATIO EFFECT ON THE FUNCTIONAL BEHAVIOR OF SMA	STRESS RATIO EFFECT ON THE	https://doi.org/10.53254/ESISTUBE.ECF24.418
IMPROVED ANALYSIS OF MICROSTRUCTURE AND FRACTURE BY ARTIFICIAL INTELLIGENCE AND DIGITIZATION IN DUCTILE CAST IRON	Tlatlik, Johannes; Rosenberger, Johannes; Münstermann, Sebastian	https://doi.org/10.53254/ESISTUBE.ECF24.419
SUSCEPTIBILITY TO ENVIRONMENT-ASSISTED CRACKING OF MG ALLOYS AFFECTED BY SOLUTION PH AND AL CONTENT	SUSCEPTIBILITY TO ENVIRONMENT	https://doi.org/10.53254/ESISTUBE.ECF24.420

Presentation title	Authors	DOI
THE NORMALIZED DISTANCE BETWEEN THE SOURCES OF ACOUSTIC EVENTS AS A STRUCTURAL HEALTH MONITORING PARAMETER	Triantis, Dimos; Stavrakas, Ilias; Pasiou, Ermioni D.; Kourkoulis, Stavros K.	https://doi.org/10.53254/ESISTUBE.ECF24.421
ASSESSMENT OF THE EFFECTS OF HIGH-PRESSURE GASEOUS HYDROGEN ON PIPELINE AND CASING STEELS USING HOLLOW SPECIMENS	Macoretta, Giuseppe; Monelli, Bernardo Disma; Belardini, Carlo Maria; Bertini, Leonardo; Grossi, Tommaso; Pontarollo, Alberto; Gennaro, Maria Elena; Todesco, Fabio; Valentini, Renzo	https://doi.org/10.53254/ESISTUBE.ECF24.422
HYDROGEN EFFECT ON TENSILE PROPERTIES OF PIPELINE STEEL: A COMPARISON BETWEEN HOLLOW AND SOLID SPECIMENS	Campari, Alessandro; Konert, Florian; Nietzsche, Jonathan; Sobol, Oded; Alvaro, Antonio	https://doi.org/10.53254/ESISTUBE.ECF24.423
IMPROVEMENT IN FATIGUE PROPERTIES OF WELDED JOINTS USING CRACK INITIATION RESISTANT STEEL PART 1: FATIGUE STRENGTH OF WELD HEAT AFFECTED ZONE AND CRUCIFORM FILLET WELDED JOINTS	Ito, Takanori; Takashima, Yasuhito; Kinofuchi, Masao	https://doi.org/10.53254/ESISTUBE.ECF24.424
IMPROVEMENT IN FATIGUE PROPERTIES OF WELDED JOINTS USING CRACK INITIATION RESISTANT STEEL PART2 : FATIGUE CRACK INITIATION LIFE OF RIB-TO-DECK WELDED JOINTS OF ORTHOTROPIC STEEL BRIDGE DECKS	Tabata, Akito; Matsushita, Masahiro; Yamaguchi, Tetsuo; Takashima, Yasuhito; Ishikawa, Toshiyuki	https://doi.org/10.53254/ESISTUBE.ECF24.425
EVALUATION OF THE C* PARAMETER IN WELDED JOINTS OF 9%CR STEELS UNDER CONSIDERATION OF THE HEAT AFFECTED ZONE	Schönherr, Josef Arthur; Mueller, Falk; Kontermann, Christian; Oechsner, Matthias	https://doi.org/10.53254/ESISTUBE.ECF24.426
FRACTURE OF REFILL FRICTION STIR SPOT WELDS: MICROSTRUCTURE, RESIDUAL STRESSES AND OTHER INFLUENCING FACTORS	Becker, Niklaas; Klusemann, Benjamin	https://doi.org/10.53254/ESISTUBE.ECF24.427
INVESTIGATION OF THE CORROSION-INDUCED DAMAGE	Charalampidou, Margarita Christina;	https://doi.org/10.53254/ESISTUBE.ECF24.428

Presentation title	Authors	DOI
MECHANISM OF AERONAUTICAL ALUMINUM ALLOYS 2024 AND 2198 RIVETED SHEETS	Grammatikos, George; Papanikos, Paraskevas; Louka, Eleftheria-Sotiria; Alexopoulos, Nikolaos D.	
LOCALIZED DAMAGE BEHAVIOR OF P92 WELDED JOINTS BASED ON CRYSTAL PLASTICITY METHOD	Gong, Jianming	https://doi.org/10.53254/ESISTUBE.ECF24.429
FRACTURE MECHANICS ANALYSIS OF UNDERCUT EFFECTS IN MISALIGNED WELDED JOINTS	Arandelović, Mihajlo; Sedmak, Simon; Đorđević, Branislav; Radu, Dorin; Petrović, Ana	https://doi.org/10.53254/ESISTUBE.ECF24.430
ON THE FATIGUE BEHAVIOUR OF HIGH-STRENGTH STEEL WELDED JOINTS THROUGH AVERAGED STRAIN ENERGY DENSITY METHOD	Schillaci, Carolina; Foti, Pietro; Berto, Filippo	https://doi.org/10.53254/ESISTUBE.ECF24.431
FATIGUE LIFE EVALUATION OF A WELDED JOINT USED IN A HIGH CAPACITY PRESS USING DIFFERENT APPROACHES	Yetgin, Ali; Özaslan, Emre; Acar, Bülent; Yarşılıkal Solmaz, Buse	https://doi.org/10.53254/ESISTUBE.ECF24.432
CRACK PROPAGATION BEHAVIOR IN P92 WELDED JOINT BASED ON CRYSTAL PLASTICITY FINITE ELEMENT METHOD COMBINED WITH XFEM	Zhou, Dewen; Wang, Xiaowei; Gong, Jianming; Abdel Wahab, Magd	https://doi.org/10.53254/ESISTUBE.ECF24.433
EVALUATION OF FATIGUE LIFE IN CORNER WELDED JOINTS	Hanna, Peter Duncan; Gao, Yi; Whitfield, Steve; Davies, Catrin Mair	https://doi.org/10.53254/ESISTUBE.ECF24.434
HIGH CYCLE FATIGUE PROPERTIES OF A LOW-CARBON STEEL PROCESSED USING WIRE ARC ADDITIVE MANUFACTURING	Martelli, Pietro Antonio; Benni, Akshay; Menghini, Alessandro; Kanyilmaz, Alper; Catanzano, Alessandro; Demir, Ali Gokhan; Previtali, Barbara; Abrusci, Lorenzo; Stavridis, John; Sabirov, Ilchat	https://doi.org/10.53254/ESISTUBE.ECF24.435
UNIAXIAL COMPRESSION PROPERTIES AND MICROSTRUCTURAL EVALUATION OF 316L STAINLESS STEEL MANUFACTURED BY LASER POWDER BED FUSION	Milne, Amy Jade; Davies, Catrin Mair	https://doi.org/10.53254/ESISTUBE.ECF24.436

Presentation title	Authors	DOI
MICROMECHANICAL FATIGUE MODELLING OF AISI 347 UNDER CONSIDERATION OF THE MARTENSITIC PHASE TRANSFORMATION	Häffner, Christian; Fehlemann, Niklas; Münstermann, Sebastian	https://doi.org/10.53254/ESISTUBE.ECF24.437
DERIVING PARAMETERS OF A MACROSCOPIC DAMAGE MODEL BY MICROSTRUCTURE-BASED VIRTUAL EXPERIMENTS	Neite, Maximilian; Tekkaya, Berk; Dölz, Michael; Münstermann, Sebastian	https://doi.org/10.53254/ESISTUBE.ECF24.438
FAILURE ANALYSIS IN DUAL PHASE STEEL MICROSTRUCTURES WITH A PHASE FIELD FRACTURE FRAMEWORK	Erdogan, Can; Tatli, Berkehan; Yalcinkaya, Tuncay	https://doi.org/10.53254/ESISTUBE.ECF24.439
A MICROELEMENT BASED SEMI-ANALYTICAL MODEL FOR HIGH CYCLE FATIGUE	Venkatesh, Bhukya; Vedantam, Srikanth	https://doi.org/10.53254/ESISTUBE.ECF24.440
FEM MODULE DEVELOPMENT CONSIDERING TRIP	Tsuda, Rintaro; Morohoshi, Ritsuki; Tsuchida, Noriyuki; Kawabata, Tomoya	https://doi.org/10.53254/ESISTUBE.ECF24.441
WEAKEST-LINK MODELLING OF NOTCHED GEOMETRIES OF BRITTLE MATERIALS	Klein, Daniela V.; Linden, Gustaf; Faleskog, Jonas	https://doi.org/10.53254/ESISTUBE.ECF24.442
HIGH TEMPERATURE FATIGUE BEHAVIOR AND LIFE PREDICTION OF NOTCHED SPECIMENS MADE OF 316H STAINLESS STEEL	Gu, Jiayuan; Wang, Xiaowei; Chen, Guanhong; Zhang, Zhen; Gong, Jianming	https://doi.org/10.53254/ESISTUBE.ECF24.443
EFFECTS OF GAS NITRIDING ON STATIC AND DYNAMIC MECHANICAL BEHAVIOUR OF MICRO-POROUS TITANIUM SCAFFOLDS PREPARED BY DIRECT INK WRITING	Slámečka, Karel; Kashimbetova, Adelia; Drotárová, Lenka; Tkachenko, Serhii; Gejdoš, Pavel; Skalka, Petr; Pokluda, Jaroslav; Čelko, Ladislav; Montufar, Edgar Benjamin	https://doi.org/10.53254/ESISTUBE.ECF24.444
PREDICTION OF CRACK FRONT SHAPE UNDER THE INFLUENCE OF COMPRESSIVE RESIDUAL STRESS USING FINITE ELEMENT MODELLING AND EXPERIMENTAL VALIDATION	Bab Nadi, Reza; Champiaud, Henri; Jahazi, Mohammad; Lantaigne, Jacques; Pham, Xuan-Tan	https://doi.org/10.53254/ESISTUBE.ECF24.445
EFFECT OF DIFFERENT RESIDUAL STRESS ENGINEERING TECHNIQUES ON THE RESIDUAL	Lehmann, Jonas; Ventzke, Volker; Dorn, Falk; Knothe-	https://doi.org/10.53254/ESISTUBE.ECF24.446

Presentation title	Authors	DOI
STRESS AND FATIGUE CRACK GROWTH BEHAVIOUR IN AA7075	Horstmann, Christian; Klusemann, Benjamin; Kshaev, Nikolai; Ben Khalifa, Noomane	
QUANTIFICATION OF FATIGUE LIFE IMPROVEMENT IN S550MC WELDMENTS BY HFMI TREATMENT USING 2D SBFM MODEL	Mahatab, Mohd; Ranjan, Rakesh	https://doi.org/10.53254/ESISTUBE.ECF24.447
DEVELOPMENT OF A NUMERICAL MODEL FOR ESTIMATING THE HARDNESS OF STEEL AFTER QUENCHING	Kukuljan, Ema; Basan, Robert; Ijkić, Dario; Marković, Ela	https://doi.org/10.53254/ESISTUBE.ECF24.448
COMPUTATIONAL ANALYSIS OF CRACK INITIATION AND PROPAGATION IN CGI: COMPARISON OF DAMAGE MODELS	Luo, Xingling; Baxevanakis, Konstantinos; Silberschmidt, Vadim	https://doi.org/10.53254/ESISTUBE.ECF24.449
THE STRESS FIELD DEPENDENCY OF MARTENSITIC TRANSFORMATION IN METASTABLE AUSTENITIC STAINLESS STEEL	Morohoshi, Ritsuki; Kawabata, Tomoya	https://doi.org/10.53254/ESISTUBE.ECF24.450
MECHANICS OF ZIGZAG MOTION OF CRACK PROPAGATION IN BICRYSTAL SILICON USING NEAR-TIP STRESS FIELD ANALYSIS	Dutta, Sunil Kumar; Singh, Gaurav	https://doi.org/10.53254/ESISTUBE.ECF24.451
MECHANICAL PROPERTIES AND FRACTURE BEHAVIOR OF COPPER SHEETS	Auer, Peter; Gomboc, David; Silvayeh, Zahra; Baumann, Georg; Unterrainer, Markus; Feist, Florian; Burböck, Andreas; Domitner, Josef	https://doi.org/10.53254/ESISTUBE.ECF24.452