

IGF28 - MedFract3

28th International Conference on Fracture and Structural Integrity
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Chairpersons

- Filippo BERTO, Università di Roma "Sapienza"
- Sabrina VANTADORI, Università di Parma
- Francesco IACOVIELLO, Università di Cassino e del Lazio Meridionale
- Giuseppe FERRO, Politecnico di Torino
- Vittorio DI COCCO, Università di Cassino e del Lazio Meridionale



Presentation title	Authors	DOI
Summer School: Fundamental Principles and Methodologies in Artificial Intelligence	D. Iacoviello	https://doi.org/10.53255/IGFTUBE.IGF28.01
Summer School: Advanced AI Techniques applied to structural integrity. Part I	F. Berto	https://doi.org/10.53255/IGFTUBE.IGF28.02
Summer School: Advanced AI Techniques applied to structural integrity. Part II	M. Laurenti	https://doi.org/10.53255/IGFTUBE.IGF28.03
Plenary 1: Fretting fatigue: our recent developments on the use of Artificial Neural Networks and on the conduct of complex tests	Araujo José Alexander	https://doi.org/10.53255/IGFTUBE.IGF28.04
Plenary 2: Mean stress effect, stress ratio R in Fatigue Crack Growth Rate description - from Dimensional Analysis to generalization of Paris law	Grzegorz Lesiuk	https://doi.org/10.53255/IGFTUBE.IGF28.05
Plenary 3: The effect of laser induced residual stress on fatigue properties of titanium alloys	Oleg Plekhov	https://doi.org/10.53255/IGFTUBE.IGF28.06
Plenary 4: Fatigue short crack growth prediction of additively manufactured alloy based on ensemble learning	Guian Qian	https://doi.org/10.53255/IGFTUBE.IGF28.07
Experimental Verification of Soil - Foundation Interaction	Radim CAJKA, Kamil BURKOVIC	https://doi.org/10.53255/IGFTUBE.IGF28.08
A study of Hydrogen-Induced Cracking mechanism in Old and New Generation API 5L Pipeline Steels	Jorge Luis González-Velázquez, Diego Israel Rivas-López, Manuel Alejandro Beltrán-Zúñiga, Ehsan Entezari, Jerzy Szpunar	https://doi.org/10.53255/IGFTUBE.IGF28.09
An intelligent integrity monitoring system for pressure boundary components and piping operating at high-temperature in the creep range	H.-Y. Lee, K.-E. Nam, Y.-S. Lee and J. Lee	https://doi.org/10.53255/IGFTUBE.IGF28.10
Application the nonlocal criterion of bridged cracks growth with necessary and sufficient conditions	Mikhail Perelmuter	https://doi.org/10.53255/IGFTUBE.IGF28.11
On the influence of corrosion and manufacturing on the very high cycle fatigue behaviour of aluminum bronzes	Christoph Bleicher, Steffen Schönborn, Sebastian Böhlert, Lutz Kleinsorge, Jörn Klüss, Marcel Nürnberg	https://doi.org/10.53255/IGFTUBE.IGF28.12
KEYNOTE - Influence of SLM Processing Parameters on Intrinsic Defects and Fatigue Behavior of Ti6Al4V	Neves Daniela, Morgado Teresa, Pereira, A. Mário, Pereira Manuel, Silva Rui, Suzana Lampreia	https://doi.org/10.53255/IGFTUBE.IGF28.13

Presentation title	Authors	DOI
Fatigue evaluation of WAAM-CMT HSLA steel: experimental S–N curve analysis considering deposition direction	Déborah de Oliveira, Daniel Víctor Carvalho Lima, Rodrigo Souza Pimenta, Thiago Doca José Alexander Araújo, Maksym Ziberov	https://doi.org/10.53255/IGFTUBE.IGF28.14
Melt pool monitoring as a defect detection method for quality control of AISi10Mg parts produced by PBF-LB/M	Carla M. Ferreira, Pedro M. Ferreira, João Marques, Pedro Cardoso, Rodolfo Batalha, Aníbal Valido, António Garcês, Luís Reis, Ricardo Cláudio	https://doi.org/10.53255/IGFTUBE.IGF28.15
A combined approach using critical distance theory and extreme value statistics to assess the impact of surface roughness and pores on the fatigue strength of Inconel 718	Lorenzo Romanelli, Ciro Santus, Giuseppe Macoretta, Michele Barsanti, Bernardo Disma Monelli, Ivan Senegaglia, Adrian Hugh Alexander Lutey, Hossein Rajaei, Cinzia Menapace, Matteo Benedetti	https://doi.org/10.53255/IGFTUBE.IGF28.16
Towards accurate fatigue life estimation of additively manufactured notched metals under multiaxial cyclic loading. Part I: theoretical aspects	Sabrina Vantadori, Camilla Ronchei, Andrea Zanichelli	https://doi.org/10.53255/IGFTUBE.IGF28.17
Towards accurate fatigue life estimation of additively manufactured notched metals under multiaxial cyclic loading. Part II: experimental campaign and validation of the proposed framework	Sabrina Vantadori, Andrea Zanichelli, Camilla Ronchei, Daniela Scorza	https://doi.org/10.53255/IGFTUBE.IGF28.18
Prediction of size effect and fatigue limiting stress in SLM-manufactured 18Ni300 steel	Łukasz Blacha, Harsh Mehta, Andrzej Kurek	https://doi.org/10.53255/IGFTUBE.IGF28.19
The influence of the bending load direction on the fatigue properties of additively manufactured components	Mihiretu Ganta, Andrzej Kurek, Tadeusz Łagoda, Marta Kurek	https://doi.org/10.53255/IGFTUBE.IGF28.20
In-situ mechanical and thermal characterization of 3D printed composite polymers for plastics applications	Dimitrios Karalekas, Nikoleta Chatzidai, Charoula Kousiatza, Constantina Matsika-Klossa	https://doi.org/10.53255/IGFTUBE.IGF28.21
The influence of pre-tension on the fatigue durability of rubber with a single reinforcement layer	Karolina Głowacka, Roland Pawliczek, Marko Nagode, Jernej Klemenc, Tadeusz Łagoda	https://doi.org/10.53255/IGFTUBE.IGF28.22
Aluminum alloys 6XXX after cyclic and impact bending	Joanna Małecka, Aleksander Hebda, Marta Kurek, Sławomir Małys, Paweł Krysiński, Krzysztof Żak, Tadeusz Łagoda	https://doi.org/10.53255/IGFTUBE.IGF28.23

Presentation title	Authors	DOI
Probabilistic Analysis of Cold Expanded Holes Utilising Uncertainty Quantification	David Wieland	https://doi.org/10.53255/IGFTUBE.IGF28.24
Physics informed modelling of fatigue safety factors	Henrik Petersson, Daniel Leidermark, Mattias Tiger, Robert Eriksson	https://doi.org/10.53255/IGFTUBE.IGF28.25
Data augmentation of scarce experimental data for constitutive models	Daniel Leidermark, Robert Eriksson	https://doi.org/10.53255/IGFTUBE.IGF28.26
Cyclic bending in the plane of welded aluminum alloy 6060	Tadeusz Łagoda, Sebastian Skrobacz, Mariusz Prażmowski, Krzysztof Żak, Joanna Małecka	https://doi.org/10.53255/IGFTUBE.IGF28.27
Risk based approach to structural integrity assessment of penstock critical components – case studies	Snezana Kirin, Aleksandar Sedmak, Igor Martić, Milan Miladinov, Ivana Vucetic	https://doi.org/10.53255/IGFTUBE.IGF28.28
Impact toughness of A516 GR. 60 steel welded joints	Ivica Čamagić, Nikola Kostić, Aleksandar Sedmak, Simon Sedmak, Zijah Burzić	https://doi.org/10.53255/IGFTUBE.IGF28.29
Prediction of crack growth retardation following single overload using a sub-space encoder network	Sven Passier, Maarten Schoukens, Davide Leonetti	https://doi.org/10.53255/IGFTUBE.IGF28.30
Tailoring the microstructure and properties of Al ₂ O ₃ –Cu composites through the selection of processing techniques and the addition of a secondary metallic component (Ni or Cr)	Marcin Wachowski, Justyna Zygmuntowicz, Paulina Piotrkiewicz, Waldemar Kaszuwara	https://doi.org/10.53255/IGFTUBE.IGF28.31
Blunt and sharp notches: the concept of limit notch radius according to the averaged SED method.	Pietro Foti, Filippo Berto	https://doi.org/10.53255/IGFTUBE.IGF28.32
Strain energy density and hot-spot stress analysis of a welded T-Joint in marine applications	Pasqualino Corigliano, Santi Marchetta, Giulia Palomba, Giacomo Risitano, Dario Santonocito	https://doi.org/10.53255/IGFTUBE.IGF28.33
Correlation between intrinsic dissipation and uniaxial fatigue strength at two load ratios in 42CrMo4 Q&T steel specimens for marine applications	S. Pelizzoni, M. Ricotta, G. Meneghetti	https://doi.org/10.53255/IGFTUBE.IGF28.34
Assessment of the X-ray luminescence efficiency of Cerium-doped Lutetium-Yttrium Oxyorthosilicate (LYSO:Ce) single crystal upon temperature	George Papageorgiou, Vasiliki Beskou, Marios Kyriakopoulos, Ioannis Valais, Nektarios Kalyvas, George Fountos, Ioannis Kandarakis and Christos Michail	https://doi.org/10.53255/IGFTUBE.IGF28.35

Presentation title	Authors	DOI
Analytical over-energy with numerical investigation on fatigue small crack and the performance of multiaxial criterion linked to the threshold stress	Marhabi Driss, Zitouni Azari, Fatah Mejni	https://doi.org/10.53255/IGFTUBE.IGF28.36
Application of IR thermography methods to fatigue life prediction of additively manufactured IN625 alloy	A. Avanzini, G. Fausti, D. Battini	https://doi.org/10.53255/IGFTUBE.IGF28.37
Bio-inspired structures for energy efficiency	Liviu Marsavina, Mihai Marghitas, Davide D'Andrea, Dario Santonocito, Giacomo Risitano	https://doi.org/10.53255/IGFTUBE.IGF28.38
Machine learning algorithms for design optimization of Ceramic Substrates-DBC for Power Applications using local approaches	Davide D'Andrea, Salvatore Sparaino, Marco Papasero, Giuliano Angelo Babulano, Stefano Orlando, Giacomo Risitano, Dario Santonocito	https://doi.org/10.53255/IGFTUBE.IGF28.39
The averaged strain energy density approach for predicting static notch effects in short fibre composites: from theory to validation	Michele Zappalorto, Matteo Pastrello, Mauro Ricotta, Filippo Coppola	https://doi.org/10.53255/IGFTUBE.IGF28.40
Phase field modelling of thermo-mechanical crack growth in carbon fiber reinforced composites	Manish Singh Rajput, Raj Kiran, Himanshu Pathak	https://doi.org/10.53255/IGFTUBE.IGF28.41
The crack opening profile: a novel approach to the measurement of stress intensity and fracture toughness	Anis Allahdiniyan, Linda Maggi, Laura Vergani, Federica Buccino, David Taylor	https://doi.org/10.53255/IGFTUBE.IGF28.42
Optimisation of the gyroidal structure of a cobalt-based alloy produced by Laser Powder Bed Fusion	Anna Falkowska, Michał Doroszko, Monika Ostapiuk, Katarzyna Zasińska, Andrzej Seweryn	https://doi.org/10.53255/IGFTUBE.IGF28.43
An experimental investigation of static and fatigue behavior of WAAM to substrate interface	D. Leonetti, H. Heydarinouri	https://doi.org/10.53255/IGFTUBE.IGF28.44
Fatigue behaviour of EBM Ti6Al4V: impact of process parameters	Costanzo Bellini, Filippo Berto, Vittorio Di Cocco, Paolo Di Giamberardino, Daniela Iacoviello, Stefano Natali, Daniela Pilone, Carolina Schillaci, Stefania Franchitti, Rosario Borrelli	https://doi.org/10.53255/IGFTUBE.IGF28.45

Presentation title	Authors	DOI
Fatigue strength assessment of arc-welded dissimilar joints of AM and rolled AISI 316L according to the Peak Stress Method	L. Contiero, L. Vecchiato, A. Campagnolo, V. Babini, G. Meneghetti	https://doi.org/10.53255/IGFTUBE.IGF28.46
Additive manufacturing applied to maintenance management	Suzana Lampreia, Teresa Morgado, João Alves	https://doi.org/10.53255/IGFTUBE.IGF28.47
Influence of the process parameters on laser beam welding of additive manufacturing IN625	Saveria Spiller, Alessandra Varone, Giuliano Angella, Fabio Bergamini, Paolo Ferro	https://doi.org/10.53255/IGFTUBE.IGF28.48
A novel optimisation-based approach to predict the S-N curves behaviour based on small crack growth in additively manufactured Ti-6Al-4V	João Alves, Teresa Morgado, Manuel Pereira, António Pereira, Rui F. Martins	https://doi.org/10.53255/IGFTUBE.IGF28.49
Fatigue life estimation of thin-walled fillet-welded joints under constant amplitude loading	Martin Sladký, Martin Machač, Jan Papuga, Ivo Jebáček	https://doi.org/10.53255/IGFTUBE.IGF28.50
Horizontal shear force in RC internal beam-column connection at initiation and crack growth from linearly distributed load on a cantilever beam. Part II - asymmetrical cross section	Albena Doicheva	https://doi.org/10.53255/IGFTUBE.IGF28.51
Development of a random fatigue life prediction method for electronic components mounted on PCBs	Giulia Morettini, Filippo Cianetti	https://doi.org/10.53255/IGFTUBE.IGF28.52
Application of the ENLO_SED method to large-scale models for predicting the strain energy density of welded joints using shell modeling	S. Lucertini, G. Morettini, F. Cianetti	https://doi.org/10.53255/IGFTUBE.IGF28.53
Tensile and fatigue strength of laser-beam welded steel-aluminum adapters for applications in shipbuilding	Benjamin Möller, Tim Korschinsky, Rabi Lahdo, Jörg Baumgartner, Sarah Seffer, Jörg Hermsdorf	https://doi.org/10.53255/IGFTUBE.IGF28.54
A model for the dynamic adhesion between rigid and viscoelastic bodies	America Caliano, Gabriele Cricri	https://doi.org/10.53255/IGFTUBE.IGF28.55
Seismic behavior of ancient colonnades interacting through a diaphragmatic roof	Vrouva Antigone, Psycharis Ioannis, Christodouloupoulou Rosalia	https://doi.org/10.53255/IGFTUBE.IGF28.56
Unveiling Damage Mechanisms in Biological Materials through Synchrotron-Based Image-Guided Failure Assessment	Ludovica Clementini, Federica Buccino, Laura Maria Vergani	https://doi.org/10.53255/IGFTUBE.IGF28.57

Presentation title	Authors	DOI
Impact resistance of epoxy resin coating with waste mineral powders: a drop-weight testing approach	Agnieszka Chowaniec-Michalak, Sławomir Czarnecki, Łukasz Sadowski	https://doi.org/10.53255/IGFTUBE.IGF28.58
Structural assessment of historic masonry lighthouses under critical environmental actions: the case study of the Bell Rock Lighthouse (Scotland).	Aikaterini Marinelli, Cat Wright	https://doi.org/10.53255/IGFTUBE.IGF28.59
Fatigue behaviour of notched galvanized high-strength steel specimens	Arturo Bacco, Alessandro De Luca, Stefano Natali, Filippo Berto, Raffaele Sepe	https://doi.org/10.53255/IGFTUBE.IGF28.60
Influence of recycling aluminium on the quasi-static and cyclic material behaviour of AlSi7Mg0.3	Christoph Bleicher, Ahmad Qaralleh, Sascha Fliegenger, Silke Sommer, Johannes Tlatlik, Robert Kleinhans, Manuel Pintore	https://doi.org/10.53255/IGFTUBE.IGF28.61
Thermo-structural analysis of residual stresses in dissimilar welded joints Cast iron (GJS500-7) - steel (S355)	A. Bacco, R. Sepe	https://doi.org/10.53255/IGFTUBE.IGF28.62
Physical activity, sedentary time and spinal fracture risk: A Mendelian randomization study	Guowei Jiang, Federica Buccino, Laura Vergani	https://doi.org/10.53255/IGFTUBE.IGF28.63
Enhancing structural analysis of dissimilar metal spot-welded lap-joints utilizing thermal strain generation algorithm	Ibrahim T. Teke, Ahmet H. Ertas	https://doi.org/10.53255/IGFTUBE.IGF28.64
An HDST-based xiga approach for vibration analysis of cracked bi-directional functionally graded plates	Pranaw Parihar, Sunil Kumar Singh	https://doi.org/10.53255/IGFTUBE.IGF28.65
Numerical and experimental investigation of microstructural fracture in polycrystalline materials	Manish Kumar, Edoardo Rossi, Paola Palmero, Bartolomeo Coppola, Enrico Salvati	https://doi.org/10.53255/IGFTUBE.IGF28.66
AI tools for the structural health assessment of concrete dams: merits and limits	Gabriella Bolzon, Caterina Nogara	https://doi.org/10.53255/IGFTUBE.IGF28.67
Anisotropy and failure in trabecular structures: a deep learning approach	Marco Piacentini, Chiara Bertolin, Bjørn Skallerud, Filippo Berto, Chao Gao	https://doi.org/10.53255/IGFTUBE.IGF28.68
Finite element simulation of toughening mechanisms of graphene-reinforced Si3N4 nanocomposites	Osman Bayrak	https://doi.org/10.53255/IGFTUBE.IGF28.69
A simple combined mechanical-fractographic parameter for monotonic tensile fracture analysis of pre-deformed material	Wojciech Macek, Adam Tomczyk, Michał Dobrzyński, Michał Doroszko, Andrzej Seweryn	https://doi.org/10.53255/IGFTUBE.IGF28.70

Presentation title	Authors	DOI
Fatigue life of Ti-6Al-4V hip implants under various load cases	Simon Sedmak, Katarina Čolić, Aleksa Milovanović, Aleksandar Grbović, Tamara Smoljanić	https://doi.org/10.53255/IGFTUBE.IGF28.71
Fatigue behaviour of composite NdFeB specimens	Hofferberth Daniel , Reissner Felix, Baumgartner Jörg	https://doi.org/10.53255/IGFTUBE.IGF28.72
Fully reversed Very High Cycle Fatigue (VHCF) of composite materials: influence of specimen design for ultrasonic testing	Carlo Boursier Niutta, Andrea Tridello, Davide Salvatore Paolino	https://doi.org/10.53255/IGFTUBE.IGF28.73
Application of game theory-based interpretability method to machine learning algorithms used to predict the fatigue life of additive manufactured alloys	Danilo Antonello Renzo, Marcello Laurenti, Pietro Foti, Matteo Benedetti, Jacopo Tirillò, Filippo Berto	https://doi.org/10.53255/IGFTUBE.IGF28.74
The role of heavy minerals in the characteristics of concrete: a comprehensive review	Naweed Ahmad Rabani, Abdullah Namdar, Abdulhai Kaiwaan	https://doi.org/10.53255/IGFTUBE.IGF28.75
Fracture and fatigue behaviour of a next-generation earthen composite	Daniela Scorza, Camilla Ronchei, Sabrina Vantadori, Rossella Fiorillo	https://doi.org/10.53255/IGFTUBE.IGF28.76
Porosity meets performance: investigating fracture in eco-friendly concrete	Rossella Fiorillo, Daniela Scorza, Andrea Zanichelli, Sabrina Vantadori	https://doi.org/10.53255/IGFTUBE.IGF28.77
Effects of post-heat treatment on hydrogen ingress resistance and interfacial integrity of Al-based coatings formed on steels for hydrogen infrastructure	Hiroshi Nishiguchi, Shinichi Kubota	https://doi.org/10.53255/IGFTUBE.IGF28.78
Effect of preliminary combined loading on the failure micromechanisms of aluminum alloy 2024-T351	Volodymyr Hutsaylyuk	https://doi.org/10.53255/IGFTUBE.IGF28.79
Final verdict - pressure vessel with unacceptable defects after 27 years of exploitation	Lazar Jeremić, Aleksandar Sedmak, Nikola Milovanović, Simon Sedmak, Mirjana Opačić	https://doi.org/10.53255/IGFTUBE.IGF28.80
A Voroni-inspired microstructure model to simulate cohesion strength in cold spray deposits	Ramin Yousefi-Nooraie, Maxime Robert Maurice Leprévost, Mario Guagliano, and Sara Bagherifard	https://doi.org/10.53255/IGFTUBE.IGF28.81
Degradation of multiaxial fatigue strength of Laser Powder Bed Fused (LPBFed) 18Ni-300 steel in a simulated corrosive environment: experimental and machine learning analysis	M. Ganta, M. Kurek	https://doi.org/10.53255/IGFTUBE.IGF28.82
Experimental investigation of the notch strength of lamellar cast iron	Davide Leonetti, Bert Snijder, Wim van 't Land, Hans van Lint	https://doi.org/10.53255/IGFTUBE.IGF28.83

Presentation title	Authors	DOI
Development and mechanical characterization of a novel ni-ti based damping seismic device	Girolamo Costanza, Alessandro Molinari, Ilaria Porroni Maria Elisa Tata	https://doi.org/10.53255/IGFTUBE.IGF28.84
An average strain energy density-based optimization procedure for design standardized tensile lattice specimens	Nikodmose Moges Gebre, Raffaele De Biasi, Lorenzo Romanelli, Paolo Neri, Ciro Santus, Matteo Benedetti, Filippo Berto	https://doi.org/10.53255/IGFTUBE.IGF28.85
In-flight structural sensing of helicopter landing gear using fiber bragg gratings	C. Vendittozzi, A. Brindisi, A. Concilio, E. Di Micco, F. Berto, S. Natali, D. Tittoni	https://doi.org/10.53255/IGFTUBE.IGF28.86
Fatigue analysis of notched and welded components using the Effective Critical Plane approach	Andrea Chiocca, Francesco Frendo, Michele Sgamma	https://doi.org/10.53255/IGFTUBE.IGF28.87
Mechanical characterization of TPMS cellular structures produced using the lost PLA method	Alessandra Ceci, Girolamo Costanza, Maria E. Tata	https://doi.org/10.53255/IGFTUBE.IGF28.88
Effect of fiber orientation on the strength in symmetric composite laminates using the boundary element method	Slimane Debbaghi	https://doi.org/10.53255/IGFTUBE.IGF28.89
Fatigue behavior of miniaturized Ti-6Al-4V struts produced by continuous and pulsed wave L-PBF	S. Murchio, P. Gallo, A. Fabrizi, M. Benedetti, F. Berto	https://doi.org/10.53255/IGFTUBE.IGF28.90
Fatigue strength assessment of AM205 aluminum alloy produced via L-PBF with different process parameters	G. Macoretta, B. D. Monelli, M. Abruzzo, F. Berto	https://doi.org/10.53255/IGFTUBE.IGF28.91
Improving the Laser-Powder Bed Fusion sustainability of a novel Iron-based Shape Memory Alloy by comparing numerical simulation and experimental results	Gianni Virgili, Alberto Santoni, Marcello Cabibbo, Maria Laura Gatto, Gabriele Grima, Eleonora Santecchia, Kamal Sleem, Stefano Spigarelli, Mattia Utzeri	https://doi.org/10.53255/IGFTUBE.IGF28.92
SLM fabrication of Inconel 718 lattice structures: benefits, limitations, and mechanical implications	Miroslav Zetek, Miloslav Kepka Jr., Ludmila Kučerová, Ivana Zetková, Yusuf Bakir, Miloslav Kepka	https://doi.org/10.53255/IGFTUBE.IGF28.93
Tailoring truss lattices via beam absence probability for enhanced energy absorption	Luca Lomazzi, Andrea Manes	https://doi.org/10.53255/IGFTUBE.IGF28.94
Effect of normal and tangential acceleration on longitudinal fracture of inhomogeneous structure rotating around a horizontal axis	Victor Rizov	https://doi.org/10.53255/IGFTUBE.IGF28.95
Common imperfections and mechanical performance of additively manufactured scaffolds	Masoomah Farrokhtar, Gabriella Bolzon, Lisa Biasetto, Vanessa Gastaldi	https://doi.org/10.53255/IGFTUBE.IGF28.96

Presentation title	Authors	DOI
Predicting the Effective Stiffness of Spinodal-like Trabecular Bone via Finite Element Analysis	Della Rocca Alessandro, Marco Piacentini, Francesco Penta, Chao Gao, Chiara Bertolin	https://doi.org/10.53255/IGFTUBE.IGF28.97
Examples of Machine Learning algorithms to support the fatigue design of Additively Manufactured metallic parts	Alessio Centola Alberto Ciampaglia, Filippo Berto, Davide Salvatore Paolino, Andrea Tridello	https://doi.org/10.53255/IGFTUBE.IGF28.98
AI-aided damage detection in composites via infrared thermography and transfer learning	Muyao Li, Davide Leonetti, Donatella Zappalá, H.H. Bert Snijder	https://doi.org/10.53255/IGFTUBE.IGF28.99
Damage evolution analysis in bioinspired composite structures by using a machine learning-based multiscale modeling approach	Lorenzo Leonetti, Domenico Ammendolea, Fabrizio Greco, Paolo Lonetti, Paolo Nevone Blasi, Girolamo Sgambitterra	https://doi.org/10.53255/IGFTUBE.IGF28.100
Tailoring mechanical performance in SLA 3D-printed lattices through AI prediction and genetic algorithm optimization	Marcello Laurenti, Jacopo Tirillò, Fabrizio Sarasini, Filippo Berto.	https://doi.org/10.53255/IGFTUBE.IGF28.101
Fracture simulation in multiphase materials via ALE-driven cohesive interface strategy	Umberto De Maio, Francesco Fabbrocino, Daniele Gaetano, Fabrizio Greco, Andrea Pranno, Alessandra Silvestri	https://doi.org/10.53255/IGFTUBE.IGF28.102
Slow-crack growth in peroxide-tuned polyethylene	F. Olla, M. Contino, D. Ferri, F. Scavello, L. Andena	https://doi.org/10.53255/IGFTUBE.IGF28.103
Numerical simulation of dynamic crack propagation in brittle materials using a moving mesh technique	Domenico Ammendolea, Francesco Fabbrocino, Fabrizio Greco, Paolo Lonetti, Arturo Pascuzzo	https://doi.org/10.53255/IGFTUBE.IGF28.104
A Monte Carlo Study on the effect of runouts on confidence intervals of bilinear S-N curves	Felix-Christian Reissner, Jörg Baumgartner	https://doi.org/10.53255/IGFTUBE.IGF28.105
Effects of hydrogen on the mechanical properties of QP1180 AHSS	G. Macoretta, C. M. Belardini, B. D. Monelli, R. Valentini, M. E. Palmieri, M. Villa, L. Tricarico, S. Bruschi, M. M. Tedesco	https://doi.org/10.53255/IGFTUBE.IGF28.106
Peridynamic-based modeling of fatigue damage and remaining life estimation in metallic components	Majid Nasrollahnejad, Francesco Scabbia, Mirco Zaccariotto, Ugo Galvanetto	https://doi.org/10.53255/IGFTUBE.IGF28.107
Experimental and numerical investigation of sandwich structures under 4-point bending using progressive damage models	H.G.E. da Silva, R.J.B. Rocha, R.D.S.G. Campilho, P.J.R.O. Nóvoa, K. Madani	https://doi.org/10.53255/IGFTUBE.IGF28.108

Presentation title	Authors	DOI
Finite element simulation of axially loaded corroded steel tubes considering the intended and unintended imperfections	Abubakr E. S. Musa, Mahmoud Nasr, Kong Fah Tee, Khalid Mohamed, Subhan Ahmad, Mohammed A. Al-Osta	https://doi.org/10.53255/IGFTUBE.IGF28.109
Effect of aggregate shape and volume on concrete fracture: A mesoscale modelling	Mansi Gupta, Sonali Bhowmik	https://doi.org/10.53255/IGFTUBE.IGF28.110
Finite element simulation of cracked dentin	Mays H. Udah, Qassim M. Doos, A. M. Al-Mukhtar	https://doi.org/10.53255/IGFTUBE.IGF28.111
Effect of hydrogen on the cyclic material behaviour of X-seam butt-welded joints in the austenitic steel X6CrNiTi18-10	I. Chatziioannidis, S. Schönborn, T. Steingraber, P. Hoffmann	https://doi.org/10.53255/IGFTUBE.IGF28.112
Microstructure and mechanical properties of two quenched and tempered steels for industrial undercarriage track links: a preliminary comparison	Lorenzo Antonioli, Chiara Soffritti, Cindy Morales, Mattia Merlin, Denis Benasciutti, Elena Capatti	https://doi.org/10.53255/IGFTUBE.IGF28.113
Specifics of fatigue strength estimation for bicycle frames	Miroslava Kučerková, Vladimír Chmelko	https://doi.org/10.53255/IGFTUBE.IGF28.114
Exploring the acoustic activity in marble under compression by means of the evolution of the Cumulative Counts in the Natural Time Domain	Dimos Triantis, Ilias Stavrakas, Ermioni D. Pasiou, Stavros K. Kourkoulis	https://doi.org/10.53255/IGFTUBE.IGF28.115
Simulation-based optimization of molten pool position in sand casting of a complex steering knuckle geometry	Kazem Reza Kashyzadeh, Negewo Getu Bogale	https://doi.org/10.53255/IGFTUBE.IGF28.116
Machine Learning-based prediction of high cycle fatigue and fatigue crack growth rate in LPBF Co-Cr-Mo alloys under varying scanning strategies	Vinod Kumar Jat, R. U. Patil	https://doi.org/10.53255/IGFTUBE.IGF28.117