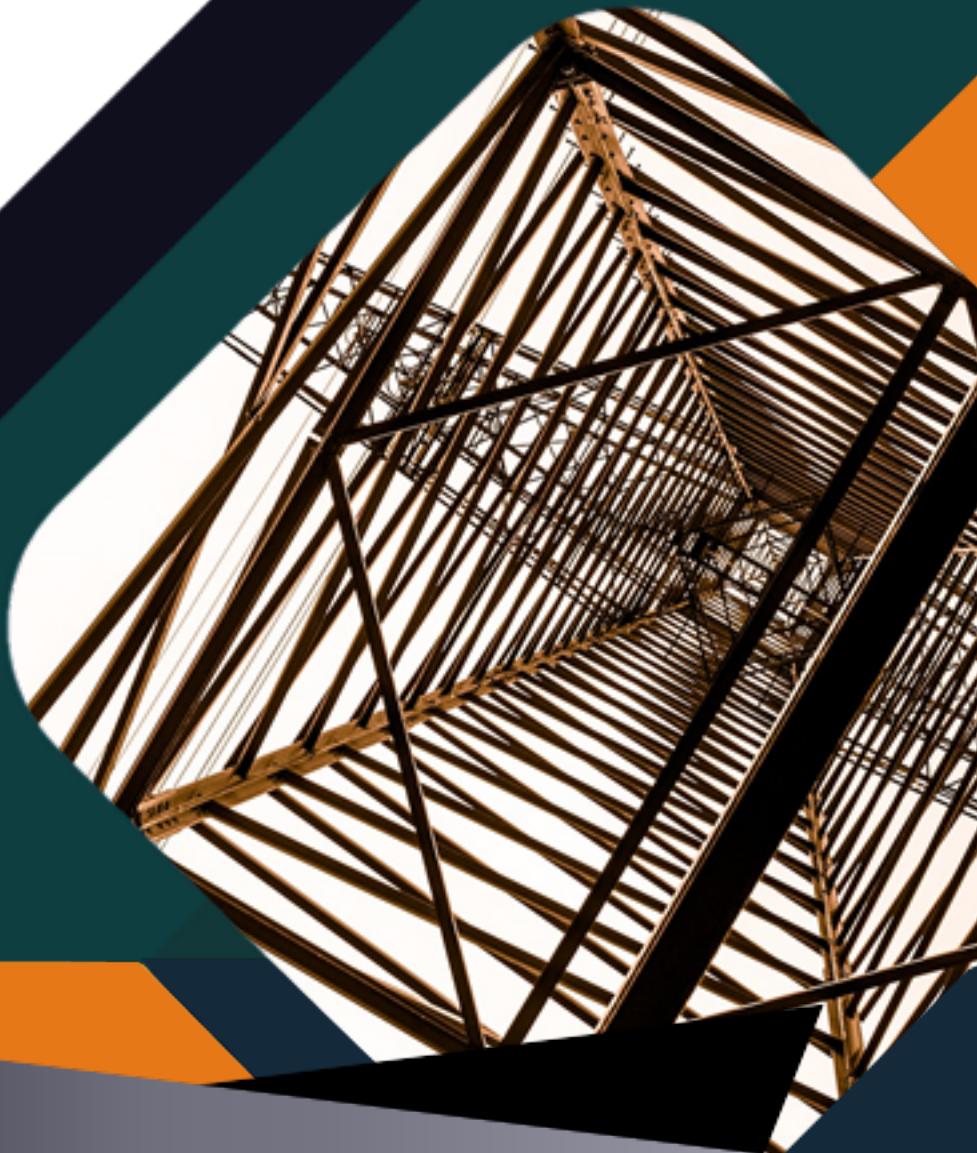


APFIE Video recordings

ISBN: 978-88-31482-16-5



Virtual 4th International Conference on Structural Integrity - ICSI2021

Virtual 4th International Conference on Structural Integrity – ICSI 2021

Virtual 4th International Conference on Structural Integrity – ICSI 2021 was held online, August 26-31, 2018. August 30 – September 2, 2021

Chairmen

Pedro Moreira, INEGI, Portugal
Paulo Tavares, INEGI, Portugal

Organizing Committee

Virginia Infante, IST, Portugal
Luís Reis, IST, Portugal
Paulo Lobo, UMA, Portugal
Luís Borrego, IPC, Portugal

Local Organizing Committee

Behzad Farahani, INEGI, Portugal
Carmen Sguazzo, INEGI, Portugal
Daniel Braga, INEGI, Portugal
Nuno Viriato, INEGI, Portugal
Shayan Eslami, INEGI, Portugal



VIDEO-PRESENTATIONS

Presentation title	Authors	DOI
Index Combination for Damage Localization using Genetic Algorithm	E. K. Ervin, C. Zeng	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.1
Experimental Investigations on Stiffened and Web-core Sandwich Panels Made for Steel under...	J. Romanoff, M. Korgesaar, P. Lehto, K. Bemtsson, H. Remes	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.2
Identification of orthotropic elastic properties of wood by digital image correlation and ...	J. Henriques, J. Xavier, A. Andrade-Campos	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.3
Experimental study on fatigue crack propagation of octet-truss lattice	Y. Li, M. Pavier, H. Coules	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.4
Fracture behaviour of octet-truss lattices in different orientations	Y. Li, M. Pavier, H. Coules	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.5
Aluminium to GFR Polymer Composite Joining through Friction Stir Welding	F. Dias, V. Infante, G. Cipriano, D. Braga, A. Correia, S. Eslami, P.M.G.B. Moreira	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.6
Fracture analysis of a leaf spring of a wagon railway car	M. Freitas, V. Infante, M. Fonte	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.7
Failure analysis of a parabolic spring belonging to a railway wagon	V. Infante, M. Freitas, R. Baptista	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.8
Fatigue Crack Growth on Modified CT Specimens Using Artificial Neural Networks	R. Baptista, P. Moita, V. Infante	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.9
A prefabricated MVFT composite girder suitable for small-span bridge	Z. Xiong	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.10
High Resolution Crack Tip Displacement Field Applications Using Numerical Methods	R. Baptista, V. Infante, M. Garcia, C. Esteves, D. Braga, B. Farahani, P. Moreira	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.11
SHM of a Foot Bridge in a Virtual Reality Environment	F. Luleci, L. Li, J. Chi, C. Cruz-neira	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.12
Numerical and Theoretical Modal Analysis of Transit Buses	R. Lopes, B. Farahani, F. Q. De Melo, N. V. Ramos, P. M.G.P. Moreira	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.13

Presentation title	Authors	DOI
A Numerical Dynamic Analysis of a Multi-Body Bus	R. Lopes, B. Farahani, F. Q. De Melo, N. V. Ramos, P. M.G.P. Moreira	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.14
A method for determining the distribution of carbon nanotubes in nanocomposites by ...	Dayou Ma, A. Esmaeili, C. Sbaruffatti, M. Giglio, A. Manes	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.15
Frontal impact on a coach, door sub-system pseudo-dynamic (PSD) test	R. Lopes, F. Barros, F.Q. De Melo, N.V. Ramos, P.M.G.P. Moreira, R. Cunha, R. Maya, R. Rodrigues	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.16
Frontal impact on a coach, door sub-system numerical modelling	R. Lopes, M. Parente, P.M.G.P. Moreira, R. Cunha, R. Maya, R. Rodrigues	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.17
The Evaluation of Quenching Temperature Effect on Microstructural and Mechanical ...	E. Entezari	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.18
Influence Assessment of Artificial Defects on the Fatigue Behavior of Additively ...	F. Stern, J. Grabowski, S. Kleszczynski, D. Kozzem, E. ElspaB, G. Witt, F. Walther	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.19
Structural integrity of 3D-printed prosthetic sockets: Experimental study for paediatric ...	T. Marinopoulos, S. Li, V.V. Silberschmidt	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.20
Displacement monitoring of crossbeams in an airport runway extension using digital image ...	F. Barros, S. Aguiar, P. J. Sousa, A. Cachaco, N.V. Ramos, P.J. Tavares, P.M.G.P Moreira, M. Xu, L.O. Santos, E. Franco	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.21
Structural monitoring of a breakwater using UAVs and photogrammetry	A. Cachaco, P.J.Sousa, F. Barros, P.J. Tavares, P.M.G.P. Moreira, R. Capitao, M.G. Neves, E. Franco	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.22
Hardware proposal for SHM in airborne vehicles	J. Etxaniz, G. Aranguren, J. M.	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.23

Presentation title	Authors	DOI
	Gil-Garcia, J. Sanchez	
Experimental investigation of factors influencing the transmission capabilities of a low ...	G. Wogcik, P. Przystalka	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.24
In service failure of a signal-support bridge structure for traffic signaling	M. Iordachescu, A. Valiente, M. De Abreu	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.25
Damage classification in composite structures based on Xray computed tomography scans using...	T. Rogala, P. Przystalka, A. Katunin	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.26
Graphite debonding in compacted graphite iron under thermal loading: 3d microstructure-...	E.N. Palkanoglou , M.C.K .P. Baxevanakis ,V. V. Silberschmidt	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.27
Dynamic Fracture Behaviour of Additively Manufactured Polymers and Composites under ...	K. P. Baxevanakis, V.V Sliiberschmidt	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.28
Integrity evaluation of a reactor pressure vessel based on a sequential Abaqus-FRANC3D ...	M. Annor- Nyarko	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.29
Failure Analysis of FRP Composites Exposed to Real Marine Environment	G. Vizentin, G. Vukelic	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.30
Penetration of thin aluminium targets with non-axisymmetric projectiles: Numerical study	T. Stergiou, K. Baxevanakis, A. Roy, N. Sazhenkov, M.A. Nikhamkin, V. V. Silberschmidt	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.31
Failure behavior of human trabecular bone	E. Smotrova, S. Li, M. Tashkinov, V. V. Silbershmidt	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.32
Analysis of cyclic properties of additive vs. conventionally produced material AlSi10Mg	V. Chmelko, I. Berta, M. Margerit	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.33
Fatigue lifetime of a bicycle frame made additively from AlSi10Mg	R. Durka, M. Gasparik, P. Zlabeck	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.34
Structural integrity analysis of a Kaplan turbine cover	A. Sedmak, M. Arsic, M. Opacic	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.35
Numerical simulation of fatigue crack growth in aircraft structure with a honeycomb mesh	M. Dinulovic, A. Grbovic, S. Sedmak, T. Mijatovic, M. Arandelovic	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.36

Presentation title	Authors	DOI
Analysis of fatigue behaviour of a bridge welded structure	Z. Burzic, A. Sedmak, S. Sedmak, S. Perkovic, I. Camagic	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.37
Crack identification in tungsten carbide using image processing techniques	K. E. Hazzan, M. Pacella	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.38
Ultrasonically assisted turning of SiCp/Al composites	J. Kim, L. Zani, A. Abdul-kadir, M. L. Ribeiro, A. Roy, K. P. Baxevanakis, L. Jones, V. V. Silberschmidt	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.39
The Demonstrator of Structural Health Monitoring System of Helicopter Composite Blades	A. Mironov	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.40
Effectiveness of damage identification in composite plates using damage indices based on ...	A. Katunin, S. Rucevskis	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.41
Quantitative Thermometry: A Revived Simplified Approach to Fatigue Strength Determination	F. Schaefer, J. Rosar, H. Wu, P. Starke, M. Marx	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.42
Eigenstrain Reconstruction from Contaminated Data using Inverse-EIM	A. Agrawal	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.43
Fatigue Damage Assessment in a Welded Tubular Joint Under Random Loading	C. Ronchei, S. Vantadori, A. Carpinteri, D. Scorza, A. Zanichelli	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.44
Effect of primer and sealant in refill friction stir spot welded joints on strength and ...	P. Homola, R. Ruzek, A. R. Mc Andrew, J. De Backer	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.45
Acousto-Ultrasonic Investigation of corrosion in CORTen steel by Deep Learning Neural Network	C. Barile, C. Casavola, G. Pappalettera, V. P. Kannan	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.46
3D simulation models for developing digital twins of heritage structures: challenges and ...	A. Shabani, M. Skamantzari, S. Tapinaki, A. Georgopoulos, V. Plevris, M. Kioumarsi	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.47
NLFEA based design optimization of GFRP stirrups in partially confined concrete	S. Djenad, S. Alt Taleb, A. SI Salem, M. Amin Bouzidi	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.48

Presentation title	Authors	DOI
Overloading effect on transient fatigue crack growth of TiAl6V4 parts produced by Laser ...	L. Borrego, J. Jesus, J. M. Ferreira, C. Capela, J. D. Costa	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.49
Investigation of Crack Formation and Propagation in AA7475 using Multiple Potential Drop ...	J. Bar, M. Nahbein	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.50
CLT-concrete composite slab optimization	C. M. Criado, J. R. A. Zunzunegui	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.51
Proof of concept for impact and flaw detection in airborne structures	G. Vivas, J. Gonzales, J. Etxanis, G. Aranguren	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.52
Effect of specimen configuration and notch root angle on fatigue behavior of novel dissimilar	L. Shi, J. Xue, J. Kang, A. S. Haselhuhn, B. E. Carlson	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.53
Comparison between design guidelines in predicting FRP contribution to shear capacity of ...	H. H. Mhanna, R. A. Hawlieh, J. A. Abdalla	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.54
Evaluation the effect of FRP anchor embedment depth on the flexural bond capacity of ...	G. S. Alshami, R. A. Hawlieh, L. A. Abdalla	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.55
Modelling the impact of climate change on a novel Irish Concrete Bridge	D. R. Wallace	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.56
Mechanical Characterization of PDMS with Different Mixing Ratios	F. C. P. Sales, R. M. Ariati, V. T. Noronha, J. E. Ribeiro	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.57
PU tensile tests: conventional and digital image correlation analysis	F. C. P. Sales, R. M. Ariati, V. T. Noronha, J. E. Ribeiro, R. R. C. Da Costa	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.58
Global and local fracture behavior in a brittle solid with a set of pre-existing small-scale..	C. Nagasawa, K. Uenishi	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.59
The effect of confinement and material heterogeneities on the dynamics of a granular medium...	K. Uenishi, D. Xi	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.60
Prospects of Structural Damage Identification Using Modal Analysis and Anomaly Detection	D. Mironovs, S. Rucevskis, K. Dzelzitis	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.61
Effect of testing frequency on fatigue behavior of base materials AA2024, Ti-6Al-4V and ...	R. Kuliiiev, S. Riekehr, V. Ventzke, N. Kashaev	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.62

Presentation title	Authors	DOI
influence of the connector shape parameters in the structural behaviour of the adhesive-free...	G. Moltini, V. Bano	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.63
Research and Prediction of the Stress-Strain State of Construction Facilities in the ...	G. Gusev, I. Shardakov	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.64
Study of rock dilation effect on oil recovery during steam-assisted gravity drainage	A. Kostina, M. Zhelnin, O. Plekhov	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.65
Damage assessment of CFRP laminate plate subjected to close-range blast loading: hydrocode ...	A. Vescovini, L. Lomazzi, M. Giglio, A. Manes	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.66
Mechanical behavior of tropical Glued Laminated Timber (GLT) beams with fingers joints	C.H. Ndong Bidzo, C. F. Pambou Nziengui, R. Moutou Pitti, S. Ikogou, B. Kaiser	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.67
Ship Model Structural Health Monitoring using FBGS to obtain internal forces	M. Gonzales Gallego, F. Terroba, J. L. Martinez, R. Atieza, M. Frovel	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.68
Cyclic deformation behaviour of AlSi10Mg aluminium alloy fabricated by laser powder-bed fusion	R. Fernandes, J. Jesus, R. Branco, L. P. Borrego, J. A. Martins Ferreira	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.69
Impact of mechano-sorptive loading on crack propagation of notched beams of White-fir and ...	M. A. Ella, S. Ikogou, G. Goli, R. Moutou Pitti, J. Gril, E. Fournely, G. Godi	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.70
Optimization of the graphene reinforcement in cement-based materials	S. Anastopoulos, F. Givannaki, Z. Metaxa, P. Papanikos, N.D. Alexopoulos	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.71
Microstructure and mechanical properties of laser beam-welded AA2198 using Al-Si filler wire..	T. N. Examilioti, V. Ventzke, N. Kashaev, B. Klusemann, N. D. Alexopoulos	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.72
Strain measurements by FBG-based sensors embedded in various materials manufactured by ...	V. Matveenko, N. Kosheleva, G. Serovaev	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.73
On the exploitation of multiple 3D full-field pulsed ESPI measurements in damage location ...	A. Zanarini	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.74

Presentation title	Authors	DOI
On the defect tolerance by fatigue spectral methods based on full-field dynamic testing	A. Zanarini	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.75
Cyclic compression behavior of multilayered polymeric nanostructured foams: FEM simulation and	I. Gutierrez Montero, R. Sesana, S. D'Hers, F. Scarpa	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.76
Method of Coaxial Accelerometers Correlation for Quality Assessment of Structural Joints	D. Serduks, V. Kurtenoks, A. Tatarinov, V. Mironovs, V. Lapkovskis, K. Buka-Vaivade, A. Macevics, K. Topcijs, M. Vinnitis,	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.77
Non-model vibration analysis methods for health monitoring of structural joints	V. Lapkovskis, V. Kurtenoks, K. Buka-Vaivade, D. Serduks, V. Mironovs, A. Tatarinov, A. Podkoritovs	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.78
Behaviour of timber-concrete composite with defects in adhesive connection	K. Buka- Vaivade, D. Serduks	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.79
Effects of long-term loading on Moabi timber beams in the tropical environment of Gabon: ...	V. Nsouami, N. Manfoumbi, E. Bastidas Arteaga, R. Moutou Pitti	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.80
Innovative processing for ceramic ball manufacturing: analytical estimation, experimental ...	R. Sesana, I. Filos Pessolano, S. Rizzo, R. Lupoi	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.81
Oil transmission pipelines with corrosion defects reinforced by two types of sleeves: ...	J. Katch, I. Cerny, A. Poloch, B. Kysela, M. Poupa	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.82
The influence of high temperature on dynamic response of concrete beams reinforced with GFRP	B. Zima	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.83
Thermal and Electrical characterization of Si3N4 blanks through Active Thermography ...	R. Sesana, I. Filos Pessolano, A. Uva	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.84
Security determination in timber structures	M. Tortoriello, L. Lima, A. Cobas, R. Cichero,	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.85

Presentation title	Authors	DOI
On the transmission of non-Gaussian random loading through linear structures	A. Trapp, F. Hollweck, P. Wolfsteiner	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.86
Active thermography for the investigation of corrosion in steel surfaces	M. M. Dugand, F. Curà, R. Sesana, S. S. Lazzaro	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.87
Crack Closure Analysis Using Digital Image Correlation	B. V. Farahani, F. Direito, P. J. Sousa, P. M. G. P. Moreira	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.88
A Study on the Passive Safety Solution on Transit Buses According to Regulation No. 66 of ...	B. V. Farahani, N. Ramos, P. Moreira, R. Cunha, A. Costa, R. Maia, R. M. Rodrigues	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.89
Compression fatigue behaviour of extrusion based 3D printed PLA	R. Claudio, R. A. Baptista, J. Dupont, M. Leite, L. Reis	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.90
Ironing process influence in the mechanical properties of seams in PLA specimens produced with	M. Sardinha, N. Frutuoso, M. Leite, R. Ribeiro, L. Reis	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.91
Identification of material properties of green laminate composite plates using bio-inspired...	A. Rodrigues, J. Araujo dos Santos, H. Lopes	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.92
On the use of finite differences for vibration-based damage localization in laminated...	T. Oliveira, J. Araujo dos Santos, H. Lopes	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.93
VHCF under biaxial loading of a mold tool steel	P. R. da Costa, L. Reis, M. Freitas	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.94
Health indicator development for damage monitoring of composite panels utilizing SHM sensors	G. Galanopoulos	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.95
Geometrical study of adhesively-bonded T-joints by cohesive models	J.P.M. Lopes, R.G.S.G. Campilho, R.J.B. Rocha, F.J.G. Silva	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.96
Adherend effect on the peel strength of a brittle adhesive	J.P.O. Pereira, R.G.S.G Campilho, F.J.G Silva, D.C. Goncalves	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.97
Development of a small-scale testing machine for use with interferometric monitoring methods	P.J. Sousa, S. Eslami, F. P. Direito, P.M.G.P. Moreira	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.98
Probabilistic Method to estimate the Scatter of the Fatigue Strength of Shafts in the ...	S. Vetter, A. Hasse	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.99

Presentation title	Authors	DOI
Corrosion characterisation of solid and lattice AlSi10Mg manufactured by laser powder bed ...	C. Taute, H. Moller, A. du Plessis	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.100
Influence of easy repair using plasma sintering and alumina particle on fatigue crack growth	D. Sasaki, T. Kiyonaga, Y. Obukuro, Y. Kawakami	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.101
Stiffness optimization through a modified greedy algorithm	I. C. Coropetchi, A. Vasile, S. Sorhan, C. R. Picu, D. M. Costantinescu	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.102
A constitutive equation for the kinetics of high temperature hydrogen attack and its use for..	R. Mostert, T. Mukarati, T. Pretorius, M. Mathoho	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.103
Solution for consolidation and retrofitting an historical steel bridge	D. Radu, R. Bancila, D. Boldus, S. Sedmak, M Arandelovic	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.104
Analytically based time reversal damage imaging in plate-like structures with a sparse ...	A. Eremin, I. Bareiko, E. Glushkov, N. Glushkova	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.105
Evaluation Framework for Tensile Measurements, based on Full-Field Deformation Measurements...	D. Antok, T. Fakete, L. Tatar	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.106
Estimation of residual fatigue life of polymer composites after preliminary low-velocity ...	O. Staroverov, D. Lobanov	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.107
Effect of graphene nanoparticles on suspension viscosity and mechanical properties of epoxy...	J. M. Parente, R. Simoes, P. N. B. Reis	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.108
Mechanism of fireside corrosion deteriorating creep rupture life of Super304H in simulated ...	Y. Xu, X. Yang, J. Lu, W. Li, Z. Guo	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.109
Custom control system for Split Hopkinson Pressure bars	P. J. Sousa, R. Lopes, J. M. Reis, P. M. G. P. Moreira	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.110
Impact characterization of bio-based sandwich panels with cork core	P. Santos, N. Bouhemame, P. N. B. Reis, A. Bezazi	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.111
Effect of different hostile solutions on mechanical properties of composite materials	P. Santos, J. M. Parente, S. Volvez, P. N. B. Reis	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.112

Presentation title	Authors	DOI
Development of a custom setup for additive manufacturing of high-performance thermoplastics	T. Domingues, A. Cachaco, P. J. Sousa, F. Carneiro, J. Silva, S. Eslami, P. M. G. P. Moreira	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.113
A simulated annealing algorithm for stiffness optimization	A. Vasile, I. C. Coropetchi, S. Sorohan, C. R. Picu, D. M. Costantinescu	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.114
Crack Tip Monitoring by Multiscale Optical Techniques	F. DiReito, B. Farahani, P. Sousa, P. Tavares, P. Moreira	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.115
Displacement monitoring of a pedestrian bridge using 3D digital image correlation	F. Barros, S. Aguiar, P. J. Sousa, A. Cachaco, P. J. Tavares, P. M. G. P. Moreira, D. Ranzal, N. Cardoso, N. Fernandes, R. Fernandes, R. Henriques, P. M. Crus, A. Cannizzaro	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.116
Experimental evaluation of the stress intensity factors, T-stress and higher order ...	L. V. Stepanova, O. N. Belova	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.117
Stress intensity factors, T-stress and higher order coefficients of the Williams series ...	L. V. Stepanova, O. N. Belova	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.118
Nonlinear eigenvalue problems arising from nonlinear fracture mechanics problems	L. V. Stepanova, E. M. Yakanova	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.119
An effective scheme for solving a class of nonlinear boundary value problems of stress ...	L. V. Stepanova, R. M. Zhabbarov	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.120
Constraint effect on fracture toughness resistance curves of an X60 pipe steel	C. Quian, J. Liang, Y. Huang, J. Kang, J. Gianetto	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.121
The effect of artificial ageing on the corrosion-induced mechanical properties degradation of	M. C. Charalampidou, F. Tazlakidou, A. Proiou, S. Kourkoulis, N. Alexopoulos	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.122
Mechanical, electrical and piezoresistive properties of a ternary cement-based restoration ...	C. M. Charalampidou, N. D. Alexopoulos, A. E. Dimou, Z. S.	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.123

Presentation title	Authors	DOI
	Metaxa, S. K. Kourkoulis, I. Karatasios	
Influence of ester on the mechanical hysteresis characteristic of power transformer insulation	D. F. O. Braga	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.124
Crack growth rate deceleration effect in constructional steel caused by artificial crack ...	G. Lesiuk, H. Nykyforchyn	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.125
Damage detection and localization in imperfect bolted joints	R. Soleimanpour, S. Mohammad Solemani, N. K. Mohammad	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.126
Application of Sandwich Panels in Steel Structures	A. Vidwans, J.A. Correia	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.127
Effects of normalizing heat treatment on the mechanical and magnetic properties of an ancient	L. Benini, J. Oliviera, J. M. Pardal, L. Noris, A.F.O. Correia	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.128
A review of fatigue damage in offshore wind turbine structures	D. Haselbozchalooe, J. A. F. O. Correia, P. Mendes, M. Correia, A. M. P. Jesus, F. Berto	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.129
An Automatic System for Residual Stress Measurements by Hole Drilling	A. Benincasa	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.130
Advanced Mechanical Surface Characterization	J. Cascalheira	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.131
Friction based spot joining method for thermoplastic based materials	S. Eslami, P. Sousa, P. Moreira	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.132
Fatigue life estimation of CFRP reinforced puddle iron structural details using fatigue ...	A. Mohabeddine, J. Arrojado, J. Correira, J.M. Castro, A. M. P. De Jesus, R. A. B. Calcada, F. Berto	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.133
Comparison between rigid and ductile adhesives in CFRP/Steel bonded joints	G. Malik, N. Fantuzzi, J. Correira, J.M. Castro, A. De Jesus, R. A. B. Calcada, F. Berto	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.134

Presentation title	Authors	DOI
Static and fatigue properties of maraging steel X3NiCoMoTi18-9-5	I. Zetkova, M. Kepka, M. Zetek, L. Kucerova, J. Volak	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.135
Fracture studies of 3D-printed PLA-wood composite	M. R. Khosravani, T. Reinicke	https://doi.org/10.53254/ESISTUBE.ICIS2021.1.136

