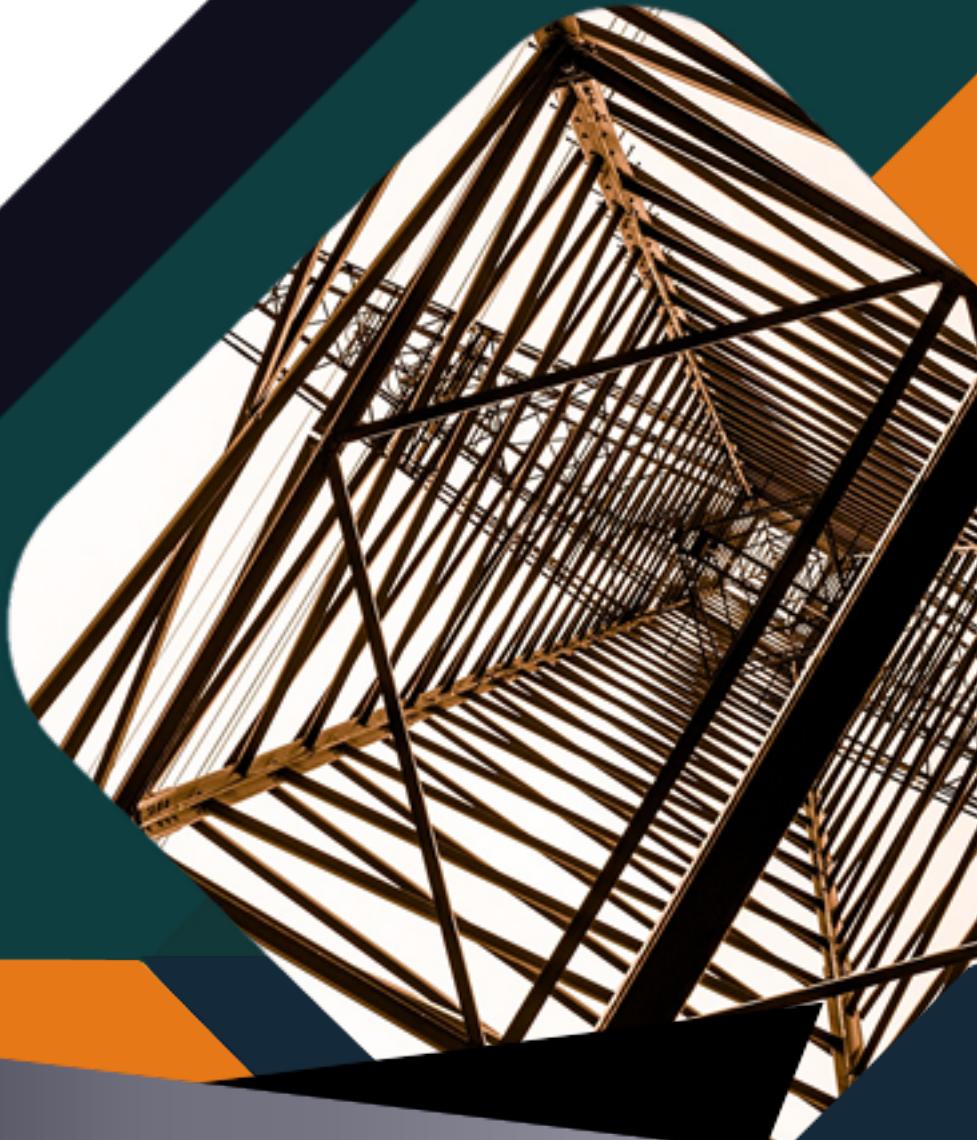


# IGF Video recordings

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## 2nd Mediterranean Conference on Fracture and Structural Integrity, MedFract2



# **2nd Mediterranean Conference on Fracture and Structural Integrity, MedFract2**

February 14-16, 2022, Catania (Italy) & Web

*Algerian Group of Fracture Mechanics and Energy (AGFME), Greek Society of Experimental Mechanics of Materials (GSEMM), Italian Group of Fracture (IGF) and Sociedad Espanola de Integridad Estructural - Grupo Espanol de Fractura (SEIE-GEF) organized the 2nd Mediterranean Conference on Fracture and Structural Integrity, MedFract2.*

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and Structural Integrity, MedFract2**

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## VIDEO-PRESENTATIONS

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Peridynamic Modelling of Propagation of Cracks in Photovoltaic Panels	Andrew Premchander, Islam Amin, Selda Oterkus, Erkan Oterkus, Nabil Ahmed Shawky Elminshawy	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.1">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.1</a>
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Flexural and fracture behaviour of a cement-based material reinforced with GO nanoplates	Camilla Ronchei, Sabrina Vantadori, Daniela Scorza, Andrea Zanichelli, Giacomo Magnani, Daniele Pontiroli, Mauro Riccò, Michele Sidoli	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.8">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.8</a>
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Presentation title	Authors	DOI
Simulation of dynamic fracture mechanics in quasi-brittle materials using a finite element modeling approach enhanced by moving mesh technique and interaction integral method	Fabrizio Greco; Domenico Ammendolea; Paolo Leonetti; Arturo Pascuzzo	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.74">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.74</a>
Cracking behavior analysis of reinforced concrete structures by using a cohesive fracture model	Umberto De Maio, Fabrizio Greco, Lorenzo Leonetti, Paolo Nevone Blasi, Andrea Pranno	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.75">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.75</a>
A cohesive fracture approach for the nonlinear analysis of load-induced degradation of vibration characteristics in RC beams	A. Pranno, F. Greco, P. Leonetti, U. De Maio, D. Gaetano, C. Le Piane	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.76">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.76</a>
An experimental investigation on the net cross-section failure of damaged plates containing holes	H. (Hendrik) Baarssen, J. (Jan-Willem) van Maanen, D. (Davide) Leonetti, H.H. (Bert) Snijder	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.77">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.77</a>
Fracture behaviour of natural fibres reinforced epoxy composites using small punch test	Saeed Mousa, S Vantadori, Hossam El-Din M. Sallam, A.A. Abd-Elhady	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.78">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.78</a>
Mechanical and morphological characterization of BCC - derived unit cells for biomedical devices	Fabio Distefano, Gabriella Epasto, Eugenio Guglielmino, Rosalia Mineo	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.79">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.79</a>
Making a point: a discussion on the puncturing of soft tissues	Andrea Spagnoli, Roberto Brighenti, Riccardo Alberini, Mattia P. Cosma, Matteo Montanari, Farzad Tatar, Michele Terzano	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.80">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.80</a>
Experimental and statistical study on the effects of fused filament fabrication parameters on the tensile strength of hybrid PLA-Wood fabricated parts	N.A. Fountas, J.D. Kechagias, S.P. Zaoutsos and N.M. Vaxevanidis	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.81">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.81</a>
Experimental investigation on mechanical properties of FFF parts using different materials	Jelena Djokikj, Ognen Tuteski, Elisaveta Doncheva, Bojana Hadjieva	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.82">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.82</a>

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Effect of recycling on internal and external defects of Ti-6Al-4V powder particles for electron beam melting process	Costanzo Bellini, Filippo Berto, Vittorio Di Cocco, Francesco Iacoviello, Larisa Patricia Mocanu, Seyed Mohammad Javad Razavi, Stefania Franchitti	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.83">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.83</a>
Fracture mechanics behaviour of Ti6Al4V via different experimental techniques	Rosa De Finis, Aleksander Omholt Myhre, Aleksander Sendrowicz, Alexei Vinogradov, Umberto Galiotti, Filippo Berto	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.84">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.84</a>
Experimental and numerical determination of the effect of ratio of crack length and specimen width ( $a/W$ ) on the fracture mechanics parameters of ring-shaped specimens	Isaak Trajkovic, Milos Milosevic, Bojan Medjo, Aleksandar Sedmak, Marko Rakin	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.85">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.85</a>
Influence of thickness on the IZOD impact strength of FDM printed specimens from PLA and PETG	Cosmin-Florin Popa, Mihai-Petru Mărghitaş, Sergiu-Valentin Galaţanu, Liviu Marşavina	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.86">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.86</a>
On the fracture toughness of PPS and PPA reinforced with glass fiber	Alexandru Isaincu, Dan Micota, Liviu Marsavina	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.87">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.87</a>
Comparing the efficiency of various post-processing methods on structural integrity of laser powder bed fusion AlSi10Mg	Erfan Maleki, Sara Bagherifard, S.M.J. Razavi, Filippo Berto, Mario Guagliano	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.88">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.88</a>
Smart NiTi-polymer composites for shape morphing applications: interfacial damage under thermo-mechanical loading	Emanuele Sgambitterra, Elio Curcio, Stefano Rodinò, Danilo Renzo, Pietro Magarò, Franco Furgiuele, Marco Brandizzi, Carmine Maletta	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.89">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.89</a>
Electrical Methods for Sensing Damages in Cement Mortar Beams combined with Acoustic Emissions	Andronikos Loukidis, Ilias Stavrakas, Dimos Triantis	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.90">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.90</a>
Damage-failure transition in VT6 titanium alloy under	Vladimir Oborin, Mikhail Bannikov, Oleg Naimark	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.91">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.91</a>

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consecutive dynamic and VHCF loads		
Fatigue analysis method for lattice structures from metal additive manufacturing	Giorgio De Pasquale, Antonio Coluccia	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.92">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.92</a>
Gapped momentum states as the mechanism of damage-failure transition in solids with defects	Oleg Naimark	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.93">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.93</a>
Modeling of fatigue crack growth and crack paths in heat treated 42CrMo4 steel under mixed mode (I+II) loading	Monika Duda, Aleksandra Królicka, Michał Smolnicki, Grzegorz Lesiuk, Jose A.F.O. Correia, Filippo Berto	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.94">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.94</a>
Failure analysis of pearlitic matrix components	D. Firrao, P. Matteis	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.95">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.95</a>
Effect of adhesive type and bondline thickness on the peeling behavior of epoxy bonded CFRP/PA6 joints	F. Dicosta, C. Morano, M. Alfano, F. Furgiuele, A. Andrieu	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.96">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.96</a>
Cohesive zone parameter influence on the impact strength of steel adhesive joints	T.F.C. Pereira, R.D.S.G. Campilho, J.J.M. Machado, R.J.B. Rocha, I.J. Sánchez-Arce	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.97">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.97</a>
Adhesively-bonded T-joint cohesive zone analysis using dual-adhesives	P.M.D. Carvalho, R.D.S.G. Campilho, I.J. Sánchez-Arce, R.J.B. Rocha, A.R.F. Soares	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.98">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.98</a>
Numerical evaluation of tensile-loaded tubular scarf adhesive joints	J.E.S.M. Silva, R.D.S.G. Campilho, I.J. Sánchez-Arce, R.D.F. Moreira	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.99">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.99</a>
Design and validation of mixed-mode device for fracture toughness analysis of adhesive joints	Soares, A.R.F., Campilho, R.D.S.G., Chaves, F.J.P., Sánchez-Arce, I.J., Fecheira, J.M.F.S., Silva, F.J.G., Carvalho, P.M.D.	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.100">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.100</a>
Validation of theoretical models for the strength prediction of tubular adhesive joints	Pinheiro, A.E.S., Campilho, R.D.S.G., Moreira,	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.101">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.101</a>

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	R.D.F., Sánchez-Arce, I.J.	
Cohesive zone analysis of torsional tubular joints with an epoxy adhesive	Oliveira, T.J.S., Campilho, R.D.S.G., Cardoso, M.G., Sánchez-Arce, I.J.	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.102">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.102</a>
Quantification of low-cycle fatigue damage accumulation in stress concentration area by local strain evolution	Yu.G Matvienko, V.S. Pisarev, S.I. Eleonsky	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.103">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.103</a>
Fatigue crack propagation for an aircraft compressor under input data variability	V. Giannella, R. Sepe, R. Citarella	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.104">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.104</a>
Microstructure based fatigue life modeling of SLM fabricated Hastelloy-X using a FFT approach	Chandrashekhar Pilgar, Javier Segurado	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.105">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.105</a>
Revisiting the flattened brazilian disc configuration - Part 1	S.K. Kourkoulis, Ch.F. Markides, E.D. Pasiou, M. Stavropoulou, A. Papagiannopoulos, F. Sakaropoulos	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.106">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.106</a>
Influence of post welding heat treatment on corrosion resistance of UNS N06625 nickel-chromium-molybdenum alloy	Paolo Ferro, Alberto Fabrizi, Franco Bonollo, Filippo Berto	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.107">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.107</a>
Driving Mode Analysis of Quarter Elliptical Flaw under Cyclic Loading	Slobodanka Boljanović, Andrea Carpinteri	<a href="https://doi.org/10.53255/IGFTUBE.MEDFRACT2.108">https://doi.org/10.53255/IGFTUBE.MEDFRACT2.108</a>

