Francesco Iacoviello

List of Publications by Year
in descending order

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110 papers	1,398 citations	361413 20 h-index	414414 32 g-index
120 all docs	120 docs citations	120 times ranked	828 citing authors

#	Article	IF	Citations
1	Effect of â€œ475 Â°C embrittlementâ€•on duplex stainless steels localized corrosion resistance. Corrosion Science, 2005, 47, 909-922.	6.6	113
2	Fatigue crack propagation damaging micromechanisms in ductile cast irons. Engineering Fracture Mechanics, 2008, 75, 694-704.	4.3	81
3	Damaging micromechanisms characterization of a ferritic ductile cast iron. Engineering Fracture Mechanics, 2010, 77, 2016-2023.	4.3	76
4	Damaging micromechanisms in ferriticâ€“pearlitic ductile cast irons. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 478, 181-186.	5.6	72
5	Macro and microscopical approach to the damaging micromechanisms analysis in a ferritic ductile cast iron. Theoretical and Applied Fracture Mechanics, 2014, 69, 26-33.	4.7	48
6	Performance evaluation of CFRP/Al fibre metal laminates with different structural characteristics. Composite Structures, 2019, 225, 111117.	5.8	43
7	Fatigue crack propagation in austeno-ferritic duplex stainless steel 22 Cr 5 Ni. International Journal of Fatigue, 1999, 21, 957-963.	5.7	41
8	Graphite nodules and fatigue crack propagation micromechanisms in a ferritic ductile cast iron. Fatigue and Fracture of Engineering Materials and Structures, 2013, 36, 893-902.	3.4	39
9	Quantitative shape evaluation of graphite particles in ductile iron. Journal of Materials Processing Technology, 2008, 196, 292-302.	6.3	37
10	Damaging micromechanisms in hot-dip galvanizing Zn based coatings. Theoretical and Applied Fracture Mechanics, 2014, 70, 91-98.	4.7	35
11	Influence of the graphite elements morphology on the fatigue crack propagation mechanisms in a ferritic ductile cast iron. Engineering Fracture Mechanics, 2016, 167, 248-258.	4.3	33
12	Can pure mode III fatigue loading contribute to crack propagation in metallic materials?. Fatigue and Fracture of Engineering Materials and Structures, 2005, 28, 179-185.	3.4	30
13	Analysis of stress ratio effects on fatigue propagation in a sintered duplex steel by experimentation and artificial neural network approaches. International Journal of Fatigue, 2004, 26, 819-828.	5.7	29
14	Cyclic microstructural transitions and fracture micromechanisms in a near equiatomic NiTi alloy. International Journal of Fatigue, 2014, 58, 136-143.	5.7	29
15	A thermal outgassing method (t.o.m.) To measure the hydrogen diffusion coefficients in austenitic, austeno-ferritic and ferriticâ€“perlitic steels. Corrosion Science, 1998, 40, 1281-1293.	6.6	27
16	Engineering prediction of fatigue strength for AM50 magnesium alloys. International Journal of Fatigue, 2019, 127, 10-15.	5.7	27
17	Ductile cast irons: Microstructure influence on the fatigue initiation mechanisms. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 2172-2182.	3.4	23
18	Fatigue crack propagation and damaging micromechanisms in Ductile Cast Irons. International Journal of Fatigue, 2019, 124, 48-54.	5.7	22

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19	Hydrogen embrittlement in the duplex stainless steel Z2CND2205 hydrogen-charged at 200Â°C. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 224, 116-124.	5.6	21
20	Pearlitic ductile cast iron: damaging micromechanisms at crack tip. Frattura Ed Integrita Strutturale, 2013, 7, 102-108.	0.9	21
21	Ductile cast irons: Microstructure influence on the damaging micromechanisms in overloaded fatigue cracks. Engineering Failure Analysis, 2017, 82, 340-349.	4.0	20
22	Fatigue crack tip damaging micromechanisms in pearlitic ductile cast irons. Fatigue and Fracture of Engineering Materials and Structures, 2015, 38, 238-245.	3.4	19
23	Fatigue crack propagation and overload damaging micromechanisms in a ferriticâ€“pearlitic ductile cast iron. Fatigue and Fracture of Engineering Materials and Structures, 2016, 39, 999-1011.	3.4	19
24	Experimental analysis of aluminium/carbon epoxy hybrid laminates under flexural load. Frattura Ed Integrita Strutturale, 2019, 13, 739-747.	0.9	19
25	Grain size and loading conditions influence on fatigue crack propagation in a Cu-Zn-Al shape memory alloy. International Journal of Fatigue, 2018, 115, 27-34.	5.7	17
26	Bending properties of titanium lattice structures produced by electron beam melting process. Fatigue and Fracture of Engineering Materials and Structures, 2021, 44, 1961-1970.	3.4	17
27	Microstructure influence on fatigue crack propagation in sintered stainless steels. International Journal of Fatigue, 2005, 27, 155-163.	5.7	16
28	Damaging micromechanisms in an as cast ferritic and a ferritized ductile cast iron. Procedia Structural Integrity, 2017, 3, 201-207.	0.8	16
29	Fatigue analysis of a near-equiatomic pseudo-elastic NiTi SMA. Theoretical and Applied Fracture Mechanics, 2018, 94, 110-119.	4.7	16
30	Overload effects on fatigue cracks in a ferritized ductile cast iron. International Journal of Fatigue, 2019, 127, 376-381.	5.7	16
31	Fatigue crack behavior on a Cu-Zn-Al SMA. Frattura Ed Integrita Strutturale, 2014, 8, 454-461.	0.9	14
32	Ductile cast irons: microstructure influence on fatigue crack propagation resistance. Frattura Ed Integrita Strutturale, 2010, 4, 3-16.	0.9	14
33	Damaging Micromechanisms Characterization in Pearlitic Ductile Cast Irons. , 2014, 3, 295-300.		13
34	Characterisation of the damaging micromechanisms in a pearlitic ductile cast iron and damage assessment by acoustic emission testing. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 1038-1050.	3.4	13
35	Additive manufacturing processes for metals and effects of defects on mechanical strength: a review. Procedia Structural Integrity, 2021, 33, 498-508.	0.8	13
36	Graphite Nodules Influence on DCIs Mechanical Properties: experimental and Numerical Investigation. Procedia Engineering, 2015, 109, 135-143.	1.2	12

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37	Titanium lattice structures manufactured by EBM process: Effect of skin material on bending characteristics. Engineering Fracture Mechanics, 2022, 260, 108180.	4.3	12
38	Kinetics of Intermetallic Phases and Mechanical Behavior of ZnSn3% Hotâ€Đip Galvanization Coatings. Advanced Engineering Materials, 2016, 18, 2088-2094.	3.5	11
39	Classification of ductile cast iron specimens based on image analysis and support vector machine. Procedia Structural Integrity, 2017, 3, 283-290.	0.8	11
40	Damage micromechanisms in a hot dip galvanized steel. Procedia Structural Integrity, 2017, 3, 231-236.	0.8	11
41	Relation between microstructural heterogeneities and damage mechanisms of a ferritic spheroidal graphite cast iron during tensile loading. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 1262-1273.	3.4	11
42	Potentiality of hybrid structures in CFRP and additive manufactured metal octet-truss lattice. Procedia Structural Integrity, 2020, 28, 667-674.	0.8	11
43	Integranular corrosion susceptibility analysis in austeno-ferritic (duplex) stainless steels. Procedia Structural Integrity, 2017, 3, 276-282.	0.8	10
44	Novel zinc-based alloys used to improve the corrosion protection of metallic substrates. Engineering Failure Analysis, 2017, 82, 327-339.	4.0	10
45	Mechanical and Structural Characterization of Zn-Ti Colored Coatings. Procedia Engineering, 2015, 109, 105-112.	1.2	9
46	Pearlitic Ductile Cast Iron: mechanical properties gradient analysis in graphite elements. Procedia Structural Integrity, 2018, 9, 9-15.	0.8	8
47	Failure energy and stiffness of titanium lattice specimens produced by electron beam melting process. Material Design and Processing Communications, 2021, 3, .	0.9	8
48	Statistical behaviour of Î”K threshold values and life prediction analysis in 2091 Al-Li alloy. International Journal of Fatigue, 2000, 22, 657-663.	5.7	7
49	Sintered stainless steels: Fatigue crack propagation resistance under hydrogen charging conditions. Corrosion Science, 2007, 49, 2099-2117.	6.6	7
50	22 Cr 5 Ni duplex and 25 Cr 7 Ni superduplex stainless steel: Hydrogen influence on fatigue crack propagation resistance. Engineering Fracture Mechanics, 2008, 75, 705-714.	4.3	7
51	Stress triaxiality influence on damaging micromechanisms in a pearlitic ductile cast iron. Frattura Ed Integrita Strutturale, 2014, 8, 462-468.	0.9	7
52	Analysis of the intergranular corrosion susceptibility in stainless steel by means of potentiostatic reactivation tests. Procedia Structural Integrity, 2017, 3, 269-275.	0.8	7
53	Mechanical Behaviour and Phase Transition Mechanisms of a Shape Memory Alloy by Means of a Novel Analytical Model. Acta Mechanica Et Automatica, 2018, 12, 105-108.	0.6	7
54	Optimal binarization of images by neural networks for morphological analysis of ductile cast iron. Pattern Analysis and Applications, 2007, 10, 125-133.	4.6	6

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55	Damaging micromechanisms characterization in a ferritic-pearlitic ductile cast iron. Frattura Ed Integrita Strutturale, 2014, 8, 62-67.	0.9	6
56	Fatigue microstructural evolution in pseudo elastic NiTi alloy. Procedia Structural Integrity, 2016, 2, 1457-1464.	0.8	6
57	High temperature embrittled duplex stainless steels: influence of the chemical composition on the fatigue crack propagation. Procedia Structural Integrity, 2017, 3, 308-315.	0.8	6
58	Duplex stainless steels â€œ475Â°C embrittlementâ€• influence of the chemical composition on the fatigue crack propagation. Procedia Structural Integrity, 2017, 3, 299-307.	0.8	6
59	Graphite nodules features identifications and damaging micromechanims in ductile irons. Frattura Ed Integrita Strutturale, 2013, 7, 12-21.	0.9	5
60	Overload effects on fatigue cracks in ferritic-pearlitic ductile cast irons. Procedia Structural Integrity, 2016, 2, 3369-3376.	0.8	5
61	Fatigue crack propagation mechanisms in C70250 and CuCrZr copper alloys. Procedia Structural Integrity, 2020, 26, 330-335.	0.8	5
62	Damage analysis of Ti6Al4V lattice structures manufactured by electron beam melting process subjected to bending load. Material Design and Processing Communications, 2021, 3, .	0.9	5
63	A cyclic integrated microstructural-mechanical model for a shape memory alloy. International Journal of Fatigue, 2021, 153, 106473.	5.7	5
64	Fatigue crack tip damaging micromechanisms in a ferritic-pearlitic ductile cast iron. Frattura Ed Integrita Strutturale, 2015, 9, 111-119.	0.9	5
65	Bath chemical composition influence on intermetallic phases damage in hot dip galvanizing. Procedia Structural Integrity, 2022, 39, 574-581.	0.8	5
66	Influence of sintered stainless steel microstructure on fatigue crack paths. Fatigue and Fracture of Engineering Materials and Structures, 2005, 28, 187-193.	3.4	4
67	Fatigue Crack Propagation in a Ferritic-pearlitic DCI: Overload Effects on Damaging Mechanisms. Procedia Engineering, 2015, 109, 35-42.	1.2	4
68	Cast Irons. , 2016, , .		4
69	Fatigue crack propagation in Ductile Cast Irons: an Artificial Neural Networks based model. Procedia Structural Integrity, 2017, 3, 291-298.	0.8	4
70	The influence of hot dip galvanizing process on intermetallic phases formation. Material Design and Processing Communications, 2019, 1, e39.	0.9	4
71	Flexural strength of aluminium carbon/epoxy fibre metal laminates. Material Design and Processing Communications, 2019, 1, e40.	0.9	4
72	Study of the fracture behavior of a CuCrZr alloy. Material Design and Processing Communications, 2020, 2, e113.	0.9	4

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73	Sn and Ti influence on damage of bent hot-dip galvanizing phases. Procedia Structural Integrity, 2017, 3, 224-230.	0.8	3
74	Crack path and damage in a CuZnAl SMA. Procedia Structural Integrity, 2017, 3, 217-223.	0.8	3
75	Bending damages in galvanized ductile cast irons. Procedia Structural Integrity, 2018, 9, 265-271.	0.8	3
76	QUANTITATIVE ANALYSIS OF FATIGUE FRACTURE SURFACE IN THE DUPLEX STEEL. Image Analysis and Stereology, 2002, 21, 55.	0.9	3
77	Classification of ductile cast iron specimens: a machine learning approach. Frattura Ed Integrita Strutturale, 2017, 11, 231-238.	0.9	3
78	Numerical Simulation of Traditional and Technological Zincâ€Based Coatings: Part I. Advanced Engineering Materials, 2022, 24, .	3.5	3
79	Pearlitic Ductile Cast Irons: Fatigue Initiation Micromechanisms. Procedia Engineering, 2015, 109, 465-472.	1.2	2
80	Pearlitic ductile cast iron: fatigue crack paths and damaging micromechanisms. Procedia Structural Integrity, 2018, 13, 192-197.	0.8	2
81	Analysis of CFRP/Al hybrid laminates flexural strength. Procedia Structural Integrity, 2019, 18, 368-372.	0.8	2
82	Hydrogen embrittlement in a 2101 lean Duplex Stainless Steel. Procedia Structural Integrity, 2019, 18, 391-398.	0.8	2
83	Failure energy and strength of Al/CFRP hybrid laminates under flexural load. Material Design and Processing Communications, 2020, 2, e109.	0.9	2
84	Assessment of fatigue damage in a fully pearlitic ductile cast iron by evaluation of Acoustic Emission Entropy. Procedia Structural Integrity, 2020, 25, 364-369.	0.8	2
85	Analysis of acoustic emission entropy for damage assessment of pearlitic ductile cast irons. Material Design and Processing Communications, 2020, 2, e158.	0.9	2
86	Damage evolution during tensile test of austempered ductile iron partially austenized. Material Design and Processing Communications, 2020, 2, e157.	0.9	2
87	Performance index of isogrid structures: robotic filament winding carbon fiber reinforced polymer vs. titanium alloy. Materials and Manufacturing Processes, 0, , 1-9.	4.7	2
88	An integrated model to predict the microstructure evolution and the mechanical behaviour of a two-phases pseudo-elastic SMA. Procedia Structural Integrity, 2020, 28, 2283-2290.	0.8	2
89	Failure criteria for real-time assessment of ductile cast irons subjected to various loading conditions. Smart Materials and Structures, 2021, 30, 017001.	3.5	2
90	Ductile Irons: Ferriticâ€"Pearlitic. , 2016, , 1126-1131.		1

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91	Integranular corrosion susceptibility analysis in austenoâ€ferritic (duplex) stainless steels. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 739-748.	3.4	1
92	Chemical composition and heat treatment influence on duplex stainless steels fatigue crack propagation resistance. Strength, Fracture and Complexity, 2018, 11, 253-263.	0.3	1
93	Microstrain measurements and damage analysis during tensile loading of intercritical austempered ductile iron. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 2744-2755.	3.4	1
94	Standards for shape memory alloy applications. , 2021, , 77-111.		1
95	Cycling model for a NiTi Shape Memory Alloy. Procedia Structural Integrity, 2021, 33, 1035-1041.	0.8	1
96	Hybrid structures in Titanium-Lattice/FRP: effect of skins material on bending characteristics. Procedia Structural Integrity, 2022, 41, 3-8.	0.8	1
97	Crack micromechanisms in cycled shape memory alloys. Procedia Structural Integrity, 2022, 41, 692-698.	0.8	1
98	Crack Paths 2012 (CP 2012). Engineering Fracture Mechanics, 2013, 108, 1-2.	4.3	0
99	Guest Editorial: Special Issue on Characterisation of Crack Tip Stress Fields. Fatigue and Fracture of Engineering Materials and Structures, 2013, 36, 1-2.	3.4	0
100	Improved Zn-based coatings for ipersandelin steel products. Procedia Structural Integrity, 2016, 2, 2263-2268.	0.8	0
101	Guest editorial: special issueâ€IGF internationalâ€structural integrity. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 717-717.	3.4	0
102	Grain size influence on fatigue behaviour in a CuZnAl PE SMA. Procedia Structural Integrity, 2018, 13, 204-209.	0.8	0
103	Characterisation of crack tip fieldsâ€"CCTF5. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 1609-1610.	3.4	0
104	Degenerated graphite nodules influence on fatigue crack paths in a ferritic ductile cast iron. Frattura Ed Integrita Strutturale, 2016, , .	0.9	0
105	Fatigue crack micromechanisms in a Cu-Zn-Al shape memory alloy with pseudo-elastic behavior. Frattura Ed Integrita Strutturale, 2016, , .	0.9	0
106	CFRP/aluminium fibre metal laminates: numerical model for mechanical properties simulation. Procedia Structural Integrity, 2021, 33, 824-831.	0.8	0
107	Numerical Modelling of Fibre Metal Laminate Flexural Behaviour. Material Design and Processing Communications, 2022, 2022, 1-8.	0.9	0
108	Analysis of fracture characteristics in aluminium-CFRP hybrid laminate subject to three-point bending loading. Procedia Structural Integrity, 2022, 39, 173-178.	0.8	0

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109	Combination of discrete and finite element method to simulate damage in galvanised steel. Procedia Structural Integrity, 2022, 41, 254-259.	0.8	0
110	Fracture micrographic analysis of a carbon FML under three-point bending load. Frattura Ed Integrita Strutturale, 2022, 16, 410-418.	0.9	0