Tito Andriollo

List of Publications by Year
in descending order

25	277	840776 11	940533 16
papers	citations	h-index	g-index

25	25	25	171
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent trends in Xâ€rayâ€based characterization of nodular cast iron. Material Design and Processing Communications, 2021, 3, e212.	0.9	0
2	A simplified formula to estimate the size of the cyclic plastic zone in metals containing elastic particles. Engineering Fracture Mechanics, 2021, 241, 107428.	4.3	4
3	Unraveling compacted graphite evolution during solidification of cast iron using in-situ synchrotron X-ray tomography. Carbon, 2021, 184, 799-810.	10.3	6
4	In situ synchrotron investigation of degenerate graphite nodule evolution in ductile cast iron. Acta Materialia, 2021, 221, 117367.	7.9	6
5	Micromechanical impact of solidification regions in ductile iron revealed via a 3D strain partitioning analysis method. Scripta Materialia, 2020, 178, 463-467.	5.2	11
6	Modeling the deformation of fresh porcine bellies: A quantitative comparison of different constitutive formulations. Mechanics of Materials, 2020, 150, 103597.	3.2	1
7	Impact of local Si segregation on strain localization in ductile cast iron. IOP Conference Series: Materials Science and Engineering, 2020, 861, 012038.	0.6	0
8	X-ray tomography, digital volume correlation and FE modelling: A synergistic combination to study the processing-structure-property relations in ductile iron. IOP Conference Series: Materials Science and Engineering, 2020, 861, 012037.	0.6	0
9	Creep of the Matrix During Coalescence and Overgrowth of Graphite Precipitates in a High-Silicon Spheroidal Graphite Iron Submitted to Thermal Cycling in the Ferritic Domain. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 2685-2688.	2.2	0
10	Analysis of the correlation between micro-mechanical fields and fatigue crack propagation path in nodular cast iron. Acta Materialia, 2020, 188, 302-314.	7.9	21
11	Distance map based micromechanical analysis of the impact of matrix heterogeneities on the yield stress of nodular cast iron. Mechanics of Materials, 2020, 148, 103414.	3.2	4
12	Investigation of the elastoplastic and fracture behavior of solid materials considering microstructural anisotropy: A discrete element modeling study. Computational Materials Science, 2019, 170, 109164.	3.0	5
13	Microstructure and residual elastic strain at graphite nodules in ductile cast iron analyzed by synchrotron X-ray microdiffraction. Acta Materialia, 2019, 167, 221-230.	7.9	26
14	Impact of micro-scale residual stress on in-situ tensile testing of ductile cast iron: Digital volume correlation vs. model with fully resolved microstructure vs. periodic unit cell. Journal of the Mechanics and Physics of Solids, 2019, 125, 714-735.	4.8	25
15	Probing the structure and mechanical properties of the graphite nodules in ductile cast irons via nano-indentation. Mechanics of Materials, 2018, 122, 85-95.	3.2	17
16	Uncovering the local inelastic interactions during manufacture of ductile cast iron: How the substructure of the graphite particles can induce residual stress concentrations in the matrix. Journal of the Mechanics and Physics of Solids, 2018, 111, 333-357.	4.8	15
17	Analysis of the equivalent indenter concept used to extract Youngâ€™s modulus from a nano-indentation test: some new insights into the Oliverâ€“Pharr method. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 045004.	2.0	8
18	Synchrotron measurements of local microstructure and residual strains in ductile cast iron. IOP Conference Series: Materials Science and Engineering, 2017, 219, 012054.	0.6	2

#	ARTICLE	IF	CITATIONS
19	On the isotropic elastic constants of graphite nodules in ductile cast iron: Analytical and numerical micromechanical investigations. Mechanics of Materials, 2016, 96, 138-150.	3.2	28
20	Modeling the elastic behavior of ductile cast iron including anisotropy in the graphite nodules. International Journal of Solids and Structures, 2016, 100-101, 523-535.	2.7	28
21	Three-dimensional local residual stress and orientation gradients near graphite nodules in ductile cast iron. Acta Materialia, 2016, 121, 173-180.	7.9	32
22	A micro-mechanical analysis of thermo-elastic properties and local residual stresses in ductile iron based on a new anisotropic model for the graphite nodules. Modelling and Simulation in Materials Science and Engineering, 2016, 24, 055012.	2.0	20
23	Analytical solution to the 1D Lemaitre's isotropic damage model and plane stress projected implicit integration procedure. Applied Mathematical Modelling, 2016, 40, 5759-5774.	4.2	2
24	Modeling of damage in ductile cast iron - The effect of including plasticity in the graphite nodules. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012027.	0.6	15
25	Residual Stresses around Individual Graphite Nodules in Ductile Iron: Impact on the Tensile Mechanical Properties. Materials Science Forum, 0, 925, 465-472.	0.3	1