

Nicola Bonora

List of Publications by Year in descending order

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108
papers

2,162
citations

331670

21
h-index

254184

43
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112
all docs

112
docs citations

112
times ranked

1365
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of anterior capsulorhexis shape, centration, size, and location on intraocular lens position: finite element model. <i>Journal of Cataract and Refractive Surgery</i> , 2022, 48, 222-229.	1.5	6
2	Plasticity damage self-consistent model incorporating stress triaxiality and shear controlled fracture mechanisms – Model formulation. <i>Engineering Fracture Mechanics</i> , 2022, 271, 108634.	4.3	4
3	Plasticity damage self-consistent model incorporating stress triaxiality and shear controlled fracture mechanisms – Model verification and validation. <i>Engineering Fracture Mechanics</i> , 2022, 271, 108635.	4.3	0
4	High-rate characterization of additively manufactured Ti-6Al-4V using Taylor cylinder impact test: Experiments. <i>Material Design and Processing Communications</i> , 2021, 3, e192.	0.9	0
5	Stress triaxiality effect on cleavage fracture stress. <i>Theoretical and Applied Fracture Mechanics</i> , 2020, 109, 102689.	4.7	10
6	Stress triaxiality effect on void nucleation in ductile metals. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2020, 43, 1473-1486.	3.4	18
7	Continuum damage mechanics modelling incorporating stress triaxiality effect on ductile damage initiation. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2020, 43, 1755-1768.	3.4	20
8	Flow Stress of bcc Metals over a Wide Range of Temperature and Strain Rates. <i>Metals</i> , 2020, 10, 120.	2.3	19
9	Full scale experimental tests and numerical model validation of reinforced concrete slab subjected to direct contact explosion. <i>International Journal of Impact Engineering</i> , 2019, 132, 103309.	5.0	21
10	A new overall nonlinear damage model for fiber metal laminates based on continuum damage mechanics. <i>Engineering Fracture Mechanics</i> , 2019, 206, 21-33.	4.3	20
11	A new constitutive bulk material model to predict the uniaxial tensile nonlinear behavior of fiber metal laminates. <i>Journal of Strain Analysis for Engineering Design</i> , 2018, 53, 26-35.	1.8	12
12	Analysis of reinforced concrete slabs under blast loading. <i>Procedia Structural Integrity</i> , 2018, 9, 272-278.	0.8	12
13	Constitutive behavior modelling of AA1100-O at large strain and high strain rates. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	2
14	Numerical simulation and validation of damage in AA1100 aluminum symmetric Taylor impact (ROR). <i>AIP Conference Proceedings</i> , 2018, , .	0.4	0
15	Modification of the Bonora Damage Model for shear failure. <i>Frattura Ed Integrita Strutturale</i> , 2018, 12, 140-150.	0.9	8
16	Numerical simulation of self-piercing riveting process (SRP) using continuum damage mechanics modelling. <i>Frattura Ed Integrita Strutturale</i> , 2018, 12, 161-172.	0.9	5
17	Deformation and failure of OFHC copper under high strain rate shear compression. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	2
18	Micromechanical modelling of constitutive behavior of austempered ductile iron (ADI) at high strain rate. <i>Theoretical and Applied Fracture Mechanics</i> , 2017, 92, 351-359.	4.7	9

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19	Effect of microstructure on dynamic shear localisation in Alloy 718. <i>Mechanics of Materials</i> , 2017, 109, 88-100.	3.2	23
20	Firecracker eye exposure: experimental study and simulation. <i>Biomechanics and Modeling in Mechanobiology</i> , 2017, 16, 1401-1411.	2.8	8
21	Ductile fracture assessment of X65 steel using damage mechanics. <i>Procedia Structural Integrity</i> , 2017, 3, 508-516.	0.8	7
22	A Contribution to New Material Standards for Ductile Irons and Austempered Ductile Irons. <i>International Journal of Metalcasting</i> , 2017, 11, 136-147.	1.9	22
23	Strain capacity assessment of API X65 steel using damage mechanics. <i>Frattura Ed Integrita Strutturale</i> , 2017, 11, 315-327.	0.9	3
24	Dynamic Recrystallization During High-Strain-Rate Tension of Copper. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 2555-2559.	2.2	9
25	The effect of subcritical ductile crack growth on cleavage fracture probability in the transition regime using continuum damage mechanics simulation. <i>Theoretical and Applied Fracture Mechanics</i> , 2016, 82, 125-135.	4.7	12
26	Prediction of fracture toughness in ductile-to-brittle transition region using combined CDM and Beremin models. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 657, 161-172.	5.6	18
27	Modelling human eye under blast loading. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015, 18, 107-115.	1.6	25
28	Deformation and texture evolution of OFHC copper during dynamic tensile extrusion. <i>Acta Materialia</i> , 2015, 89, 163-180.	7.9	26
29	Experimental modeling of strain-dependent cyclic plasticity for prediction of hysteresis curve. <i>Journal of Strain Analysis for Engineering Design</i> , 2015, 50, 314-324.	1.8	9
30	Numerical Simulation of Dynamic Tensile Extrusion Test of OFHC Copper. <i>Journal of Dynamic Behavior of Materials</i> , 2015, 1, 136-152.	1.7	19
31	On the postbuckling of flawed shear panels considering crack growth effect. <i>Thin-Walled Structures</i> , 2015, 97, 186-198.	5.3	5
32	An Integrated Creep Model Based on Internal Stress Evolution. , 2014, , .		0
33	Integrity Assessment of Clad Pipe Girth Welds. , 2014, , .		2
34	Experimental assessment of ductile damage in P91 steel at high temperature. <i>International Journal of Damage Mechanics</i> , 2014, 23, 567-587.	4.2	8
35	Experimental measurement and model validation of COD in pipe under bending with off-centered circumferential crack. <i>Frattura Ed Integrita Strutturale</i> , 2014, 8, 42-50.	0.9	0
36	Use of Circumferentially Cracked Bar sample for CTOD fracture toughness determination in the upper shelf regime. <i>Frattura Ed Integrita Strutturale</i> , 2014, 8, 252-262.	0.9	0

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37	Numerical implementation of a new coupled cyclic plasticity and continuum damage model. Computational Materials Science, 2014, 81, 538-547.	3.0	22
38	Mechanoluminescence of nylon under high velocity impact. Journal of Physics: Conference Series, 2014, 500, 182005.	0.4	1
39	Ductile damage in Taylor-anvil and rod-on-rod impact experiment. Journal of Physics: Conference Series, 2014, 500, 112035.	0.4	8
40	Crack Initiation and Propagation Clad Pipe Girth Weld Flaws. , 2014, , .		4
41	Predicting Creep Rupture Using Damage Mechanics. , 2014, , .		2
42	The Role of Weld Processing on the Integrity Assessment of Bimetallic Girth Welds. , 2014, , .		1
43	Crack Initiation and Growth in Bimetallic Girth Welds. , 2014, , .		7
44	Modeling and Simulation of Creep Crack Growth in High Chromium Steels. , 2014, , .		0
45	Evaluation of Constraint Effect on Creep Crack Growth by Advanced Creep Modeling and Damage Mechanics. , 2014, , .		0
46	Traumatic eye injuries as a result of blunt impact: computational issues. Journal of Physics: Conference Series, 2014, 500, 102003.	0.4	2
47	Dynamic Crack Tip Opening Displacement (DCTOD) as governing parameters for material fragmentation. Journal of Physics: Conference Series, 2014, 500, 112009.	0.4	3
48	High strain rate fracture behaviour of fused silica. Journal of Physics: Conference Series, 2014, 500, 182036.	0.4	7
49	An Investigation on Circumferentially Cracked Bar Geometry for Critical CTOD Determination. , 2014, , .		0
50	COD of Off-Centered Cracks in Pipes Under Bending: Experimental Measures and Model Validation. , 2013, , .		1
51	Simplified Approach for Fracture Integrity Assessment of Bimetallic Girth Weld Joint. , 2013, , .		4
52	A Novel Procedure for Measuring the Dynamic Fracture Toughness Using Direct Tension Hopkinson Bar. , 2013, , .		1
53	Failure Assessment of Pipe Tee Element Using Continuum Damage Mechanics. , 2013, , .		2
54	Fracture Integrity Assessment of Flawed Bi-Metallic Girth Weld Joint. , 2013, , .		1

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55	Modeling of Multiaxial Stress Effects on the Creep Resistance of High Chromium Steel. , 2013, , .		1
56	Ultrafine particle size distribution during high velocity impact of high density metals. , 2012, , .		0
57	The pathogenesis of retinal damage in human eye under impact and blast load. , 2012, , .		1
58	Modeling ductile metals under large strain, pressure and high strain rate incorporating damage and microstructure evolution. AIP Conference Proceedings, 2012, , .	0.4	6
59	Ductile damage evolution in high purity copper taylor impact test. AIP Conference Proceedings, 2012, , .	0.4	8
60	Primary Blast Injury to the Eye and Orbit: Finite Element Modeling. , 2012, 53, 8057.		50
61	Primary Creep Modeling Based on the Dependence of the Activation Energy on the Internal Stress. Journal of Pressure Vessel Technology, Transactions of the ASME, 2012, 134, .	0.6	8
62	Determination of Johnson-holmquist constitutive model parameters for fused silica. EPJ Web of Conferences, 2012, 26, 04011.	0.3	11
63	Assessment of an engineering approach to the evaluation of the cod of off-centered crack in pipes under bending for LBB design. Engineering Fracture Mechanics, 2012, 81, 69-79.	4.3	4
64	The Pathogenesis of Retinal Damage in Blunt Eye Trauma: Finite Element Modeling. , 2011, 52, 3994.		70
65	Practical Applicability and Limitations of the Elastic Modulus Degradation Technique for Damage Measurements in Ductile Metals. Strain, 2011, 47, 241-254.	2.4	43
66	A primary creep model for Class M materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5496-5501.	5.6	19
67	Experimental Study of the Effect of Triaxiality Ratio on the Formability Limit Diagram and Ductile Damage Evolution in Steel and High Purity Copper. International Journal of Material Forming, 2010, 3, 171-174.	2.0	8
68	Mechanism Based Creep Model Incorporating Damage. Journal of Engineering Materials and Technology, Transactions of the ASME, 2010, 132, .	1.4	17
69	Primary Creep Modeling Based on the Dependence of the Activation Energy on the Internal Stress. , 2010, , .		0
70	New time-independent formulation for creep damage in polycrystalline metals and its specialisation to high alloy steel for high-temperature applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 510-511, 214-218.	5.6	9
71	Time-independent formulation for creep damage modeling in metals based on void and crack evolution. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 510-511, 207-213.	5.6	13
72	DAMAGE DEVELOPMENT IN HIGH PURITY COPPER UNDER VARYING DYNAMIC CONDITIONS AND MICROSTRUCTURAL STATES USING CONTINUUM DAMAGE MECHANICS. , 2009, , .		6

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73	DUCTILE DAMAGE EVOLUTION ASSESSMENT IN HIGH PURITY COPPER AND STAINLESS STEEL SUBJECTED TO DIFFERENT SHOCK-LOADING PROFILES USING COHESIVE MODELING. , 2009, , .		2
74	A Revised Approach to Damage Measurement Based on Stiffness Loss Technique. , 2008, , .		4
75	Mechanism Based Unified Creep Model Incorporating Damage. , 2008, , .		1
76	EMBEDDED COHESIVE ELEMENTS (ECE) APPROACH TO THE SIMULATION OF SPALL FRACTURE EXPERIMENT. , 2008, , .		0
77	NICKEL BASED SUPERALLOY CONTAINMENT CASE DESIGN: CONSTITUTIVE MODELING AND COMPUTATIONAL ANALYSIS. , 2008, , .		0
78	Investigation on the Weibull parameters identification for local approach application in the ductile to brittle transition regime. Engineering Fracture Mechanics, 2007, 74, 549-562.	4.3	12
79	Ballistic tests and numerical simulations for containment capability characterisation of Waspaloy® alloy. WIT Transactions on Modelling and Simulation, 2007, , .	0.0	0
80	Micromechanical modeling of composites with mechanical interface “ Part 1: Unit cell model development and manufacturing process effects. Composites Science and Technology, 2006, 66, 314-322.	7.8	27
81	Micromechanical modeling of composites with mechanical interface “ Part II: Damage mechanics assessment. Composites Science and Technology, 2006, 66, 323-332.	7.8	29
82	Simulation of failure under cyclic plastic loading by damage models. International Journal of Plasticity, 2006, 22, 2146-2170.	8.8	79
83	CDM modeling of ductile failure in ferritic steels: Assessment of the geometry transferability of model parameters. International Journal of Plasticity, 2006, 22, 2015-2047.	8.8	94
84	On the Presence of the Elastic Precursor in Re-Shock Experiment: An Unorthodox Explanation. AIP Conference Proceedings, 2006, , .	0.4	1
85	On the Role of Material Post-Necking Stress-Strain Curve in the Simulation of Dynamic Impact. AIP Conference Proceedings, 2006, , .	0.4	7
86	Ductile damage evolution under triaxial state of stress: theory and experiments. International Journal of Plasticity, 2005, 21, 981-1007.	8.8	261
87	Micromechanical modelling of cyclic plasticity incorporating damage. International Journal of Solids and Structures, 2005, 42, 337-351.	2.7	57
88	Micromechanical modeling of ductile cast iron incorporating damage. Part I: Ferritic ductile cast iron. International Journal of Solids and Structures, 2005, 42, 1401-1424.	2.7	89
89	Identification of the parameters of a non-linear continuum damage mechanics model for ductile failure in metals. Journal of Strain Analysis for Engineering Design, 2004, 39, 639-651.	1.8	39
90	Investigation on flying plate diameter to thickness ratio influence on damage pattern and spall signal. International Journal of Impact Engineering, 2003, 29, 127-138.	5.0	3

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91	Modeling ductile damage under fully reversed cycling. Computational Materials Science, 2003, 26, 129-141.	3.0	108
92	Assessment of Potential Damage to Ductile Cast Iron Cask as a Result of Exceptional Impact Loading. , 2003, , .		0
93	Failure Mode of Pipes Containing Circumferential Cracks Under Bending and Its Consequence on the Application of NSCM Criterion. , 2003, , .		0
94	Constitutive modeling for ductile metals behavior incorporating strain rate, temperature and damage mechanics. International Journal of Impact Engineering, 2001, 26, 53-64.	5.0	31
95	Title is missing!. International Journal of Fracture, 2000, 104, 71-87.	2.2	35
96	Identification and measurement of ductile damage parameters. Journal of Strain Analysis for Engineering Design, 1999, 34, 463-478.	1.8	42
97	Computational analysis of mixed-mode delamination crack growth in a woven laminated ceramic-matrix composite. Composites Science and Technology, 1999, 59, 2287-2292.	7.8	8
98	Low cycle fatigue life estimation for ductile metals using a nonlinear continuum damage mechanics model. International Journal of Solids and Structures, 1998, 35, 1881-1894.	2.7	59
99	On the Effect of Triaxial State of Stress on Ductility Using Nonlinear CDM Model. International Journal of Fracture, 1997, 88, 359-371.	2.2	38
100	A nonlinear CDM model for ductile failure. Engineering Fracture Mechanics, 1997, 58, 11-28.	4.3	336
101	Effects of off-centered cracks and restraint of induced bending caused by pressure on the crack-opening-area analysis of pipes. Nuclear Engineering and Design, 1996, 167, 55-67.	1.7	16
102	COD of off-centred cracks in pipes under bending load: a geometrical solution. International Journal of Fracture, 1996, 75, 1-18.	2.2	12
103	A computational procedure to calculate stress-strain field around simple shape holes in composite laminates. Computers and Structures, 1994, 53, 1167-1179.	4.4	17
104	Microdamage effects on the overall response of long fibre/metal-matrix composites. Composites, 1994, 25, 575-582.	0.7	20
105	Experimental verification and theoretical simulation of fracture behaviours of composite materials. Composite Structures, 1993, 23, 87-97.	5.8	5
106	On closed form solution for the elastic stress field around holes in orthotropic composite plates under in-plane stress conditions. Composite Structures, 1993, 25, 139-156.	5.8	21
107	Cleavage fracture prediction and assessment of a nuclear pressure vessel carbon steel using local approach criteria. Nuclear Engineering and Design, 1993, 144, 1-7.	1.7	2
108	Theoretical Forecasting and Experimental Validation of Damage Tolerance and Accumulation in Glass/Epoxy Laminates. Journal of Reinforced Plastics and Composites, 1992, 11, 56-81.	3.1	3