

Celal Soyarslan

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7673918/publications.pdf>

Version: 2024-02-01

48
papers

1,333
citations

471061

17
h-index

344852

36
g-index

48
all docs

48
docs citations

48
times ranked

1140
citing authors

#	ARTICLE	IF	CITATIONS
1	Generation of 3D representative volume elements for heterogeneous materials: A review. Progress in Materials Science, 2018, 96, 322-384.	16.0	308
2	3D stochastic bicontinuous microstructures: Generation, topology and elasticity. Acta Materialia, 2018, 149, 326-340.	3.8	146
3	Structure-property relationships in nanoporous metallic glasses. Acta Materialia, 2016, 106, 199-207.	3.8	101
4	A combined experimentalâ€“numerical investigation of ductile fracture in bending of a class of ferriticâ€“martensitic steel. International Journal of Solids and Structures, 2012, 49, 1608-1626.	1.3	70
5	Characterization of anisotropy of sheet metals employing inhomogeneous strain fields for Yld2000-2D yield function. International Journal of Solids and Structures, 2012, 49, 3517-3527.	1.3	65
6	A grooved in-plane torsion test for the investigation of shear fracture in sheet materials. International Journal of Solids and Structures, 2015, 66, 121-132.	1.3	63
7	Elastic and plastic Poissonâ€™s ratios of nanoporous gold. Scripta Materialia, 2016, 110, 65-69.	2.6	61
8	A cyclic twin bridge shear test for the identification of kinematic hardening parameters. International Journal of Mechanical Sciences, 2012, 59, 31-43.	3.6	59
9	Tunable auxeticity and elastomechanical symmetry in a class of very low density core-shell cubic crystals. Acta Materialia, 2019, 177, 280-292.	3.8	49
10	Application of Continuum Damage Mechanics in discontinuous crack formation: Forward extrusion chevron predictions. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2008, 88, 436-453.	0.9	37
11	Phase contrast mediated switch of auxetic mechanism in composites of infilled re-entrant honeycomb microstructures. Extreme Mechanics Letters, 2020, 35, 100641.	2.0	33
12	Determining tensile yield stresses from Small Punch tests: A numerical-based scheme. Materials and Design, 2019, 182, 107974.	3.3	31
13	Modeling of fracture in small punch tests for small- and large-scale yielding conditions at various temperatures. International Journal of Mechanical Sciences, 2016, 106, 266-285.	3.6	27
14	A simple finite strain non-linear visco-plastic model for thermoplastics and its application to the simulation of incremental cold forming of polyvinylchloride (PVC). International Journal of Mechanical Sciences, 2013, 66, 192-201.	3.6	24
15	Identification of fully coupled anisotropic plasticity and damage constitutive equations using a hybrid experimentalâ€“numerical methodology with various triaxialities. International Journal of Damage Mechanics, 2015, 24, 683-710.	2.4	24
16	Size affected dislocation activity in crystals: Advanced surface and grain boundary conditions. Extreme Mechanics Letters, 2017, 13, 36-41.	2.0	21
17	Effective elastic properties of 3D stochastic bicontinuous composites. Mechanics of Materials, 2019, 137, 103098.	1.7	20
18	Variants of Lemaitreâ€™s damage model and their use in formability prediction of metallic materials. Mechanics of Materials, 2016, 92, 58-79.	1.7	16

#	ARTICLE	IF	CITATIONS
19	Finite deformation plasticity coupled with isotropic damage: Formulation in principal axes and applications. <i>Finite Elements in Analysis and Design</i> , 2010, 46, 668-683.	1.7	15
20	A damage coupled orthotropic finite plasticity model for sheet metal forming: CDM approach. <i>Computational Materials Science</i> , 2010, 48, 150-165.	1.4	15
21	Materials based design of structures: Computational modeling of the mechanical behavior of gold-polymer nanocomposites. <i>Mechanics of Materials</i> , 2016, 94, 53-65.	1.7	14
22	A Thermomechanically Consistent Constitutive Theory for Modeling Micro-Void and/or Micro-Crack Driven Failure in Metals at Finite Strains. <i>International Journal of Applied Mechanics</i> , 2016, 08, 1650009.	1.3	14
23	Skeletonization-based beam finite element models for stochastic bicontinuous materials: Application to simulations of nanoporous gold. <i>Journal of Materials Research</i> , 2018, 33, 3371-3382.	1.2	14
24	Effect of Surface Elasticity on the Elastic Response of Nanoporous Gold. <i>Journal of Nanomechanics & Micromechanics</i> , 2017, 7, .	1.4	11
25	Inverse method for identification of initial yield locus of sheet metals utilizing inhomogeneous deformation fields. <i>International Journal of Material Forming</i> , 2011, 4, 121-128.	0.9	10
26	An Experimental and Numerical Assessment of Sheet-Bulk Formability of Mild Steel DC04. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2011, 133, .	1.3	10
27	Experimental and Computational Study of Ductile Fracture in Small Punch Tests. <i>Materials</i> , 2017, 10, 1185.	1.3	9
28	Inherent and induced anisotropic finite visco-plasticity with applications to the forming of DC06 sheets. <i>International Journal of Mechanical Sciences</i> , 2014, 89, 101-111.	3.6	7
29	The effect of yield surface curvature change by cross hardening on forming limit diagrams of sheets. <i>International Journal of Mechanical Sciences</i> , 2016, 117, 53-66.	3.6	7
30	Broad stress triaxiality ratio band fracture experiments in DP900 metal sheets and corresponding predictive capability of advanced phenomenological and micromechanical fully coupled damage models. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 811, 140978.	2.6	6
31	Finite Element Method. , 2014, , 508-514.		6
32	Inverse Identification of CDM Model Parameters for DP1000 Steel Sheets Using a Hybrid Experimental-Numerical Methodology Spanning Various Stress Triaxiality Ratios. <i>Key Engineering Materials</i> , 0, 554-557, 2103-2110.	0.4	5
33	Numerical Investigation of the Incremental Tube Forming Process. <i>Key Engineering Materials</i> , 0, 554-557, 664-670.	0.4	5
34	Continuum Damage Mechanics (CDM) Based Local Approach to the Sheet-Bulk Metal Formability Prediction. <i>Advanced Materials Research</i> , 0, 769, 205-212.	0.3	5
35	A Class of Rate-Independent Lower-Order Gradient Plasticity Theories: Implementation and Application to Disc Torsion Problem. <i>Materials</i> , 2018, 11, 1425.	1.3	5
36	Gradient enhanced physically based plasticity: Implementation and application to a problem pertaining size effect. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	3

#	ARTICLE	IF	CITATIONS
37	Thermomechanical formulation of ductile damage coupled to nonlinear isotropic hardening and multiplicative viscoplasticity. Journal of the Mechanics and Physics of Solids, 2016, 91, 334-358.	2.3	3
38	Implementation and application of a gradient enhanced crystal plasticity model. AIP Conference Proceedings, 2017, , .	0.3	3
39	Computational modeling of amorphous polymers: A Lagrangian logarithmic strain space formulation of a glassâ€“rubber constitutive model. Computer Methods in Applied Mechanics and Engineering, 2019, 344, 887-909.	3.4	3
40	Insights into fracture mechanisms in nanoporous gold and polymer impregnated nanoporous gold. Extreme Mechanics Letters, 2020, 39, 100815.	2.0	3
41	A directional modification of the Levkovitchâ€“Svendsen cross-hardening model based on the stress deviator. Mechanics of Materials, 2015, 86, 21-30.	1.7	2
42	Characterization of Initial Anisotropy of Sheet Metals Employing Inhomogeneous Strain Fields. , 2011, , .		1
43	Finite element analysis of stress distribution on modified retentive tips of bar clasp. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 609-613.	0.9	1
44	A numerical study on intended and unintended failure mechanisms in blanking of sandwich plates. , 2013, , .		1
45	Erratum to â€œA damage coupled orthotropic finite plasticity model for sheet metal forming: CDM approachâ€“[Comput. Mater. Sci. 48 (2010) 150â€“165]. Computational Materials Science, 2010, 48, 875-876.	1.4	0
46	Tool Design Induced Anisotropic Flow Behavior of Hot Extruded Aluminum Profiles. Key Engineering Materials, 0, 585, 131-138.	0.4	0
47	Lode Parameter Dependence and Quasi-Unilateral Effects in Continuum Damage Mechanics: Models and Applications in Metal Forming. Key Engineering Materials, 2015, 651-653, 187-192.	0.4	0
48	An Enhanced Method to Evaluate Tensile Yield Stress by Small Punch Tests Using Deflection Curves. Materials, 2020, 13, 2840.	1.3	0