Ercan GÃ¼rses

List of Publications by Year
in descending order

38 papers	**670** citations	759233 **12** h-index	552781 **26** g-index
41 all docs	**41** docs citations	**41** times ranked	**568** citing authors

#	Article	IF	Citations
1	A Two-Level Homogenization Approach for Polymer Nanocomposites with Coated Inclusions. Procedia Structural Integrity, 2022, 35, 34-41.	0.8	1
2	Development of a procedure to model the mechanical behavior of composites with embedded element method by considering the matrix non-linearity. Composite Structures, 2021, 259, 113400.	5.8	2
3	Polymer interfaces with carbon nanostructures: First principles density functional theory and molecular dynamics study of polyetheretherketone adsorption on graphene and nanotubes. Computational Materials Science, 2021, 191, 110320.	3.0	5
4	Modeling and simulation of coupled phase transformation and stress evolution in thermal barrier coatings. International Journal of Plasticity, 2020, 134, 102790.	8.8	13
5	A modulus gradient model for inhomogeneous materials with isotropic linear elastic constituents. European Journal of Mechanics, A/Solids, 2019, 78, 103846.	3.7	0
6	Micromechanical modelling of carbon nanotube reinforced composite materials with a functionally graded interphase. Journal of Composite Materials, 2019, 53, 4337-4348.	2.4	7
7	Finite Element Modelling of TBC Failure Mechanisms by Using XFEM and CZM. Procedia Structural Integrity, 2019, 21, 91-100.	0.8	8
8	Development of Bolted Flange Design Tool Based on Artificial Neural Network. Journal of Pressure Vessel Technology, Transactions of the ASME, 2019, 141, .	0.6	1
9	A modulus gradient model for an axially loaded inhomogeneous elastic rod. Meccanica, 2018, 53, 2573-2584.	2.0	1
10	Development of Structural Neural Network Design Tool for Buckling Behaviour of Skin-Stringer Structures Under Combined Compression and Shear Loading. , 2018, , .		0
11	Finite Element Modelling of TBC Failure Mechanisms by Using XFEM. , 2018, , .		0
12	Experimental and computational study of the damage process in CFRP composite beams under low-velocity impact. Composites Part A: Applied Science and Manufacturing, 2017, 92, 167-182.	7.6	99
13	Structural and aerodynamic analyses of a hybrid trailing edge control surface of a fully morphing wing. Journal of Intelligent Material Systems and Structures, 2017, 28, 979-991.	2.5	4
14	Experimental Study and Finite Element Analysis of Dovetail Attachments. , 2017, , .		1
15	Development of Artificial Neural Network Based Design Tool for Aircraft Engine Bolted Flange Connection Subject to Combined Axial and Moment Load. , 2017, , .		2
16	Experimental and Computational Investigation of Out-of-Plane Low Velocity Impact Behavior of CFRP Composite Plates. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 9-16.	0.5	0
17	Modeling of a Three-Dimensional Spherulite Microstructure in Semicrystalline Polymers. Lecture Notes in Computational Science and Engineering, 2016, , 567-575.	0.3	0
18	Development of Bolted Flange Design Tool Based on Finite Element Analysis and Artificial Neural Network. , 2015, , .		2

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19	Decamber Morphing Concepts by Using a Hybrid Trailing Edge Control Surface. Aerospace, 2015, 2, 482-504.	2.2	8
20	Modeling of spherulite microstructures in semicrystalline polymers. Mechanics of Materials, 2015, 90, 83-101.	3.2	18
21	Constitutive modeling of stress-driven grain growth in nanocrystalline metals. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 025011.	2.0	1
22	A phenomenological two-phase constitutive model for porous shape memory alloys. Computational Materials Science, 2012, 60, 44-52.	3.0	25
23	A constitutive model of nanocrystalline metals based on competing grain boundary and grain interior deformation mechanisms. Materials Letters, 2011, 65, 3391-3395.	2.6	11
24	Softening in Nanocrystalline Metals: Modeling of Grain Growth Induced Creep and Relaxation. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 377-378.	0.2	0
25	Multiscale Modeling of Nanocrystalline Materials: A Variational Approach. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 511-512.	0.2	0
26	Constitutive modeling of strain rate effects in nanocrystalline and ultrafine grained polycrystals. International Journal of Solids and Structures, 2011, 48, 1610-1616.	2.7	10
27	A variational multiscale constitutive model for nanocrystalline materials. Journal of the Mechanics and Physics of Solids, 2011, 59, 732-749.	4.8	18
28	On evolving deformation microstructures in non-convex partially damaged solids. Journal of the Mechanics and Physics of Solids, 2011, 59, 1268-1290.	4.8	29
29	On tension–compression asymmetry in ultrafine-grained and nanocrystalline metals. Computational Materials Science, 2010, 50, 639-644.	3.0	13
30	Shock-induced subgrain microstructures as possible homogenous sources of hot spots and initiation sites in energetic polycrystals. Physical Review B, 2010, 81, .	3.2	34
31	A computational framework of three-dimensional configurational-force-driven brittle crack propagation. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 1413-1428.	6.6	87
32	A robust algorithm for configurational-force-driven brittle crack propagation with R-adaptive mesh alignment. International Journal for Numerical Methods in Engineering, 2007, 72, 127-155.	2.8	128
33	A computational framework of three dimensional configurational-force-driven crack propagation. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 4030019-4030020.	0.2	0
34	A computational framework of configurational-force-driven brittle fracture based on incremental energy minimization. International Journal of Fracture, 2007, 145, 245-259.	2.2	54
35	Analytical and Numerical Methods for Finite-Strain Elastoplasticity. , 2006, , 491-529.		4
36	Numerical Computation of Anisotropically Evolving Yield Surfaces Based on Micro-to-Macro Transitions. Proceedings in Applied Mathematics and Mechanics, 2004, 4, 219-220.	0.2	2

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37	Analysis of material instabilities in inelastic solids by incremental energy minimization and relaxation methods: evolving deformation microstructures in finite plasticity. Journal of the Mechanics and Physics of Solids, 2004, 52, 2725-2769.	4.8	79
38	Application of Relaxation Techniques to Nonconvex Isotropic Damage Model. Proceedings in Applied Mathematics and Mechanics, 2003, 3, 222-223.	0.2	2