

Andrei Constantinescu

List of Publications by Year in descending order

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Version: 2024-02-01

67
papers

1,708
citations

257450

24
h-index

302126

39
g-index

69
all docs

69
docs citations

69
times ranked

1254
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Inverse problems in elasticity. <i>Inverse Problems</i> , 2005, 21, R1-R50. | 2.0 | 315 |
| 2 | A computational approach to thermomechanical fatigue. <i>International Journal of Fatigue</i> , 2004, 26, 805-818. | 5.7 | 108 |
| 3 | Fatigue design of structures under thermomechanical loadings. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2002, 25, 1199-1206. | 3.4 | 104 |
| 4 | A unified approach for high and low cycle fatigue based on shakedown concepts. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2003, 26, 561-568. | 3.4 | 65 |
| 5 | Crack initiation under thermal fatigue: An overview of CEA experience. Part I: Thermal fatigue appears to be more damaging than uniaxial isothermal fatigue. <i>International Journal of Fatigue</i> , 2009, 31, 587-600. | 5.7 | 62 |
| 6 | Dissipative aspects in high cycle fatigue. <i>Mechanics of Materials</i> , 2009, 41, 483-494. | 3.2 | 54 |
| 7 | A comparison of lifetime prediction methods for a thermal fatigue experiment. <i>International Journal of Fatigue</i> , 2006, 28, 692-706. | 5.7 | 50 |
| 8 | TMFâ€“LCF life assessment of a Lost Foam Casting A319 aluminum alloy. <i>International Journal of Fatigue</i> , 2013, 53, 75-81. | 5.7 | 48 |
| 9 | Numerical identification of linear cracks in 2D elastodynamics using the instantaneous reciprocity gap. <i>Inverse Problems</i> , 2004, 20, 993-1001. | 2.0 | 43 |
| 10 | On the identification of elastic moduli from displacement-force boundary measurements. <i>Inverse Problems in Science and Engineering</i> , 1995, 1, 293-313. | 0.5 | 38 |
| 11 | On the identification of elastoviscoplastic constitutive laws from indentation tests. <i>Inverse Problems in Science and Engineering</i> , 2001, 9, 19-44. | 0.5 | 37 |
| 12 | Crack initiation under thermal fatigue: An overview of CEA experience Part II (of II): Application of various criteria to biaxial thermal fatigue tests and a first proposal to improve the estimation of the thermal fatigue damage. <i>International Journal of Fatigue</i> , 2009, 31, 1196-1210. | 5.7 | 36 |
| 13 | Influence of interlayer dwell time on the microstructure of Inconel 718 Laser Cladded components. <i>Optics and Laser Technology</i> , 2020, 128, 106218. | 4.6 | 32 |
| 14 | Modeling of thermal shock-induced damage in a borosilicate glass. <i>Mechanics of Materials</i> , 2010, 42, 863-872. | 3.2 | 31 |
| 15 | Behavior, damage and fatigue life assessment of lost foam casting aluminum alloys under thermo-mechanical fatigue conditions. <i>Procedia Engineering</i> , 2010, 2, 1145-1154. | 1.2 | 30 |
| 16 | Influence of prestrain on mechanical properties of highly-filled elastomers: Measurements and modeling. <i>Polymer Testing</i> , 2012, 31, 978-986. | 4.8 | 30 |
| 17 | Self-heating behavior during cyclic loadings of 316L stainless steel specimens manufactured or repaired by Directed Energy Deposition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 786, 139476. | 5.6 | 29 |
| 18 | A computational lifetime prediction of a thermal shock experiment. Part II: discussion on difference fatigue criteria. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2006, 29, 219-227. | 3.4 | 28 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Microstructure and deformation mechanisms of a solid propellant using 1 H NMR spectroscopy. Fuel, 2015, 148, 39-47. | 6.4 | 28 |
| 20 | On the inversion of subsurface residual stresses from surface stress measurements. Journal of the Mechanics and Physics of Solids, 1994, 42, 1767-1787. | 4.8 | 27 |
| 21 | A multiscale approach of fatigue and shakedown for notched structures. Theoretical and Applied Fracture Mechanics, 2007, 48, 140-151. | 4.7 | 27 |
| 22 | A critical comparison of shear tests for adhesive joints. International Journal of Adhesion and Adhesives, 2018, 84, 63-79. | 2.9 | 26 |
| 23 | A computational approach for the fatigue design of threaded connections. International Journal of Fatigue, 2011, 33, 610-623. | 5.7 | 25 |
| 24 | The influence of indenter bluntness on the apparent contact stiffness of thin coatings. Thin Solid Films, 2009, 517, 4835-4844. | 1.8 | 24 |
| 25 | Numerical and experimental modal analysis of the reed and pipe of a clarinet. Journal of the Acoustical Society of America, 2003, 113, 2874-2883. | 1.1 | 23 |
| 26 | Sensitivity analysis for parameter identification in quasi-static poroelasticity. International Journal for Numerical and Analytical Methods in Geomechanics, 2005, 29, 163-185. | 3.3 | 21 |
| 27 | Design and testing of 3D-printed micro-architected polymer materials exhibiting a negative Poisson's ratio. Continuum Mechanics and Thermodynamics, 2020, 32, 433-449. | 2.2 | 21 |
| 28 | High resolution digital image correlation for microstructural strain analysis of a stainless steel repaired by Directed Energy Deposition. Materials Letters, 2020, 270, 127632. | 2.6 | 21 |
| 29 | A computational lifetime prediction of a thermal shock experiment. Part I: thermomechanical modelling and lifetime prediction. Fatigue and Fracture of Engineering Materials and Structures, 2006, 29, 175-182. | 3.4 | 20 |
| 30 | Numerical exploration of the Dang Van high cycle fatigue criterion: application to gradient effects. Journal of Mechanics of Materials and Structures, 2009, 4, 293-308. | 0.6 | 20 |
| 31 | Design of multi-layer materials using inverse homogenization and a level set method. Computer Methods in Applied Mechanics and Engineering, 2019, 346, 388-409. | 6.6 | 20 |
| 32 | TMF criteria for Lost Foam Casting aluminum alloys. Fatigue and Fracture of Engineering Materials and Structures, 2013, 36, 349-360. | 3.4 | 19 |
| 33 | Stress relaxation in polymeric microlattice materials. Materials and Design, 2017, 130, 433-441. | 7.0 | 19 |
| 34 | Effect of the sol fraction and hydrostatic deformation on the viscoelastic behavior of prestrained highly filled elastomers. Journal of Applied Polymer Science, 2013, 127, 1772-1780. | 2.6 | 17 |
| 35 | Fracture of a borosilicate glass under triaxial tension. Mechanics of Materials, 2013, 57, 15-29. | 3.2 | 15 |
| 36 | Critère de fatigue polycyclique pour des matériaux anisotropes: application aux monocristaux. Comptes Rendus - Mécanique, 2004, 332, 115-121. | 2.1 | 12 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Plasticity and asperity-induced fatigue crack closure under mixed-mode loading. International Journal of Fatigue, 2010, 32, 1612-1619. | 5.7 | 11 |
| 38 | Mechanical model of the inspiratory pump. Journal of Biomechanics, 2002, 35, 139-145. | 2.1 | 10 |
| 39 | Influence of orthogonal prestrain on the viscoelastic behaviour of highly-filled elastomers. Polymer Testing, 2013, 32, 375-384. | 4.8 | 10 |
| 40 | Micromechanical modeling for the probabilistic failure prediction of stents in high-cycle fatigue. International Journal of Fatigue, 2016, 87, 405-417. | 5.7 | 10 |
| 41 | A Statistical Framework for Generating Microstructures of Two-Phase Random Materials: Application to Fatigue Analysis. Multiscale Modeling and Simulation, 2020, 18, 21-43. | 1.6 | 10 |
| 42 | Estimation of the mesoscopic thermoplastic dissipation in High-Cycle Fatigue. Comptes Rendus - Mecanique, 2006, 334, 373-379. | 2.1 | 9 |
| 43 | A Modeling Approach to Predict Fretting Fatigue on Highly Loaded Blade Roots. Journal of Engineering for Gas Turbines and Power, 2010, 132, . | 1.1 | 9 |
| 44 | A computational approach based on a multiaxial fatigue criterion combining phase transformation and shakedown response for the fatigue life assessment of Nitinol stents. Journal of Intelligent Material Systems and Structures, 2018, 29, 3710-3724. | 2.5 | 8 |
| 45 | Tensile and ductile fracture properties of as-printed 316L stainless steel thin walls obtained by directed energy deposition. Additive Manufacturing, 2021, 37, 101664. | 3.0 | 8 |
| 46 | Crushing of additively manufactured thin-walled metallic lattices: Two-scale strain localization analysis. Mechanics of Materials, 2021, 160, 103915. | 3.2 | 8 |
| 47 | Identification of Poroelastic Constants of "Tight" Rocks from Laboratory Tests. International Journal of Geomechanics, 2006, 6, 201-208. | 2.7 | 7 |
| 48 | A modified dissipated energy fatigue criterion to consider the thermo-oxidative ageing of electrically conductive silicone adhesive joints. International Journal of Fatigue, 2018, 116, 68-79. | 5.7 | 7 |
| 49 | Computational fatigue assessment of mooring chains under tension loading. Engineering Failure Analysis, 2019, 106, 104043. | 4.0 | 7 |
| 50 | Dissipation and fatigue damage. Materialpruefung/Materials Testing, 2004, 46, 524-530. | 2.2 | 7 |
| 51 | Design of thin micro-architected panels with extension"bending coupling effects using topology optimization. Computer Methods in Applied Mechanics and Engineering, 2022, 391, 114496. | 6.6 | 7 |
| 52 | Semianalytical solution for the stress distribution in notched tubes. International Journal of Fatigue, 2011, 33, 557-567. | 5.7 | 6 |
| 53 | Graphitization and amorphization of textured carbon using high-energy nanosecond laser pulses. Carbon, 2016, 105, 227-232. | 10.3 | 6 |
| 54 | Diffraction acoustique inverse de fissure plane: Solution explicite pour un solide borné. Comptes Rendus De L'Academie De Sciences - Serie Iib: Mecanique, Physique, Chimie, Astronomie, 1999, 327, 971-976. | 0.1 | 5 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Molecular Origin of the Influence of the Temperature on the Loss Factor of a Solid Propellant. Propellants, Explosives, Pyrotechnics, 2015, 40, 469-478. | 1.6 | 5 |
| 56 | Shape-shifting panel from 3D printed undulated ribbon lattice. Extreme Mechanics Letters, 2021, 42, 101089. | 4.1 | 5 |
| 57 | Fast time-scale average for a mesoscopic high cycle fatigue criterion. International Journal of Fatigue, 2012, 45, 39-47. | 5.7 | 4 |
| 58 | Influence of fillers and bonding agents on the viscoelasticity of highly filled elastomers. Journal of Applied Polymer Science, 2014, 131, . | 2.6 | 4 |
| 59 | Identification of the material behavior of adhesive joints under dynamic multiaxial loadings. International Journal of Impact Engineering, 2019, 133, 103355. | 5.0 | 4 |
| 60 | Systematic two-scale image analysis of extreme deformations in soft architected sheets. International Journal of Mechanical Sciences, 2021, 194, 106205. | 6.7 | 4 |
| 61 | A non-iterative sampling approach using noise subspace projection for EIT. Inverse Problems, 2012, 28, 075015. | 2.0 | 3 |
| 62 | A New Multiaxial Specimen for Determining the Dynamic Properties of Adhesive Joints. Experimental Mechanics, 2018, 58, 1207-1219. | 2.0 | 2 |
| 63 | FIB manufactured microstructures with low coefficients of thermal expansion. Mechanics Research Communications, 2021, 114, 103667. | 1.8 | 2 |
| 64 | On the reconstruction of residual stresses after matter removal in rods. Comptes Rendus - Mecanique, 2008, 336, 69-78. | 2.1 | 1 |
| 65 | The inverse problem of seismic fault determination using part time measurements. Journal of Mechanics of Materials and Structures, 2012, 7, 997-1007. | 0.6 | 1 |
| 66 | Viscoelastic behavior of filled silicone elastomers and influence of aging in inert and hermetic environment. Continuum Mechanics and Thermodynamics, 0, , . | 2.2 | 1 |
| 67 | Statistically equivalent surrogate material models: Impact of random imperfections on the elasto-plastic response. Computer Methods in Applied Mechanics and Engineering, 2022, , 115278. | 6.6 | 1 |