## Elias C Aifantis

List of Publications by Year in descending order

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FLIAS C ALEANITIS

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | A Note on Gradient/Fractional One-Dimensional Elasticity and Viscoelasticity. Fractal and Fractional, 2022, 6, 84.  | 3.3 | 3         |
| 2  | Hadronization via gravitational confinement of fast neutrinos: Mechanics at fm distances. ZAMM<br>Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2022, 102, .  | 1.6 | 3         |
| 3  | Transmissibility in Interactive Nanocomposite Diffusion: The Nonlinear Double-Diffusion Model.<br>Frontiers in Applied Mathematics and Statistics, 2022, 8, .   | 1.3 | 2         |
| 4  | A new method for interpreting Vickers indentation measurements. Materials Today: Proceedings, 2022,   | 1.8 | 0         |
| 5  | Gradient Extension of Classical Material Models: From Nuclear & Condensed Matter Scales to<br>Earth & Cosmological Scales. Springer Tracts in Mechanical Engineering, 2021, , 417-452.  | 0.3 | 12        |
| 6  | Assessment and Fragility of Byzantine Unreinforced Masonry Towers. Infrastructures, 2021, 6, 40.  | 2.8 | 4         |
| 7  | Stochastic Dynamic Analysis of Cultural Heritage Towers up to Collapse. Buildings, 2021, 11, 296.   | 3.1 | 5         |
| 8  | Atomic Force Microscope Nanoindentation Analysis of Diffuse Astrocytic Tumor Elasticity: Relation with Tumor Histopathology. Cancers, 2021, 13, 4539.   | 3.7 | 6         |
| 9  | A Concise Review of Gradient Models in Mechanics and Physics. Frontiers in Physics, 2020, 7, .  | 2.1 | 24        |
| 10 | Discussion of "Derivation of Mindlin's first and second strain gradient elastic theory via simple<br>lattice and continuum models―by Polyzos and Fotiadis. International Journal of Solids and<br>Structures, 2020, 191-192, 646-651. | 2.7 | 8         |
| 11 | Mechanical properties of human glioma. Neurological Research, 2020, 42, 1018-1026.  | 1.3 | 6         |
| 12 | An elastoplastic axisymmetric borehole problem using a deformation theory of gradient plasticity.<br>Geomechanics and Geoengineering, 2020, , 1-10.   | 1.8 | 1         |
| 13 | A gradient elastic homogenisation model for brick masonry. Engineering Structures, 2020, 208, 110311.   | 5.3 | 13        |
| 14 | On fractional and fractal formulations of gradient linear and nonlinear elasticity. Acta Mechanica, 2019, 230, 2043-2070.   | 2.1 | 20        |
| 15 | Screw dislocation in a Bi-medium within strain gradient elasticity revisited. Journal of the Mechanical<br>Behavior of Materials, 2019, 28, 68-73.  | 1.8 | 1         |
| 16 | Gradient elasticity and dispersive wave propagation: Model motivation and length scale identification procedures in concrete and composite laminates. International Journal of Solids and Structures, 2019, 158, 176-190.             | 2.7 | 39        |
| 17 | On certain applications of gradient nanochemomechanics: deformation and fracture of LIB and SGS.<br>Journal of the Mechanical Behavior of Materials, 2019, 28, 74-80.   | 1.8 | 2         |
| 18 | Operator Splits and Multiscale Methods in Computational Dynamics. Mathematics of Planet Earth, 2019, , 239-255.   | 0.1 | 0         |

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|----|---|-----|-----------|
| 19 | Model analogies between pattern formation in deforming engineering materials & morphogenesis<br>in ageing human brains. Journal of the Mechanical Behavior of Materials, 2019, 28, 95-106.                      | 1.8 | 1         |
| 20 | Existence result for a dislocation based model of single crystal gradient plasticity with isotropic or<br>linear kinematic hardening. Quarterly Journal of Mechanics and Applied Mathematics, 2018, 71, 99-124. | 1.3 | 6         |
| 21 | Analytical and numerical bifurcation analysis of dislocation pattern formation of the<br>Walgraef–Aifantis model. International Journal of Non-Linear Mechanics, 2018, 102, 41-52.                              | 2.6 | 7         |
| 22 | Fracture of hollow multiply-twinned particles under chemical etching. European Journal of Mechanics, A/Solids, 2018, 68, 133-139.   | 3.7 | 6         |
| 23 | Gradient elasticity for disclinated micro crystals. Mechanics Research Communications, 2018, 93, 159-162.   | 1.8 | 6         |
| 24 | Generation of circular prismatic dislocation loops in decahedral small particles. Scripta Materialia,<br>2018, 146, 77-81.  | 5.2 | 10        |
| 25 | Modelling double diffusion in soils and materials. Journal of the Mechanical Behavior of Materials, 2018, 27, .   | 1.8 | 3         |
| 26 | Capturing wave dispersion in heterogeneous and microstructured materials through a<br>three-length-scale gradient elasticity formulation. Journal of the Mechanical Behavior of Materials,<br>2018, 27, .       | 1.8 | 9         |
| 27 | CuO nanowhiskers: Preparation, structure features, properties, and applications. Materials Science and Technology, 2018, 34, 2126-2135.   | 1.6 | 10        |
| 28 | Gradient and size effects on spinodal and miscibility gaps. Continuum Mechanics and Thermodynamics, 2018, 30, 1185-1199.  | 2.2 | 3         |
| 29 | Gradient Elasticity Effects on the Two-Phase Lithiation of LIB Anodes. Advanced Structured Materials, 2018, , 221-235.  | 0.5 | 4         |
| 30 | Gradient elasticity and size effect for the borehole problem. Acta Mechanica, 2018, 229, 3305-3318.   | 2.1 | 10        |
| 31 | Gradient-enriched finite element methodology for axisymmetric problems. Acta Mechanica, 2017, 228, 1423-1444.   | 2.1 | 10        |
| 32 | On the role of micro-inertia in enriched continuum mechanics. Proceedings of the Royal Society A:<br>Mathematical, Physical and Engineering Sciences, 2017, 473, 20160722.                                      | 2.1 | 22        |
| 33 | Homotopy Shear Band Solutions in Gradient Plasticity. Zeitschrift Fur Naturforschung - Section A<br>Journal of Physical Sciences, 2017, 72, 477-486.  | 1.5 | 2         |
| 34 | Thermodynamic coupling between gradient elasticity and a Cahn–Hilliard type of diffusion:<br>size-dependent spinodal gaps. Continuum Mechanics and Thermodynamics, 2017, 29, 1181-1194.                         | 2.2 | 15        |
| 35 | Double diffusivity model under stochastic forcing. Physical Review E, 2017, 95, 052134.   | 2.1 | 6         |
| 36 | A statistical study of precursor activity in earthquake-induced landslides. Computers and Geotechnics, 2017, 81, 137-142.   | 4.7 | 7         |

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|----|--|-----|-----------|
| 37 | Z-Box Merging: Ultra-Fast Computation of Fractal Dimension and Lacunarity. , 2017, , .   |     | 2         |
| 38 | Tsallis statistics and neurodegenerative disorders. Journal of the Mechanical Behavior of Materials, 2016, 25, 129-139.  | 1.8 | 2         |
| 39 | Gradient plasticity used for modeling extrinsic and intrinsic size effects in the torsion of Au microwires. Journal of the Mechanical Behavior of Materials, 2016, 25, 53-56.                                    | 1.8 | 1         |
| 40 | Internal Length Gradient (ILG) Material Mechanics Across Scales and Disciplines. Advances in Applied Mechanics, 2016, 49, 1-110.   | 2.3 | 98        |
| 41 | Dislocation-based gradient elastic fracture mechanics for in-plane analysis of cracks. International<br>Journal of Fracture, 2016, 202, 93-110.  | 2.2 | 15        |
| 42 | Stochastically forced dislocation density distribution in plastic deformation. Physical Review E, 2016, 94, 022139.  | 2.1 | 15        |
| 43 | The use of nanoindentation for determining internal lengths and the constitutive response of<br>monument materials: models and experiments. Journal of the Mechanical Behavior of Materials, 2016,<br>25, 57-60. | 1.8 | 2         |
| 44 | The effect of the diffusion on the bifurcation behavior of dislocation patterns in the one-dimensional finite domain. AIP Conference Proceedings, 2016, , .  | 0.4 | 0         |
| 45 | Two-temperature dual-phase-lags theory in a thermoelastic solid half-space due to an inclined load.<br>Mechanical Sciences, 2016, 7, 179-187.  | 1.0 | 0         |
| 46 | On temporal-structural dynamic failure criteria for rocks. Journal of the Mechanical Behavior of<br>Materials, 2015, 24, 173-181.  | 1.8 | 4         |
| 47 | Analysis of serrations and shear bands fractality in UFGs. Journal of the Mechanical Behavior of<br>Materials, 2015, 24, 1-9.  | 1.8 | 16        |
| 48 | Portevin–Le Chatelier effect and Tsallis nonextensive statistics. Physica A: Statistical Mechanics and<br>Its Applications, 2015, 438, 509-518.  | 2.6 | 10        |
| 49 | Non-Monotonous Mechanical Behavior at the Nanoscale: Elastic and Plastic Properties. Strength of<br>Materials, 2015, 47, 642-651.  | 0.5 | 1         |
| 50 | Modeling the zonal disintegration of rocks near deep level tunnels by gradient internal variable<br>continuous phase transition theory. Journal of the Mechanical Behavior of Materials, 2015, 24, 161-171.      | 1.8 | 4         |
| 51 | On the Effect of Strain Gradient on Adiabatic Shear Banding. Metallurgical and Materials<br>Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4459-4467.                                      | 2.2 | 10        |
| 52 | State space approach for the vibration of nanobeams based on the nonlocal thermoelasticity theory without energy dissipation. Journal of Mechanical Science and Technology, 2015, 29, 2921-2931.                 | 1.5 | 28        |
| 53 | Nonlocal Thermoelasticity Theory for Thermal-Shock Nanobeams with Temperature-Dependent<br>Thermal Conductivity. Journal of Thermal Stresses, 2015, 38, 1049-1067.   | 2.0 | 19        |
| 54 | A bifurcation analysis of dislocation patterning in the one-dimensional finite domain. AIP Conference<br>Proceedings, 2015, , .  | 0.4 | 0         |

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| 55 | Strain gradient and electric field gradient effects in piezoelectric cantilever beams. Journal of the<br>Mechanical Behavior of Materials, 2015, 24, 121-127.   | 1.8 | 19        |
| 56 | Size effects on magnetoelectric response of multiferroic composite with inhomogeneities. Physica B:<br>Condensed Matter, 2015, 478, 36-42.  | 2.7 | 16        |
| 57 | Non-standard extensions of gradient elasticity: Fractional non-locality, memory and fractality.<br>Communications in Nonlinear Science and Numerical Simulation, 2015, 22, 197-227.   | 3.3 | 50        |
| 58 | Microscale size effects on the electromechanical coupling in piezoelectric material for anti-plane problem. Smart Materials and Structures, 2014, 23, 125043.   | 3.5 | 23        |
| 59 | Toward fractional gradient elasticity. Journal of the Mechanical Behavior of Materials, 2014, 23, 41-46.  | 1.8 | 12        |
| 60 | Continuum nanomechanics for nanocrystalline and ultrafine grain materials. IOP Conference Series:<br>Materials Science and Engineering, 2014, 63, 012129.   | 0.6 | 4         |
| 61 | A note on the discrete approach for generalized continuum models. Journal of the Mechanical Behavior of Materials, 2014, 23, 181-183.   | 1.8 | 1         |
| 62 | Filtration model of plastic flow. Journal of the Mechanical Behavior of Materials, 2014, 23, 177-180.   | 1.8 | 1         |
| 63 | Gradient material mechanics: Perspectives and Prospects. Acta Mechanica, 2014, 225, 999-1012.   | 2.1 | 53        |
| 64 | On non-singular GRADELA crack fields. Theoretical and Applied Mechanics Letters, 2014, 4, 051005.   | 2.8 | 19        |
| 65 | A refined nonlocal thermoelasticity theory for the vibration of nanobeams induced by ramp-type heating. Applied Mathematics and Computation, 2014, 248, 169-183.  | 2.2 | 28        |
| 66 | Free transverse vibrations of a double-walled carbon nanotube: gradient and internal inertia effects.<br>Acta Mechanica Solida Sinica, 2014, 27, 345-352.   | 1.9 | 13        |
| 67 | Introducing time delay in the evolution of new technology: the case study of nanotechnology.<br>Journal of the Mechanical Behavior of Materials, 2013, 22, 203-210.   | 1.8 | 0         |
| 68 | Gradient elasticity applied to a crack. Journal of the Mechanical Behavior of Materials, 2013, 22, 193-201.   | 1.8 | 9         |
| 69 | Probing the mechanical properties of dental porcelain through nanoindentation. Journal of the<br>Mechanical Behavior of Materials, 2012, 21, 41-46.   | 1.8 | 2         |
| 70 | Torsional prestrain gradient and size dependence of initial yield for <100> Cu-Mn single crystals in<br>tension. Journal of the Mechanical Behavior of Materials, 2012, 21, 95-99.  | 1.8 | 0         |
| 71 | On two applications of nanomechanics to future technology. Journal of the Mechanical Behavior of<br>Materials, 2012, 21, 47-52.   | 1.8 | 0         |
| 72 | A. Konstantinidis, P. Cornetti, N. Pugno and E.C. Aifantis, Application of Gradient Theory and Quantized<br>Fracture Mechanics in Snow Avalanches, J. Mech. Behav. Mater. 19, 39–47, 2009. Journal of the<br>Mechanical Behavior of Materials, 2012, 20, 107-109. | 1.8 | 1         |

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| 73 | Gradient effects in micro-/nanoindentation. Materials Science and Technology, 2012, 28, 1072-1078.   | 1.6 | 10        |
| 74 | On certain problems of deformation-induced material instabilities. International Journal of Engineering Science, 2012, 59, 140-155.  | 5.0 | 7         |
| 75 | Structural transformations in nano- and microobjects triggered by disclinations. Journal of Materials Research, 2012, 27, 545-551.   | 2.6 | 13        |
| 76 | Some remarks on deformation, localization, and front propagation. Journal of the Mechanical<br>Behavior of Materials, 2012, 21, 53-56.   | 1.8 | 0         |
| 77 | Random walk on graphs: An application to the double diffusivity model. Mechanics Research<br>Communications, 2012, 43, 101-104.  | 1.8 | 8         |
| 78 | A note on gradient elasticity and nonsingular crack fields. Journal of the Mechanical Behavior of<br>Materials, 2012, 20, 103-105.   | 1.8 | 25        |
| 79 | Elastic bending analysis of bilayered beams containing a gradient layer by an alternative two-variable method. Composite Structures, 2011, 93, 3130-3130.  | 5.8 | 11        |
| 80 | On the gradient approach – Relation to Eringen's nonlocal theory. International Journal of<br>Engineering Science, 2011, 49, 1367-1377.  | 5.0 | 201       |
| 81 | Eshelby's inclusion problem in the gradient theory of elasticity: Applications to composite materials.<br>International Journal of Engineering Science, 2011, 49, 1517-1525.   | 5.0 | 45        |
| 82 | Elastic fields and physical properties of surface quantum dots. Physics of the Solid State, 2011, 53, 2091-2102.   | 0.6 | 7         |
| 83 | Comments on "Model and analysis of size-stiffening in nanoporous cellular solids―by Wang and Lam<br>[J. Mater. Sci. 44, 985–991 (2009)]. Journal of Materials Science, 2011, 46, 6158-6161.  | 3.7 | 5         |
| 84 | Unconstrained and Cauchy-Born-constrained atomistic systems: deformational and configurational mechanics. Archive of Applied Mechanics, 2011, 81, 669-684.   | 2.2 | 13        |
| 85 | Gradient elasticity in statics and dynamics: An overview of formulations, length scale identification procedures, finite element implementations and new results. International Journal of Solids and Structures, 2011, 48, 1962-1990. | 2.7 | 684       |
| 86 | Effect of cooperative grain boundary sliding and migration on crack growth in nanocrystalline solids. Acta Materialia, 2011, 59, 5023-5031.  | 7.9 | 61        |
| 87 | Gradient Nanomechanics: Applications to Deformation, Fracture, and Diffusion in Nanopolycrystals.<br>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42,<br>2985-2998.                    | 2.2 | 62        |
| 88 | A gradient elasticity approach to the indentation size effect at very small depths. Journal of the<br>Mechanical Behavior of Materials, 2011, 20, 35-40.   | 1.8 | 3         |
| 89 | Special rotational deformation as a toughening mechanism in nanocrystalline solids. Journal of the<br>Mechanics and Physics of Solids, 2010, 58, 1088-1099.  | 4.8 | 59        |
| 90 | Stress concentrations in fractured compact bone simulated with a special class of anisotropic gradient elasticity. International Journal of Solids and Structures, 2010, 47, 1099-1107.  | 2.7 | 86        |

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|-----|--|-----|-----------|
| 91  | Some links between recent gradient thermo-elasto-plasticity theories and the thermomechanics of generalized continua. International Journal of Solids and Structures, 2010, 47, 3367-3376.   | 2.7 | 143       |
| 92  | On Gradient Nanomechanics: Plastic Flow in Nanopolycrystals. Materials Science Forum, 2010, 667-669, 991-996.  | 0.3 | 2         |
| 93  | A Personal View on Current Generalized Theories of Elasticity and Plastic Flow. Advances in Mechanics and Mathematics, 2010, , 191-202.  | 0.7 | 4         |
| 94  | Roughening and pinning of interface cracks in shear delamination of thin films. Journal of Statistical<br>Mechanics: Theory and Experiment, 2009, 2009, P11009.  | 2.3 | 6         |
| 95  | Exploring the applicability of gradient elasticity to certain micro/nano reliability problems.<br>Microsystem Technologies, 2009, 15, 109-115.   | 2.0 | 106       |
| 96  | Nonsingular dislocation and crack fields: implications to small volumes. Microsystem Technologies, 2009, 15, 117-121.  | 2.0 | 11        |
| 97  | Deformation and failure of bulk nanograined and ultrafine-grained materials. Materials Science &<br>Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 503, 190-197.                              | 5.6 | 38        |
| 98  | Disclinations in nanocrystalline materials: Manifestation of the relay mechanism of plastic<br>deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure<br>and Processing, 2009, 503, 62-67. | 5.6 | 18        |
| 99  | On scale invariance in anisotropic plasticity, gradient plasticity and gradient elasticity. International<br>Journal of Engineering Science, 2009, 47, 1089-1099.  | 5.0 | 36        |
| 100 | Multiscale modeling of polymer materials using a statistics-based micromechanics approach. Acta<br>Materialia, 2009, 57, 525-532.  | 7.9 | 22        |
| 101 | Gradient elasticity and flexural wave dispersion in carbon nanotubes. Physical Review B, 2009, 80, .   | 3.2 | 174       |
| 102 | On the thermodynamics of higher-order gradient plasticity for size-effects at the micron and submicron length scales. International Journal of Materials and Product Technology, 2009, 34, 172.                                      | 0.2 | 4         |
| 103 | Non-singular dislocation fields. IOP Conference Series: Materials Science and Engineering, 2009, 3, 012026.  | 0.6 | 7         |
| 104 | Finite element analysis with staggered gradient elasticity. Computers and Structures, 2008, 86, 1266-1279.   | 4.4 | 72        |
| 105 | Vibrations of Double-Walled Carbon Nanotubes With Different Boundary Conditions Between Inner and Outer Tubes. Journal of Applied Mechanics, Transactions ASME, 2008, 75, .  | 2.2 | 50        |
| 106 | Internal Variables and the Microstructural Evolution of Materials During Plastic Deformation.<br>Journal of the Mechanical Behavior of Materials, 2007, 18, 55-68.   | 1.8 | 1         |
| 107 | A new formulation and 0-implementation of dynamically consistent gradient elasticity. International<br>Journal for Numerical Methods in Engineering, 2007, 72, 111-126.   | 2.8 | 44        |
| 108 | On the direct interactions between heat transfer, mass transport and chemical processes within gradient elasticity. European Journal of Mechanics, A/Solids, 2007, 26, 68-87.  | 3.7 | 33        |

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|-----|--|-----|-----------|
| 109 | On a theory of nonlocal elasticity of bi-Helmholtz type and some applications. International Journal of Solids and Structures, 2006, 43, 1404-1421.                                | 2.7 | 156       |
| 110 | Dislocations in second strain gradient elasticity. International Journal of Solids and Structures, 2006, 43, 1787-1817.  | 2.7 | 154       |
| 111 | Deformation vs. flow and wavelet-based models of gradient plasticity: Examples of axial symmetry.<br>International Journal of Plasticity, 2006, 22, 1456-1485.                     | 8.8 | 13        |
| 112 | Randomness and slip avalanches in gradient plasticity. International Journal of Plasticity, 2006, 22, 1432-1455.   | 8.8 | 73        |
| 113 | On dislocation patterning: Multiple slip effects in the rate equation approach. International Journal of Plasticity, 2006, 22, 1486-1505.  | 8.8 | 55        |
| 114 | Gradient Elasticity Theories in Statics and Dynamics - A Unification of Approaches. International<br>Journal of Fracture, 2006, 139, 297-304.                                      | 2.2 | 80        |
| 115 | The Representative Volume Size in Static and Dynamic Micro-Macro Transitions. International Journal of Fracture, 2005, 135, L3-L9.   | 2.2 | 63        |
| 116 | On dislocations in a special class of generalized elasticity. Physica Status Solidi (B): Basic Research, 2005, 242, 2365-2390.   | 1.5 | 96        |
| 117 | Self-Affine Surface Morphology of Plastically Deformed Metals. Physical Review Letters, 2004, 93, 195507.  | 7.8 | 99        |
| 118 | Invariant relations in Boussinesq-type equations. Chaos, Solitons and Fractals, 2004, 22, 613-625.   | 5.1 | 5         |
| 119 | Geometrically necessary dislocations and strain gradient plasticity––a dislocation dynamics point of view. Scripta Materialia, 2003, 48, 133-139.                                  | 5.2 | 49        |
| 120 | Strain gradient and wavelet interpretation of size effects in yield and strength. Mechanics of Materials, 2003, 35, 733-745.   | 3.2 | 27        |
| 121 | Update on a class of gradient theories. Mechanics of Materials, 2003, 35, 259-280.   | 3.2 | 442       |
| 122 | Computer Simulation of Discrete Crack Propagation. Journal of the Mechanical Behavior of Materials, 2003, 14, 9-22.  | 1.8 | 2         |
| 123 | Disclination Patterning under Steady-State Creep at Intermediate Temperatures. Solid State<br>Phenomena, 2002, 87, 221-226.  | 0.3 | 2         |
| 124 | Recent Developments in Gradient Plasticity—Part I: Formulation and Size Effects. Journal of<br>Engineering Materials and Technology, Transactions of the ASME, 2002, 124, 352-357. | 1.4 | 56        |
| 125 | Strain Gradient Crystal Plasticity: Thermomechanical Formulations and Applications. Journal of the Mechanical Behavior of Materials, 2002, 13, 219-232.                            | 1.8 | 47        |
| 126 | On the stochastic interpretation of gradient-dependent constitutive equations. European Journal of<br>Mechanics, A/Solids, 2002, 21, 589-596.                                      | 3.7 | 18        |

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|-----|---|-----|-----------|
| 127 | Title is missing!. International Journal of Fracture, 2002, 117, 347-358.   | 2.2 | 82        |
| 128 | Recent Developments in Gradient Plasticity—Part II: Plastic Heterogeneity and Wavelets. Journal of<br>Engineering Materials and Technology, Transactions of the ASME, 2002, 124, 358-364. | 1.4 | 17        |
| 129 | Multiscale Analysis of Multiple Damage Mechanisms Coupled with Inelastic Behavior of Composite<br>Materials. Journal of Engineering Mechanics - ASCE, 2001, 127, 636-645.                 | 2.9 | 52        |
| 130 | On some applications of gradient elasticity to composite materials. Composite Structures, 2001, 53, 189-197.  | 5.8 | 16        |
| 131 | Application of double diffusivity model to superconductors. Journal of Materials Processing Technology, 2001, 108, 185-187.   | 6.3 | 9         |
| 132 | Scale-dependent constitutive relations and the role of scale on nominal properties. European Journal of Mechanics, A/Solids, 2001, 20, 925-936.   | 3.7 | 9         |
| 133 | Hydraulic Behavior and Contaminant Transport in Multiple Porosity Media. Transport in Porous<br>Media, 2001, 42, 265-292.   | 2.6 | 33        |
| 134 | Statistical Aspects of Gradient Theory. Journal of the Mechanical Behavior of Materials, 2001, 12, 77-84.   | 1.8 | 5         |
| 135 | Gradient Plasticity. , 2001, , 281-297.   |     | 13        |
| 136 | A preliminary study of stress-assisted fluid penetration in ceramic bricks. Journal of the European<br>Ceramic Society, 2000, 20, 489-495.  | 5.7 | 11        |
| 137 | Strain gradient elasticity theory for antiplane shear cracks. Part I: Oscillatory displacements.<br>Theoretical and Applied Fracture Mechanics, 2000, 34, 243-252.                        | 4.7 | 27        |
| 138 | Strain gradient elasticity theory for antiplane shear cracks. Part II: Monotonic displacements.<br>Theoretical and Applied Fracture Mechanics, 2000, 34, 253-265.                         | 4.7 | 20        |
| 139 | Some exactly solvable models for the statistical evolution of internal variables during plastic deformation. Probabilistic Engineering Mechanics, 2000, 15, 131-138.                      | 2.7 | 10        |
| 140 | Behavior of screw dislocations near phase boundaries in the gradient theory of elasticity. Physics of the Solid State, 2000, 42, 1652-1658.   | 0.6 | 8         |
| 141 | Edge dislocations near phase boundaries in the gradient theory of elasticity. Physics of the Solid State, 2000, 42, 1659-1667.  | 0.6 | 10        |
| 142 | Instability of gradient-dependent elastoviscoplastic model for clay and strain localization analysis.<br>Computer Methods in Applied Mechanics and Engineering, 2000, 183, 67-86.         | 6.6 | 30        |
| 143 | Gradient Aspects of Crystal Plasticity at Micro and Macro Scales. Key Engineering Materials, 2000,<br>177-180, 805-0.   | 0.4 | 3         |
| 144 | Dislocations and disclinations in the gradient theory of elasticity. Physics of the Solid State, 1999, 41, 1980-1988.   | 0.6 | 18        |

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|-----|--|-----|-----------|
| 145 | Numerical simulation of interface crack in thin films. International Journal of Fracture, 1999, 98, 195-207.   | 2.2 | 16        |
| 146 | Dislocations and Disclinations in Gradient Elasticity. Physica Status Solidi (B): Basic Research, 1999, 214, 245-284.  | 1.5 | 55        |
| 147 | Misfit Dislocation Patterning in Thin Films. Physica Status Solidi (B): Basic Research, 1998, 209, 295-304.  | 1.5 | 12        |
| 148 | Stochastic and deterministic aspects of strain localization during cyclic plastic deformation. Acta<br>Materialia, 1998, 46, 4143-4151.                      | 7.9 | 22        |
| 149 | On the "Anomalous―hardness of nanocrystalline materials. Scripta Materialia, 1998, 10, 1111-1118.  | 0.5 | 123       |
| 150 | A note on the problem of shear localization during chip formation in orthogonal machining. Journal of Materials Engineering and Performance, 1997, 6, 25-26. | 2.5 | 19        |
| 151 | Loading rate dependence of stick-slip fracture in polymers. Mechanics Research Communications, 1997, 24, 115-121.  | 1.8 | 8         |
| 152 | Crack growth resistance curves and stick-slip fracture instabilities. Mechanics Research<br>Communications, 1997, 24, 123-130.                               | 1.8 | 8         |
| 153 | Longitudinal vibrations of a beam: A gradient elasticity approach. Mechanics Research<br>Communications, 1996, 23, 35-40.                                    | 1.8 | 43        |
| 154 | Gradient elasticity with surface energy: mode-III crack problem. International Journal of Solids and Structures, 1996, 33, 4531-4559.                        | 2.7 | 118       |
| 155 | Non-linearity, periodicity and patterning in plasticity and fracture. International Journal of Non-Linear Mechanics, 1996, 31, 797-809.                      | 2.6 | 49        |
| 156 | Anisotropic yield and plastic flow of polycrystalline solids. International Journal of Plasticity, 1996, 12, 1221-1240.                                      | 8.8 | 27        |
| 157 | Numerical simulation of transport phenomena by using the double porosity/diffusivity continuum model. Mechanics Research Communications, 1996, 23, 577-582.  | 1.8 | 7         |
| 158 | Cracks in gradient elastic bodies with surface energy. International Journal of Fracture, 1996, 79, 107-119.   | 2.2 | 63        |
| 159 | An analytical gradient plasticity solution for mode III. International Journal of Fracture, 1996, 74, R75-R79.   | 2.2 | 3         |
| 160 | Screw dislocation near a triple junction of phases with different elastic moduli. I. General solution.<br>Physica Status Solidi A, 1996, 153, 65-75.         | 1.7 | 7         |
| 161 | Elastic Behaviour of Screw Dislocations near Triple Junctions of Interphase Boundaries. Materials<br>Science Forum, 1996, 207-209, 605-608.                  | 0.3 | 0         |
| 162 | PATTERN FORMATION IN PLASTICITY & amp; FRACTURE. , 1996, , 101-103.  |     | 0         |

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|-----|--|-----|-----------|
| 163 | Pattern formation in plasticity. International Journal of Engineering Science, 1995, 33, 2161-2178.  | 5.0 | 103       |
| 164 | The asymptotic solution of gradient elasticity for mode III. International Journal of Fracture, 1995, 71, R27-R32.   | 2.2 | 37        |
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