## Elias C Aifantis

List of Publications by Year in descending order

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255 papers

12,075 citations

28274 55 h-index 29157 104 g-index

262 all docs 262 docs citations

times ranked

262

3498 citing authors

| #  | 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 Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2022, 102, .   | 1.6 | 3         |
| 3  | Transmissibility in Interactive Nanocomposite Diffusion: The Nonlinear Double-Diffusion Model. 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 & Earth | 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 lattice and continuum models―by Polyzos and Fotiadis. International Journal of Solids and 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. 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 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 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 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 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, 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 three-length-scale gradient elasticity formulation. Journal of the Mechanical Behavior of Materials, 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: 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: 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 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 monument materials: models and experiments. Journal of the Mechanical Behavior of Materials, 2016, 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 Materials, 2015, 24, 173-181.   | 1.8 | 4         |
| 47 | Analysis of serrations and shear bands fractality in UFGs. Journal of the Mechanical Behavior of Materials, 2015, 24, 1-9.   | 1.8 | 16        |
| 48 | Portevin–Le Chatelier effect and Tsallis nonextensive statistics. Physica A: Statistical Mechanics and Its Applications, 2015, 438, 509-518.   | 2.6 | 10        |
| 49 | Non-Monotonous Mechanical Behavior at the Nanoscale: Elastic and Plastic Properties. Strength of Materials, 2015, 47, 642-651.   | 0.5 | 1         |
| 50 | Modeling the zonal disintegration of rocks near deep level tunnels by gradient internal variable 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 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 Proceedings, $2015,  ,  .$   | 0.4 | 0         |

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| 55 | Strain gradient and electric field gradient effects in piezoelectric cantilever beams. Journal of the Mechanical Behavior of Materials, 2015, 24, 121-127.  | 1.8 | 19        |
| 56 | Size effects on magnetoelectric response of multiferroic composite with inhomogeneities. Physica B: Condensed Matter, 2015, 478, 36-42.   | 2.7 | 16        |
| 57 | Non-standard extensions of gradient elasticity: Fractional non-locality, memory and fractality. 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: 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. 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. 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 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 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 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 Fracture Mechanics in Snow Avalanches, J. Mech. Behav. Mater. 19, 39–47, 2009. Journal of the 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 Behavior of Materials, 2012, 21, 53-56.  | 1.8 | 0         |
| 77 | Random walk on graphs: An application to the double diffusivity model. Mechanics Research Communications, 2012, 43, 101-104.   | 1.8 | 8         |
| 78 | A note on gradient elasticity and nonsingular crack fields. Journal of the Mechanical Behavior of 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 Engineering Science, 2011, 49, 1367-1377.   | 5.0 | 201       |
| 81 | Eshelby's inclusion problem in the gradient theory of elasticity: Applications to composite materials. 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 [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 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 Mechanics and Physics of Solids, 2010, 58, 1088-1099.   | 4.8 | 59        |
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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 Mechanics: Theory and Experiment, 2009, 2009, P11009.   | 2.3 | 6         |
| 95  | Exploring the applicability of gradient elasticity to certain micro/nano reliability problems. 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 & Deformation 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 deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 503, 62-67. | 5.6 | 18        |
| 99  | On scale invariance in anisotropic plasticity, gradient plasticity and gradient elasticity. International Journal of Engineering Science, 2009, 47, 1089-1099.   | 5.0 | 36        |
| 100 | Multiscale modeling of polymer materials using a statistics-based micromechanics approach. Acta 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. Journal of the Mechanical Behavior of Materials, 2007, 18, 55-68.  | 1.8 | 1         |
| 107 | A new formulation and î"¢0-implementation of dynamically consistent gradient elasticity. International 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. 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 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 <b>.</b> 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 Phenomena, 2002, 87, 221-226.  | 0.3          | 2         |
| 124 | Recent Developments in Gradient Plasticityâ€"Part I: Formulation and Size Effects. Journal of 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 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 Plasticityâ€"Part II: Plastic Heterogeneity and Wavelets. Journal of 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 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 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 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. 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. 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, 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 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 Communications, 1997, 24, 123-130.  | 1.8 | 8         |
| 153 | Longitudinal vibrations of a beam: A gradient elasticity approach. Mechanics Research 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. Physica Status Solidi A, 1996, 153, 65-75.  | 1.7 | 7         |
| 161 | Elastic Behaviour of Screw Dislocations near Triple Junctions of Interphase Boundaries. Materials Science Forum, 1996, 207-209, 605-608.   | 0.3 | 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        |
| 165 | Stand-off positions and nonuniform distributions of misfit dislocations in heterophase systems. Physica Status Solidi A, 1995, 151, 281-290.               | 1.7 | 8         |
| 166 | On the description of anisotropic plastic flow by the scale invariance approach. International Journal of Plasticity, 1995, 11, 183-193.                   | 8.8 | 7         |
| 167 | A simple, mixtures-based model for the grain size dependence of strength in nanophase metals. Scripta Materialia, 1995, 5, 441-448.                        | 0.5 | 155       |
| 168 | Observation and measurement of grain rotation and plastic strain in nanostructured metal thin films. Scripta Materialia, 1995, 5, 689-697.                 | 0.5 | 229       |
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