

George Z Voyiadjis

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412
papers

9,258
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52
h-index

77
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439
ext. papers

10,161
ext. citations

3.6
avg, IF

6.86
L-index

#	Paper	IF	Citations
412	Analytical and experimental determination of the material intrinsic length scale of strain gradient plasticity theory from micro- and nano-indentation experiments. <i>International Journal of Plasticity</i> , 2004 , 20, 1139-1182	7.6	246
411	A plasticity-damage theory for large deformation of solids□ Theoretical formulation. <i>International Journal of Engineering Science</i> , 1992 , 30, 1089-1108	5.7	221
410	Microstructural based models for bcc and fcc metals with temperature and strain rate dependency. <i>Mechanics of Materials</i> , 2005 , 37, 355-378	3.3	220
409	A plasticity and anisotropic damage model for plain concrete. <i>International Journal of Plasticity</i> , 2007 , 23, 1874-1900	7.6	210
408	Gradient plasticity theory with a variable length scale parameter. <i>International Journal of Solids and Structures</i> , 2005 , 42, 3998-4029	3.1	199
407	On the coupling of anisotropic damage and plasticity models for ductile materials. <i>International Journal of Solids and Structures</i> , 2003 , 40, 2611-2643	3.1	195
406	A thermodynamic consistent damage and healing model for self healing materials. <i>International Journal of Plasticity</i> , 2011 , 27, 1025-1044	7.6	171
405	Thermodynamic framework for coupling of non-local viscoplasticity and non-local anisotropic viscodamage for dynamic localization problems using gradient theory. <i>International Journal of Plasticity</i> , 2004 , 20, 981-1038	7.6	160
404	Anisotropic damage□plasticity model for concrete. <i>International Journal of Plasticity</i> , 2008 , 24, 1946-1965	7.6	156
403	A physically based gradient plasticity theory. <i>International Journal of Plasticity</i> , 2006 , 22, 654-684	7.6	131
402	A coupled anisotropic damage model for the inelastic response of composite materials. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2000 , 183, 159-199	5.7	122
401	A Comparative Study of Damage Variables in Continuum Damage Mechanics. <i>International Journal of Damage Mechanics</i> , 2009 , 18, 315-340	3	120
400	Size effects in nanoindentation: an experimental and analytical study. <i>Acta Mechanica</i> , 2010 , 211, 131-153	3.1	105
399	A coupled theory of damage mechanics and finite strain elasto-plasticity□. Damage and finite strain plasticity. <i>International Journal of Engineering Science</i> , 1990 , 28, 505-524	5.7	101
398	A generalized coupled viscoplastic□viscodamage□iscohealing theory for glassy polymers. <i>International Journal of Plasticity</i> , 2012 , 28, 21-45	7.6	94
397	A physically based constitutive model for fcc metals with applications to dynamic hardness. <i>Mechanics of Materials</i> , 2008 , 40, 549-563	3.3	89
396	Continuum Damage-Healing Mechanics with Introduction to New Healing Variables. <i>International Journal of Damage Mechanics</i> , 2012 , 21, 391-414	3	88

395	A coupled theory of damage mechanics and finite strain elasto-plasticity□ Damage and elastic deformations. <i>International Journal of Engineering Science</i> , 1990 , 28, 421-435	5.7	87
394	Damage Mechanics		83
393	The kinematics of damage for finite-strain elasto-plastic solids. <i>International Journal of Engineering Science</i> , 1999 , 37, 803-830	5.7	75
392	Quantification of damage parameters using X-ray tomography images. <i>Mechanics of Materials</i> , 2003 , 35, 777-790	3.3	74
391	Gradient-enhanced Coupled Plasticity-anisotropic Damage Model for Concrete Fracture: Computational Aspects and Applications. <i>International Journal of Damage Mechanics</i> , 2009 , 18, 115-154	3	73
390	Plastic deformation modeling of AL-6XN stainless steel at low and high strain rates and temperatures using a combination of bcc and fcc mechanisms of metals. <i>International Journal of Plasticity</i> , 2005 , 21, 1618-1639	7.6	73
389	A theory of anisotropic healing and damage mechanics of materials. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012 , 468, 163-183	2.4	72
388	A Finite Strain Plastic-damage Model for High Velocity Impact using Combined Viscosity and Gradient Localization Limiters: Part I - Theoretical Formulation. <i>International Journal of Damage Mechanics</i> , 2006 , 15, 293-334	3	72
387	A thermodynamic based higher-order gradient theory for size dependent plasticity. <i>International Journal of Solids and Structures</i> , 2007 , 44, 2888-2923	3.1	71
386	A Finite Strain Plastic-damage Model for High Velocity Impacts using Combined Viscosity and Gradient Localization Limiters: Part II - Numerical Aspects and Simulations. <i>International Journal of Damage Mechanics</i> , 2006 , 15, 335-373	3	71
385	Large scale atomistic simulation of size effects during nanoindentation: Dislocation length and hardness. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 634, 20-31	5.3	70
384	A coupled temperature and strain rate dependent yield function for dynamic deformations of bcc metals. <i>International Journal of Plasticity</i> , 2006 , 22, 1398-1431	7.6	69
383	Decomposition of Damage Tensor in Continuum Damage Mechanics. <i>Journal of Engineering Mechanics - ASCE</i> , 2001 , 127, 940-944	2.4	67
382	A direct finite element implementation of the gradient-dependent theory. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 63, 603-629	2.4	66
381	Coupling length scales for multiscale atomistics-continuum simulations: atomistically induced stress distributions in Si/Si ₃ N ₄ nanopixels. <i>Physical Review Letters</i> , 2001 , 87, 086104	7.4	66
380	Anisotropic Distortional Yield Model. <i>Journal of Applied Mechanics, Transactions ASME</i> , 1990 , 57, 537-547	2.7	65
379	A plasticity model for multiaxial cyclic loading and ratchetting. <i>Acta Mechanica</i> , 1998 , 126, 19-35	2.1	64
378	Degradation of elastic modulus in elastoplastic coupling with finite strains. <i>International Journal of Plasticity</i> , 1988 , 4, 335-353	7.6	64

377	Thermodynamic based model for the evolution equation of the backstress in cyclic plasticity. <i>International Journal of Plasticity</i> , 2003 , 19, 2121-2147	7.6	63
376	Formulation of strain gradient plasticity with interface energy in a consistent thermodynamic framework. <i>International Journal of Plasticity</i> , 2009 , 25, 1997-2024	7.6	61
375	Theoretical Formulation of a Coupled Elastic-Plastic Anisotropic Damage Model for Concrete using the Strain Energy Equivalence Concept. <i>International Journal of Damage Mechanics</i> , 2009 , 18, 603-638	7.6	61
374	Damage Mechanics with Fabric Tensors. <i>Mechanics of Advanced Materials and Structures</i> , 2006 , 13, 285-308	7.6	61
373	Thermo-mechanical strain gradient plasticity with energetic and dissipative length scales. <i>International Journal of Plasticity</i> , 2012 , 30-31, 218-247	7.6	60
372	Calibration Chamber Studies of Piezocone Test in Cohesive Soils. <i>Journal of Geotechnical Engineering</i> , 1994 , 120, 81-107	7.6	60
371	A consistent modified Zerilli-Armstrong flow stress model for BCC and FCC metals for elevated temperatures. <i>Acta Mechanica</i> , 2005 , 175, 1-18	2.1	57
370	A plasticity-damage theory for large deformation of solids. Applications to finite simple shear. <i>International Journal of Engineering Science</i> , 1993 , 31, 183-199	5.7	57
369	Strain gradient continuum plasticity theories: Theoretical, numerical and experimental investigations. <i>International Journal of Plasticity</i> , 2019 , 121, 21-75	7.6	56
368	Determination of nanoindentation size effects and variable material intrinsic length scale for body-centered cubic metals. <i>Mechanics of Materials</i> , 2012 , 44, 189-211	3.3	56
367	Damage of fiber-reinforced composite materials with micromechanical characterization. <i>International Journal of Solids and Structures</i> , 1993 , 30, 2757-2778	3.1	56
366	Effect of boundary conditions on the MD simulation of nanoindentation. <i>Computational Materials Science</i> , 2014 , 95, 626-636	3.2	55
365	A large strain theory and its application in the analysis of the cone penetration mechanism. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 1988 , 12, 45-60	4	55
364	Review of Nanoindentation Size Effect: Experiments and Atomistic Simulation. <i>Crystals</i> , 2017 , 7, 321	2.3	54
363	Nonlocal damage model using the phase field method: Theory and applications. <i>International Journal of Solids and Structures</i> , 2013 , 50, 3136-3151	3.1	54
362	Nano-indentation in FCC metals: experimental study. <i>Acta Mechanica</i> , 2010 , 209, 1-9	2.1	54
361	Viscoplastic constitutive theory for brittle to ductile damage in polycrystalline materials under dynamic loading. <i>International Journal of Plasticity</i> , 2013 , 48, 125-151	7.6	53
360	The mechanical behavior during nanoindentation near the grain boundary in a bicrystal FCC metal. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 621, 218-228	5.3	49

359	Cyclic Viscoplastic-Viscodamage Analysis of Shape Memory Polymers Fibers With Application to Self-Healing Smart Materials. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2013 , 80,	2.7	49
358	Numerical Parametric Study of Piezocone Penetration Test in Clays. <i>International Journal of Geomechanics</i> , 2003 , 3, 170-181	3.1	49
357	Anisotropic Properties of Asphalt Concrete: Characterization and Implications for Pavement Design and Analysis. <i>Journal of Materials in Civil Engineering</i> , 2005 , 17, 535-543	3	49
356	An anisotropic yield surface model for directionally reinforced metal-matrix composites. <i>International Journal of Plasticity</i> , 1995 , 11, 867-894	7.6	48
355	Experimental nanoindentation of BCC metals. <i>Mechanics Research Communications</i> , 2010 , 37, 307-314	2.2	47
354	Modelling strain localization in granular materials using micropolar theory: mathematical formulations. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2006 , 30, 1501-1524	4.7	47
353	Modelling strain localization in granular materials using micropolar theory: numerical implementation and verification. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2006 , 30, 1525-1544	4	47
352	Atomistic simulation of size effects in single-crystalline metals of confined volumes during nanoindentation. <i>Computational Materials Science</i> , 2016 , 111, 64-73	3.2	46
351	Vibration analysis of multi-delaminated beams. <i>Composites Part B: Engineering</i> , 2003 , 34, 647-659	10	45
350	Experimental Damage Investigation of a SiC-Ti Aluminide Metal Matrix Composite. <i>International Journal of Damage Mechanics</i> , 1995 , 4, 338-361	3	44
349	Size effects in fcc crystals during the high rate compression test. <i>Acta Materialia</i> , 2016 , 121, 190-201	8.4	43
348	Mechanics of strain gradient plasticity with particular reference to decomposition of the state variables into energetic and dissipative components. <i>International Journal of Engineering Science</i> , 2009 , 47, 1405-1423	5.7	43
347	Framework using functional forms of hardening internal state variables in modeling elasto-plastic-damage behavior. <i>International Journal of Plasticity</i> , 2007 , 23, 1826-1859	7.6	43
346	Multiscale Analysis of Multiple Damage Mechanisms Coupled with Inelastic Behavior of Composite Materials. <i>Journal of Engineering Mechanics - ASCE</i> , 2001 , 127, 636-645	2.4	43
345	Evolving internal length scales in plastic strain localization for granular materials. <i>International Journal of Plasticity</i> , 2005 , 21, 2000-2024	7.6	42
344	Simulated Micromechanical Models Using Artificial Neural Networks. <i>Journal of Engineering Mechanics - ASCE</i> , 2001 , 127, 730-738	2.4	42
343	Plasticity-Damage Model for Concrete under Cyclic Multiaxial Loading. <i>Journal of Engineering Mechanics - ASCE</i> , 1993 , 119, 1465-1484	2.4	42
342	Determination of the Material Intrinsic Length Scale of Gradient Plasticity Theory. <i>International Journal for Multiscale Computational Engineering</i> , 2004 , 2, 377-400	2.4	42

341	Mechanics of damage processes in series and in parallel: a conceptual framework. <i>Acta Mechanica</i> , 2012 , 223, 1863-1878	2.1	41
340	Plasticity model for concrete using the bounding surface concept. <i>International Journal of Plasticity</i> , 1994 , 10, 1-21	7.6	41
339	A Refined two-dimensional theory for thick cylindrical shells. <i>International Journal of Solids and Structures</i> , 1991 , 27, 261-282	3.1	40
338	Role of grain boundary on the sources of size effects. <i>Computational Materials Science</i> , 2016 , 117, 315-329	3.2	39
337	Mechanics of damage, healing, damageability, and integrity of materials: A conceptual framework. <i>International Journal of Damage Mechanics</i> , 2017 , 26, 50-103	3	38
336	Nanoindentation Study of Yielding and Plasticity of Poly(methyl methacrylate). <i>Macromolecules</i> , 2015 , 48, 5348-5357	5.5	38
335	Constitutive modeling of large inelastic deformation of amorphous polymers: Free volume and shear transformation zone dynamics. <i>Journal of Applied Physics</i> , 2016 , 119, 225104	2.5	38
334	Healing and super healing in continuum damage mechanics. <i>International Journal of Damage Mechanics</i> , 2014 , 23, 245-260	3	37
333	A theory for grain boundaries with strain-gradient plasticity. <i>International Journal of Solids and Structures</i> , 2014 , 51, 1872-1889	3.1	36
332	Local and interfacial damage analysis of metal matrix composites using the finite element method. <i>Engineering Fracture Mechanics</i> , 1997 , 56, 483-511	4.2	36
331	Numerical analysis of the miniature piezocone penetration tests (PCPT) in cohesive soils. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 1998 , 22, 791-818	4	36
330	A Mixed Finite Element Implementation of a Gradient-enhanced Coupled Damage-Plasticity Model. <i>International Journal of Damage Mechanics</i> , 2006 , 15, 201-235	3	36
329	Nonlocal gradient-dependent modeling of plasticity with anisotropic hardening. <i>International Journal of Plasticity</i> , 2010 , 26, 1335-1356	7.6	35
328	Overall damage and elastoplastic deformation in fibrous metal matrix composites. <i>International Journal of Plasticity</i> , 1993 , 9, 931-949	7.6	35
327	A hyperelastic fractional damage material model with memory. <i>International Journal of Solids and Structures</i> , 2017 , 124, 151-160	3.1	34
326	Effect of Strain Rate on the Dynamic Hardness in Metals. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2007 , 129, 505-512	1.8	34
325	A Sixth-Order Theory of Shear Deformable Beams With Variational Consistent Boundary Conditions. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2011 , 78,	2.7	33
324	Damage estimation on beam-like structures using the multi-resolution analysis. <i>International Journal of Solids and Structures</i> , 2006 , 43, 4238-4257	3.1	33

323	Nonlinear FE Analysis of Plain Concrete Pavements with Doweled Joints. <i>Journal of Transportation Engineering</i> , 1993 , 119, 763-781		33
322	Analytical and Experimental Determination of Rate- and Temperature-Dependent Length Scales Using Nanoindentation Experiments. <i>Journal of Nanomechanics & Micromechanics</i> , 2011 , 1, 24-40		32
321	Continuum Approach to Damage Mechanics of Composite Materials with Fabric Tensors. <i>International Journal of Damage Mechanics</i> , 2007 , 16, 301-329	3	32
320	Rate-dependent size effects and material length scales in nanoindentation near the grain boundary for a bicrystal FCC metal. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 659, 55-62	5-3	32
319	Nanoindentation of high performance semicrystalline polymers: A case study on PEEK. <i>Polymer Testing</i> , 2017 , 61, 57-64	4-5	31
318	Numerical evaluation of the performance of a Geosynthetic Reinforced Soil-Integrated Bridge System (GRS-IBS) under different loading conditions. <i>Geotextiles and Geomembranes</i> , 2017 , 45, 558-569	5-2	31
317	Implicit algorithm for finite deformation hypoelastic-viscoplasticity in fcc metals. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 67, 933-959	2-4	31
316	Local and interfacial damage analysis of metal matrix composites. <i>International Journal of Engineering Science</i> , 1995 , 33, 1595-1621	5-7	31
315	Simple and efficient shear flexible two-node arch/beam and four-node cylindrical shell/plate finite elements. <i>International Journal for Numerical Methods in Engineering</i> , 1991 , 31, 759-776	2-4	31
314	Brain modelling in the framework of anisotropic hyperelasticity with time fractional damage evolution governed by the Caputo-Almeida fractional derivative. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019 , 89, 209-216	4-1	31
313	Effect of passivation on higher order gradient plasticity models for non-proportional loading: energetic and dissipative gradient components. <i>Philosophical Magazine</i> , 2017 , 97, 318-345	1-6	30
312	Effects of fatigue damage and wear on fretting fatigue under partial slip condition. <i>Wear</i> , 2015 , 338-339, 394-405	3-5	30
311	The effects of temperature and strain rate in fcc and bcc metals during extreme deformation rates. <i>Acta Materialia</i> , 2018 , 151, 1-10	8-4	30
310	Evaluation of Factors Affecting the Performance of Geogrid-Reinforced Granular Base Material Using Repeated Load Triaxial Tests. <i>Journal of Materials in Civil Engineering</i> , 2012 , 24, 72-83	3	30
309	Structural Performance of Bridge Approach Slabs under Given Embankment Settlement. <i>Journal of Bridge Engineering</i> , 2005 , 10, 482-489	2-7	30
308	Modeling of damage-healing and nonlinear self-healing concrete behavior: Application to coupled and uncoupled self-healing mechanisms. <i>Theoretical and Applied Fracture Mechanics</i> , 2018 , 96, 216-230	3-7	30
307	Characterizing shear transformation zones in polycarbonate using nanoindentation. <i>Polymer</i> , 2016 , 82, 238-245	3-9	29
306	Free vibration analysis of axially compressed laminated composite beam-columns with multiple delaminations. <i>Composites Part B: Engineering</i> , 2002 , 33, 605-617	10	29

305	A 4-node assumed strain quasi-conforming shell element with 6 degrees of freedom. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 58, 2177-2200	2.4	29
304	Micromechanical modeling of damage in uniaxially loaded unidirectional fiberreinforced composite laminae. <i>International Journal of Solids and Structures</i> , 1993 , 30, 19-36	3.1	29
303	Mechanistic-Empirical analysis of the results of finite element analysis on flexible pavement with geogrid base reinforcement. <i>International Journal of Pavement Engineering</i> , 2014 , 15, 786-798	2.6	28
302	Local Approach to Damage in Elasto-Plastic Metal Matrix Composites. <i>International Journal of Damage Mechanics</i> , 1993 , 2, 92-114	3	28
301	Eulerian constitutive model for finite deformation plasticity with anisotropic hardening. <i>Mechanics of Materials</i> , 1989 , 7, 279-293	3.3	28
300	Phase field based nonlocal anisotropic damage mechanics model. <i>Physica D: Nonlinear Phenomena</i> , 2015 , 308, 11-25	3.3	27
299	Coupled theory of mixtures for clayey soils. <i>Computers and Geotechnics</i> , 1997 , 20, 195-222	4.4	27
298	Nonlocal dislocation based plasticity incorporating gradients of hardening. <i>Mechanics of Materials</i> , 2003 , 35, 721-732	3.3	27
297	Computational model for the simulation of the shield tunneling process in cohesive soils. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 1999 , 23, 23-44	4	27
296	A cyclic anisotropic-plasticity model for metal matrix composites. <i>International Journal of Plasticity</i> , 1996 , 12, 69-91	7.6	27
295	Damage Model for Concrete Using Bounding Surface Concept. <i>Journal of Engineering Mechanics - ASCE</i> , 1993 , 119, 1865-1885	2.4	27
294	Efficient and accurate four-node quadrilateral C0 plate bending element based on assumed strain fields. <i>International Journal for Numerical Methods in Engineering</i> , 1991 , 32, 1041-1055	2.4	27
293	Hyperelastic modeling of the human brain tissue: Effects of no-slip boundary condition and compressibility on the uniaxial deformation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018 , 83, 63-78	4.1	25
292	Variable Material Length Scale Associated with Nanoindentation Experiments. <i>Journal of Engineering Mechanics - ASCE</i> , 2009 , 135, 139-148	2.4	25
291	Determination of Hydraulic Conductivity Using Piezocone Penetration Test. <i>International Journal of Geomechanics</i> , 2003 , 3, 217-224	3.1	25
290	Strain gradient plasticity for amorphous and crystalline polymers with application to micro- and nano-scale deformation analysis. <i>Polymer</i> , 2014 , 55, 4182-4198	3.9	24
289	Modeling of strengthening and softening in inelastic nanocrystalline materials with reference to the triple junction and grain boundaries using strain gradient plasticity. <i>Acta Mechanica</i> , 2010 , 213, 3-26	2.1	24
288	Evolution of fabric tensors in damage mechanics of solids with micro-cracks: Part I - Theory and fundamental concepts. <i>Mechanics Research Communications</i> , 2007 , 34, 145-154	2.2	24

287	Anisotropic Damage of Fiber-Reinforced MMC Using Overall Damage Analysis. <i>Journal of Engineering Mechanics - ASCE</i> , 1995 , 121, 1209-1217	2.4	24
286	Constitutive model for metals with dynamic strain aging. <i>Mechanics of Materials</i> , 2019 , 129, 352-360	3.3	24
285	Micro and macro anisotropic cyclic damage-plasticity models for MMCS. <i>International Journal of Engineering Science</i> , 1997 , 35, 467-484	5.7	23
284	Thermodynamic modeling of creep damage in materials with different properties in tension and compression. <i>International Journal of Solids and Structures</i> , 2000 , 37, 3281-3303	3.1	23
283	Nonlocal Gradient-Dependent Thermodynamics for Modeling Scale-Dependent Plasticity. <i>International Journal for Multiscale Computational Engineering</i> , 2007 , 5, 295-323	2.4	23
282	Mechanics of small damage in fiber-reinforced composite materials. <i>Composite Structures</i> , 2010 , 92, 2187-2193	2.2	22
281	Thick Rectangular Plates on an Elastic Foundation. <i>Journal of Engineering Mechanics - ASCE</i> , 1986 , 112, 1218-1240	2.4	22
280	Adiabatic Shear Band Localizations in BCC Metals at High Strain Rates and Various Initial Temperatures. <i>International Journal for Multiscale Computational Engineering</i> , 2007 , 5, 325-349	2.4	22
279	Coupled gradient damage viscoplasticity model for ductile materials: Phase field approach. <i>International Journal of Plasticity</i> , 2016 , 83, 55-73	7.6	22
278	An Indirect Indentation Method for Evaluating the Linear Viscoelastic Properties of the Brain Tissue. <i>Journal of Biomechanical Engineering</i> , 2017 , 139,	2.1	21
277	3D Finite element analysis of the geosynthetic reinforced soil-integrated bridge system (GRS-IBS) under different loading conditions. <i>Transportation Geotechnics</i> , 2018 , 15, 70-83	4	21
276	New Tensors for Anisotropic Damage in Continuum Damage Mechanics. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2012 , 134,	1.8	21
275	General non-linear finite element analysis of thick plates and shells. <i>International Journal of Solids and Structures</i> , 2006 , 43, 2209-2242	3.1	21
274	Indentation size effect in amorphous polymers based on shear transformation mediated plasticity. <i>Polymer</i> , 2018 , 137, 72-81	3.9	20
273	A combined experimental, modeling, and computational approach to interpret the viscoelastic response of the white matter brain tissue during indentation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018 , 77, 24-33	4.1	20
272	Gradient plasticity for thermo-mechanical processes in metals with length and time scales. <i>Philosophical Magazine</i> , 2013 , 93, 1013-1053	1.6	20
271	Multi-scale analysis of multiple damage mechanisms coupled with inelastic behavior of composite materials. <i>Mechanics Research Communications</i> , 2000 , 27, 295-300	2.2	20
270	Indentation of a half-space with a rigid indenter. <i>International Journal for Numerical Methods in Engineering</i> , 1983 , 19, 1555-1578	2.4	20

269	Size and strain rate effects in metallic samples of confined volumes: Dislocation length distribution. <i>Scripta Materialia</i> , 2017 , 130, 182-186	5.6	19
268	Shakedown Analysis of Geogrid-Reinforced Granular Base Material. <i>Journal of Materials in Civil Engineering</i> , 2013 , 25, 337-346	3	19
267	Experimental determination of the material parameters of elasto-plastic workhardening metal alloys. <i>Materials Science and Engineering</i> , 1984 , 62, 99-107		19
266	Small scale volume formulation based on coupled thermo-mechanical gradient enhanced plasticity theory. <i>International Journal of Solids and Structures</i> , 2018 , 134, 195-215	3.1	19
265	Fatigue and fretting fatigue life prediction of double-lap bolted joints using continuum damage mechanics-based approach. <i>International Journal of Damage Mechanics</i> , 2017 , 26, 162-188	3	18
264	Anisotropic Damage for the Characterization of the Onset of Macro-Crack Initiation in Metals. <i>International Journal of Damage Mechanics</i> , 1996 , 5, 68-92	3	18
263	A New Fabric-Based Damage Tensor. <i>Journal of the Mechanical Behavior of Materials</i> , 2006 , 17, 31-56	1.9	18
262	A refined theory for thick spherical shells. <i>International Journal of Solids and Structures</i> , 2004 , 41, 3747-3769		18
261	Finite Strain Plasticity and Damage in Constitutive Modeling of Metals With Spin Tensors. <i>Applied Mechanics Reviews</i> , 1992 , 45, S95-S109	8.6	18
260	Effect of annealing temperature on interrelation between the microstructural evolution and plastic deformation in polymers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2017 , 55, 1286-1297	2.6	17
259	Introducing damage mechanics templates for the systematic and consistent formulation of holistic material damage models. <i>Acta Mechanica</i> , 2017 , 228, 951-990	2.1	17
258	Constitutive Modeling and Simulation of Perforation of Targets by Projectiles. <i>AIAA Journal</i> , 2008 , 46, 304-316	2.1	17
257	Micromechanical approach to damage mechanics of composite materials with fabric tensors. <i>Composites Part B: Engineering</i> , 2007 , 38, 862-877	10	17
256	Analysis of creep deformation and creep damage in thin-walled branched shells from materials with different behavior in tension and compression. <i>International Journal of Solids and Structures</i> , 2007 , 44, 5075-5100	3.1	17
255	Bridging of length scales through gradient theory and diffusion equations of dislocations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2004 , 193, 1671-1692	5.7	17
254	Theory of creep deformation with kinematic hardening for materials with different properties in tension and compression. <i>International Journal of Plasticity</i> , 2005 , 21, 435-462	7.6	17
253	Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. I: Theory. <i>Journal of Engineering Mechanics - ASCE</i> , 2000 , 126, 1012-1019	2.4	17
252	A Simple C0 quadrilateral thick/thin shell element based on the refined shell theory and the assumed strain fields. <i>International Journal of Solids and Structures</i> , 1991 , 27, 283-298	3.1	17

251	A simple non-layered finite element for the elasto-plastic analysis of shear flexible plates. <i>International Journal for Numerical Methods in Engineering</i> , 1992 , 33, 85-99	2.4	17
250	Variation of the strain rate during CSM nanoindentation of glassy polymers and its implication on indentation size effect. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016 , 54, 2179-2187	2.6	16
249	Introduction to the mechanics and design of undamageable materials. <i>International Journal of Damage Mechanics</i> , 2013 , 22, 323-335	3	16
248	Thermodynamic Consistent Formulations of Viscoplastic Deformations in FCC Metals. <i>Journal of Engineering Mechanics - ASCE</i> , 2007 , 133, 76-86	2.4	16
247	A physically based constitutive model for dynamic strain aging in Inconel 718 alloy at a wide range of temperatures and strain rates. <i>Acta Mechanica</i> , 2020 , 231, 19-34	2.1	16
246	Microstructural investigation of the hardening mechanism in fcc crystals during high rate deformations. <i>Computational Materials Science</i> , 2017 , 138, 10-15	3.2	15
245	A Device Enhancement for the Dry Sliding Friction Coefficient Measurement Between Steel 1080 and VascoMax with Respect to Surface Roughness Changes. <i>Experimental Mechanics</i> , 2011 , 51, 337-358	2.6	15
244	Formulation and Verification of a Concrete Model with Strong Coupling between Isotropic Damage and Elastoplasticity and Comparison to a Weak Coupling Model. <i>Journal of Engineering Mechanics - ASCE</i> , 2012 , 138, 530-541	2.4	15
243	Modeling of secondary creep behavior for anisotropic materials with different properties in tension and compression. <i>International Journal of Plasticity</i> , 1998 , 14, 1059-1083	7.6	15
242	Elasto-plastic finite element analysis of shells with damage due to microvoids. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 68, 338-380	2.4	15
241	Directionally Constrained Viscoplasticity for Metal Matrix Composites. <i>Journal of Aerospace Engineering</i> , 2000 , 13, 92-99	1.4	15
240	Higher-Order Thermomechanical Gradient Plasticity Model With Energetic and Dissipative Components. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2017 , 139,	1.8	13
239	Overview of Enhanced Continuum Theories for Thermal and Mechanical Responses of the Microsystems in the Fast-Transient Process. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2014 , 136,	1.8	13
238	On the small and finite deformation thermo-elasto-viscoplasticity theory for strain localization problems. <i>European Journal of Computational Mechanics</i> , 2006 , 15, 945-987	0.5	13
237	Investigation of the super healing theory in continuum damage and healing mechanics. <i>International Journal of Damage Mechanics</i> , 2019 , 28, 896-917	3	13
236	On the slip and twinning mechanisms on first order pyramidal plane of magnesium: Molecular dynamics simulations and first principal studies. <i>Materials and Design</i> , 2020 , 191, 108648	8.1	12
235	An atomic displacive model for 101 $\bar{1}$ 011 twinning in hexagonal close packed metals with the emphasis on the role of partial stacking faults in formation of {101 $\bar{1}$ } twins. <i>Acta Materialia</i> , 2018 , 150, 381-393	8.4	12
234	Study of static lateral behavior of battered pile group foundation at I-10 Twin Span Bridge using three-dimensional finite element modeling. <i>Canadian Geotechnical Journal</i> , 2016 , 53, 962-973	3.2	12

233	The effect of shape memory alloys on the ductility of exterior reinforced concrete beam-column joints using the damage plasticity model. <i>Engineering Structures</i> , 2019 , 200, 109676	4.7	12
232	Microstructure to Macro-Scale Using Gradient Plasticity with Temperature and Rate Dependent Length Scale. <i>Procedia IUTAM</i> , 2012 , 3, 205-227		12
231	Localization in stainless steel using microstructural based viscoplastic model. <i>International Journal of Impact Engineering</i> , 2013 , 54, 114-129	4	12
230	A New Class of Damage Variables in Continuum Damage Mechanics. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2012 , 134,	1.8	12
229	Identification of a Distribution of Stiffness Reduction in Reinforced Concrete Slab Bridges Subjected to Moving Loads. <i>Journal of Bridge Engineering</i> , 2009 , 14, 355-365	2.7	12
228	A new free energy for plastic damage analysis. <i>Mechanics Research Communications</i> , 1997 , 24, 377-383	2.2	12
227	Evolution of fabric tensors in damage mechanics of solids with micro-cracks: Part II [Evolution of length and orientation of micro-cracks with an application to uniaxial tension. <i>Mechanics Research Communications</i> , 2007 , 34, 155-163	2.2	12
226	Influence of Micromaterial Heterogeneity on Strain Localization in Granular Materials. <i>International Journal of Geomechanics</i> , 2006 , 6, 248-259	3.1	12
225	Microstructure consideration with plastic spin and multiple back-stresses for large strain problems in soils. <i>International Journal of Plasticity</i> , 2002 , 18, 1271-1289	7.6	12
224	Flow Stress and Damage Behavior of C45 Steel Over a Range of Temperatures and Loading Rates. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2017 , 139,	1.8	11
223	Numerical parametric study to evaluate the performance of a Geosynthetic Reinforced Soil-Integrated Bridge System (GRS-IBS) under service loading. <i>Transportation Geotechnics</i> , 2019 , 20, 100238	4	11
222	Investigation of the damage variable basic issues in continuum damage and healing mechanics. <i>Mechanics Research Communications</i> , 2015 , 68, 89-94	2.2	11
221	Assessing texture development and mechanical response in microscale reverse extrusion of copper. <i>Journal of Materials Research</i> , 2018 , 33, 978-988	2.5	11
220	Effects of stress invariants and reverse loading on ductile fracture initiation. <i>International Journal of Solids and Structures</i> , 2012 , 49, 1541-1556	3.1	11
219	A Thermodynamic Consistent Model for Coupled Strain-Gradient Plasticity With Temperature. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2014 , 136,	1.8	11
218	On the Theory of Elastic Undamageable Materials. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2013 , 135,	1.8	11
217	A Plasticity Model for Metals With Dependency on All the Stress Invariants. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2013 , 135,	1.8	11
216	Friction coefficient evaluation using physically based viscoplasticity model at the contact region during high velocity sliding. <i>Acta Mechanica</i> , 2010 , 213, 39-52	2.1	11

215	Damage in MMCs using the GMC: theoretical formulation. <i>Composites Part B: Engineering</i> , 1997 , 28, 597-601	6.1	11
214	Numerical Parametric Study of Strip Footing on Reinforced Embankment Soils. <i>Transportation Research Record</i> , 2007 , 2004, 132-140	1.7	11
213	A finite strain, total Lagrangian finite element solution for metal extrusion problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1991 , 86, 337-370	5.7	11
212	A two-dimensional finite element model of the grain boundary based on thermo-mechanical strain gradient plasticity. <i>Journal of Theoretical and Applied Mechanics</i> , 377	1.3	11
211	Damaged plasticity model for concrete using scalar damage variables with a novel stress decomposition. <i>International Journal of Solids and Structures</i> , 2020 , 191-192, 56-75	3.1	11
210	Crystal Plasticity Simulation of Magnesium and Its Alloys: A Review of Recent Advances. <i>Crystals</i> , 2021 , 11, 435	2.3	11
209	Material Behavior Description for a Large Range of Strain Rates from Low to High Temperatures: Application to High Strength Steel. <i>Metals</i> , 2018 , 8, 795	2.3	11
208	Decomposition of healing tensor: In continuum damage and healing mechanics. <i>International Journal of Damage Mechanics</i> , 2018 , 27, 1020-1057	3	10
207	Recurrent Single Delaminated Beam Model for Vibration Analysis of Multidelaminated Beams. <i>Journal of Engineering Mechanics - ASCE</i> , 2004 , 130, 1072-1082	2.4	10
206	Finite elasto-plastic analysis of torsion problems using different spin tensors. <i>International Journal of Plasticity</i> , 1992 , 8, 271-314	7.6	10
205	Fundamental aspects for characterization in continuum damage mechanics. <i>International Journal of Damage Mechanics</i> , 2019 , 28, 200-218	3	10
204	Comparison of static lateral behavior of three pile group configurations using three-dimensional finite element modeling. <i>Canadian Geotechnical Journal</i> , 2018 , 55, 107-118	3.2	9
203	Thermodynamically consistent coupled viscoplastic damage model for perforation and penetration in metal matrix composite materials. <i>Composites Part B: Engineering</i> , 2009 , 40, 427-433	10	9
202	Damage analysis and elasto-plastic behavior of metal matrix composites using the finite element method. <i>Engineering Fracture Mechanics</i> , 1997 , 56, 623-646	4.2	9
201	Pore pressure response of saturated soils around a penetrating object. <i>Computers and Geotechnics</i> , 2005 , 32, 37-46	4.4	9
200	Nonlinear postbuckling analysis of plates and shells by four-noded strain element. <i>AIAA Journal</i> , 1992 , 30, 1110-1116	2.1	9
199	A large strain theory for the two dimensional problems in geomechanics. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 1986 , 10, 17-39	4	9
198	Lagrangian Continuum Theory for Saturated Porous Media. <i>Journal of Engineering Mechanics - ASCE</i> , 1985 , 111, 1277-1288	2.4	9

197	Ligament size dependency of strain hardening and ductility in nanoporous gold. <i>Computational Materials Science</i> , 2021 , 186, 109920	3.2	9
196	Fracture investigation of the shape memory alloy using GTN model. <i>Engineering Fracture Mechanics</i> , 2019 , 216, 106519	4.2	8
195	Numerical Modeling of Frictional Contact Between a Blunt Tool and Quasi-Brittle Rock. <i>Rock Mechanics and Rock Engineering</i> , 2019 , 52, 3771-3790	5.7	8
194	Time-dependent modeling of subsidence due to drainage in bounding shales: Application to a depleted gas field in Louisiana. <i>Journal of Petroleum Science and Engineering</i> , 2018 , 166, 175-187	4.4	8
193	Elasticity of damaged graphene: A damage mechanics approach. <i>International Journal of Damage Mechanics</i> , 2016 , 25, 1184-1213	3	8
192	Residual stress analyses of re-autofrettaged thick-walled tubes. <i>International Journal of Pressure Vessels and Piping</i> , 2012 , 98, 57-64	2.4	8
191	Simulation of perforation and penetration in metal matrix composite materials using coupled viscoplastic damage model. <i>Composites Part B: Engineering</i> , 2009 , 40, 434-442	10	8
190	Finite element analysis of the piezocone test in cohesive soils using an elastoplastic-viscoplastic model and updated Lagrangian formulation. <i>International Journal of Plasticity</i> , 2003 , 19, 253-280	7.6	8
189	Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. II: Application to Piezocone Test. <i>Journal of Engineering Mechanics - ASCE</i> , 2000 , 126, 1020-1026	2.4	8
188	Theory vs. experiment for finite strain viscoplastic, lagrangian constitutive model. <i>International Journal of Plasticity</i> , 1991 , 7, 329-350	7.6	8
187	Refined Theory for Thick Composite Plates. <i>Journal of Engineering Mechanics - ASCE</i> , 1988 , 114, 671-687	2.4	8
186	Determination of the Material Intrinsic Length Scale of Gradient Plasticity Theory. <i>Solid Mechanics and Its Applications</i> , 2004 , 167-174	0.4	8
185	Review of Size Effects during Micropillar Compression Test: Experiments and Atomistic Simulations. <i>Crystals</i> , 2019 , 9, 591	2.3	8
184	Decomposition of Elastic Stiffness Degradation in Continuum Damage Mechanics. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2017 , 139,	1.8	7
183	Constitutive modeling of dynamic strain aging for HCP metals. <i>European Journal of Mechanics, A/Solids</i> , 2020 , 83, 104034	3.7	7
182	Fracture analysis of shape memory alloys in martensite and austenite phase based on the voids behavior. <i>Mechanics of Materials</i> , 2019 , 137, 103119	3.3	7
181	High cycle fatigue damage evolution in uni-directional metal matrix composites using a micro-mechanical approach. <i>Mechanics of Materials</i> , 1998 , 30, 91-110	3.3	7
180	Simulation of damage evolution in a uni-directional titanium matrix composite subjected to high cycle fatigue. <i>International Journal of Fatigue</i> , 1999 , 21, 909-923	5	7

179	Isotropic plate elements with shear and normal strain deformations. <i>International Journal for Numerical Methods in Engineering</i> , 1987 , 24, 1671-1695	2.4	7
178	Rate equations for viscoplastic materials subjected to finite strains. <i>International Journal of Plasticity</i> , 1988 , 4, 215-229	7.6	7
177	Numerical parametric study of geosynthetic reinforced soil integrated bridge system (GRS-IBS). <i>Geotextiles and Geomembranes</i> , 2021 , 49, 289-303	5.2	7
176	Nonlinear Superhealing and Contribution to the Design of a New Strengthening Theory. <i>Journal of Engineering Mechanics - ASCE</i> , 2018 , 144, 04018055	2.4	7
175	A review of continuum damage and plasticity in concrete: Part I Theoretical framework. <i>International Journal of Damage Mechanics</i> , 105678952110681	3	7
174	Modeling and Design of SHPB to Characterize Brittle Materials Under Compression for High Strain Rates. <i>Materials</i> , 2020 , 13,	3.5	6
173	Damage and healing mechanics in plane stress, plane strain, and isotropic elasticity. <i>International Journal of Damage Mechanics</i> , 2020 , 29, 1246-1270	3	6
172	Order in polycrystalline plasticity deformation fields: Short-range intermittency and long-range persistency. <i>International Journal of Plasticity</i> , 2020 , 128, 102674	7.6	6
171	Coupled Thermomechanical Modeling of Small Volume FCC Metals. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2013 , 135,	1.8	6
170	Theoretical and Experimental Characterization for the Inelastic Behavior of the Micro-/Nanostructured Thin Films Using Strain Gradient Plasticity With Interface Energy. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2009 , 131,	1.8	6
169	Physically Based Constitutive Model for Body Centered Cubic Metals with Applications to Iron. <i>Journal of Engineering Mechanics - ASCE</i> , 2008 , 134, 521-529	2.4	6
168	Detection of Stiffness Reductions in Concrete Decks with Arbitrary Damage Shapes Using Incomplete Dynamic Measurements. <i>Journal of Engineering Mechanics - ASCE</i> , 2008 , 134, 567-577	2.4	6
167	Experimental Study and Fabric Tensor Quantification of Microcrack Distributions in Composite Materials. <i>Journal of Composite Materials</i> , 2007 , 41, 713-745	2.7	6
166	Determination of permeability of soils using the multiple piezo-element penetrometer. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 1999 , 23, 1609-1629	4	6
165	A damage cyclic plasticity model for metal matrix composites. <i>Studies in Applied Mechanics</i> , 1996 , 107-131		6
164	Damage-plasticity in a uniaxially loaded composite lamina: Overall analysis. <i>International Journal of Solids and Structures</i> , 1996 , 33, 555-576	3.1	6
163	Finite Strain Contact Problem of Cylinder Embedded in Body. <i>Journal of Engineering Mechanics - ASCE</i> , 1984 , 110, 1597-1609	2.4	6
162	Evaluating the effect of pile spacing and configuration on the lateral resistance of pile groups. <i>Marine Georesources and Geotechnology</i> , 2021 , 39, 150-162	2.2	6

161	The Lattice Discrete Particle Model (LDPM) for the Numerical Simulation of Concrete Behavior Subject to Penetration	369-387		6
160	Analysis of Shear Flexible Layered Isotropic and Composite Shells by \mathbb{P} SA	<i>Shock and Vibration</i> , 2012 , 19, 459-475	1.1	5
159	Residual Stress Analysis of the Autofrettaged Thick-Walled Tube Using Nonlinear Kinematic Hardening.	<i>Journal of Pressure Vessel Technology, Transactions of the ASME</i> , 2013 , 135,	1.2	5
158	Dynamic Localizations in HSLA-65 and DH-36 Structural Steel at Elevated Temperatures.	<i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2013 , 135,	1.8	5
157	First American Academy of Mechanics Conference New Orleans, Louisiana, June of 2008.	<i>Acta Mechanica</i> , 2010 , 213, 1-2	2.1	5
156	A coupled micro-mechanical based model for saturated soils.	<i>Mechanics Research Communications</i> , 2005 , 32, 490-503	2.2	5
155	A review of continuum damage and plasticity in concrete: Part II \mathbb{N} umerical framework.	<i>International Journal of Damage Mechanics</i> , 105678952110632	3	5
154	Characterization of the strain rate effect under uniaxial loading for nanoporous gold.	<i>Computational Materials Science</i> , 2021 , 194, 110425	3.2	5
153	A fully nonlinear viscohyperelastic model for the brain tissue applicable to dynamic rates.	<i>Journal of Biomechanics</i> , 2019 , 84, 211-217	2.9	5
152	A nonlocal damage model for concrete with three length scales.	<i>Computational Mechanics</i> , 2021 , 68, 461-486	4	5
151	On the decomposition of the damage variable in continuum damage mechanics.	<i>Acta Mechanica</i> , 2017 , 228, 2499-2517	2.1	4
150	How a singularity forms in continuum damage mechanics.	<i>Mechanics Research Communications</i> , 2014 , 55, 86-88	2.2	4
149	Thermal and Mechanical Responses of BCC Metals to the Fast-Transient Process in Small Volumes.	<i>Journal of Nanomechanics & Micromechanics</i> , 2012 , 2, 29-41		4
148	Nonlocal Coupled Damage-Plasticity Model Incorporating Functional Forms of Hardening State Variables.	<i>AIAA Journal</i> , 2007 , 45, 337-346	2.1	4
147	Multi-scale non-local approach for geomaterials.	<i>Mechanics Research Communications</i> , 2002 , 29, 121-129	2.2	4
146	Coupling of Length Scales: Hybrid Molecular Dynamics and Finite Element Approach for Multiscale Nanodevice Simulations.	<i>Materials Research Society Symposia Proceedings</i> , 2000 , 653,		4
145	Effect of transverse normal strain on the bending of thick circular plates on an elastic foundation subjected to surface loads.	<i>International Journal of Mechanical Sciences</i> , 1991 , 33, 413-433	5.5	4
144	Finite-Strain, Elasto-Plastic Solution for Contact Problems.	<i>Journal of Engineering Mechanics - ASCE</i> , 1986 , 112, 273-292	2.4	4

143	On certain fundamental issues in continuum damage mechanics. <i>Journal of the Mechanical Behavior of Materials</i> , 2012 , 21, 33-36	1.9	4
142	Scaling laws for nanoporous metals under uniaxial loading. <i>Journal of Materials Research</i> , 2021 , 36, 2729-2741	3.41	4
141	Advances in the mechanics of undamageable materials: General three-dimensional formulation. <i>International Journal of Damage Mechanics</i> , 2019 , 28, 1021-1037	3	4
140	Fatigue Damage Analysis of Double-Lap Bolted Joints Considering the Effects of Hole Cold Expansion and Bolt Clamping Force. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2017 , 139,	1.8	3
139	Strain gradient finite element model for finite deformation theory: size effects and shear bands. <i>Computational Mechanics</i> , 2020 , 65, 1219-1246	4	3
138	Some Basic Issues of Isotropic and Anisotropic Continuum Damage Mechanics 2014 , 1-37		3
137	Damage Quantification in Metal Matrix Composites. <i>Journal of Engineering Mechanics - ASCE</i> , 2001 , 127, 291-298	2.4	3
136	Elasto-plastic stress and strain concentration tensors for damaged fibrous composites. <i>Studies in Applied Mechanics</i> , 1996 , 44, 81-106		3
135	Evaluating long-term benefits of geosynthetics in flexible pavements built over weak subgrades by finite element and Mechanistic-Empirical analyses. <i>Geotextiles and Geomembranes</i> , 2022 ,	5.2	3
134	Thick Plates on Elastic Foundations: One-Variable Formulation. <i>Journal of the Engineering Mechanics Division</i> , 1979 , 105, 1041-1045		3
133	A new anisotropic elasto-plastic-damage model for quasi-brittle materials using strain energy equivalence. <i>Mechanics of Materials</i> , 2022 , 165, 104163	3.3	3
132	Local and non-local damage model with extended stress decomposition for concrete. <i>International Journal of Damage Mechanics</i> , 105678952199872	3	3
131	Numerical Investigation of the Performance of a Geosynthetic Reinforced Soil-Integrated Bridge System (GRS-IBS) under Working Stress Conditions 2018 ,		3
130	Introduction: Size effects in materials 2019 , 1-79		2
129	A theory of damage and self-regenerating materials. <i>Acta Mechanica</i> , 2017 , 228, 4249-4268	2.1	2
128	Coupled Viscoplastic Damage Model for Hypervelocity Impact Induced Damage in Metals and Composites 2013 , 209-246		2
127	A Gradient Enhanced, Generalized Plasticity/Damage Model: Rigorous Mathematical Formulation and Finite Element Implementation. <i>Journal of the Mechanical Behavior of Materials</i> , 2004 , 15, 309-340	1.9	2
126	Design of Ribbed Concrete Approach Slab Based on Interaction with the Embankment. <i>Transportation Research Record</i> , 2005 , 1936, 181-191	1.7	2

125	A Micro-Damage Model for High Velocity Impact Using Combined Viscosity and Gradient Localization Limiters 2005 , 123		2
124	Model of Inelastic Behavior Coupled to Damage 2001 , 814-820		2
123	Bending of Thick Plates on Elastic Foundation. <i>Studies in Applied Mechanics</i> , 1990 , 24, 87-121		2
122	Bending and Stretching Elements for Analysis of Thick Composite Plates. <i>Journal of Engineering Mechanics - ASCE</i> , 1988 , 114, 1973-1994	2.4	2
121	Finite Element Analysis of Thermodynamically Consistent Strain Gradient Plasticity Theory and Applications 2018 , 1-58		2
120	Continuum Damage-Healing Mechanics 2015 , 1515-1539		2
119	Performance of MMFX Steel Rebar at Elevated Temperatures. <i>Journal of Engineering Mechanics - ASCE</i> , 2020 , 146, 04020126	2.4	2
118	Grain size dependence of polycrystalline plasticity modeling in cylindrical indentation. <i>Computational Mechanics</i> , 2021 , 68, 499-543	4	2
117	Constitutive modeling and numerical simulations for dynamic strain aging in MMFX steel at elevated temperatures. <i>International Journal of Mechanical Sciences</i> , 2021 , 210, 106743	5.5	2
116	Temperature effect on nanoporous gold under uniaxial tension and compression. <i>Computational Materials Science</i> , 2021 , 200, 110766	3.2	2
115	Complex Damage Variables in Continuum Damage Mechanics. <i>Applied Mechanics and Materials</i> , 2015 , 784, 3-10	0.3	1
114	Molecular dynamics 2019 , 275-355		1
113	Nonlocal continuum plasticity 2019 , 81-190		1
112	Healing, Super Healing, and Other Issues in Continuum Damage Mechanics 2013 , 1-24		1
111	An Improved Contact Algorithm for Multi-Material Continuum Codes 2013 , 389-413		1
110	An Approach to Generate Random Localizations in Lagrangian Numerical Simulations 2013 , 311-332		1
109	Studying the effect of a hydrostatic stress/strain reduction factor on damage mechanics of concrete materials. <i>Journal of the Mechanical Behavior of Materials</i> , 2013 , 22, 149-159	1.9	1
108	Modeling of Nonlocal Damage Using the Phase Field Method 2013 , 1-32		1

107	Analytical solution for shear bands in cold-rolled 1018 steel. <i>Journal of the Mechanical Behavior of Materials</i> , 2012 , 20, 89-102	1.9	1
106	Nonlocal and Generalized Continuum Materials Modeling for Simulating Multiscale Behavior. <i>Journal of Engineering Mechanics - ASCE</i> , 2009 , 135, 115-116	2.4	1
105	Material characterization of a Kelvin chain from dynamic response. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2004 , 84, 807-817	1	1
104	A Framework for the Analysis of Damaged Composite Materials Using the Homogenization Method. <i>Journal of the Mechanical Behavior of Materials</i> , 2003 , 14, 129-148	1.9	1
103	On the Bridging of the Length Scales and the Behavior of Granular Materials 2004 , 191		1
102	Engineering Large Deflection Theory for Thick Plates. <i>Journal of Engineering Mechanics - ASCE</i> , 1989 , 115, 935-951	2.4	1
101	Finite Strain Analysis of Pressuremeter Test. <i>Journal of Geotechnical Engineering</i> , 1990 , 116, 1002-1007		1
100	Shear Transformation Zones in Amorphous Polymers: Geometrical and Micromechanical Properties 2016 , 1-27		1
99	Size Effects and Material Length Scales in Nanoindentation for Metals 2019 , 3-38		1
98	Size Effects During Nanoindentation: Molecular Dynamics Simulation 2019 , 39-76		1
97	The Effect of Temperature on Interfacial Gradient Plasticity in Metallic Thin Films. <i>Advanced Structured Materials</i> , 2013 , 337-349	0.6	1
96	Micromechanical modeling of damage and plasticity in continuously reinforced MMCs. <i>Studies in Applied Mechanics</i> , 1994 , 41, 307-345		1
95	Cyclic Plasticity and Ratchetting. <i>Studies in Applied Mechanics</i> , 1994 , 253-295		1
94	A cyclic plasticity model for metal-matrix-composites using an anisotropic yield surface. <i>Studies in Applied Mechanics</i> , 1994 , 41, 51-81		1
93	Testing Conditions on Kolsky Bar 131-144		1
92	Rate Effect in Frictional Contact on Porous Rocks. <i>Rock Mechanics and Rock Engineering</i> , 2021 , 54, 1411-1430	1.7	1
91	Effect of plastic deformation on the nanomechanical properties of glassy polymers: An experimental study. <i>Mechanics of Materials</i> , 2021 , 159, 103900	3.3	1
90	Some Basic Issues of Isotropic and Anisotropic Continuum Damage Mechanics 2015 , 3-42		1

- 89 A Dislocation Based Gradient Plasticity Theory With Applications to Size Effects **2005**, 69 ○
- 88 On identification of small defects by vibration tests. *Revue Europeenne Des Elements*, **2001**, 10, 435-448 ○
- 87 A Moving Vehicle Height Monitoring Sensor System for Overheight Impact Avoidance. *Infrastructures*, **2021**, 6, 91 2.6 ○
- 86 Effect of element wall thickness on the homogeneity and isotropy of hardness in SLM IN718 using nanoindentation. *Mechanics Research Communications*, **2021**, 114, 103568 2.2 ○
- 85 Future evolution: Multiscale modeling framework to develop a physically based nonlocal plasticity model for crystalline materials **2019**, 357-384
- 84 Modeling High-Speed Impact Failure of Metallic Materials: Nonlocal Approaches **2019**, 939-969
- 83 Linearized damage mechanics for states of small damage. *Acta Mechanica*, **2015**, 226, 3707-3715 2.1
- 82 Development of Combined Pile-CPT Methods for Estimating the Ultimate Axial Capacity of PPC Piles Driven in Different Soil Categories in Louisiana. *Transportation Research Record*, **2020**, 2674, 313-327¹⁷
- 81 Review of experimental observations on the gradient-enhanced continuum plasticity **2020**, 9-42
- 80 Review of theoretical developments on the gradient-enhanced continuum plasticity **2020**, 43-93
- 79 Lower-order strain gradient plasticity theory with variable length scales **2020**, 123-155
- 78 Gradient-enhanced continuum plasticity for small deformations **2020**, 157-203
- 77 Review of numerical approaches using the gradient-enhanced continuum plasticity **2020**, 95-122
- 76 Gradient-enhanced continuum plasticity for finite deformations **2020**, 205-253
- 75 Temperature- and rate-dependent indentation size effects and material length scales **2020**, 311-361
- 74 Open issues in strain gradient continuum plasticity and other approaches to address size effects **2020**, 363-374
- 73 Evaluating the Performance of Geosynthetic Reinforced Soil-Integrated Bridge System (GRS-IBS) under Working Stress Condition. *MATEC Web of Conferences*, **2019**, 271, 02001 0.3
- 72 Use of Fabric Tensors in Continuum Damage Mechanics of Solids with Micro-cracks **2014**, 1-34

- 71 Undamageable Materials and Damage Processes in Series and in Parallel **2014**, 1-29
- 70 On the Thermodynamics of Continuum Damage-Healing Mechanics **2013**, 1-19
- 69 Continuum Damage-Healing Mechanics **2013**, 1-22
- 68 Dynamic fracture mechanics in rocks with application to drilling and perforation **2017**, 233-256
- 67 Undamageable Materials and Damage Processes in Series and in Parallel **2015**, 43-74
- 66 Geomaterials Under Extreme Loading: The Natural Case **2013**, 1-43
- 65 The Shock Properties of Concrete and Related Materials **2013**, 45-67
- 64 X-FEM for the Simulation of Dynamic Crack Propagation **2013**, 333-349
- 63 Shell Element Based on the Refined Theory of Thick Spherical Shells **2008**, 49-75
- 62 Micro-Damage Constitutive Modeling and Numerical Simulation of Perforation of Targets by Projectiles **2007**, 549
- 61 Modeling the Size and Interface Effects in Thin Metal Film-Substrate Systems Using the Strain Gradient Plasticity **2007**, 1023
- 60 Formulation of a Gradient Enhanced Coupled Damage-Plasticity Model **2004**, 15
- 59 A Modified Gradient Plasticity Theory for Micro-Bending and Micro-Torsion Size Effects **2004**, 233
- 58 Comparison of the Strain Localization Approaches: Viscoplasticity Theory and Gradient Dependent Theory **2005**, 79
- 57 Closure to Finite Strain Anisotropic Modified Cam Clay Model with Plastic Spin. I: Theory
by George Z. Voyiadjis and Chung R. Song. *Journal of Engineering Mechanics - ASCE*, **2002**, 128, 498-498 2.4
- 56 Closure to Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. II: Application to Piezocone Test
by George Z. Voyiadjis and Chung R. Song. *Journal of Engineering Mechanics - ASCE*, **2002**, 128, 600-600 2.4
- 55 Coupling of Length Scales: Hybrid Molecular Dynamics and Finite Element Approach for Multiscale Nanodevice Simulations. *Materials Research Society Symposia Proceedings*, **2000**, 653, 1
- 54 Damage and Nonlinear Super Healing with Application to the Design of New Strengthening Theory **2020**, 1-37

53 Mechanics of Self-Regenerating Materials **2020**, 1-19

52 Shell Constitutive Equations **2008**, 7-47

51 Geometrically Non-linear Finite Element Analysis of Thick Plates and Shells **2008**, 77-90

50 Elasto-Plastic Geometrically Non-linear Finite Element Analysis of Thick Plates and Shells **2008**, 91-117

49 Elasto-Plastic Geometrically Non-linear Finite Element Analysis of Thick Plates and Shells With Damage Due to Microvoids **2008**, 119-143

48 Non-linear Post Buckling Finite Element Analysis of Plates and Shells **2008**, 145-161

47 Damageability and Integrity of Materials: New Concepts of the Damage and Healing Fields **2021**, 1-38

46 Damageability and Integrity of Materials: Unrecoverable Damage and Generalized Healing Model **2021**, 1-21

45 Introduction to Partial Damage Mechanics **2021**, 1-17

44 Gradients of Hardening in Nonlocal Dislocation Based Plasticity. *Solid Mechanics and Its Applications*, **2004**, 157-165

0.4

43 Modeling High-Speed Impact Failure of Metallic Materials: Nonlocal Approaches **2018**, 1-31

42 Modeling Temperature-Driven Ductile-to-Brittle Transition Fracture in Ferritic Steels **2018**, 1-24

41 Continuous Stiffness Measurement Nanoindentation Experiments on Polymeric Glasses: Strain Rate Alteration **2019**, 315-332

40 Higher Order Thermo-mechanical Gradient Plasticity Model: Nonproportional Loading with Energetic and Dissipative Components **2019**, 547-594

39 Finite Element Analysis of Thermodynamically Consistent Strain Gradient Plasticity Theory and Applications **2019**, 781-838

38 Nanostructural Response to Plastic Deformation in Glassy Polymers **2019**, 377-399

37 Modeling Temperature-Driven Ductile-to-Brittle Transition Fracture in Ferritic Steels **2019**, 1099-1122

36 Shear Transformation Zones in Amorphous Polymers: Geometrical and Micromechanical Properties **2019**, 333-359

- 35 Frictional Contact Between a Blunt Tool and Quasi-Brittle Rock with Damage: Numerical Modeling **2020**, 1-40
- 34 Constitutive Model for Cyclic Plasticity with Ratchetting Effects **1991**, 473-476
- 33 Analysis of Damage and Plasticity for Large Deformation with Application in Simple Shear **1991**, 357-360
- 32 Incremental Damage Theory for Metal Matrix Composites **1995**, 576-592
- 31 Use of Fabric Tensors in Continuum Damage Mechanics of Solids with Micro-cracks **2015**, 75-110
- 30 Modeling of Nonlocal Damage Using the Phase Field Method **2015**, 1541-1576
- 29 Healing, Super Healing, and Other Issues in Continuum Damage Mechanics **2015**, 1465-1491
- 28 Evolution of Fabric Tensors in Continuum Damage Mechanics of Solids with Micro-cracks: Studying the Effects of Length and Orientation **2015**, 111-133
- 27 Size Effects During Nanoindentation: Molecular Dynamics Simulation **2016**, 1-38
- 26 Size Effects and Material Length Scales in Nanoindentation for Metals **2016**, 1-36
- 25 Continuous Stiffness Measurement Nanoindentation Experiments on Polymeric Glasses: Strain Rate Alteration **2016**, 1-19
- 24 Nanostructural Response to Plastic Deformation in Glassy Polymers **2016**, 1-23
- 23 Higher Order Thermo-mechanical Gradient Plasticity Model: Non-proportional Loading with Energetic and Dissipative Components **2017**, 1-48
- 22 Consistent Non Local Coupled Damage Model and Its Application in Impact Response of Composite Materials. *CISM International Centre for Mechanical Sciences, Courses and Lectures*, **2011**, 3-102 0.6
- 21 3D Imaging and the Split Cylinder Fracture of Cement-Based Composites 121-130
- 20 Experimental Approach and Modeling of the Dynamic Tensile Behavior of a Micro-Concrete 145-177
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- 10 Evolution of Fabric Tensors in Continuum Damage Mechanics of Solids with Micro-cracks: Studying the Effects of Length and Orientation **2014**, 1-22
- 9 Gradient-enhanced continuum plasticity-damage theory for finite deformations under high velocity impact loading **2020**, 255-310
- 8 The True Nature of the Decomposition of the Damage Variable **2021**, 1-20
- 7 The True Nature of the Decomposition of the Damage Variable **2022**, 3-22
- 6 Partial Damage Mechanics: Introduction **2022**, 83-99
- 5 Mechanics of Self-Regenerating Materials **2022**, 101-118
- 4 Damageability and Integrity of Materials: New Concepts of the Damage and Healing Fields **2022**, 23-59
- 3 Damageability and Integrity of Materials: Unrecoverable Damage and Generalized Healing Model **2022**, 61-81
- 2 Frictional Contact Between a Blunt Tool and Quasi-brittle Rock with Damage: Numerical Modeling **2022**, 853-891
- 1 Damage and Nonlinear Super Healing with Application to the Design of New Strengthening Theory **2022**, 119-154