

Abu Al-Rub, Rashid K

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

155
papers

6,734
citations

50
h-index

78
g-index

167
ext. papers

8,143
ext. citations

4.1
avg, IF

6.64
L-index

#	Paper	IF	Citations
155	Effective stiffness, strength, buckling and anisotropy of foams based on nine unique triple periodic minimal surfaces. <i>International Journal of Solids and Structures</i> , 2022 , 238, 111418	3.1	1
154	Fluid flow and heat transfer of porous TPMS architected heat sinks in free convection environment. <i>Case Studies in Thermal Engineering</i> , 2022 , 33, 101944	5.6	1
153	Flexural Properties of Functionally Graded Additively Manufactured AlSi10Mg TPMS Latticed-beams. <i>International Journal of Mechanical Sciences</i> , 2022 , 107293	5.5	1
152	An optimization case study to design additively manufacturable porous heat sinks based on triply periodic minimal surface (TPMS) lattices. <i>Case Studies in Thermal Engineering</i> , 2022 , 102161	5.6	0
151	Forced Convection Computational Fluid Dynamics Analysis of Architected and Three-Dimensional Printable Heat Sinks Based on Triply Periodic Minimal Surfaces. <i>Journal of Thermal Science and Engineering Applications</i> , 2021 , 13,	1.9	17
150	The Impact of Critical Operational Parameters on the Performance of the Aluminum Anode Baking Furnace. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2021 , 143,	2.6	2
149	Mechanical properties of additively-manufactured sheet-based gyroidal stochastic cellular materials. <i>Additive Manufacturing</i> , 2021 , 48, 102418	6.1	5
148	Comparative assessment of the effects of 3D printed feed spacers on process performance in MD systems. <i>Desalination</i> , 2021 , 503, 114940	10.3	5
147	Quasi-static and dynamic compressive behaviour of sheet TPMS cellular structures. <i>Composite Structures</i> , 2021 , 266, 113801	5.3	25
146	Antiscaling 3D printed feed spacers via facile nanoparticle coating for membrane distillation. <i>Water Research</i> , 2021 , 189, 116649	12.5	6
145	Effective Anisotropic Elastic and Plastic Yield Properties of Periodic Foams Derived from Triply Periodic Schoenfl-WP Minimal Surface. <i>Journal of Engineering Mechanics - ASCE</i> , 2020 , 146, 04020030	2.4	11
144	Design and prototyping soft-rigid tendon-driven modular grippers using interpenetrating phase composites materials. <i>International Journal of Robotics Research</i> , 2020 , 39, 1635-1646	5.7	15
143	Microstructural Characterization and Thermomechanical Behavior of Additively Manufactured AlSi10Mg Material and Architected Cellular Structures. <i>Minerals, Metals and Materials Series</i> , 2020 , 165-173	0.3	2
142	Compression and buckling of microarchitected Neovius-lattice. <i>Extreme Mechanics Letters</i> , 2020 , 37, 100688	3.9	15
141	Functionally graded and multi-morphology sheet TPMS lattices: Design, manufacturing, and mechanical properties. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020 , 102, 103520	4.1	71
140	MSLattice: A free software for generating uniform and graded lattices based on triply periodic minimal surfaces. <i>Material Design and Processing Communications</i> , 2020 , e205	0.9	21
139	Mechanical behavior of polymeric selective laser sintered ligament and sheet based lattices of triply periodic minimal surface architectures. <i>Materials and Design</i> , 2020 , 196, 109100	8.1	11

138	Impacts of feed spacer design on UF membrane cleaning efficiency. <i>Journal of Membrane Science</i> , 2020 , 616, 118571	9.6	5
137	Novel static mixers based on triply periodic minimal surface (TPMS) architectures. <i>Journal of Environmental Chemical Engineering</i> , 2020 , 8, 104289	6.8	13
136	Microstructural characterization and thermomechanical behavior of additively manufactured AlSi10Mg sheet cellular materials. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 791, 139714	5.3	19
135	Highly electrically conductive carbon nanostructured mats fabricated out of aligned CNTs-based flakes. <i>Diamond and Related Materials</i> , 2020 , 106, 107849	3.5	2
134	Viscoelastic properties of architected foams based on the Schoen IWP triply periodic minimal surface. <i>Mechanics of Advanced Materials and Structures</i> , 2020 , 27, 775-788	1.8	7
133	Multi-objective Optimization of Aluminum Anode Baking Process Employing a Response Surface Methodology. <i>Energy Procedia</i> , 2019 , 158, 5541-5550	2.3	2
132	3D printed spacers for organic fouling mitigation in membrane distillation. <i>Journal of Membrane Science</i> , 2019 , 581, 331-343	9.6	41
131	Mechanical Response of 3D Printed Bending-Dominated Ligament-Based Triply Periodic Cellular Polymeric Solids. <i>Journal of Materials Engineering and Performance</i> , 2019 , 28, 2316-2326	1.6	26
130	3D printed spacers based on TPMS architectures for scaling control in membrane distillation. <i>Journal of Membrane Science</i> , 2019 , 581, 38-49	9.6	36
129	Additive manufacturing of architected catalytic ceramic substrates based on triply periodic minimal surfaces. <i>Journal of the American Ceramic Society</i> , 2019 , 102, 6176-6193	3.8	40
128	Multifunctional Mechanical Metamaterials Based on Triply Periodic Minimal Surface Lattices. <i>Advanced Engineering Materials</i> , 2019 , 21, 1900524	3.5	121
127	Mechanical properties of 3D printed polymeric Gyroid cellular structures: Experimental and finite element study. <i>Materials and Design</i> , 2019 , 165, 107597	8.1	123
126	On Mechanical Properties of Cellular Steel Solids With Shell-Like Periodic Architectures Fabricated by Selective Laser Sintering. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2019 , 141,	1.8	35
125	Modeling Time and Frequency Domain Viscoelastic Behavior of Architected Foams. <i>Journal of Engineering Mechanics - ASCE</i> , 2018 , 144, 04018029	2.4	11
124	The effect of architecture on the mechanical properties of cellular structures based on the IWP minimal surface. <i>Journal of Materials Research</i> , 2018 , 33, 343-359	2.5	49
123	Topology-mechanical property relationship of 3D printed strut, skeletal, and sheet based periodic metallic cellular materials. <i>Additive Manufacturing</i> , 2018 , 19, 167-183	6.1	230
122	3D printed feed spacers based on triply periodic minimal surfaces for flux enhancement and biofouling mitigation in RO and UF. <i>Desalination</i> , 2018 , 425, 12-21	10.3	79
121	Nature-Inspired Lightweight Cellular Co-Continuous Composites with Architected Periodic Gyroidal Structures. <i>Advanced Engineering Materials</i> , 2018 , 20, 1700549	3.5	40

120	3D printed triply periodic minimal surfaces as spacers for enhanced heat and mass transfer in membrane distillation. <i>Desalination</i> , 2018 , 443, 256-271	10.3	74
119	The effects of flue-wall design modifications on combustion and flow characteristics of an aluminum anode baking furnace-CFD modeling. <i>Applied Energy</i> , 2018 , 230, 207-219	10.7	12
118	Microarchitected Stretching-Dominated Mechanical Metamaterials with Minimal Surface Topologies. <i>Advanced Engineering Materials</i> , 2018 , 20, 1800029	3.5	74
117	A thermodynamically consistent framework to derive local/nonlocal generalized nonassociative plasticity/viscoplasticity theories. <i>International Journal of Plasticity</i> , 2018 , 110, 19-37	7.6	9
116	Investigating the flue-wall deformation effects on performance characteristics of an open-top aluminum anode baking furnace. <i>Applied Energy</i> , 2018 , 231, 1033-1049	10.7	4
115	Effect of the Realistic Tire Contact Pressure on the Rutting Performance of Asphaltic Concrete Pavements. <i>KSCE Journal of Civil Engineering</i> , 2018 , 22, 2138-2146	1.9	6
114	Mass transfer analysis of ultrafiltration using spacers based on triply periodic minimal surfaces: Effects of spacer design, directionality and voidage. <i>Journal of Membrane Science</i> , 2018 , 561, 89-98	9.6	36
113	Fabrication of Freestanding Sheets of Multiwalled Carbon Nanotubes (Buckypapers) for Vanadium Redox Flow Batteries and Effects of Fabrication Variables on Electrochemical Performance. <i>Electrochimica Acta</i> , 2017 , 230, 222-235	6.7	46
112	Mechanical properties of 3D printed polymeric cellular materials with triply periodic minimal surface architectures. <i>Materials and Design</i> , 2017 , 122, 255-267	8.1	152
111	Mechanical properties of periodic interpenetrating phase composites with novel architected microstructures. <i>Composite Structures</i> , 2017 , 176, 9-19	5.3	68
110	Micromechanical Finite Element Analysis of the Effects of Martensite Particle Size and Ferrite Grain Boundaries on the Overall Mechanical Behavior of Dual Phase Steel. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2017 , 139,	1.8	1
109	Stiffness and yield strength of architected foams based on the Schwarz Primitive triply periodic minimal surface. <i>International Journal of Plasticity</i> , 2017 , 95, 1-20	7.6	68
108	Time dependent response of architected Neovius foams. <i>International Journal of Mechanical Sciences</i> , 2017 , 126, 106-119	5.5	29
107	Mechanical Properties of a New Type of Architected Interpenetrating Phase Composite Materials. <i>Advanced Materials Technologies</i> , 2017 , 2, 1600235	6.8	70
106	Effect of Nanotube Geometry on the Strength and Dispersion of CNT-Cement Composites. <i>Journal of Nanomaterials</i> , 2017 , 2017, 1-15	3.2	13
105	Two Dimensional CFD Simulations of a Flue-wall in the Anode Baking Furnace for Aluminum Production. <i>Energy Procedia</i> , 2017 , 105, 5134-5139	2.3	7
104	Micromechanical finite element analysis of the effects of martensite morphology on the overall mechanical behavior of dual phase steel. <i>International Journal of Solids and Structures</i> , 2017 , 104-105, 8-24	3.1	29
103	Numerical Investigation of Turbulent Diffusion Flame in the Aluminum Anode Baking Furnace Employing Presumed PDF. <i>Energy Procedia</i> , 2017 , 142, 4157-4162	2.3	3

102	Experimental Prediction of the Elastic Properties of Nanocomposite Cementitious Materials Based on Nanoindentation Measurements. <i>Science of Advanced Materials</i> , 2017 , 9, 830-846	2.3	3
101	Strength optimisation of mortar with CNTs and nanoclays. <i>Proceedings of the Institution of Civil Engineers: Structures and Buildings</i> , 2016 , 169, 340-356	0.9	12
100	Effect of mixing duration on flexural strength of multi walled carbon nanotubes cementitious composites. <i>Construction and Building Materials</i> , 2016 , 126, 586-598	6.7	39
99	Effective conductivities and elastic moduli of novel foams with triply periodic minimal surfaces. <i>Mechanics of Materials</i> , 2016 , 95, 102-115	3.3	115
98	A thermodynamic framework for constitutive modeling of coupled moisture-mechanical induced damage in partially saturated viscous porous media. <i>Mechanics of Materials</i> , 2016 , 96, 53-75	3.3	9
97	Finite element prediction of effective elastic properties of interpenetrating phase composites with architected 3D sheet reinforcements. <i>International Journal of Solids and Structures</i> , 2016 , 83, 169-182	3.1	58
96	Mechanical properties of 3D printed interpenetrating phase composites with novel architected 3D solid-sheet reinforcements. <i>Composites Part A: Applied Science and Manufacturing</i> , 2016 , 84, 266-280	8.4	65
95	Computational Modelling of Fracture Propagation in Rocks Using a Coupled Elastic-Plasticity-Damage Model. <i>Mathematical Problems in Engineering</i> , 2016 , 2016, 1-15	1.1	9
94	Processing and property investigation of high-density carbon nanostructured papers with superior conductive and mechanical properties. <i>Diamond and Related Materials</i> , 2016 , 68, 109-117	3.5	19
93	Finite element implementation and application of a cohesive zone damage-healing model for self-healing materials. <i>Engineering Fracture Mechanics</i> , 2016 , 163, 1-22	4.2	22
92	Three-dimensional microstructural modelling of coupled moisture-mechanical response of asphalt concrete. <i>International Journal of Pavement Engineering</i> , 2015 , 16, 445-466	2.6	15
91	Thermo-Electro-Mechanical Properties of Interpenetrating Phase Composites with Periodic Architected Reinforcements. <i>Advanced Structured Materials</i> , 2015 , 1-18	0.6	8
90	Micromechanical finite element predictions of a reduced coefficient of thermal expansion for 3D periodic architected interpenetrating phase composites. <i>Composite Structures</i> , 2015 , 133, 85-97	5.3	59
89	Computational modeling of the effect of equiaxed heterogeneous microstructures on strength and ductility of dual phase steels. <i>Computational Materials Science</i> , 2015 , 103, 20-37	3.2	20
88	Microstructural Modeling of Dual Phase Steel Using a Higher-Order Gradient Plasticity-Damage Model. <i>Applied Mechanics and Materials</i> , 2015 , 784, 119-128	0.3	
87	Cohesive Zone Damage-Healing Model for Self-Healing Materials. <i>Applied Mechanics and Materials</i> , 2015 , 784, 111-118	0.3	1
86	Electrical conductivity of 3D periodic architected interpenetrating phase composites with carbon nanostructured-epoxy reinforcements. <i>Composites Science and Technology</i> , 2015 , 118, 127-134	8.6	35
85	Finite element predictions of effective multifunctional properties of interpenetrating phase composites with novel triply periodic solid shell architected reinforcements. <i>International Journal of Mechanical Sciences</i> , 2015 , 92, 80-89	5.5	54

84	Application of a large deformation nonlinear-viscoelastic viscoplastic viscodamage constitutive model to polymers and their composites. <i>International Journal of Damage Mechanics</i> , 2015 , 24, 198-244	3	28
83	Constitutive Modeling of the Coupled Moisture-Mechanical Response of Particulate Composite Materials with Application to Asphalt Concrete. <i>Journal of Engineering Mechanics - ASCE</i> , 2015 , 141, 040174120	9	9
82	On the numerical implementation of the higher-order strain gradient-dependent plasticity theory and its non-classical boundary conditions. <i>Finite Elements in Analysis and Design</i> , 2015 , 93, 50-69	2.2	8
81	The Effect of Interfacial Transition Zone Properties on the Elastic Properties of Cementitious Nanocomposite Materials. <i>Journal of Nanomaterials</i> , 2015 , 2015, 1-13	3.2	1
80	The Effect of Fiber Geometry and Interfacial Properties on the Elastic Properties of Cementitious Nanocomposite Material. <i>Journal of Nanomaterials</i> , 2015 , 2015, 1-14	3.2	4
79	Thermodynamic-based cohesive zone healing model for self-healing materials. <i>Mechanics Research Communications</i> , 2015 , 70, 102-113	2.2	18
78	Microstructural modeling of dual phase steel using a higher-order gradient plasticity damage model. <i>International Journal of Solids and Structures</i> , 2015 , 58, 178-189	3.1	25
77	Microstructural modeling of asphalt concrete using a coupled moisture-mechanical constitutive relationship. <i>International Journal of Solids and Structures</i> , 2014 , 51, 4260-4279	3.1	28
76	Modeling of elastoplastic behavior of stainless-steel/bronze interpenetrating phase composites with damage evolution. <i>International Journal of Plasticity</i> , 2014 , 61, 94-111	7.6	28
75	Calibration and Validation of a Comprehensive Constitutive Model for Asphalt Mixtures. <i>Transportation Research Record</i> , 2014 , 2447, 13-22	1.7	7
74	Three-Dimensional Microstructural Modeling Framework for Dense-Graded Asphalt Concrete Using a Coupled Viscoelastic, Viscoplastic, and Viscodamage Model. <i>Journal of Materials in Civil Engineering</i> , 2014 , 26, 607-621	3	12
73	Effect of confinement pressure on the nonlinear-viscoelastic response of asphalt concrete at high temperatures. <i>Construction and Building Materials</i> , 2013 , 47, 779-788	6.7	35
72	Constitutive Modeling of Cyclic Viscoplastic Response of Asphalt Concrete. <i>Transportation Research Record</i> , 2013 , 2373, 22-33	1.7	2
71	Cyclic Hardening-Relaxation Viscoplasticity Model for Asphalt Concrete Materials. <i>Journal of Engineering Mechanics - ASCE</i> , 2013 , 139, 832-847	2.4	18
70	Mechanistic-based constitutive modeling of oxidative aging in aging-susceptible materials and its effect on the damage potential of asphalt concrete. <i>Construction and Building Materials</i> , 2013 , 41, 439-454	6.7	61
69	Constitutive modeling of fatigue damage response of asphalt concrete materials with consideration of micro-damage healing. <i>International Journal of Solids and Structures</i> , 2013 , 50, 2901-2913	3.1	67
68	Continuum Coupled Moisture-Mechanical Damage Model for Asphalt Concrete. <i>Transportation Research Record</i> , 2013 , 2372, 72-82	1.7	22
67	Constitutive Modeling of Fatigue Damage Response of Asphalt Concrete Materials. <i>Transportation Research Record</i> , 2013 , 2373, 11-21	1.7	2

66	Three-Dimensional Microstructural Modeling of Asphalt Concrete by Use of X-Ray Computed Tomography. <i>Transportation Research Record</i> , 2013 , 2373, 63-70	1.7	22
65	Nano-Mechanical Characterization of Mastic, Aggregate, and Interfacial Zone in Asphalt Composites. <i>Journal of Testing and Evaluation</i> , 2013 , 41, 20120178	1	13
64	Three-dimensional microstructural modeling of asphalt concrete using a unified viscoelastic-viscoplastic-viscodamage model. <i>Construction and Building Materials</i> , 2012 , 28, 531-548	6.7	87
63	On the aspect ratio effect of multi-walled carbon nanotube reinforcements on the mechanical properties of cementitious nanocomposites. <i>Construction and Building Materials</i> , 2012 , 35, 647-655	6.7	233
62	A thermodynamic framework for constitutive modeling of time- and rate-dependent materials. Part I: Theory. <i>International Journal of Plasticity</i> , 2012 , 34, 61-92	7.6	83
61	A thermodynamic framework for constitutive modeling of time- and rate-dependent materials. Part II: Numerical aspects and application to asphalt concrete. <i>International Journal of Plasticity</i> , 2012 , 35, 67-99	7.6	62
60	A modified viscoplastic model to predict the permanent deformation of asphaltic materials under cyclic-compression loading at high temperatures. <i>International Journal of Plasticity</i> , 2012 , 35, 100-134	7.6	64
59	A continuum damage mechanics framework for modeling micro-damage healing. <i>International Journal of Solids and Structures</i> , 2012 , 49, 492-513	3.1	140
58	Thermodynamic-based model for coupling temperature-dependent viscoelastic, viscoplastic, and viscodamage constitutive behavior of asphalt mixtures. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2012 , 36, 817-854	4	56
57	Comparing finite element and constitutive modelling techniques for predicting rutting of asphalt pavements. <i>International Journal of Pavement Engineering</i> , 2012 , 13, 322-338	2.6	55
56	Prediction of Micro and Nano Indentation Size Effects from Spherical Indenters. <i>Mechanics of Advanced Materials and Structures</i> , 2012 , 19, 119-128	1.8	12
55	Mechanical Properties of Nanocomposite Cement Incorporating Surface-Treated and Untreated Carbon Nanotubes and Carbon Nanofibers. <i>Journal of Nanomechanics & Micromechanics</i> , 2012 , 2, 1-6		98
54	NONLOCAL GRADIENT-DEPENDENT CONSTITUTIVE MODEL FOR SIMULATING LOCALIZED DAMAGE AND FRACTURE OF VISCOPLASTIC SOLIDS UNDER HIGH-ENERGY IMPACTS. <i>International Journal for Multiscale Computational Engineering</i> , 2012 , 10, 503-526	2.4	1
53	Challenges and Benefits of Utilizing Carbon Nanofilaments in Cementitious Materials. <i>Journal of Nanomaterials</i> , 2012 , 2012, 1-8	3.2	33
52	Carbon Nanotubes and Carbon Nanofibers for Enhancing the Mechanical Properties of Nanocomposite Cementitious Materials. <i>Journal of Materials in Civil Engineering</i> , 2011 , 23, 1028-1035	3	204
51	Numerical implementation and validation of a nonlinear viscoelastic and viscoplastic model for asphalt mixes. <i>International Journal of Pavement Engineering</i> , 2011 , 12, 433-447	2.6	38
50	Three-Dimensional Simulations of Asphalt Pavement Permanent Deformation Using a Nonlinear Viscoelastic and Viscoplastic Model. <i>Journal of Materials in Civil Engineering</i> , 2011 , 23, 56-68	3	72
49	Thermo-mechanical Viscoelastic, Viscoplastic, and Viscodamage Model for Polymers and Polymer Composites 2011 ,		1

48	Dispersion quantification of inclusions in composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2011 , 42, 75-83	8.4	51
47	Nonlocal Microdamage Constitutive Model for High Energy Impacts. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2011 , 59-66	0.3	
46	Mesomechanical modeling of the thermo-viscoelastic, thermo-viscoplastic, and thermo-viscodamage response of asphalt concrete. <i>International Journal of Advances in Engineering Sciences and Applied Mathematics</i> , 2011 , 3, 14-33	0.6	26
45	A thermo-viscoelastic-viscoplastic-viscodamage constitutive model for asphaltic materials. <i>International Journal of Solids and Structures</i> , 2011 , 48, 191-207	3.1	151
44	A quantitative method for analyzing the dispersion and agglomeration of nano-particles in composite materials. <i>Composites Part B: Engineering</i> , 2011 , 42, 1395-1403	10	58
43	Meso-scale computational modeling of the plastic-damage response of cementitious composites. <i>Cement and Concrete Research</i> , 2011 , 41, 339-358	10.3	264
42	Coupled Interfacial Energy and Temperature Effects on Size-Dependent Yield Strength and Strain Hardening of Small Metallic Volumes. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2011 , 133,	1.8	6
41	Mesomechanical Modeling of Polymer/Clay Nanocomposites Using a Viscoelastic-Viscoplastic-Viscodamage Constitutive Model. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2011 , 133,	1.8	11
40	Modeling Interparticle Size Effect on Deformation Behavior of Metal Matrix Composites by a Gradient Enhanced Plasticity Model. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2011 , 133,	1.8	6
39	The effect of atomic force microscope probe size on indentation tests simulated using realistic surface forces. <i>International Journal of Materials and Structural Integrity</i> , 2010 , 4, 160	0.3	1
38	Distribution of Carbon Nanofibers and Nanotubes in Cementitious Composites. <i>Transportation Research Record</i> , 2010 , 2142, 89-95	1.7	100
37	Dislocation-based model for predicting size-scale effects on the micro and nano indentation hardness of metallic materials. <i>International Journal of Materials and Structural Integrity</i> , 2010 , 4, 251	0.3	5
36	Modelling size effects in micro/nano-systems by including interfacial effects in a gradient plasticity framework. <i>International Journal of Materials and Structural Integrity</i> , 2010 , 4, 278	0.3	1
35	A micro-damage healing model that improves prediction of fatigue life in asphalt mixes. <i>International Journal of Engineering Science</i> , 2010 , 48, 966-990	5.7	137
34	Computational applications of a coupled plasticity-damage constitutive model for simulating plain concrete fracture. <i>Engineering Fracture Mechanics</i> , 2010 , 77, 1577-1603	4.2	90
33	Micromechanical theoretical and computational modeling of energy dissipation due to nonlinear vibration of hard ceramic coatings with microstructural recursive faults. <i>International Journal of Solids and Structures</i> , 2010 , 47, 2131-2142	3.1	23
32	Predicting mesh-independent ballistic limits for heterogeneous targets by a nonlocal damage computational framework. <i>Composites Part B: Engineering</i> , 2009 , 40, 495-510	10	10
31	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

30	On the thermodynamics of higher-order gradient plasticity for size-effects at the micron and submicron length scales. <i>International Journal of Materials and Product Technology</i> , 2009 , 34, 172	1	1
29	Modeling the Particle Size and Interfacial Hardening Effects in Metal Matrix Composites with Dispersed Particles at Decreasing Microstructural Length Scales. <i>International Journal for Multiscale Computational Engineering</i> , 2009 , 7, 329-350	2.4	10
28	Constitutive Modeling and Simulation of Perforation of Targets by Projectiles. <i>AIAA Journal</i> , 2008 , 46, 304-316	2.1	17
27	Thermodynamic framework for coupling of elasto-viscoplasticity and nonlocal anisotropic damage for microelectronics solder alloys. <i>International Journal of Materials and Structural Integrity</i> , 2008 , 2, 106 ^{0.3}		2
26	Modeling the interfacial effect on the yield strength and flow stress of thin metal films on substrates. <i>Mechanics Research Communications</i> , 2008 , 35, 65-72	2.2	8
25	Interfacial gradient plasticity governs scale-dependent yield strength and strain hardening rates in micro/nano structured metals. <i>International Journal of Plasticity</i> , 2008 , 24, 1277-1306	7.6	51
24	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
23	A plasticity and anisotropic damage model for plain concrete. <i>International Journal of Plasticity</i> , 2007 , 23, 1874-1900	7.6	210
22	Prediction of micro and nanoindentation size effect from conical or pyramidal indentation. <i>Mechanics of Materials</i> , 2007 , 39, 787-802	3.3	76
21	Micro-Damage Constitutive Modeling and Numerical Simulation of Perforation of Targets by Projectiles 2007 , 549		
20	Modeling the Size and Interface Effects in Thin Metal Film-Substrate Systems Using the Strain Gradient Plasticity 2007 , 1023		
19	Nonlocal Gradient-Dependent Thermodynamics for Modeling Scale-Dependent Plasticity. <i>International Journal for Multiscale Computational Engineering</i> , 2007 , 5, 295-323	2.4	23
18	A physically based gradient plasticity theory. <i>International Journal of Plasticity</i> , 2006 , 22, 654-684	7.6	131
17	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
16	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
15	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
14	Comparison of the Strain Localization Approaches: Viscoplasticity Theory and Gradient Dependent Theory 2005 , 79		
13	Gradient plasticity theory with a variable length scale parameter. <i>International Journal of Solids and Structures</i> , 2005 , 42, 3998-4029	3.1	199

12	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
11	A Micro-Damage Model for High Velocity Impact Using Combined Viscosity and Gradient Localization Limiters 2005 , 123		2
10	A Dislocation Based Gradient Plasticity Theory With Applications to Size Effects 2005 , 69		0
9	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
8	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
7	A Modified Gradient Plasticity Theory for Micro-Bending and Micro-Torsion Size Effects 2004 , 233		
6	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
5	Determination of the Material Intrinsic Length Scale of Gradient Plasticity Theory. <i>Solid Mechanics and Its Applications</i> , 2004 , 167-174	0.4	8
4	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
3	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
2	Scalable synthesis, characterization and testing of 3D architected gyroid graphene lattices from additively manufactured templates. <i>Journal of Micromechanics and Molecular Physics</i> , 1-12	1.4	1
1	On Stiffness, Strength, Anisotropy, and Buckling of 3D Strut-Based Lattices with Cubic Crystal Structures. <i>Advanced Engineering Materials</i> , 2101379	3.5	0