

Noël Challamel

List of Publications by Year in descending order

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docs citations

124
times ranked

962
citing authors

#	ARTICLE	IF	CITATIONS
1	The small length scale effect for a non-local cantilever beam: a paradox solved. <i>Nanotechnology</i> , 2008, 19, 345703.	1.3	418
2	Bending, Buckling, and Vibration of Micro/Nanobeams by Hybrid Nonlocal Beam Model. <i>Journal of Engineering Mechanics - ASCE</i> , 2010, 136, 562-574.	1.6	150
3	On nonconservativeness of Eringen's nonlocal elasticity in beam mechanics: correction from a discrete-based approach. <i>Archive of Applied Mechanics</i> , 2014, 84, 1275-1292.	1.2	139
4	Variational formulation of gradient or/and nonlocal higher-order shear elasticity beams. <i>Composite Structures</i> , 2013, 105, 351-368.	3.1	96
5	Discrete systems behave as nonlocal structural elements: Bending, buckling and vibration analysis. <i>European Journal of Mechanics, A/Solids</i> , 2014, 44, 125-135.	2.1	92
6	A dispersive wave equation using nonlocal elasticity. <i>Comptes Rendus - Mecanique</i> , 2009, 337, 591-595.	2.1	76
7	Calibration of Eringen's small length scale coefficient for initially stressed vibrating nonlocal Euler beams based on microstructured beam model. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 345501.	1.3	67
8	Analytical length scale calibration of nonlocal continuum from a microstructured buckling model. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2014, 94, 402-413.	0.9	66
9	Hencky Bar-Chain Model for Buckling and Vibration of Beams with Elastic End Restraints. <i>International Journal of Structural Stability and Dynamics</i> , 2015, 15, 1540007.	1.5	65
10	On the fractional generalization of Eringen's nonlocal elasticity for wave propagation. <i>Comptes Rendus - Mecanique</i> , 2013, 341, 298-303.	2.1	55
11	A nonlocal Fourier's law and its application to the heat conduction of one-dimensional and two-dimensional thermal lattices. <i>Comptes Rendus - Mecanique</i> , 2016, 344, 388-401.	2.1	55
12	Strain-based anisotropic damage modelling and unilateral effects. <i>International Journal of Mechanical Sciences</i> , 2005, 47, 459-473.	3.6	49
13	Eringen's length scale coefficient for buckling of nonlocal rectangular plates from microstructured beam-grid model. <i>International Journal of Solids and Structures</i> , 2014, 51, 4307-4315.	1.3	48
14	Development of analytical vibration solutions for microstructured beam model to calibrate length scale coefficient in nonlocal Timoshenko beams. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	47
15	Nonlocal Equivalent Continua for Buckling and Vibration Analyses of Microstructured Beams. <i>Journal of Nanomechanics & Micromechanics</i> , 2015, 5, .	1.4	46
16	Eringen's Stress Gradient Model for Bending of Nonlocal Beams. <i>Journal of Engineering Mechanics - ASCE</i> , 2016, 142, .	1.6	44
17	Eringen's small length scale coefficient for buckling of nonlocal Timoshenko beam based on microstructured beam model. <i>Journal of Applied Physics</i> , 2013, 114, 114902.	1.1	42
18	Discrete and non-local elastica. <i>International Journal of Non-Linear Mechanics</i> , 2015, 77, 128-140.	1.4	41

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19	Buckling and vibrations of microstructured rectangular plates considering phenomenological and lattice-based nonlocal continuum models. <i>Composite Structures</i> , 2016, 149, 145-156.	3.1	40
20	On boundary conditions for buckling and vibration of nonlocal beams. <i>European Journal of Mechanics, A/Solids</i> , 2017, 61, 73-81.	2.1	39
21	Variationally-based theories for buckling of partial composite beam-columns including shear and axial effects. <i>Engineering Structures</i> , 2011, 33, 2297-2319.	2.6	35
22	Higher-order shear beam theories and enriched continuum. <i>Mechanics Research Communications</i> , 2011, 38, 388-392.	1.0	35
23	Obtaining Eringen's length scale coefficient for vibrating nonlocal beams via continualization method. <i>Journal of Sound and Vibration</i> , 2014, 333, 4977-4990.	2.1	35
24	Stability of non-conservative elastic structures under additional kinematics constraints. <i>Engineering Structures</i> , 2010, 32, 3086-3092.	2.6	34
25	Hencky bar-chain model for buckling and vibration analyses of non-uniform beams on variable elastic foundation. <i>Engineering Structures</i> , 2016, 126, 252-263.	2.6	33
26	Nonlocal or gradient elasticity macroscopic models: A question of concentrated or distributed microstructure. <i>Mechanics Research Communications</i> , 2016, 71, 25-31.	1.0	31
27	Buckling of elastic beams on non-local foundation: A revisiting of Reissner model. <i>Mechanics Research Communications</i> , 2010, 37, 472-475.	1.0	30
28	Buckling and vibration of Hencky bar-chain with internal elastic springs. <i>International Journal of Mechanical Sciences</i> , 2016, 119, 383-395.	3.6	30
29	Buckling of Nonlocal Columns with Allowance for Selfweight. <i>Journal of Engineering Mechanics - ASCE</i> , 2016, 142, .	1.6	30
30	Revisiting finite difference and finite element methods applied to structural mechanics within enriched continua. <i>European Journal of Mechanics, A/Solids</i> , 2015, 53, 107-120.	2.1	29
31	Eringen's Length-Scale Coefficients for Vibration and Buckling of Nonlocal Rectangular Plates with Simply Supported Edges. <i>Journal of Engineering Mechanics - ASCE</i> , 2015, 141, .	1.6	29
32	Statics and dynamics of nanorods embedded in an elastic medium: Nonlocal elasticity and lattice formulations. <i>European Journal of Mechanics, A/Solids</i> , 2018, 67, 254-271.	2.1	29
33	Small length scale coefficient for Eringen's and lattice-based continualized nonlocal circular arches in buckling and vibration. <i>Composite Structures</i> , 2017, 165, 148-159.	3.1	28
34	Critical contrasting of three versions of vibrating Bresse-Timoshenko beam with a crack. <i>International Journal of Solids and Structures</i> , 2017, 109, 143-151.	1.3	27
35	Variational derivation of governing differential equations for truncated version of Bresse-Timoshenko beams. <i>Journal of Sound and Vibration</i> , 2018, 435, 409-430.	2.1	27
36	Lateral-torsional buckling of vertically layered composite beams with interlayer slip under uniform moment. <i>Engineering Structures</i> , 2012, 34, 505-513.	2.6	25

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37	Comparison of nonlocal continualization schemes for lattice beams and plates. <i>Archive of Applied Mechanics</i> , 2017, 87, 1105-1138.	1.2	25
38	AN ANALYTICAL STUDY ON THE LATERAL-TORSIONAL BUCKLING OF LINEARLY TAPERED CANTILEVER STRIP BEAMS. <i>International Journal of Structural Stability and Dynamics</i> , 2007, 07, 441-456.	1.5	24
39	A brief history of first-order shear-deformable beam and plate models. <i>Mechanics Research Communications</i> , 2019, 102, 103389.	1.0	24
40	Boundary-Layer Effect in Composite Beams with Interlayer Slip. <i>Journal of Aerospace Engineering</i> , 2011, 24, 199-209.	0.8	22
41	On the Comparison of Timoshenko and Shear Models in Beam Dynamics. <i>Journal of Engineering Mechanics - ASCE</i> , 2006, 132, 1141-1145.	1.6	21
42	Surface stress effects may induce softening: Euler-Bernoulli and Timoshenko buckling solutions. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2012, 44, 1862-1867.	1.3	21
43	Plastic failure of nonlocal beams. <i>Physical Review E</i> , 2008, 78, 026604.	0.8	20
44	Scale effect and higher-order boundary conditions for generalized lattices, with direct and indirect interactions. <i>Mechanics Research Communications</i> , 2019, 97, 1-7.	1.0	19
45	Asymptotic derivation of nonlocal beam models from two-dimensional nonlocal elasticity. <i>Mathematics and Mechanics of Solids</i> , 2019, 24, 2425-2443.	1.5	19
46	Out-of-plane behaviour of partially composite or sandwich beams by exact and Finite Element Methods. <i>Thin-Walled Structures</i> , 2010, 48, 561-580.	2.7	18
47	LATERAL-TORSIONAL BUCKLING OF BEAMS UNDER COMBINED LOADING: A REAPPRAISAL OF PAPKOVITCH-SCHAEFER THEOREM. <i>International Journal of Structural Stability and Dynamics</i> , 2007, 07, 55-79.	1.5	17
48	On lateral-torsional vibrations of elastic composite beams with interlayer slip. <i>Journal of Sound and Vibration</i> , 2009, 325, 1012-1022.	2.1	17
49	On the propagation of localization in the plasticity collapse of hardening-softening beams. <i>International Journal of Engineering Science</i> , 2010, 48, 487-506.	2.7	17
50	Static and dynamic behaviour of nonlocal elastic bar using integral strain-based and peridynamic models. <i>Comptes Rendus - Mecanique</i> , 2018, 346, 320-335.	2.1	17
51	Comparison of nano-plate bending behaviour by Eringen nonlocal plate, Hencky bar-net and continualised nonlocal plate models. <i>Acta Mechanica</i> , 2019, 230, 885-907.	1.1	17
52	Asymptotic derivation of nonlocal plate models from three-dimensional stress gradient elasticity. <i>Continuum Mechanics and Thermodynamics</i> , 2019, 31, 47-70.	1.4	16
53	Higher-order gradient elasticity models applied to geometrically nonlinear discrete systems. <i>Theoretical and Applied Mechanics</i> , 2015, 42, 223-248.	0.1	16
54	On Nonlocal Computation of Eigenfrequencies of Beams Using Finite Difference and Finite Element Methods. <i>International Journal of Structural Stability and Dynamics</i> , 2015, 15, 1540008.	1.5	15

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55	Treatment of elastically restrained ends for beam buckling in finite difference, microstructured and nonlocal beam models. <i>Acta Mechanica</i> , 2015, 226, 419-436.	1.1	15
56	Vibrations of asymptotically and variationally based Mindlin plate models. <i>International Journal of Engineering Science</i> , 2017, 116, 58-73.	2.7	15
57	Virus sensor based on single-walled carbon nanotube: improved theory incorporating surface effects. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2013, 371, 20120424.	1.6	14
58	Semi-analytical solutions for optimal design of columns based on Hencky bar-chain model. <i>Engineering Structures</i> , 2017, 136, 87-99.	2.6	14
59	An approximate model for optimizing Bernoulli columns against buckling. <i>Engineering Structures</i> , 2017, 141, 316-327.	2.6	14
60	Exact lateral-torsional buckling solutions for cantilevered beams subjected to intermediate and end transverse point loads. <i>Thin-Walled Structures</i> , 2010, 48, 71-76.	2.7	13
61	Flexural-Torsional Buckling of Cantilever Strip Beam-Columns with Linearly Varying Depth. <i>Journal of Engineering Mechanics - ASCE</i> , 2010, 136, 787-800.	1.6	13
62	On the post-buckling of elastic beams on gradient foundation. <i>Comptes Rendus - Mecanique</i> , 2011, 339, 396-405.	2.1	13
63	Buckling of Generic Higher-Order Shear Beam/Columns with Elastic Connections: Local and Nonlocal Formulation. <i>Journal of Engineering Mechanics - ASCE</i> , 2013, 139, 1091-1109.	1.6	12
64	From discrete to nonlocal continuum damage mechanics: Analysis of a lattice system in bending using a continualized approach. <i>International Journal of Damage Mechanics</i> , 2015, 24, 983-1012.	2.4	12
65	Exact and Nonlocal Solutions for Vibration of Axial Lattice with Direct and Indirect Neighboring Interactions. <i>Journal of Engineering Mechanics - ASCE</i> , 2018, 144, 04018025.	1.6	12
66	Uncovering the finite difference model equivalent to Hencky bar-net model for axisymmetric bending of circular and annular plates. <i>Applied Mathematical Modelling</i> , 2018, 61, 300-315.	2.2	12
67	Discrete and nonlocal models of Engesser and Haringx elastica. <i>International Journal of Mechanical Sciences</i> , 2017, 130, 571-585.	3.6	11
68	Modelling vibrating nano-strings by lattice, finite difference and Eringen's nonlocal models. <i>Journal of Sound and Vibration</i> , 2018, 425, 41-52.	2.1	11
69	Lattice and continualized models for the buckling study of nonlocal rectangular thick plates including shear effects. <i>International Journal of Mechanical Sciences</i> , 2018, 145, 221-230.	3.6	11
70	Buckling of multiply connected bar-chain and its associated continualized nonlocal model. <i>International Journal of Mechanical Sciences</i> , 2019, 150, 168-175.	3.6	11
71	On buckling of granular columns with shear interaction: Discrete versus nonlocal approaches. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	10
72	Exact and nonlocal solutions for vibration of multiply connected bar-chain system with direct and indirect neighbouring interactions. <i>Journal of Sound and Vibration</i> , 2019, 443, 63-73.	2.1	10

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73	A regularization study of some softening beam problems with an implicit gradient plasticity model. <i>Journal of Engineering Mathematics</i> , 2008, 62, 373-387.	0.6	9
74	Comparison of Refined Beam Theories for Parametric Instability. <i>AIAA Journal</i> , 2018, 56, 438-442.	1.5	9
75	Static and Dynamic Behaviors of Microstructured Membranes within Nonlocal Mechanics. <i>Journal of Engineering Mechanics - ASCE</i> , 2018, 144, .	1.6	9
76	Localization in the Vibration of an Axially Loaded Two-span Weakened Column. <i>JVC/Journal of Vibration and Control</i> , 2009, 15, 1827-1851.	1.5	8
77	Lateral-Torsional Buckling of Partially Composite Horizontally Layered or Sandwich-Type Beams under Uniform Moment. <i>Journal of Engineering Mechanics - ASCE</i> , 2013, 139, 1047-1064.	1.6	8
78	Buckling of softening columns in a continuum damage mechanics perspective – Local versus non-local formulation. <i>European Journal of Mechanics, A/Solids</i> , 2013, 39, 229-242.	2.1	8
79	On the use of spring models to analyse the lateral-torsional buckling behaviour of cracked beams. <i>Thin-Walled Structures</i> , 2013, 73, 121-130.	2.7	8
80	Out-of-Plane Buckling of Microstructured Beams: Gradient Elasticity Approach. <i>Journal of Engineering Mechanics - ASCE</i> , 2013, 139, 1036-1046.	1.6	7
81	On lateral-torsional buckling of discrete elastic systems: A nonlocal approach. <i>European Journal of Mechanics, A/Solids</i> , 2015, 49, 106-113.	2.1	7
82	On the failure of a discrete axial chain using a continualized nonlocal Continuum Damage Mechanics approach. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2016, 40, 436-466.	1.7	7
83	Buckling and Postbuckling of a Heavy Compressed Nanorod on Elastic Foundation. <i>Journal of Nanomechanics & Micromechanics</i> , 2017, 7, 04017004.	1.4	7
84	Free vibration of a nanogrid based on Eringen's stress gradient model. <i>Mechanics Based Design of Structures and Machines</i> , 2022, 50, 537-555.	3.4	7
85	An application of large displacement limit analysis to frame structures. <i>Structural Engineering and Mechanics</i> , 2009, 33, 159-177.	1.0	7
86	Poiseuille flow of nonlocal microstructured fluid. <i>Mechanics Research Communications</i> , 2014, 59, 51-57.	1.0	6
87	Nonlocal continuum analysis of a nonlinear uniaxial elastic lattice system under non-uniform axial load. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2016, 83, 378-388.	1.3	6
88	From Ziegler to Beck's column: a nonlocal approach. <i>Archive of Applied Mechanics</i> , 2016, 86, 1095-1118.	1.2	6
89	Critical comparison of exact solutions in random vibration of beams using three versions of Bresse-Timoshenko theory. <i>Probabilistic Engineering Mechanics</i> , 2018, 53, 95-108.	1.3	6
90	Critical Comparison of Bresse-Timoshenko Beam Theories for Parametric Instability in the Presence of Pulsating Load. <i>International Journal of Structural Stability and Dynamics</i> , 2019, 19, 1950006.	1.5	6

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91	Buckling of granular systems with discrete and gradient elasticity Cosserat continua. <i>Annals of Solid and Structural Mechanics</i> , 2020, 12, 7-22.	0.5	6
92	Exact solutions for the vibration of finite granular beam using discrete and gradient elasticity cosserat models. <i>Journal of Sound and Vibration</i> , 2021, 494, 115839.	2.1	6
93	On the post-buckling of distributed microstructured system: The finite element elastica. <i>International Journal of Mechanical Sciences</i> , 2016, 114, 12-20.	3.6	5
94	Application of Green's function method to bending of stress gradient nanobeams. <i>International Journal of Solids and Structures</i> , 2018, 143, 209-217.	1.3	5
95	Elasticity solutions for nano-plane structures under body forces using lattice elasticity, continualised nonlocal model and Eringen nonlocal model. <i>Continuum Mechanics and Thermodynamics</i> , 2021, 33, 2453-2480.	1.4	5
96	On stress-based piecewise elasticity for limited strain extensibility materials. <i>International Journal of Non-Linear Mechanics</i> , 2016, 81, 303-309.	1.4	4
97	Nonlocal Approaches for the Vibration of Lattice Plates Including Both Shear and Bending Interactions. <i>International Journal of Structural Stability and Dynamics</i> , 2018, 18, 1850094.	1.5	4
98	Calibration of Eringen's small length scale coefficient for buckling circular and annular plates via Hencky bar-net model. <i>Applied Mathematical Modelling</i> , 2020, 78, 399-417.	2.2	4
99	Bending/shear wave dispersion analysis of granular chains – Discrete and enriched continuous Cosserat modelling. <i>International Journal of Solids and Structures</i> , 2022, 236-237, 111355.	1.3	4
100	Buckling and post-buckling of gradient and nonlocal plasticity columns experiencing softening. <i>International Journal of Solids and Structures</i> , 2014, 51, 4052-4067.	1.3	3
101	Free vibration analysis of plates taking into account rotary inertia and shear deformation via three alternative theories: a Lévy-type solution. <i>Acta Mechanica</i> , 2017, 228, 3633-3655.	1.1	3
102	Nonlocal thermal diffusion in one-dimensional periodic lattice. <i>International Journal of Heat and Mass Transfer</i> , 2021, 180, 121753.	2.5	3
103	Simplified Timoshenko-Ehrenfest beam equation to analyze metamaterials. <i>Journal of Applied Physics</i> , 2022, 131, 104902.	1.1	3
104	Reply to the comments of M.E. Golmakani and J. RezaTalab, Comment on “Nonlocal third-order shear deformation plate theory with application to bending and vibration of plates” (by R. Aghababaei and) Tj ETQq0 0 0 qgBT /Overlock 10 T 3831-3835. <i>Journal of Sound and Vibration</i> , 2014, 333, 5654-5656.	2.1	2
105	Eringen's small length scale coefficient for vibration of axially loaded nonlocal Euler beams with elastic end restraints. <i>Journal of Modeling in Mechanics and Materials</i> , 2017, 1, .	0.5	2
106	Bending of an elastoplastic Hencky bar-chain: from discrete to nonlocal continuous beam models. <i>Meccanica</i> , 2018, 53, 3083-3104.	1.2	2
107	Buckling of Granular Systems with Shear Interactions: Discrete versus Continuum Approaches. , 2020, , 199-221.		2
108	A localization analysis of a non-uniform damage lattice in presence of strength gradient. <i>International Journal of Fracture</i> , 2018, 210, 29-43.	1.1	1

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109	Lattice-Based Nonlocal Elastic Structural Models. Springer Tracts in Mechanical Engineering, 2021, , 1-50.	0.1	1
110	Geometrically exact bifurcation and post-buckling analysis of the granular elastica. International Journal of Non-Linear Mechanics, 2021, 136, 103772.	1.4	1
111	Static bending of granular beam: exact discrete and nonlocal solutions. Meccanica, 0, , .	1.2	1
112	Hyperelastic or Hypoelastic Granular Circular Chain Instability in a Geometrically Exact Framework. Journal of Engineering Mechanics - ASCE, 2022, 148, .	1.6	1
113	Two-scale nonlocal shear rate formulation of Bingham plastic fluid. Applied Mathematical Modelling, 2015, 39, 4075-4094.	2.2	0
114	Nonlocal Continuum Damage Mechanics Approach of a Discrete Axial Chain under Non-Uniform Axial Load. Applied Mechanics and Materials, 2015, 784, 317-324.	0.2	0
115	Scale effects in the static response of a one-dimensional quasi-brittle damage lattice. European Journal of Environmental and Civil Engineering, 2016, 20, 1233-1248.	1.0	0
116	Nonlocality of one-dimensional bilinear hardening-softening elastoplastic axial lattices. Mathematics and Mechanics of Solids, 2020, 25, 475-497.	1.5	0
117	Divergence instability of kinematically constrained Hencky chains: Analytic results and asymptotic behavior. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 0, , e202100157.	0.9	0
118	On Stability of Discrete and Asymptotically Continuous Systems. , 2020, , 1-56.		0