Noël Challamel

List of Publications by Year
in descending order

118 papers	3,006 citations	172207 29 h-index	197535 49 g-index
124 all docs	124 docs citations	124 times ranked	962 citing authors

#	Article	IF	Citations
1	Free vibration of a nanogrid based on Eringen's stress gradient model. Mechanics Based Design of Structures and Machines, 2022, 50, 537-555.	3.4	7
2	Bending/shear wave dispersion analysis of granular chains – Discrete and enriched continuous Cosserat modelling. International Journal of Solids and Structures, 2022, 236-237, 111355.	1.3	4
3	Simplified Timoshenko–Ehrenfest beam equation to analyze metamaterials. Journal of Applied Physics, 2022, 131, 104902.	1.1	3
4	Hyperelastic or Hypoelastic Granular Circular Chain Instability in a Geometrically Exact Framework. Journal of Engineering Mechanics - ASCE, 2022, 148, .	1.6	1
5	Exact solutions for the vibration of finite granular beam using discrete and gradient elasticity cosserat models. Journal of Sound and Vibration, 2021, 494, 115839.	2.1	6
6	Lattice-Based Nonlocal Elastic Structural Models. Springer Tracts in Mechanical Engineering, 2021, , 1-50.	0.1	1
7	Elasticity solutions for nano-plane structures under body forces using lattice elasticity, continualised nonlocal model and Eringen nonlocal model. Continuum Mechanics and Thermodynamics, 2021, 33, 2453-2480.	1.4	5
8	Geometrically exact bifurcation and post-buckling analysis of the granular elastica. International Journal of Non-Linear Mechanics, 2021, 136, 103772.	1.4	1
9	Nonlocal thermal diffusion in one-dimensional periodic lattice. International Journal of Heat and Mass Transfer, 2021, 180, 121753.	2.5	3
10	Calibration of Eringen's small length scale coefficient for buckling circular and annular plates via Hencky bar-net model. Applied Mathematical Modelling, 2020, 78, 399-417.	2.2	4
11	Nonlocality of one-dimensional bilinear hardening–softening elastoplastic axial lattices. Mathematics and Mechanics of Solids, 2020, 25, 475-497.	1.5	0
12	Buckling of granular systems with discrete and gradient elasticity Cosserat continua. Annals of Solid and Structural Mechanics, 2020, 12, 7-22.	0.5	6
13	On Stability of Discrete and Asymptotically Continuous Systems. , 2020, , 1-56.		0
14	Buckling of Granular Systems with Shear Interactions: Discrete versus Continuum Approaches. , 2020, , 199-221.		2
15	A brief history of first-order shear-deformable beam and plate models. Mechanics Research Communications, 2019, 102, 103389.	1.0	24
16	Scale effect and higher-order boundary conditions for generalized lattices, with direct and indirect interactions. Mechanics Research Communications, 2019, 97, 1-7.	1.0	19
17	Comparison of nano-plate bending behaviour by Eringen nonlocal plate, Hencky bar-net and continualised nonlocal plate models. Acta Mechanica, 2019, 230, 885-907.	1.1	17
18	Exact and nonlocal solutions for vibration of multiply connected bar-chain system with direct and indirect neighbouring interactions. Journal of Sound and Vibration, 2019, 443, 63-73.	2.1	10

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19	Buckling of multiply connected bar-chain and its associated continualized nonlocal model. International Journal of Mechanical Sciences, 2019, 150, 168-175.	3.6	11
20	Critical Comparison of Bresseâ€"Timoshenko Beam Theories for Parametric Instability in the Presence of Pulsating Load. International Journal of Structural Stability and Dynamics, 2019, 19, 1950006.	1.5	6
21	Asymptotic derivation of nonlocal beam models from two-dimensional nonlocal elasticity. Mathematics and Mechanics of Solids, 2019, 24, 2425-2443.	1.5	19
22	Asymptotic derivation of nonlocal plate models from three-dimensional stress gradient elasticity. Continuum Mechanics and Thermodynamics, 2019, 31, 47-70.	1.4	16
23	Modelling vibrating nano-strings by lattice, finite difference and Eringen's nonlocal models. Journal of Sound and Vibration, 2018, 425, 41-52.	2.1	11
24	Static and dynamic behaviour of nonlocal elastic bar using integral strain-based and peridynamic models. Comptes Rendus - Mecanique, 2018, 346, 320-335.	2.1	17
25	A localization analysis of a non-uniform damage lattice in presence of strength gradient. International Journal of Fracture, 2018, 210, 29-43.	1.1	1
26	Nonlocal Approaches for the Vibration of Lattice Plates Including Both Shear and Bending Interactions. International Journal of Structural Stability and Dynamics, 2018, 18, 1850094.	1.5	4
27	Exact and Nonlocal Solutions for Vibration of Axial Lattice with Direct and Indirect Neighboring Interactions. Journal of Engineering Mechanics - ASCE, 2018, 144, 04018025.	1.6	12
28	Application of Green's function method to bending of stress gradient nanobeams. International Journal of Solids and Structures, 2018, 143, 209-217.	1.3	5
29	Variational derivation of governing differential equations for truncated version of Bresse-Timoshenko beams. Journal of Sound and Vibration, 2018, 435, 409-430.	2.1	27
30	Statics and dynamics of nanorods embedded in an elastic medium: Nonlocal elasticity and lattice formulations. European Journal of Mechanics, A/Solids, 2018, 67, 254-271.	2.1	29
31	Comparison of Refined Beam Theories for Parametric Instability. AIAA Journal, 2018, 56, 438-442.	1.5	9
32	Static and Dynamic Behaviors of Microstructured Membranes within Nonlocal Mechanics. Journal of Engineering Mechanics - ASCE, 2018, 144, .	1.6	9
33	Critical comparison of exact solutions in random vibration of beams using three versions of Bresseâ€"Timoshenko theory. Probabilistic Engineering Mechanics, 2018, 53, 95-108.	1.3	6
34	Uncovering the finite difference model equivalent to Hencky bar-net model for axisymmetric bending of circular and annular plates. Applied Mathematical Modelling, 2018, 61, 300-315.	2.2	12
35	Lattice and continualized models for the buckling study of nonlocal rectangular thick plates including shear effects. International Journal of Mechanical Sciences, 2018, 145, 221-230.	3.6	11
36	Bending of an elastoplastic Hencky bar-chain: from discrete to nonlocal continuous beam models. Meccanica, 2018, 53, 3083-3104.	1.2	2

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37	Semi-analytical solutions for optimal design of columns based on Hencky bar-chain model. Engineering Structures, 2017, 136, 87-99.	2.6	14
38	Small length scale coefficient for Eringen's and lattice-based continualized nonlocal circular arches in buckling and vibration. Composite Structures, 2017, 165, 148-159.	3.1	28
39	Critical contrasting of three versions of vibrating Bresse–Timoshenko beam with a crack. International Journal of Solids and Structures, 2017, 109, 143-151.	1.3	27
40	Discrete and nonlocal models of Engesser and Haringx elastica. International Journal of Mechanical Sciences, 2017, 130, 571-585.	3.6	11
41	Vibrations of asymptotically and variationally based Uflyand–Mindlin plate models. International Journal of Engineering Science, 2017, 116, 58-73.	2.7	15
42	An approximate model for optimizing Bernoulli columns against buckling. Engineering Structures, 2017, 141, 316-327.	2.6	14
43	Buckling and Postbuckling of a Heavy Compressed Nanorod on Elastic Foundation. Journal of Nanomechanics & Micromechanics, 2017, 7, 04017004.	1.4	7
44	Comparison of nonlocal continualization schemes for lattice beams and plates. Archive of Applied Mechanics, 2017, 87, 1105-1138.	1.2	25
45	Eringen's small length scale coefficient for vibration of axially loaded nonlocal Euler beams with elastic end restraints. Journal of Modeling in Mechanics and Materials, 2017, 1, .	0.5	2
46	Free vibration analysis of plates taking into account rotary inertia and shear deformation via three alternative theories: a Lévy-type solution. Acta Mechanica, 2017, 228, 3633-3655.	1.1	3
47	On boundary conditions for buckling and vibration of nonlocal beams. European Journal of Mechanics, A/Solids, 2017, 61, 73-81.	2.1	39
48	On the failure of a discrete axial chain using a continualized nonlocal Continuum Damage Mechanics approach. International Journal for Numerical and Analytical Methods in Geomechanics, 2016, 40, 436-466.	1.7	7
49	On the post-buckling of distributed microstructured system: The finite element elastica. International Journal of Mechanical Sciences, 2016, 114, 12-20.	3.6	5
50	Buckling and vibrations of microstructured rectangular plates considering phenomenological and lattice-based nonlocal continuum models. Composite Structures, 2016, 149, 145-156.	3.1	40
51	Hencky bar-chain model for buckling and vibration analyses of non-uniform beams on variable elastic foundation. Engineering Structures, 2016, 126, 252-263.	2.6	33
52	Eringen's Stress Gradient Model for Bending of Nonlocal Beams. Journal of Engineering Mechanics - ASCE, 2016, 142, .	1.6	44
53	Buckling and vibration of Hencky bar-chain with internal elastic springs. International Journal of Mechanical Sciences, 2016, 119, 383-395.	3.6	30
54	Nonlocal continuum analysis of a nonlinear uniaxial elastic lattice system under non-uniform axial load. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 83, 378-388.	1.3	6

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55	Nonlocal or gradient elasticity macroscopic models: A question of concentrated or distributed microstructure. Mechanics Research Communications, 2016, 71, 25-31.	1.0	31
56	Buckling of Nonlocal Columns with Allowance for Selfweight. Journal of Engineering Mechanics - ASCE, 2016, 142, .	1.6	30
57	A nonlocal Fourier's law and its application to the heat conduction of one-dimensional and two-dimensional thermal lattices. Comptes Rendus - Mecanique, 2016, 344, 388-401.	2.1	55
58	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
59	On stress-based piecewise elasticity for limited strain extensibility materials. International Journal of Non-Linear Mechanics, 2016, 81, 303-309.	1.4	4
60	From Ziegler to Beck's column: a nonlocal approach. Archive of Applied Mechanics, 2016, 86, 1095-1118.	1.2	6
61	Revisiting finite difference and finite element methods applied to structural mechanics within enriched continua. European Journal of Mechanics, A/Solids, 2015, 53, 107-120.	2.1	29
62	On Nonlocal Computation of Eigenfrequencies of Beams Using Finite Difference and Finite Element Methods. International Journal of Structural Stability and Dynamics, 2015, 15, 1540008.	1.5	15
63	Two-scale nonlocal shear rate formulation of Bingham plastic fluid. Applied Mathematical Modelling, 2015, 39, 4075-4094.	2.2	0
64	Treatment of elastically restrained ends for beam buckling in finite difference, microstructured and nonlocal beam models. Acta Mechanica, 2015, 226, 419-436.	1.1	15
65	Discrete and non-local elastica. International Journal of Non-Linear Mechanics, 2015, 77, 128-140.	1.4	41
66	Eringen's Length-Scale Coefficients for Vibration and Buckling of Nonlocal Rectangular Plates with Simply Supported Edges. Journal of Engineering Mechanics - ASCE, 2015, 141, .	1.6	29
67	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
68	Hencky Bar-Chain Model for Buckling and Vibration of Beams with Elastic End Restraints. International Journal of Structural Stability and Dynamics, 2015, 15, 1540007.	1.5	65
69	From discrete to nonlocal continuum damage mechanics: Analysis of a lattice system in bending using a continualized approach. International Journal of Damage Mechanics, 2015, 24, 983-1012.	2.4	12
70	Nonlocal Equivalent Continua for Buckling and Vibration Analyses of Microstructured Beams. Journal of Nanomechanics & Micromechanics, 2015, 5, .	1.4	46
71	On lateral-torsional buckling of discrete elastic systems: A nonlocal approach. European Journal of Mechanics, A/Solids, 2015, 49, 106-113.	2.1	7
72	Higher-order gradient elasticity models applied to geometrically nonlinear discrete systems. Theoretical and Applied Mechanics, 2015, 42, 223-248.	0.1	16

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73	Discrete systems behave as nonlocal structural elements: Bending, buckling and vibration analysis. European Journal of Mechanics, A/Solids, 2014, 44, 125-135.	2.1	92
74	Poiseuille flow of nonlocal microstructured fluid. Mechanics Research Communications, 2014, 59, 51-57.	1.0	6
75	Analytical length scale calibration of nonlocal continuum from a microstructured buckling model. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2014, 94, 402-413.	0.9	66
76	On buckling of granular columns with shear interaction: Discrete versus nonlocal approaches. Journal of Applied Physics, 2014, 115, .	1.1	10
77	Buckling and post-buckling of gradient and nonlocal plasticity columns experiencing softening. International Journal of Solids and Structures, 2014, 51, 4052-4067.	1.3	3
78	Eringenâ€™s length scale coefficient for buckling of nonlocal rectangular plates from microstructured beam-grid model. International Journal of Solids and Structures, 2014, 51, 4307-4315.	1.3	48
79	On nonconservativeness of Eringenâ€™s nonlocal elasticity in beam mechanics: correction from a discrete-based approach. Archive of Applied Mechanics, 2014, 84, 1275-1292.	1.2	139
80	Reply to the comments of M.E. Golmakani and J. Rezatalab, Comment on â€œNonlocal third-order shear deformation plate theory with application to bending and vibration of platesâ€•(by R. Aghababaei and) Tj ETQq0 0 0 rgBT /Overlock 10 T 3831â€"3835. Journal of Sound and Vibration, 2014, 333, 5654-5656.	2.1	2
81	Obtaining Eringen×³s length scale coefficient for vibrating nonlocal beams via continualization method. Journal of Sound and Vibration, 2014, 333, 4977-4990.	2.1	35
82	Buckling of Generic Higher-Order Shear Beam/Columns with Elastic Connections: Local and Nonlocal Formulation. Journal of Engineering Mechanics - ASCE, 2013, 139, 1091-1109.	1.6	12
83	Lateral-Torsional Buckling of Partially Composite Horizontally Layered or Sandwich-Type Beams under Uniform Moment. Journal of Engineering Mechanics - ASCE, 2013, 139, 1047-1064.	1.6	8
84	Variational formulation of gradient or/and nonlocal higher-order shear elasticity beams. Composite Structures, 2013, 105, 351-368.	3.1	96
85	Buckling of softening columns in a continuum damage mechanics perspective â€" Local versus non-local formulation. European Journal of Mechanics, A/Solids, 2013, 39, 229-242.	2.1	8
86	On the use of spring models to analyse the lateral-torsional buckling behaviour of cracked beams. Thin-Walled Structures, 2013, 73, 121-130.	2.7	8
87	Virus sensor based on single-walled carbon nanotube: improved theory incorporating surface effects. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120424.	1.6	14
88	On the fractional generalization of EringenÊ¼s nonlocal elasticity for wave propagation. Comptes Rendus - Mecanique, 2013, 341, 298-303.	2.1	55
89	Eringen's small length scale coefficient for buckling of nonlocal Timoshenko beam based on microstructured beam model. Journal of Applied Physics, 2013, 114, 114902.	1.1	42
90	Development of analytical vibration solutions for microstructured beam model to calibrate length scale coefficient in nonlocal Timoshenko beams. Journal of Applied Physics, 2013, 114, .	1.1	47

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91	Calibration of Eringen's small length scale coefficient for initially stressed vibrating nonlocal Euler beams based on microstructured beam model. Journal Physics D: Applied Physics, 2013, 46, 345501.	1.3	67
92	Out-of-Plane Buckling of Microstructured Beams: Gradient Elasticity Approach. Journal of Engineering Mechanics - ASCE, 2013, 139, 1036-1046.	1.6	7
93	Surface stress effects may induce softening: Eulerâ€"Bernoulli and Timoshenko buckling solutions. Physica E: Low-Dimensional Systems and Nanostructures, 2012, 44, 1862-1867.	1.3	21
94	Lateral-torsional buckling of vertically layered composite beams with interlayer slip under uniform moment. Engineering Structures, 2012, 34, 505-513.	2.6	25
95	On the post-buckling of elastic beams on gradient foundation. Comptes Rendus - Mecanique, 2011, 339, 396-405.	2.1	13
96	Variationally-based theories for buckling of partial composite beamâ€"columns including shear and axial effects. Engineering Structures, 2011, 33, 2297-2319.	2.6	35
97	Higher-order shear beam theories and enriched continuum. Mechanics Research Communications, 2011, 38, 388-392.	1.0	35
98	Boundary-Layer Effect in Composite Beams with Interlayer Slip. Journal of Aerospace Engineering, 2011, 24, 199-209.	0.8	22
99	Exact lateralâ€"torsional buckling solutions for cantilevered beams subjected to intermediate and end transverse point loads. Thin-Walled Structures, 2010, 48, 71-76.	2.7	13
100	Out-of-plane behaviour of partially composite or sandwich beams by exact and Finite Element Methods. Thin-Walled Structures, 2010, 48, 561-580.	2.7	18
101	Buckling of elastic beams on non-local foundation: A revisiting of Reissner model. Mechanics Research Communications, 2010, 37, 472-475.	1.0	30
102	On the propagation of localization in the plasticity collapse of hardeningâ€"softening beams. International Journal of Engineering Science, 2010, 48, 487-506.	2.7	17
103	Stability of non-conservative elastic structures under additional kinematics constraints. Engineering Structures, 2010, 32, 3086-3092.	2.6	34
104	Bending, Buckling, and Vibration of Micro/Nanobeams by Hybrid Nonlocal Beam Model. Journal of Engineering Mechanics - ASCE, 2010, 136, 562-574.	1.6	150
105	Flexural-Torsional Buckling of Cantilever Strip Beam-Columns with Linearly Varying Depth. Journal of Engineering Mechanics - ASCE, 2010, 136, 787-800.	1.6	13
106	On lateralâ€"torsional vibrations of elastic composite beams with interlayer slip. Journal of Sound and Vibration, 2009, 325, 1012-1022.	2.1	17
107	A dispersive wave equation using nonlocal elasticity. Comptes Rendus - Mecanique, 2009, 337, 591-595.	2.1	76
108	Localization in the Vibration of an Axially Loaded Two-span Weakened Column. JVC/Journal of Vibration and Control, 2009, 15, 1827-1851.	1.5	8

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109	An application of large displacement limit analysis to frame structures. Structural Engineering and Mechanics, 2009, 33, 159-177.	1.0	7
110	The small length scale effect for a non-local cantilever beam: a paradox solved. Nanotechnology, 2008, 19, 345703.	1.3	418
111	A regularization study of some softening beam problems with an implicit gradient plasticity model. Journal of Engineering Mathematics, 2008, 62, 373-387.	0.6	9
112	Plastic failure of nonlocal beams. Physical Review E, 2008, 78, 026604.	0.8	20
113	LATERAL-TORSIONAL BUCKLING OF BEAMS UNDER COMBINED LOADING: A REAPPRAISAL OF PAPKOVITCHâ€"SCHAEFER THEOREM. International Journal of Structural Stability and Dynamics, 2007, 07, 55-79.	1.5	17
114	AN ANALYTICAL STUDY ON THE LATERAL-TORSIONAL BUCKLING OF LINEARLY TAPERED CANTILEVER STRIP BEAMS. International Journal of Structural Stability and Dynamics, 2007, 07, 441-456.	1.5	24
115	On the Comparison of Timoshenko and Shear Models in Beam Dynamics. Journal of Engineering Mechanics - ASCE, 2006, 132, 1141-1145.	1.6	21
116	Strain-based anisotropic damage modelling and unilateral effects. International Journal of Mechanical Sciences, 2005, 47, 459-473.	3.6	49
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	Static bending of granular beam: exact discrete and nonlocal solutions. Meccanica, 0, , .	1.2	1