

S K Lai

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8323454/publications.pdf>

Version: 2024-02-01

63
papers

1,138
citations

394421
19
h-index

477307
29
g-index

63
all docs

63
docs citations

63
times ranked

782
citing authors

#	ARTICLE	IF	CITATIONS
1	Newton's harmonic balancing approach for accurate solutions to nonlinear cubic-quintic Duffing oscillators. <i>Applied Mathematical Modelling</i> , 2009, 33, 852-866.	4.2	96
2	Vibrations of graphene nanoplatelet reinforced functionally gradient piezoelectric composite microplate based on nonlocal theory. <i>Composite Structures</i> , 2020, 236, 111813.	5.8	68
3	A nonlinear multi-stable piezomagnetoelastic harvester array for low-intensity, low-frequency, and broadband vibrations. <i>Mechanical Systems and Signal Processing</i> , 2019, 122, 87-102.	8.0	58
4	On the nano-structural dependence of nonlocal dynamics and its relationship to the upper limit of nonlocal scale parameter. <i>Applied Mathematical Modelling</i> , 2019, 69, 127-141.	4.2	52
5	Analytical approximations to nonlinear vibration of an electrostatically actuated microbeam. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2012, 17, 1947-1955.	3.3	38
6	DSC regularized Dirac-delta method for dynamic analysis of FG graphene platelet-reinforced porous beams on elastic foundation under a moving load. <i>Composite Structures</i> , 2021, 255, 112865.	5.8	37
7	Accurate analytical perturbation approach for large amplitude vibration of functionally graded beams. <i>International Journal of Non-Linear Mechanics</i> , 2012, 47, 473-480.	2.6	34
8	A magnetic levitation-based tristable hybrid energy harvester for scavenging energy from low-frequency structural vibration. <i>Engineering Structures</i> , 2020, 221, 110789.	5.3	33
9	DSC ANALYSIS FOR BUCKLING AND VIBRATION OF RECTANGULAR PLATES WITH ELASTICALLY RESTRAINED EDGES AND LINEARLY VARYING IN-PLANE LOADING. <i>International Journal of Structural Stability and Dynamics</i> , 2009, 09, 511-531.	2.4	32
10	DSC-element method for free vibration analysis of rectangular Mindlin plates. <i>International Journal of Mechanical Sciences</i> , 2010, 52, 548-560.	6.7	30
11	Analytical asymptotic approximations for large amplitude nonlinear free vibration of a dielectric elastomer balloon. <i>Nonlinear Dynamics</i> , 2017, 88, 2255-2264.	5.2	30
12	A low-frequency, broadband and tri-hybrid energy harvester with septuple-stable nonlinearity-enhanced mechanical frequency up-conversion mechanism for powering portable electronics. <i>Nano Energy</i> , 2019, 64, 103943.	16.0	30
13	Design and performance enhancement of a force-amplified piezoelectric stack energy harvester under pressure fluctuations in hydraulic pipeline systems. <i>Sensors and Actuators A: Physical</i> , 2020, 309, 112031.	4.1	27
14	Gap separation effect on thermoacoustic wave generation by heated suspended CNT nano-thin film. <i>Applied Thermal Engineering</i> , 2015, 86, 135-142.	6.0	25
15	DSC-Ritz element method for vibration analysis of rectangular Mindlin plates with mixed edge supports. <i>European Journal of Mechanics, A/Solids</i> , 2010, 29, 619-628.	3.7	24
16	Stochastic meshless method for nonlinear vibration analysis of composite plate reinforced with carbon fibers. <i>Aerospace Science and Technology</i> , 2020, 105, 105919.	4.8	24
17	Thermal effect on vibration and buckling analysis of thin isotropic/orthotropic rectangular plates with crack defects. <i>Engineering Structures</i> , 2018, 177, 444-458.	5.3	23
18	Superelasticity and wrinkles controlled by twisting circular graphene. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 338, 634-656.	6.6	23

#	ARTICLE	IF	CITATIONS
19	Accurate approximate analytical solutions for nonlinear free vibration of systems with serial linear and nonlinear stiffness. Journal of Sound and Vibration, 2007, 307, 720-736.	3.9	19
20	Pinned modes in lossy lattices with local gain and nonlinearity. Physical Review E, 2012, 86, 036608.	2.1	19
21	Nonlinear wave propagation in porous materials based on the Biot theory. Journal of the Acoustical Society of America, 2017, 142, 756-770.	1.1	19
22	Accurate Higher-Order Analytical Approximate Solutions to Large-Amplitude Oscillating Systems with a General Non-Rational Restoring Force. Nonlinear Dynamics, 2005, 42, 267-281.	5.2	18
23	Accurate higher-order analytical approximate solutions to nonconservative nonlinear oscillators and application to van der Pol damped oscillators. International Journal of Mechanical Sciences, 2006, 48, 483-492.	6.7	18
24	Analytical analysis for large-amplitude oscillation of a rotational pendulum system. Applied Mathematics and Computation, 2011, 217, 6115-6124.	2.2	18
25	Interfacial thermal conductance in multilayer graphene/phosphorene heterostructure. Journal Physics D: Applied Physics, 2016, 49, 465301.	2.8	18
26	Comparisons of nonlinear vibrations among pure polymer plate and graphene platelet reinforced composite plates under combined transverse and parametric excitations. Composite Structures, 2021, 265, 113767.	5.8	18
27	Nonlinear vibration of a two-mass system with nonlinear stiffnesses. Nonlinear Dynamics, 2007, 49, 233-249.	5.2	17
28	Nonlinear dynamic behavior of single-layer graphene under uniformly distributed loads. Composites Part B: Engineering, 2019, 165, 473-490.	12.0	17
29	Application of a generalized Senatorâ€Bapat perturbation technique to nonlinear dynamical systems with an irrational restoring force. Computers and Mathematics With Applications, 2010, 60, 2078-2086.	2.7	16
30	Study on asymptotic analytical solutions using HAM for strongly nonlinear vibrations of a restrained cantilever beam with an intermediate lumped mass. Numerical Algorithms, 2011, 58, 293-314.	1.9	16
31	On Asymptotic Analysis for Large Amplitude Nonlinear Free Vibration of Simply Supported Laminated Plates. Journal of Vibration and Acoustics, Transactions of the ASME, 2009, 131, .	1.6	15
32	Nonlocal scale effect on Rayleigh wave propagation in porous fluid-saturated materials. International Journal of Mechanical Sciences, 2018, 148, 459-466.	6.7	15
33	Exact solutions for oscillators with quadratic damping and mixed-parity nonlinearity. Physica Scripta, 2012, 85, 045006.	2.5	14
34	Suppressing homoclinic chaos for a weak periodically excited non-smooth oscillator. Nonlinear Dynamics, 2020, 99, 1621-1642.	5.2	13
35	Application of a modified Lindstedtâ€PoincarÃ© method in coupled TDOF systems with quadratic nonlinearity and a constant external excitation. Archive of Applied Mechanics, 2009, 79, 411-431.	2.2	12
36	Thermo-acoustics generated by periodically heated thin line array. Journal of Sound and Vibration, 2018, 427, 28-40.	3.9	12

#	ARTICLE	IF	CITATIONS
37	Dynamic Response and Stability Analysis with Newton Harmonic Balance Method for Nonlinear Oscillating Dielectric Elastomer Balloons. <i>International Journal of Structural Stability and Dynamics</i> , 2018, 18, 1850152.	2.4	12
38	Dynamic Weakening of Sandstone Subjected to Repetitive Impact Loading. <i>Rock Mechanics and Rock Engineering</i> , 2019, 52, 2197-2206.	5.4	12
39	Analytical approximate periodic solutions for two-degree-of-freedom coupled van der Pol-Duffing oscillators by extended homotopy analysis method. <i>Acta Mechanica</i> , 2011, 219, 1-14.	2.1	11
40	A new method for computation of eigenvector derivatives with distinct and repeated eigenvalues in structural dynamic analysis. <i>Mechanical Systems and Signal Processing</i> , 2018, 107, 78-92.	8.0	11
41	Nonlinear Free Vibration of an Elastically-Restrained Beam with a Point Mass via the Newton-Harmonic Balancing Approach. <i>International Journal of Nonlinear Sciences and Numerical Simulation</i> , 2009, 10, .	1.0	10
42	Higher-Order Approximate Solutions to a Strongly Nonlinear Duffing Oscillator. <i>International Journal for Computational Methods in Engineering Science and Mechanics</i> , 2006, 7, 201-208.	2.1	8
43	Free vibration analysis of a structural system with a pair of irrational nonlinearities. <i>Applied Mathematical Modelling</i> , 2017, 45, 997-1007.	4.2	8
44	Broadband signal response of thermo-acoustic devices and its applications. <i>Journal of the Acoustical Society of America</i> , 2017, 141, 2430-2439.	1.1	8
45	Highly Directional Acoustic Waves Generated by a Horned Parametric Acoustic Array Loudspeaker. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , 2019, 141, .	1.6	8
46	Internal Resonance Responses of Rectangular Cross-Ply Composite Plates with Graphene Skins. <i>International Journal of Structural Stability and Dynamics</i> , 2019, 19, 1950057.	2.4	8
47	An Analytical Study for Nonlinear Free and Forced Vibration of Electrostatically Actuated MEMS Resonators. <i>International Journal of Structural Stability and Dynamics</i> , 2019, 19, 1950072.	2.4	8
48	Periodic solutions of multi-degree-of-freedom strongly nonlinear coupled van der Pol oscillators by homotopy analysis method. <i>Acta Mechanica</i> , 2011, 217, 269-285.	2.1	7
49	Extended homotopy analysis method for multi-degree-of-freedom non-autonomous nonlinear dynamical systems and its application. <i>Acta Mechanica</i> , 2012, 223, 2537-2548.	2.1	6
50	A Human-Based Study of Hand's Arm Vibration Exposure Limits for Construction Workers. <i>Journal of Vibration Engineering and Technologies</i> , 2019, 7, 379-388.	2.2	6
51	Accurate approximation to the double sine-Gordon equation. <i>International Journal of Engineering Science</i> , 2007, 45, 258-271.	5.0	5
52	Higher-order approximate solutions for nonlinear vibration of a constant-tension string. <i>Journal of Sound and Vibration</i> , 2008, 317, 440-448.	3.9	5
53	A DSC Regularized Dirac-Delta Method for Flexural Vibration of Elastically Supported FG Beams Subjected to a Moving Load. <i>International Journal of Structural Stability and Dynamics</i> , 2020, 20, 2050039.	2.4	5
54	Application of the DSC-Element method to flexural vibration of skew plates with continuous and discontinuous boundaries. <i>Thin-Walled Structures</i> , 2011, 49, 1080-1090.	5.3	4

#	ARTICLE	IF	CITATIONS
55	Analysis of Large-Amplitude Oscillations in Triple-Well Non-Natural Systems. Journal of Computational and Nonlinear Dynamics, 2019, 14, .	1.2	4
56	Periodic solutions for n -dimensional generalized Liénard type n -Laplacian functional differential system. Nonlinear Analysis: Theory, Methods & Applications, 2009, 71, 5906-5914.	1.1	3
57	Buckling and Vibration of Elastically Restrained Standing Vertical Plates. Journal of Vibration and Acoustics, Transactions of the ASME, 2012, 134, .	1.6	3
58	Bifurcation and Chaotic Analysis for Cable Vibration of a Cable-Stayed Bridge. International Journal of Structural Stability and Dynamics, 2020, 20, 2071004.	2.4	3
59	On nonlinear oscillation response of a negatively dissipated oscillator and its analogy to long Josephson junction. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 368, 289-298.	2.1	2
60	On the reflection and diffraction of carbon nanotube array thin film. Wave Motion, 2019, 90, 196-204.	2.0	2
61	Nonlinear Dynamics and Performance Enhancement of Multi-stable Wideband Energy Harvesting: Theoretical Analysis. IOP Conference Series: Materials Science and Engineering, 2019, 531, 012040.	0.6	1
62	Homotopy Analysis Method for Multi-Degree-of-Freedom Nonlinear Dynamical Systems. , 2010, , .		0
63	Free Vibration Analysis of Cracked Orthotropic Rectangular Plates Under Thermal Effect. Lecture Notes in Civil Engineering, 2020, , 223-233.	0.4	0