Sundaramoorthy Rajasekaran

List of Publications by Year
in descending order

68 papers	1,747 citations	304743 22 h-index	276875 41 g-index
72 all docs	72 docs citations	72 times ranked	1045 citing authors

#	Article	IF	Citations
1	On the mechanics of shear deformable micro beams under thermo-mechanical loads using finite element analysis and deep learning neural network. Mechanics Based Design of Structures and Machines, 2023, 51, 6612-6656.	4.7	6
2	Static, stability and dynamic characteristics of asymmetric bi-directional functionally graded sandwich tapered elastic arches in thermo-mechanical environments. European Journal of Mechanics, A/Solids, 2022, 92, 104447.	3.7	14
3	Thermo-mechanics of multi-directional functionally graded elastic sandwich plates. Thin-Walled Structures, 2022, 176, 109266.	5.3	7
4	Bi-directional functionally graded thin-walled non-prismatic Euler beams of generic open/closed cross section Part II: Static, stability and free vibration studies. Thin-Walled Structures, 2019, 141, 646-674.	5.3	7
5	Size-dependent forced vibration of non-uniform bi-directional functionally graded beams embedded in variable elastic environment carrying a moving harmonic mass. Applied Mathematical Modelling, 2019, 72, 129-154.	4.2	50
6	Bi-directional functionally graded thin-walled non-prismatic Euler beams of generic open/closed cross section Part I: Theoretical formulations. Thin-Walled Structures, 2019, 141, 627-645.	5.3	20
7	Finite element static and dynamic analysis of axially functionally graded nonuniform small-scale beams based on nonlocal strain gradient theory. Mechanics of Advanced Materials and Structures, 2019, 26, 1245-1259.	2.6	54
8	Mechanical analysis of non-uniform bi-directional functionally graded intelligent micro-beams using modified couple stress theory. Materials Research Express, 2018, 5, 055703.	1.6	40
9	Analysis of axially functionally graded nano-tapered Timoshenko beams by element-based Bernstein pseudospectral collocation (EBBPC). Engineering With Computers, 2018, 34, 543-563.	6.1	14
10	Bending, buckling and vibration analysis of functionally graded non-uniform nanobeams via finite element method. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	26
11	Free vibration analysis of bi-directional functionally graded single/multi-cracked beams. International Journal of Mechanical Sciences, 2018, 144, 341-356.	6.7	48
12	Bending, buckling and vibration of small-scale tapered beams. International Journal of Engineering Science, 2017, 120, 172-188.	5.0	62
13	Free vibration analysis of axially functionally graded tapered Timoshenko beams using differential transformation element method and differential quadrature element method of lowest-order. Meccanica, 2014, 49, 995-1009.	2.0	48
14	Analysis of curved beams using a new differential transformation based curved beam element. Meccanica, 2014, 49, 863-886.	2.0	21
15	Elastic stability of all edges simply supported, stepped and stiffened rectangular plate under Biaxial loading. Applied Mathematical Modelling, 2014, 38, 479-495.	4.2	1
16	Elastic stability of all edges clamped stepped and stiffened rectangular plate under uni-axial, bi-axial and shearing forces. Meccanica, 2013, 48, 2325-2337.	2.0	4
17	Buckling and vibration of axially functionally graded nonuniform beams using differential transformation based dynamic stiffness approach. Meccanica, 2013, 48, 1053-1070.	2.0	47
18	Differential transformation and differential quadrature methods for centrifugally stiffened axially functionally graded tapered beams. International Journal of Mechanical Sciences, 2013, 74, 15-31.	6.7	79

#	ARTICLE	IF	CITATIONS
19	Free vibration of centrifugally stiffened axially functionally graded tapered Timoshenko beams using differential transformation and quadrature methods. Applied Mathematical Modelling, 2013, 37, 4440-4463.	4.2	88
20	Static, stability and free vibration analysis of arches using a new differential transformation-based arch element. International Journal of Mechanical Sciences, 2013, 77, 82-97.	6.7	17
21	Buckling and vibration of stepped rectangular plates by element-based differential transform method. IES Journal Part A: Civil and Structural Engineering, 2013, 6, 51-64.	0.4	2
22	Elastic stability of all edges simply supported, stepped and stiffened rectangular plate under uniaxial loading. Applied Mathematical Modelling, 2012, 36, 5758-5772.	4.2	9
23	Free vibration and stability of tapered Euler–Bernoulli beams made of axially functionally graded materials. Applied Mathematical Modelling, 2012, 36, 3094-3111.	4.2	185
24	Ant colony optimisation of spatial steel structures under static and earthquake loading. Civil Engineering and Environmental Systems, 2009, 26, 339-354.	0.9	6
25	Structural mechanics approach for Carbon Nanotubes. KSCE Journal of Civil Engineering, 2009, 13, 347-358.	1.9	2
26	Support vector regression methodology for storm surge predictions. Ocean Engineering, 2008, 35, 1578-1587.	4.3	154
27	Hybridization of genetic algorithm with immune system for optimization problems in structural engineering. Structural and Multidisciplinary Optimization, 2007, 34, 415-429.	3.5	22
28	MicroARTMAP for pattern recognition problems. Advances in Engineering Software, 2007, 38, 698-709.	3.8	1
29	GENERATION OF ARTIFICIAL EARTHQUAKE MOTION RECORDS USING WAVELETS AND PRINCIPAL COMPONENT ANALYSIS. Journal of Earthquake Engineering, 2006, 10, 665-691.	2.5	20
30	Tidal level forecasting using functional and sequential learning neural networks. Applied Mathematical Modelling, 2006, 30, 85-103.	4.2	31
31	Optimal laminate sequence of non-prismatic thin-walled composite spatial members of generic section. Composite Structures, 2005, 70, 200-211.	5.8	14
32	Discussion of "Shear Compression Failure in Reinforced Concrete Deep Beams" by Prodromos D. Zararis. Journal of Structural Engineering, 2005, 131, 988-991.	3.4	2
33	Tidal Level Forecasting during Typhoon Surge Using Functional and Sequential Learning Neural Networks. Journal of Waterway, Port, Coastal and Ocean Engineering, 2005, 131, 321-324.	1.2	8
34	Functional Networks in Structural Engineering. Journal of Computing in Civil Engineering, 2004, 18, 172-181.	4.7	15
35	Discussion of "Neural Network Modeling of Confined Compressive Strength and Strain of Circular Concrete Columns" by Andres W. C. Oreta and Kuzuhiko Kawashima. Journal of Structural Engineering, 2004, 130, 1634-1635.	3.4	2
36	Image recognition using analog-ART1 architecture augmented with moment-based feature extractor. Neurocomputing, 2004, 56, 61-77.	5.9	4

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37	The optimisation of space structures using evolution strategies with functional networks. Engineering With Computers, 2004, 20, 75-87.	6.1	10
38	Discussion of â€œFormulation of Cracked Beam Element for Structural Analysisâ€•by E. Viola, L. Nobile, and L. Federici. Journal of Engineering Mechanics - ASCE, 2003, 129, 704-705.	2.9	0
39	Discussion of â€œNeural Network Model for Uplift Load Capacity of Metal Roof Panelsâ€•by Gene F. Sirca Jr. and Hojjat Adeli. Journal of Structural Engineering, 2003, 129, 562-562.	3.4	3
40	Discussion of â€œPrediction of Ultimate Shear Strength of Reinforced-Concrete Deep Beams Using Neural Networksâ€•by A. Sanad and M. P. Saka. Journal of Structural Engineering, 2002, 128, 1623-1624.	3.4	1
41	Sequential learning artificial fuzzy neural networks (SLAFNN) with single hidden layer. Neurocomputing, 2002, 42, 287-310.	5.9	4
42	Application of Sequential Learning Neural Networks to Civil Engineering Modeling Problems. Engineering With Computers, 2002, 18, 138-147.	6.1	14
43	Recurrent neural dynamic models for equilibrium and eigenvalue problems. Mathematical and Computer Modelling, 2002, 35, 229-240.	2.0	2
44	Predictions of design parameters in civil engineering problems using SLNN with a single hidden RBF neuron. Computers and Structures, 2002, 80, 2495-2505.	4.4	39
45	Methodology for Exact Solution of Catenary. Journal of Structural Engineering, 2001, 127, 471-472.	3.4	1
46	Simplified Fuzzy ARTMAP as Pattern Recognizer. Journal of Computing in Civil Engineering, 2000, 14, 92-99.	4.7	12
47	Artificial neural network and genetic algorithm for the design optimizaton of industrial roofs â€"A comparison. Computers and Structures, 1996, 58, 747-755.	4.4	26
48	Constitutive modeling of concrete using a new failure criterion. Computers and Structures, 1996, 58, 1003-1014.	4.4	15
49	Artificial fuzzy neural networks in civil engineering. Computers and Structures, 1996, 61, 291-302.	4.4	20
50	A new contouring algorithm. Computers and Structures, 1995, 54, 953-977.	4.4	3
51	Equations for Tapered Thinâ€Walled Beams of Generic Open Section. Journal of Engineering Mechanics - ASCE, 1994, 120, 1607-1629.	2.9	34
52	Instability of Tapered Thinâ€Walled Beams of Generic Section. Journal of Engineering Mechanics - ASCE, 1994, 120, 1630-1640.	2.9	20
53	Closure to â€œ Finite Element Analysis of Thinâ€Walled Curved Beams Made of Composites â€•by G. S. Palani and Sundaramoorthy Rajasekaran (August, 1992, Vol. 118, No. 8). Journal of Structural Engineering, 1994, 120, 673-674.	3.4	0
54	Discussion of â€œ Geometric and Material Nonlinear Analysis of Thinâ€Walled Beamâ€Columns â€•by J. L. Meek and W. J. Lin (June, 1990, Vol. 116, No. 6). Journal of Structural Engineering, 1992, 118, 1150-1151.	3.4	0

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55	Finite Element Analysis of Thinâ€Walled Curved Beams Made of Composites. Journal of Structural Engineering, 1992, 118, 2039-2061.	3.4	20
56	Energy Equation for Beam Lateral Buckling. Journal of Structural Engineering, 1992, 118, 1462-1479.	3.4	43
57	Configuration of deep funicular shells by boundary integral element method. Computers and Structures, 1992, 44, 213-221.	4.4	7
58	Closure of â€œ Equations of Curved Beams â€•by Sundaramoorthy Rajasekaran and S. Padmanabhan (May,) Tj ETQq0 0 0 rgBT /Overloc	2.9	0
59	Discussion of â€œ Flexuralâ€Torsional Buckling of Arches â€•by John P. Papangelis and Nicholas S. Trahair (April, 1987, Vol. 113, No. 4). Journal of Structural Engineering, 1989, 115, 243-245.	3.4	1
60	Buckling Analysis of Segmented Conical Concrete Shell Roof. Journal of Structural Engineering, 1989, 115, 1514-1524.	3.4	2
61	Equations of Curved Beams. Journal of Engineering Mechanics - ASCE, 1989, 115, 1094-1111.	2.9	104
62	Finite element analysis of laminated anisotropic thin-walled open-section beams by R. K. Gupta, A. Venkatesh and K. P. Rao. Composite Structures, 1987, 7, 225-226.	5.8	0
63	A note on plotting curves. Computers and Structures, 1984, 19, 497-500.	4.4	3
64	Flexural strength of prestressed concrete beams â€" A graphical solution. Building and Environment, 1975, 10, 73-78.	0.1	0
65	Technique for Formulating Beam Equations. Journal of the Engineering Mechanics Division, 1975, 101, 561-573.	0.4	22
66	Coupled Local Buckling in Wide-Flange Beam-Columns. Journal of the Structural Division, 1973, 99, 1003-1023.	0.2	28
67	Finite Element Solution of Inelastic Beam Equations. Journal of the Structural Division, 1973, 99, 1025-1041.	0.2	24
68	Incremental Finite Element Matrices. Journal of the Structural Division, 1973, 99, 2423-2438.	0.2	158