Sundaramoorthy Rajasekaran

List of Publications by Year
in descending order

68	1,747	304743	276875
papers	citations	22 h-index	41 g-index

72	72	72	1045
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	Free vibration and stability of tapered Eulerâ€“Bernoulli beams made of axially functionally graded materials. Applied Mathematical Modelling, 2012, 36, 3094-3111.	4.2	185
2	Incremental Finite Element Matrices. Journal of the Structural Division, 1973, 99, 2423-2438.	0.2	158
3	Support vector regression methodology for storm surge predictions. Ocean Engineering, 2008, 35, 1578-1587.	4.3	154
4	Equations of Curved Beams. Journal of Engineering Mechanics - ASCE, 1989, 115, 1094-1111.	2.9	104
5	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
6	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
7	Bending, buckling and vibration of small-scale tapered beams. International Journal of Engineering Science, 2017, 120, 172-188.	5.0	62
8	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
9	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
10	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
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	Buckling and vibration of axially functionally graded nonuniform beams using differential transformation based dynamic stiffness approach. Meccanica, 2013, 48, 1053-1070.	2.0	47
13	Energy Equation for Beam Lateral Buckling. Journal of Structural Engineering, 1992, 118, 1462-1479.	3.4	43
14	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
15	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
16	Equations for Tapered Thinâ€Walled Beams of Generic Open Section. Journal of Engineering Mechanics - ASCE, 1994, 120, 1607-1629.	2.9	34
17	Tidal level forecasting using functional and sequential learning neural networks. Applied Mathematical Modelling, 2006, 30, 85-103.	4.2	31
18	Coupled Local Buckling in Wide-Flange Beam-Columns. Journal of the Structural Division, 1973, 99, 1003-1023.	0.2	28

#	Article	IF	Citations
19	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
20	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
21	Finite Element Solution of Inelastic Beam Equations. Journal of the Structural Division, 1973, 99, 1025-1041.	0.2	24
22	Hybridization of genetic algorithm with immune system for optimization problems in structural engineering. Structural and Multidisciplinary Optimization, 2007, 34, 415-429.	3.5	22
23	Technique for Formulating Beam Equations. Journal of the Engineering Mechanics Division, 1975, 101, 561-573.	0.4	22
24	Analysis of curved beams using a new differential transformation based curved beam element. Meccanica, 2014, 49, 863-886.	2.0	21
25	Finite Element Analysis of Thinâ€Walled Curved Beams Made of Composites. Journal of Structural Engineering, 1992, 118, 2039-2061.	3.4	20
26	Instability of Tapered Thinâ€Walled Beams of Generic Section. Journal of Engineering Mechanics - ASCE, 1994, 120, 1630-1640.	2.9	20
27	Artificial fuzzy neural networks in civil engineering. Computers and Structures, 1996, 61, 291-302.	4.4	20
28	GENERATION OF ARTIFICIAL EARTHQUAKE MOTION RECORDS USING WAVELETS AND PRINCIPAL COMPONENT ANALYSIS. Journal of Earthquake Engineering, 2006, 10, 665-691.	2.5	20
29	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
30	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
31	Constitutive modeling of concrete using a new failure criterion. Computers and Structures, 1996, 58, 1003-1014.	4.4	15
32	Functional Networks in Structural Engineering. Journal of Computing in Civil Engineering, 2004, 18, 172-181.	4.7	15
33	Application of Sequential Learning Neural Networks to Civil Engineering Modeling Problems. Engineering With Computers, 2002, 18, 138-147.	6.1	14
34	Optimal laminate sequence of non-prismatic thin-walled composite spatial members of generic section. Composite Structures, 2005, 70, 200-211.	5.8	14
35	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
36	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

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37	Simplified Fuzzy ARTMAP as Pattern Recognizer. Journal of Computing in Civil Engineering, 2000, 14, 92-99.	4.7	12
38	The optimisation of space structures using evolution strategies with functional networks. Engineering With Computers, 2004, 20, 75-87.	6.1	10
39	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
40	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
41	Configuration of deep funicular shells by boundary integral element method. Computers and Structures, 1992, 44, 213-221.	4.4	7
42	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
43	Thermo-mechanics of multi-directional functionally graded elastic sandwich plates. Thin-Walled Structures, 2022, 176, 109266.	5.3	7
44	Ant colony optimisation of spatial steel structures under static and earthquake loading. Civil Engineering and Environmental Systems, 2009, 26, 339-354.	0.9	6
45	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
46	Sequential learning artificial fuzzy neural networks (SLAFNN) with single hidden layer. Neurocomputing, 2002, 42, 287-310.	5.9	4
47	Image recognition using analog-ART1 architecture augmented with moment-based feature extractor. Neurocomputing, 2004, 56, 61-77.	5.9	4
48	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
49	A note on plotting curves. Computers and Structures, 1984, 19, 497-500.	4.4	3
50	A new contouring algorithm. Computers and Structures, 1995, 54, 953-977.	4.4	3
51	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
52	Buckling Analysis of Segmented Conical Concrete Shell Roof. Journal of Structural Engineering, 1989, 115, 1514-1524.	3.4	2
53	Recurrent neural dynamic models for equilibrium and eigenvalue problems. Mathematical and Computer Modelling, 2002, 35, 229-240.	2.0	2
54	Discussion of â€œNeural Network Modeling of Confined Compressive Strength and Strain of Circular Concrete Columnsâ€•by Andres W. C. Oreta and Kuzuhiko Kawashima. Journal of Structural Engineering, 2004, 130, 1634-1635.	3.4	2

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55	Discussion of â€œShear Compression Failure in Reinforced Concrete Deep Beamsâ€•by Prodromos D. Zararis. Journal of Structural Engineering, 2005, 131, 988-991.	3.4	2
56	Structural mechanics approach for Carbon Nanotubes. KSCE Journal of Civil Engineering, 2009, 13, 347-358.	1.9	2
57	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
58	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
59	Methodology for Exact Solution of Catenary. Journal of Structural Engineering, 2001, 127, 471-472.	3.4	1
60	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
61	MicroARTMAP for pattern recognition problems. Advances in Engineering Software, 2007, 38, 698-709.	3.8	1
62	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
63	Flexural strength of prestressed concrete beams â€” A graphical solution. Building and Environment, 1975, 10, 73-78.	0.1	0
64	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
65	Closure of â€œ Equations of Curved Beams â€•by Sundaramoorthy Rajasekaran and S. Padmanabhan (May,) Tj ETQq1 1 0.784314 rgBT	2.9	0
66	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
67	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
68	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