

Song Cen

List of Publications by Year in descending order

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papers

1,627
citations

257101

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97
all docs

97
docs citations

97
times ranked

534
citing authors

#	ARTICLE	IF	CITATIONS
1	An efficient 4-node facet shell element for the modified couple stress elasticity. International Journal for Numerical Methods in Engineering, 2022, 123, 992-1012.	1.5	5
2	Shape-free polygonal hybrid displacement-function element method for analyses of Mindlin-Reissner plates. Engineering With Computers, 2021, 37, 1975.	3.5	4
3	Generalized conforming Trefftz element for size-dependent analysis of thin microplates based on the modified couple stress theory. Engineering Analysis With Boundary Elements, 2021, 125, 46-58.	2.0	11
4	Shape-free arbitrary polygonal hybrid stress/displacement-function flat shell element for linear and geometrically nonlinear analyses. International Journal for Numerical Methods in Engineering, 2021, 122, 4172-4218.	1.5	4
5	Extension of the unsymmetric 8-node hexahedral solid element US-ATFH8 to geometrically nonlinear analysis. Engineering Computations, 2021, 38, 3219-3253.	0.7	1
6	Hyperelastic finite deformation analysis with the unsymmetric finite element method containing homogeneous solutions of linear elasticity. International Journal for Numerical Methods in Engineering, 2020, 121, 3702-3721.	1.5	9
7	An unsymmetric 8-node hexahedral solid-shell element with high distortion tolerance: Geometric nonlinear formulations. International Journal for Numerical Methods in Engineering, 2019, 120, 580-606.	1.5	9
8	A simple unsymmetric 4-node 12-DOF membrane element for the modified couple stress theory. International Journal for Numerical Methods in Engineering, 2019, 119, 807-825.	1.5	14
9	Some advances in high-performance finite element methods. Engineering Computations, 2019, 36, 2811-2834.	0.7	17
10	High-performance geometric nonlinear analysis with the unsymmetric 4-node, 8-DOF plane element US-ATFQ4. International Journal for Numerical Methods in Engineering, 2018, 114, 931-954.	1.5	27
11	New hybrid-Trefftz Mindlin-Reissner plate elements for efficiently modeling the edge zones near free/SS1 edges. Engineering Computations, 2018, 35, 136-156.	0.7	1
12	A High-Performance Quadrilateral Flat Shell Element for Seismic Collapse Simulation of Tall Buildings and Its Implementation in OpenSees. Journal of Earthquake Engineering, 2018, 22, 1662-1682.	1.4	33
13	High-performance unsymmetric 3-node triangular membrane element with drilling DOFs can correctly undertake in-plane moments. Engineering Computations, 2018, 35, 2543-2556.	0.7	11
14	8-node unsymmetric distortion-immune element based on Airy stress solutions for plane orthotropic problems. Acta Mechanica, 2018, 229, 5031-5049.	1.1	12
15	Numerical investigation of the fluid lag during hydraulic fracturing. Engineering Computations, 2018, 35, 2050-2077.	0.7	16
16	An unsymmetric 8-node hexahedral solid-shell element with high distortion tolerance: Linear formulations. International Journal for Numerical Methods in Engineering, 2018, 116, 759-783.	1.5	19
17	An unsymmetric 8-node hexahedral element with high distortion tolerance. International Journal for Numerical Methods in Engineering, 2017, 109, 1130-1158.	1.5	35
18	Distortion-resistant and locking-free eight-node elements effectively capturing the edge effects of Mindlin-Reissner plates. Engineering Computations, 2017, 34, 548-586.	0.7	7

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19	Improved hybrid displacement function (IHDF) element scheme for analysis of Mindlin-Reissner plate with edge effect. <i>International Journal for Numerical Methods in Engineering</i> , 2017, 111, 1120-1169.	1.5	3
20	A New Triangular Hybrid Displacement Function Element for Static and Free Vibration Analyses of Mindlin-Reissner Plate. <i>Latin American Journal of Solids and Structures</i> , 2017, 14, 765-804.	0.6	9
21	Advances in Finite Element Method 2016. <i>Mathematical Problems in Engineering</i> , 2016, 2016, 1-2.	0.6	0
22	Quasi-Static Crack Propagation Modeling Using Shape-Free Hybrid Stress-Function Elements with Drilling Degrees of Freedom. <i>International Journal of Computational Methods</i> , 2016, 13, 1650014.	0.8	2
23	A 4-node quadrilateral flat shell element formulated by the shape-free HDF plate and HSF membrane elements. <i>Engineering Computations</i> , 2016, 33, .	0.7	11
24	A Novel Shape-Free Plane Quadratic Polygonal Hybrid Stress-Function Element. <i>Mathematical Problems in Engineering</i> , 2015, 2015, 1-13.	0.6	7
25	Developments of Mindlin-Reissner Plate Elements. <i>Mathematical Problems in Engineering</i> , 2015, 2015, 1-12.	0.6	27
26	Advances in Finite Element Method 2014. <i>Mathematical Problems in Engineering</i> , 2015, 2015, 1-2.	0.6	0
27	Four-Node Generalized Conforming Membrane Elements with Drilling DOFs Using Quadrilateral Area Coordinate Methods. <i>Mathematical Problems in Engineering</i> , 2015, 2015, 1-13.	0.6	1
28	Two generalized conforming quadrilateral Mindlin-Reissner plate elements based on the displacement function. <i>Finite Elements in Analysis and Design</i> , 2015, 99, 24-38.	1.7	14
29	Predictions of elastic property on 2.5D C/SiC composites based on numerical modeling and semi-analytical method. <i>Composites Part B: Engineering</i> , 2015, 74, 53-65.	5.9	34
30	A priori error estimation for the stochastic perturbation method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 286, 1-21.	3.4	9
31	An effective hybrid displacement function element method for solving the edge effect of Mindlin-Reissner plate. <i>International Journal for Numerical Methods in Engineering</i> , 2015, 102, 1449-1487.	1.5	19
32	An unsymmetric 4-node, 8-DOF plane membrane element perfectly breaking through MacNeal's theorem. <i>International Journal for Numerical Methods in Engineering</i> , 2015, 103, 469-500.	1.5	38
33	Comparing different fidelity models for the impact analysis of large commercial aircrafts on a containment building. <i>Engineering Failure Analysis</i> , 2015, 57, 254-269.	1.8	21
34	Advances in Finite Element Method. <i>Mathematical Problems in Engineering</i> , 2014, 2014, 1-2.	0.6	4
35	Hybrid displacement function element method: a simple hybrid-Trefftz stress element method for analysis of Mindlin-Reissner plate. <i>International Journal for Numerical Methods in Engineering</i> , 2014, 98, 203-234.	1.5	38
36	A quasi-static crack propagation simulation based on shape-free hybrid stress-function finite elements with simple remeshing. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 275, 159-188.	3.4	17

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37	Shape-Free Finite Element Method: Another Way between Mesh and Mesh-Free Methods. <i>Mathematical Problems in Engineering</i> , 2013, 2013, 1-14.	0.6	6
38	Several Treatments on Nonconforming Element Failed in the Strict Patch Test. <i>Mathematical Problems in Engineering</i> , 2013, 2013, 1-7.	0.6	2
39	Generalized Neumann Expansion and Its Application in Stochastic Finite Element Methods. <i>Mathematical Problems in Engineering</i> , 2013, 2013, 1-13.	0.6	6
40	A novel joint diagonalization approach for linear stochastic systems and reliability analysis. <i>Engineering Computations</i> , 2012, 29, 221-244.	0.7	9
41	Characteristic equation solution strategy for deriving fundamental analytical solutions of 3D isotropic elasticity. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2012, 33, 1253-1264.	1.9	7
42	A shape-free 8-node plane element unsymmetric analytical trial function method. <i>International Journal for Numerical Methods in Engineering</i> , 2012, 91, 158-185.	1.5	46
43	8- and 12-node plane hybrid stress-function elements immune to severely distorted mesh containing elements with concave shapes. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2011, 200, 2321-2336.	3.4	79
44	Shape-free finite element method: The plane hybrid stress-function (HS-F) element method for anisotropic materials. <i>Science China: Physics, Mechanics and Astronomy</i> , 2011, 54, 653-665.	2.0	34
45	A 4-node hybrid stress-function (HS-F) plane element with drilling degrees of freedom less sensitive to severe mesh distortions. <i>Computers and Structures</i> , 2011, 89, 517-528.	2.4	69
46	A novel hybrid stress-function finite element method immune to severe mesh distortion. <i>IOP Conference Series: Materials Science and Engineering</i> , 2010, 10, 012220.	0.3	2
47	A joint diagonalisation approach for linear stochastic systems. <i>Computers and Structures</i> , 2010, 88, 1137-1148.	2.4	12
48	A hybrid-stress element based on Hamilton principle. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2010, 26, 625-634.	1.5	6
49	The third form of the quadrilateral area coordinate method (QACM-III): Theory, application, and scheme of composite coordinate interpolation. <i>Finite Elements in Analysis and Design</i> , 2010, 46, 805-818.	1.7	25
50	On convergence of nonconforming convex quadrilateral finite elements AGQ6. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2010, 199, 1816-1827.	3.4	10
51	Introduction To The Third Form Of The Quadrilateral Area Coordinate Method (QACM-III). , 2010, , .		0
52	Analytical trial function method for development of new 8-node plane element based on the variational principle containing Airy stress function. <i>Engineering Computations</i> , 2010, 27, 442-463.	0.7	58
53	Quadrilateral membrane elements with analytical element stiffness matrices formulated by the new quadrilateral area coordinate method (QACM-III). <i>International Journal for Numerical Methods in Engineering</i> , 2009, 77, 1172-1200.	1.5	30
54	Advanced Finite Element Method in Structural Engineering. , 2009, , .		61

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55	Generalized Conforming Thin Plate Element II – Line-Point and SemiLoof Conforming Schemes. , 2009, , 120-175.		0
56	Generalized Conforming Element for the Analysis of Piezoelectric Laminated Composite Plates. , 2009, , 304-324.		0
57	The Sub-Region Variational Principles. , 2009, , 15-65.		0
58	Sub-Region Mixed Element I – Fundamental Theory and Crack Problem. , 2009, , 405-437.		0
59	Variational Principles with Several Adjustable Parameters. , 2009, , 66-85.		0
60	Sub-Region Mixed Element II – V-Notch Problem. , 2009, , 438-494.		0
61	Generalized Conforming Element for the Analysis of the Laminated Composite Plates. , 2009, , 268-303.		0
62	Generalized Conforming Thin Plate Element III – Perimeter-Point and Least-Square Conforming Schemes. , 2009, , 176-202.		0
63	Generalized Conforming Thin Plate Element I – Introduction. , 2009, , 101-119.		0
64	Analytical Trial Function Method I – Membrane and Plate Bending Elements. , 2009, , 495-517.		0
65	Quadrilateral Area Coordinate Systems, Part II – New Tools for Constructing Quadrilateral Elements. , 2009, , 582-640.		0
66	Quadrilateral Area Coordinate Systems, Part I – Theory and Formulae. , 2009, , 546-581.		0
67	Generalized Conforming Membrane and Shell Elements. , 2009, , 325-401.		0
68	Analytical Trial Function Method II – Singular Elements with Crack and Notch. , 2009, , 518-545.		0
69	Generalized Conforming Thick Plate Element. , 2009, , 203-267.		0
70	Geometrically nonlinear analysis with a 4-node membrane element formulated by the quadrilateral area coordinate method. Finite Elements in Analysis and Design, 2008, 44, 427-438.	1.7	15
71	A new quadrilateral area coordinate method (QACM) for developing quadrilateral finite element models. International Journal for Numerical Methods in Engineering, 2008, 73, 1911-1941.	1.5	43
72	Hexahedral volume coordinate method (HVCN) and improvements on 3D Wilson hexahedral element. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 4531-4548.	3.4	30

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73	The Analytical Trial Function Method (ATFM) for Finite Element Analysis of Plane Crack/Notch Problems. Key Engineering Materials, 2008, 385-387, 617-620.	0.4	9
74	Quadrilateral membrane element family formulated by the quadrilateral area coordinate method. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 4337-4353.	3.4	57
75	Application of the quadrilateral area coordinate method: a new element for laminated composite plate bending problems. Acta Mechanica Sinica/Lixue Xuebao, 2007, 23, 561-575.	1.5	16
76	Some Recent Advances on the Quadrilateral Area Coordinate Method. , 2007, , 380-380.		1
77	Application of the quadrilateral area co-ordinate method: a new element for Mindlin's Reissner plate. International Journal for Numerical Methods in Engineering, 2006, 66, 1-45.	1.5	70
78	The analytical element stiffness matrix of a recent 4-node membrane element formulated by the quadrilateral area co-ordinate method. Communications in Numerical Methods in Engineering, 2006, 23, 1095-1110.	1.3	17
79	Computational Strategies for Curved-side Elements Formulated by Quadrilateral Area Coordinates (QAC). , 2006, , 250-250.		0
80	Numerical determination of effective properties of voided piezoelectric materials using BNM. Engineering Analysis With Boundary Elements, 2005, 29, 636-646.	2.0	17
81	Membrane elements insensitive to distortion using the quadrilateral area coordinate method. Computers and Structures, 2004, 82, 35-54.	2.4	97
82	A meshless singular hybrid boundary node method for 2D elastostatics. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers, Series A/Chung-kuo Kung Ch'eng Hsueh K'an, 2004, 27, 481-490.	0.6	9
83	Development of triangular flat-shell element using a new thin-thick plate bending element based on semiLoof constrains. Structural Engineering and Mechanics, 2003, 15, 83-114.	1.0	13
84	A new 4-node quadrilateral FE model with variable electrical degrees of freedom for the analysis of piezoelectric laminated composite plates. Composite Structures, 2002, 58, 583-599.	3.1	60
85	A new hybrid-enhanced displacement-based element for the analysis of laminated composite plates. Computers and Structures, 2002, 80, 819-833.	2.4	37
86	Method of Area Coordinate " From Triangular to Quadrilateral Elements. Advances in Structural Engineering, 2001, 4, 1-11.	1.2	9
87	A new twelve DOF quadrilateral element for analysis of thick and thin plates. European Journal of Mechanics, A/Solids, 2001, 20, 299-326.	2.1	71
88	A new hybrid-enhanced displacement-based element for the analysis of laminated composite plates. , 2001, , 95-98.		1
89	Area co-ordinates used in quadrilateral elements. Communications in Numerical Methods in Engineering, 1999, 15, 533-545.	1.3	58
90	Some basic formulae for area co-ordinates in quadrilateral elements. Communications in Numerical Methods in Engineering, 1999, 15, 841-852.	1.3	40

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91	Area co-ordinates used in quadrilateral elements. , 1999, 15, 533.		1
92	Some basic formulae for area co-ordinates in quadrilateral elements. , 1999, 15, 841.		1
93	Elastic-Plastic Torque Analysis of Notched Cross-Section Bars Using the Finite Difference Method. Key Engineering Materials, 0, 385-387, 869-872.	0.4	1
94	Effect of Beam Height on Elastic Impact Load Subjected to Transverse Impact of Bar. Key Engineering Materials, 0, 462-463, 259-264.	0.4	3