

# Thomas J R Hughes

## List of Publications by Year in descending order

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358  
papers

67,292  
citations

558

126  
h-index

736

251  
g-index

395  
all docs

395  
docs citations

395  
times ranked

14428  
citing authors

#	ARTICLE	IF	CITATIONS
1	Discontinuous Galerkin methods through the lens of variational multiscale analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2022, 388, 114220.	6.6	8
2	Isogeometric model reconstruction of open shells via Ricci flow and quadrilateral layout-inducing energies. <i>Engineering Structures</i> , 2022, 252, 113602.	5.3	9
3	Analysis-suitable unstructured T-splines: Multiple extraordinary points per face. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2022, 391, 114494.	6.6	25
4	Galerkin Formulations with Greville Quadrature Rules for Isogeometric Shell Analysis: Higher Order Elements and Locking. , 2022, , 207-215.		0
5	A Comparison of Matrix-Free Isogeometric Galerkin and Collocation Methods for Karhunen-Loève Expansion. , 2022, , 329-341.		0
6	Dynamic Fracture of Brittle Shells in a Space-Time Adaptive Isogeometric Phase Field Framework. , 2022, , 407-415.		0
7	An accurate strategy for computing reaction forces and fluxes on trimmed locally refined meshes. <i>Journal of Mechanics</i> , 2022, 38, 60-76.	1.4	5
8	Quadrilateral layout generation and optimization using equivalence classes of integral curves: theory and application to surfaces with boundaries. <i>Journal of Mechanics</i> , 2022, 38, 128-155.	1.4	5
9	Simulating the spread of COVID-19 via a spatially-resolved susceptible-exposed-infected-recovered-deceased (SEIRD) model with heterogeneous diffusion. <i>Applied Mathematics Letters</i> , 2021, 111, 106617.	2.7	156
10	The divergence-conforming immersed boundary method: Application to vesicle and capsule dynamics. <i>Journal of Computational Physics</i> , 2021, 425, 109872.	3.8	23
11	Tuned hybrid nonuniform subdivision surfaces with optimal convergence rates. <i>International Journal for Numerical Methods in Engineering</i> , 2021, 122, 2117-2144.	2.8	27
12	Computational medicine, present and the future: obstetrics and gynecology perspective. <i>American Journal of Obstetrics and Gynecology</i> , 2021, 224, 16-34.	1.3	7
13	Polynomial spline spaces of non-uniform bi-degree on T-meshes: combinatorial bounds on the dimension. <i>Advances in Computational Mathematics</i> , 2021, 47, 1.	1.6	1
14	Isogeometric discrete differential forms: Non-uniform degrees, B-splines, extraction, polar splines and flows on surfaces. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 376, 113576.	6.6	12
15	Patient specific, imaging-informed modeling of rhenium-186 nanoliposome delivery via convection-enhanced delivery in glioblastoma multiforme. <i>Biomedical Physics and Engineering Express</i> , 2021, 7, 045012.	1.2	6
16	A matrix-free isogeometric Galerkin method for Karhunen-Loève approximation of random fields using tensor product splines, tensor contraction and interpolation based quadrature. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 379, 113730.	6.6	13
17	Removal of spurious outlier frequencies and modes from isogeometric discretizations of second- and fourth-order problems in one, two, and three dimensions. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 387, 114115.	6.6	14
18	Smooth multi-patch discretizations in Isogeometric Analysis. <i>Handbook of Numerical Analysis</i> , 2021, , 467-543.	1.8	6

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19	Seamless integration of design and Kirchhoff Love shell analysis using analysis-suitable unstructured T-splines. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 360, 112765.	6.6	58
20	Multi-degree B-splines: Algorithmic computation and properties. <i>Computer Aided Geometric Design</i> , 2020, 76, 101792.	1.2	24
21	Thinner biological tissues induce leaflet flutter in aortic heart valve replacements. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 19007-19016.	7.1	50
22	Diffusion reaction compartmental models formulated in a continuum mechanics framework: application to COVID-19, mathematical analysis, and numerical study. <i>Computational Mechanics</i> , 2020, 66, 1131-1152.	4.0	63
23	Mixed stress-displacement isogeometric collocation for nearly incompressible elasticity and elastoplasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 369, 113112.	6.6	18
24	Towards untrimmed NURBS: CAD embedded reparameterization of trimmed B-rep geometry using frame-field guided global parameterization. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 369, 113227.	6.6	21
25	<a href="#">A numerical simulation study of the dual role of <math>\alpha</math>-ketoacid dehydrogenase inhibitors on tumor growth in prostates enlarged by benign prostatic hyperplasia via stress relaxation and apoptosis upregulation.</a> <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 362, 112843.	6.6	11
26	An adaptive space-time phase field formulation for dynamic fracture of brittle shells based on LR NURBS. <i>Computational Mechanics</i> , 2020, 65, 1039-1062.	4.0	32
27	A Tchebycheffian Extension of Multidegree B-Splines: Algorithmic Computation and Properties. <i>SIAM Journal on Numerical Analysis</i> , 2020, 58, 1138-1163.	2.3	15
28	Computational Cardiovascular Analysis with the Variational Multiscale Methods and Isogeometric Discretization. <i>Modeling and Simulation in Science, Engineering and Technology</i> , 2020, , 151-193.	0.6	21
29	Reconstruction of Trimmed NURBS Surfaces for Gap-Free Intersections. <i>Journal of Computing and Information Science in Engineering</i> , 2020, 20, .	2.7	1
30	Polynomial splines of non-uniform degree on triangulations: Combinatorial bounds on the dimension. <i>Computer Aided Geometric Design</i> , 2019, 75, 101763.	1.2	5
31	Fast formation and assembly of finite element matrices with application to isogeometric linear elasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 355, 234-260.	6.6	39
32	Isogeometric boundary element methods and patch tests for linear elastic problems: Formulation, numerical integration, and applications. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 357, 112591.	6.6	21
33	Watertight Boolean operations: A framework for creating CAD-compatible gap-free editable solid models. <i>CAD Computer Aided Design</i> , 2019, 115, 147-160.	2.7	19
34	An isogeometric finite element formulation for phase transitions on deforming surfaces. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 351, 441-477.	6.6	31
35	Analysis-suitable CAD Models based on Watertight Boolean Operations. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2019, 19, e201900275.	0.2	1
36	Computer simulations suggest that prostate enlargement due to benign prostatic hyperplasia mechanically impedes prostate cancer growth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 1152-1161.	7.1	79



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55	Multi-degree smooth polar splines: A framework for geometric modeling and isogeometric analysis. Computer Methods in Applied Mechanics and Engineering, 2017, 316, 1005-1061.	6.6	68
56	Truncated T-splines: Fundamentals and methods. Computer Methods in Applied Mechanics and Engineering, 2017, 316, 349-372.	6.6	67
57	Immersogeometric cardiovascular fluid-structure interaction analysis with divergence-conforming B-splines. Computer Methods in Applied Mechanics and Engineering, 2017, 314, 408-472.	6.6	80
58	Inversion of geothermal heat flux in a thermomechanically coupled nonlinear Stokes ice sheet model. Cryosphere, 2016, 10, 1477-1494.	3.9	8
59	Extended Truncated Hierarchical Catmull-Clark Subdivision. Computer Methods in Applied Mechanics and Engineering, 2016, 299, 316-336.	6.6	37
60	A phase-field formulation for fracture in ductile materials: Finite deformation balance law derivation, plastic degradation, and stress triaxiality effects. Computer Methods in Applied Mechanics and Engineering, 2016, 312, 130-166.	6.6	399
61	Isogeometric Compatible Discretizations for Viscous Incompressible Flow. Lecture Notes in Mathematics, 2016, , 155-193.	0.2	2
62	Tissue-scale, personalized modeling and simulation of prostate cancer growth. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E7663-E7671.	7.1	68
63	Isogeometric analysis of boundary integral equations: High-order collocation methods for the singular and hyper-singular equations. Mathematical Models and Methods in Applied Sciences, 2016, 26, 1447-1480.	3.3	20
64	A palette of fine-scale eddy viscosity and residual-based models for variational multiscale formulations of turbulence. Computational Mechanics, 2016, 57, 629-635.	4.0	3
65	Laudation at the AFSI 2014 Conference Banquet Celebrating Tayfun Tezduyar's 60th Birthday, Tokyo, Japan, March 2014. Modeling and Simulation in Science, Engineering and Technology, 2016, , 1-3.	0.6	0
66	Isogeometric Phase-Field Simulation of Boiling. Modeling and Simulation in Science, Engineering and Technology, 2016, , 217-228.	0.6	0
67	A collocated $C^0$ finite element method: Reduced quadrature perspective, cost comparison with standard finite elements, and explicit structural dynamics. International Journal for Numerical Methods in Engineering, 2015, 102, 576-631.	2.8	28
68	Magnetic resonance imaging-based computational modelling of blood flow and nanomedicine deposition in patients with peripheral arterial disease. Journal of the Royal Society Interface, 2015, 12, 20150001.	3.4	27
69	An Introduction to Isogeometric Collocation Methods. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2015, , 173-204.	0.6	12
70	Single-variable formulations and isogeometric discretizations for shear deformable beams. Computer Methods in Applied Mechanics and Engineering, 2015, 284, 988-1004.	6.6	90
71	An immersogeometric variational framework for fluid-structure interaction: Application to bioprosthetic heart valves. Computer Methods in Applied Mechanics and Engineering, 2015, 284, 1005-1053.	6.6	350
72	Truncated hierarchical Catmull-Clark subdivision with local refinement. Computer Methods in Applied Mechanics and Engineering, 2015, 291, 1-20.	6.6	89

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73	Selective and reduced numerical integrations for NURBS-based isogeometric analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 284, 732-761.	6.6	96
74	A locking-free model for Reissnerâ€“Mindlin plates: Analysis and isogeometric implementation via NURBS and triangular NURPS. <i>Mathematical Models and Methods in Applied Sciences</i> , 2015, 25, 1519-1551.	3.3	64
75	Isogeometric collocation for large deformation elasticity and frictional contact problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 296, 73-112.	6.6	85
76	Liquidâ€“vapor phase transition: Thermomechanical theory, entropy stable numerical formulation, and boiling simulations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 297, 476-553.	6.6	66
77	Patient-specific isogeometric structural analysis of aortic valve closure. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 284, 508-520.	6.6	102
78	Isogeometric collocation: Neumann boundary conditions and contact. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 284, 21-54.	6.6	101
79	Amplitudeâ€“phase decompositions and the growth and decay of solutions of the incompressible Navierâ€“Stokes and Euler equations. <i>Mathematical Models and Methods in Applied Sciences</i> , 2014, 24, 1017-1035.	3.3	0
80	Isogeometric contact: a review. <i>GAMM Mitteilungen</i> , 2014, 37, 85-123.	5.5	122
81	Isogeometric analysis of nearly incompressible large strain plasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 268, 388-416.	6.6	40
82	Vascular deposition patterns for nanoparticles in an inflamed patient-specific arterial tree. <i>Biomechanics and Modeling in Mechanobiology</i> , 2014, 13, 585-597.	2.8	40
83	Volumetric T-spline construction using Boolean operations. <i>Engineering With Computers</i> , 2014, 30, 425-439.	6.1	75
84	Reduced BÃ©zier element quadrature rules for quadratic and cubic splines in isogeometric analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 277, 1-45.	6.6	120
85	A residual based eddy viscosity model for the large eddy simulation of turbulent flows. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 282, 54-70.	6.6	15
86	Isogeometric boundary-element analysis for the wave-resistance problem using T-splines. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 279, 425-439.	6.6	60
87	Fluidâ€“structure interaction analysis of bioprosthetic heart valves: significance of arterial wall deformation. <i>Computational Mechanics</i> , 2014, 54, 1055-1071.	4.0	240
88	Finite element and NURBS approximations of eigenvalue, boundary-value, and initial-value problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 272, 290-320.	6.6	187
89	A higher-order phase-field model for brittle fracture: Formulation and analysis within the isogeometric analysis framework. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 273, 100-118.	6.6	418
90	USNCTAM perspectives on mechanics in medicine. <i>Journal of the Royal Society Interface</i> , 2014, 11, 20140301.	3.4	35

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91	Volumetric T-spline Construction Using Boolean Operations. , 2014, , 405-424.		3
92	Explicit trace inequalities for isogeometric analysis and parametric hexahedral finite elements. Numerische Mathematik, 2013, 123, 259-290.	1.9	37
93	ISOGEOMETRIC DIVERGENCE-CONFORMING B-SPLINES FOR THE DARCYâ€“STOKESâ€“BRINKMAN EQUATIONS. Mathematical Models and Methods in Applied Sciences, 2013, 23, 671-741.	3.3	81
94	Conformal solid T-spline construction from boundary T-spline representations. Computational Mechanics, 2013, 51, 1051-1059.	4.0	71
95	Isogeometric boundary element analysis using unstructured T-splines. Computer Methods in Applied Mechanics and Engineering, 2013, 254, 197-221.	6.6	311
96	Blended isogeometric shells. Computer Methods in Applied Mechanics and Engineering, 2013, 255, 133-146.	6.6	133
97	Isogeometric divergence-conforming B-splines for the unsteady Navierâ€“Stokes equations. Journal of Computational Physics, 2013, 241, 141-167.	3.8	120
98	Isogeometric collocation: Cost comparison with Galerkin methods and extension to adaptive hierarchical NURBS discretizations. Computer Methods in Applied Mechanics and Engineering, 2013, 267, 170-232.	6.6	248
99	Functional entropy variables: A new methodology for deriving thermodynamically consistent algorithms for complex fluids, with particular reference to the isothermal Navierâ€“Stokesâ€“Korteweg equations. Journal of Computational Physics, 2013, 248, 47-86.	3.8	57
100	Isogeometric analysis of the advective Cahnâ€“Hilliard equation: Spinodal decomposition under shear flow. Journal of Computational Physics, 2013, 242, 321-350.	3.8	90
101	<i>In silico</i> vascular modeling for personalized nanoparticle delivery. Nanomedicine, 2013, 8, 343-357.	3.3	66
102	Trivariate solid T-spline construction from boundary triangulations with arbitrary genus topology. CAD Computer Aided Design, 2013, 45, 351-360.	2.7	114
103	Isogeometric Collocation: Cost Comparison with Galerkin Methods and Extension to Adaptive Hierarchical NURBS Discretizations. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 107-108.	0.2	2
104	Simulation of laminar and turbulent concentric pipe flows with the isogeometric variational multiscale method. Computers and Fluids, 2013, 71, 146-155.	2.5	29
105	ISOGEOMETRIC DIVERGENCE-CONFORMING B-SPLINES FOR THE STEADY NAVIERâ€“STOKES EQUATIONS. Mathematical Models and Methods in Applied Sciences, 2013, 23, 1421-1478.	3.3	137
106	An inexact Gauss-Newton method for inversion of basal sliding and rheology parameters in a nonlinear Stokes ice sheet model. Journal of Glaciology, 2012, 58, 889-903.	2.2	80
107	Isogeometric collocation for elastostatics and explicit dynamics. Computer Methods in Applied Mechanics and Engineering, 2012, 249-252, 2-14.	6.6	171
108	Isogeometric Analysis for Topology Optimization with a Phase Field Model. Archives of Computational Methods in Engineering, 2012, 19, 427-465.	10.2	220



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109	Discrete spectrum analyses for various mixed discretizations of the Stokes eigenproblem. <i>Computational Mechanics</i> , 2012, 50, 667-674.	4.0	24
110	Solid T-spline construction from boundary representations for genus-zero geometry. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012, 249-252, 185-197.	6.6	133
111	An isogeometric design-through-analysis methodology based on adaptive hierarchical refinement of NURBS, immersed boundary methods, and T-spline CAD surfaces. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012, 249-252, 116-150.	6.6	372
112	A simple algorithm for obtaining nearly optimal quadrature rules for NURBS-based isogeometric analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012, 249-252, 15-27.	6.6	172
113	Isogeometric variational multiscale large-eddy simulation of fully-developed turbulent flow over a wavy wall. <i>Computers and Fluids</i> , 2012, 68, 94-104.	2.5	48
114	Converting an unstructured quadrilateral/hexahedral mesh to a rational T-spline. <i>Computational Mechanics</i> , 2012, 50, 65-84.	4.0	57
115	On linear independence of T-spline blending functions. <i>Computer Aided Geometric Design</i> , 2012, 29, 63-76.	1.2	184
116	Generalization of the twist-Kirchhoff theory of plate elements to arbitrary quadrilaterals and assessment of convergence. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012, 209-212, 101-114.	6.6	7
117	Three-dimensional mortar-based frictional contact treatment in isogeometric analysis with NURBS. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012, 209-212, 115-128.	6.6	134
118	Local refinement of analysis-suitable T-splines. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012, 213-216, 206-222.	6.6	285
119	A phase-field description of dynamic brittle fracture. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012, 217-220, 77-95.	6.6	1,196
120	A finite strain Eulerian formulation for compressible and nearly incompressible hyperelasticity using high-order T-spline finite elements. <i>International Journal for Numerical Methods in Engineering</i> , 2012, 89, 762-785.	2.8	39
121	Mathematical modeling of coupled drug and drug-encapsulated nanoparticle transport in patient-specific coronary artery walls. <i>Computational Mechanics</i> , 2012, 49, 213-242.	4.0	86
122	Converting an unstructured quadrilateral mesh to a standard T-spline surface. <i>Computational Mechanics</i> , 2011, 48, 477-498.	4.0	64
123	New rectangular plate elements based on twist-Kirchhoff theory. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2011, 200, 2547-2561.	6.6	10
124	Isogeometric finite element data structures based on Bézier extraction of NURBS. <i>International Journal for Numerical Methods in Engineering</i> , 2011, 87, 15-47.	2.8	407
125	An isogeometric approach to cohesive zone modeling. <i>International Journal for Numerical Methods in Engineering</i> , 2011, 87, 336-360.	2.8	154
126	An isogeometric analysis approach to gradient damage models. <i>International Journal for Numerical Methods in Engineering</i> , 2011, 86, 115-134.	2.8	160



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127	Isogeometric finite element data structures based on B-spline extraction of T-splines. International Journal for Numerical Methods in Engineering, 2011, 88, 126-156.	2.8	268
128	Contact treatment in isogeometric analysis with NURBS. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1100-1112.	6.6	236
129	A large deformation, rotation-free, isogeometric shell. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1367-1378.	6.6	300
130	Provably unconditionally stable, second-order time-accurate, mixed variational methods for phase-field models. Journal of Computational Physics, 2011, 230, 5310-5327.	3.8	196
131	Isogeometric Failure Analysis. , 2011, , 275-282.		1
132	Isogeometric Analysis. , 2011, , .		0
133	Improving stability of stabilized and multiscale formulations in flow simulations at small time steps. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 828-840.	6.6	199
134	Isogeometric analysis of the isothermal Navier-Stokes-Korteweg equations. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 1828-1840.	6.6	191
135	Stabilized Methods for Compressible Flows. Journal of Scientific Computing, 2010, 43, 343-368.	2.3	129
136	A generalized finite element formulation for arbitrary basis functions: From isogeometric analysis to XFEM. International Journal for Numerical Methods in Engineering, 2010, 83, 765-785.	2.8	213
137	Isogeometric variational multiscale modeling of wall-bounded turbulent flows with weakly enforced boundary conditions on unstretched meshes. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 780-790.	6.6	241
138	Efficient quadrature for NURBS-based isogeometric analysis. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 301-313.	6.6	426
139	Robustness of isogeometric structural discretizations under severe mesh distortion. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 357-373.	6.6	220
140	Isogeometric analysis using T-splines. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 229-263.	6.6	834
141	Isogeometric shell analysis: The Reissner-Mindlin shell. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 276-289.	6.6	551
142	An automatic 3D mesh generation method for domains with multiple materials. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 405-415.	6.6	146
143	Turbulence modeling for large eddy simulations. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 779.	6.6	3
144	ISOGEOMETRIC COLLOCATION METHODS. Mathematical Models and Methods in Applied Sciences, 2010, 20, 2075-2107.	3.3	308

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145	Modeling of Drug and Drug-Encapsulated Nanoparticle Transport in Patient-Specific Coronary Artery Walls to Treat Vulnerable Plaques. , 2010, , .		0
146	Variational Multiscale Theory of LES Turbulence Modeling. ERCOFTAC Series, 2010, , 99-108.	0.1	0
147	n-Widths, sup <sup>h</sup> -infs, and optimality ratios for the k-version of the isogeometric finite element method. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 1726-1741.	6.6	231
148	Augmented Lagrangian method for constraining the shape of velocity profiles at outlet boundaries for three-dimensional finite element simulations of blood flow. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 3551-3566.	6.6	84
149	Patient-specific isogeometric fluid-structure interaction analysis of thoracic aortic blood flow due to implantation of the Jarvik 2000 left ventricular assist device. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 3534-3550.	6.6	347
150	Enforcement of constraints and maximum principles in the variational multiscale method. Computer Methods in Applied Mechanics and Engineering, 2009, 199, 61-76.	6.6	23
151	F-bar projection method for finite deformation elasticity and plasticity using NURBS based isogeometric analysis. International Journal of Material Forming, 2008, 1, 1091-1094.	2.0	12
152	NURBS-based isogeometric analysis for the computation of flows about rotating components. Computational Mechanics, 2008, 43, 143-150.	4.0	244
153	Isogeometric fluid-structure interaction: theory, algorithms, and computations. Computational Mechanics, 2008, 43, 3-37.	4.0	768
154	Multiphysics model for blood flow and drug transport with application to patient-specific coronary artery flow. Computational Mechanics, 2008, 43, 161-177.	4.0	54
155	and projection methods for nearly incompressible linear and non-linear elasticity and plasticity using higher-order NURBS elements. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 2732-2762.	6.6	297
156	Duality and unified analysis of discrete approximations in structural dynamics and wave propagation: Comparison of p-method finite elements with k-method NURBS. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 4104-4124.	6.6	329
157	Isogeometric analysis of the Cahn-Hilliard phase-field model. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 4333-4352.	6.6	514
158	Automatic 3D Mesh Generation for a Domain with Multiple Materials. , 2008, , 367-386.		13
159	Variational Multiscale Analysis: the Fine-scale Green's Function, Projection, Optimization, Localization, and Stabilized Methods. SIAM Journal on Numerical Analysis, 2007, 45, 539-557.	2.3	216
160	YZ <sup>2</sup> discontinuity capturing for advection-dominated processes with application to arterial drug delivery. International Journal for Numerical Methods in Fluids, 2007, 54, 593-608.	1.6	129
161	Stabilized shock hydrodynamics: I. A Lagrangian method. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 923-966.	6.6	77
162	Patient-specific vascular NURBS modeling for isogeometric analysis of blood flow. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 2943-2959.	6.6	340

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163	Studies of refinement and continuity in isogeometric structural analysis. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 4160-4183.	6.6	550
164	Weak Dirichlet boundary conditions for wall-bounded turbulent flows. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 4853-4862.	6.6	200
165	Variational multiscale residual-based turbulence modeling for large eddy simulation of incompressible flows. Computer Methods in Applied Mechanics and Engineering, 2007, 197, 173-201.	6.6	835
166	Weak imposition of Dirichlet boundary conditions in fluid mechanics. Computers and Fluids, 2007, 36, 12-26.	2.5	381
167	Title is missing!. Computers and Fluids, 2007, 36, 1.	2.5	1
168	The role of continuity in residual-based variational multiscale modeling of turbulence. Computational Mechanics, 2007, 41, 371-378.	4.0	202
169	Analysis of a Multiscale Discontinuous Galerkin Method for Convection-Diffusion Problems. SIAM Journal on Numerical Analysis, 2006, 44, 1420-1440.	2.3	73
170	ISOGEOMETRIC ANALYSIS: APPROXIMATION, STABILITY AND ERROR ESTIMATES FOR h-REFINED MESHES. Mathematical Models and Methods in Applied Sciences, 2006, 16, 1031-1090.	3.3	556
171	A multiscale discontinuous Galerkin method with the computational structure of a continuous Galerkin method. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 2761-2787.	6.6	111
172	A stabilized mixed discontinuous Galerkin method for Darcy flow. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 3347-3381.	6.6	83
173	Isogeometric analysis of structural vibrations. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 5257-5296.	6.6	885
174	A coupled momentum method for modeling blood flow in three-dimensional deformable arteries. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 5685-5706.	6.6	406
175	In memoriam to Professor John H. Argyris 19 August 1913-2 April 2004. Computer Methods in Applied Mechanics and Engineering, 2006, 195, v-vii.	6.6	0
176	Isogeometric Fluid-structure Interaction Analysis with Applications to Arterial Blood Flow. Computational Mechanics, 2006, 38, 310-322.	4.0	561
177	Patient-Specific Vascular NURBS Modeling for Isogeometric Analysis of Blood Flow. , 2006, , 73-92.		13
178	Conservation properties for the Galerkin and stabilised forms of the advection-diffusion and incompressible Navier-Stokes equations. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 1141-1159.	6.6	78
179	Isogeometric analysis: CAD, finite elements, NURBS, exact geometry and mesh refinement. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 4135-4195.	6.6	4,614
180	Mixed Discontinuous Galerkin Methods for Darcy Flow. Journal of Scientific Computing, 2005, 22-23, 119-145.	2.3	90

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181	Variational and Multiscale Methods in Turbulence. , 2005, , 153-163.		12
182	Energy transfers and spectral eddy viscosity in large-eddy simulations of homogeneous isotropic turbulence: Comparison of dynamic Smagorinsky and multiscale models over a range of discretizations. Physics of Fluids, 2004, 16, 4044-4052.	4.0	41
183	Sensitivity of the scale partition for variational multiscale large-eddy simulation of channel flow. Physics of Fluids, 2004, 16, 824-827.	4.0	72
184	In memoriam to Professor John H. Argyris. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 3763-3766.	6.6	4
185	In vivo validation of a one-dimensional finite-element method for predicting blood flow in cardiovascular bypass grafts. IEEE Transactions on Biomedical Engineering, 2003, 50, 649-656.	4.2	91
186	Calculation of shear stresses in the Fourier-Galerkin formulation of turbulent channel flows: projection, the Dirichlet filter and conservation. Journal of Computational Physics, 2003, 188, 281-295.	3.8	8
187	Research directions in computational mechanics. Computer Methods in Applied Mechanics and Engineering, 2003, 192, 913-922.	6.6	123
188	Computation of Trailing-Edge Noise Due to Turbulent Flow over an Airfoil. AIAA Journal, 2002, 40, 2206-2216.	2.6	158
189	The Variational Multiscale Formulation of LES with Application to Turbulent Channel Flows. , 2002, , 223-239.		2
190	A One-dimensional Finite Element Method for Simulation-based Medical Planning for Cardiovascular Disease. Computer Methods in Biomechanics and Biomedical Engineering, 2002, 5, 195-206.	1.6	90
191	Continuous/discontinuous finite element approximations of fourth-order elliptic problems in structural and continuum mechanics with applications to thin beams and plates, and strain gradient elasticity. Computer Methods in Applied Mechanics and Engineering, 2002, 191, 3669-3750.	6.6	365
192	A stabilized mixed finite element method for Darcy flow. Computer Methods in Applied Mechanics and Engineering, 2002, 191, 4341-4370.	6.6	233
193	Quantification of Vessel Wall Cyclic Strain Using Cine Phase Contrast Magnetic Resonance Imaging. Annals of Biomedical Engineering, 2002, 30, 1033-1045.	2.5	59
194	The multiscale formulation of large eddy simulation: Decay of homogeneous isotropic turbulence. Physics of Fluids, 2001, 13, 505-512.	4.0	344
195	Large eddy simulation of turbulent channel flows by the variational multiscale method. Physics of Fluids, 2001, 13, 1784-1799.	4.0	384
196	On modelling thermal oxidation of Silicon I: theory. International Journal for Numerical Methods in Engineering, 2000, 47, 341-358.	2.8	40
197	On modelling thermal oxidation of Silicon II: numerical aspects. International Journal for Numerical Methods in Engineering, 2000, 47, 359-377.	2.8	34
198	The Continuous Galerkin Method Is Locally Conservative. Journal of Computational Physics, 2000, 163, 467-488.	3.8	203

#	ARTICLE	IF	CITATIONS
199	Computational procedures for determining structural-acoustic response due to hydrodynamic sources. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2000, 190, 345-361.	6.6	97
200	A variational multiscale approach to strain localization – formulation for multidimensional problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2000, 188, 39-60.	6.6	85
201	Automotive design applications of fluid flow simulation on parallel computing platforms. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2000, 184, 449-466.	6.6	8
202	Large Eddy Simulation and the variational multiscale method. <i>Computing and Visualization in Science</i> , 2000, 3, 47-59.	1.2	532
203	On modelling thermal oxidation of Silicon II: numerical aspects. <i>International Journal for Numerical Methods in Engineering</i> , 2000, 47, 359-377.	2.8	1
204	Multiphysics simulation of flow-induced vibrations and aeroelasticity on parallel computing platforms. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1999, 174, 393-417.	6.6	40
205	A Priori Error Analysis of Residual-Free Bubbles for Advection-Diffusion Problems. <i>SIAM Journal on Numerical Analysis</i> , 1999, 36, 1933-1948.	2.3	99
206	Effect of exercise on hemodynamic conditions in the abdominal aorta. <i>Journal of Vascular Surgery</i> , 1999, 29, 1077-1089.	1.1	155
207	Finite Element Modeling of Three-Dimensional Pulsatile Flow in the Abdominal Aorta: Relevance to Atherosclerosis. <i>Annals of Biomedical Engineering</i> , 1998, 26, 975-987.	2.5	293
208	Finite element modeling of blood flow in arteries. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1998, 158, 155-196.	6.6	594
209	A comparative study of different sets of variables for solving compressible and incompressible flows. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1998, 153, 1-44.	6.6	176
210	A tutorial in elementary finite element error analysis: A systematic presentation of a priori and a posteriori error estimates. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1998, 158, 1-22.	6.6	40
211	A study of strain localization in a multiple scale framework – The one-dimensional problem. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1998, 159, 193-222.	6.6	71
212	The variational multiscale method – a paradigm for computational mechanics. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1998, 166, 3-24.	6.6	1,269
213	Iterative finite element solutions in nonlinear solid mechanics. <i>Handbook of Numerical Analysis</i> , 1998, 6, 3-178.	1.8	8
214	Consistent Finite Element Calculations of Boundary and Internal Fluxes. <i>International Journal of Computational Fluid Dynamics</i> , 1998, 9, 227-235.	1.2	19
215	Applications of the Finite Element Method to the Reynolds-Averaged Navier-Stokes Equations. <i>Notes on Numerical Fluid Mechanics</i> , 1998, , 215-222.	0.1	0
216	High-performance parallel computing in industry. <i>Parallel Computing</i> , 1997, 23, 1217-1233.	2.1	11

#	ARTICLE	IF	CITATIONS
217	An a posteriori error estimator and hp-adaptive strategy for finite element discretizations of the Helmholtz equation in exterior domains. <i>Finite Elements in Analysis and Design</i> , 1997, 25, 1-26.	3.2	14
218	$b = \hat{a} \cdot g$ . <i>Computer Methods in Applied Mechanics and Engineering</i> , 1997, 145, 329-339.	6.6	253
219	A space-time Galerkin/least-squares finite element formulation of the Navier-Stokes equations for moving domain problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1997, 146, 91-126.	6.6	199
220	h-Adaptive finite element computation of time-harmonic exterior acoustics problems in two dimensions. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1997, 146, 65-89.	6.6	30
221	Recent developments in finite element methods for structural acoustics. <i>Archives of Computational Methods in Engineering</i> , 1996, 3, 131-309.	10.2	86
222	Explicit residual-based a posteriori error estimation for finite element discretizations of the Helmholtz equation: Computation of the constant and new measures of error estimator quality. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1996, 131, 335-363.	6.6	15
223	A posteriori error estimation and adaptive finite element computation of the Helmholtz equation in exterior domains. <i>Finite Elements in Analysis and Design</i> , 1996, 22, 15-24.	3.2	7
224	A space-time formulation for multiscale phenomena. <i>Journal of Computational and Applied Mathematics</i> , 1996, 74, 217-229.	2.0	109
225	Computational Investigations in Vascular Disease. <i>Computers in Physics</i> , 1996, 10, 224.	0.5	80
226	Dynamic analysis and drilling degrees of freedom. <i>International Journal for Numerical Methods in Engineering</i> , 1995, 38, 3193-3210.	2.8	17
227	A case study in parallel computation: Viscous flow around an ONERA M6 wing. <i>International Journal for Numerical Methods in Fluids</i> , 1995, 21, 877-884.	1.6	23
228	Multiscale phenomena: Green's functions, the Dirichlet-to-Neumann formulation, subgrid scale models, bubbles and the origins of stabilized methods. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1995, 127, 387-401.	6.6	1,460
229	Numerical assessment of some membrane elements with drilling degrees of freedom. <i>Computers and Structures</i> , 1995, 55, 297-314.	4.4	38
230	Petrov-Galerkin Finite Element Approach for the Conservative Navier-Stokes Equations. , 1995, , 989-994.		0
231	Studies of domain-based formulations for computing exterior problems of acoustics. <i>International Journal for Numerical Methods in Engineering</i> , 1994, 37, 2935-2950.	2.8	40
232	Scalability of finite element applications on distributed-memory parallel computers. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1994, 119, 61-72.	6.6	19
233	A consistent equilibrium chemistry algorithm for hypersonic flows. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1994, 112, 25-40.	6.6	32
234	An efficient communications strategy for finite element methods on the Connection Machine CM-5 system. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1994, 113, 363-387.	6.6	39

#	ARTICLE	IF	CITATIONS
235	A unified approach to compressible and incompressible flows. Computer Methods in Applied Mechanics and Engineering, 1994, 113, 389-395.	6.6	148
236	Stabilized finite element methods for steady advection-diffusion with production. Computer Methods in Applied Mechanics and Engineering, 1994, 115, 165-191.	6.6	75
237	A boundary integral modification of the Galerkin least squares formulation for the Stokes problem. Computer Methods in Applied Mechanics and Engineering, 1994, 113, 173-182.	6.6	33
238	Mesh decomposition and communication procedures for finite element applications on the Connection Machine CM-5 system. Lecture Notes in Computer Science, 1994, , 233-240.	1.3	1
239	Discussions of numerical methods. Journal of Wind Engineering and Industrial Aerodynamics, 1993, 46-47, 401-405.	3.9	0
240	Implementation of a one-equation turbulence model within a stabilized finite element formulation of a symmetric advective-diffusive system. Computer Methods in Applied Mechanics and Engineering, 1993, 105, 405-433.	6.6	24
241	Convergence analyses of Galerkin least-squares methods for symmetric advective-diffusive forms of the Stokes and incompressible Navier-Stokes equations. Computer Methods in Applied Mechanics and Engineering, 1993, 105, 285-298.	6.6	125
242	Finite element methods in wind engineering. Journal of Wind Engineering and Industrial Aerodynamics, 1993, 46-47, 297-313.	3.9	6
243	Stabilized Finite Element Methods. , 1993, , 87-108.		82
244	Finite element methods in wind engineering. , 1993, , 297-313.		0
245	Galerkin/least-squares finite element methods for the reduced wave equation with non-reflecting boundary conditions in unbounded domains. Computer Methods in Applied Mechanics and Engineering, 1992, 98, 411-454.	6.6	212
246	An arbitrary Lagrangian-Eulerian finite element method for interaction of fluid and a rigid body. Computer Methods in Applied Mechanics and Engineering, 1992, 95, 115-138.	6.6	318
247	A cost comparison of boundary element and finite element methods for problems of time-harmonic acoustics. Computer Methods in Applied Mechanics and Engineering, 1992, 97, 77-102.	6.6	110
248	Analysis of continuous formulations underlying the computation of time-harmonic acoustics in exterior domains. Computer Methods in Applied Mechanics and Engineering, 1992, 97, 103-124.	6.6	115
249	Stabilized finite element methods: I. Application to the advective-diffusive model. Computer Methods in Applied Mechanics and Engineering, 1992, 95, 253-276.	6.6	551
250	Formulations of finite elasticity with independent rotations. Computer Methods in Applied Mechanics and Engineering, 1992, 95, 277-288.	6.6	58
251	Circumventing the Babuška-Brezzi condition in mixed finite element approximations of elliptic variational inequalities. Computer Methods in Applied Mechanics and Engineering, 1992, 97, 193-210.	6.6	24
252	A data parallel finite element method for computational fluid dynamics on the Connection Machine system. Computer Methods in Applied Mechanics and Engineering, 1992, 99, 113-134.	6.6	68



#	ARTICLE	IF	CITATIONS
253	What are C and h?: Inequalities for the analysis and design of finite element methods. Computer Methods in Applied Mechanics and Engineering, 1992, 97, 157-192.	6.6	157
254	Boundary Lagrange multipliers in finite element methods: Error analysis in natural norms. Numerische Mathematik, 1992, 62, 1-15.	1.9	73
255	A globally convergent matrix-free algorithm for implicit time-marching schemes arising in finite element analysis in fluids. Computer Methods in Applied Mechanics and Engineering, 1991, 87, 281-304.	6.6	114
256	The finite element method with Lagrange multipliers on the boundary: circumventing the BabuÅka-Brezzi condition. Computer Methods in Applied Mechanics and Engineering, 1991, 85, 109-128.	6.6	157
257	A new finite element formulation for computational fluid dynamics: IX. Fourier analysis of space-time Galerkin/least-squares algorithms. Computer Methods in Applied Mechanics and Engineering, 1991, 87, 35-58.	6.6	149
258	Finite element methods for the helmholtz equation in an exterior domain: Model problems. Computer Methods in Applied Mechanics and Engineering, 1991, 87, 59-96.	6.6	159
259	A new finite element formulation for computational fluid dynamics: X. The compressible Euler and Navier-Stokes equations. Computer Methods in Applied Mechanics and Engineering, 1991, 89, 141-219.	6.6	455
260	Symposium on Structural Acoustics and Fluid-Structure Interaction. Applied Mechanics Reviews, 1990, 43, S353-S353.	10.1	1
261	Symmetrization of conservation laws with entropy for high-temperature hypersonic computations. Computing Systems in Engineering: an International Journal, 1990, 1, 495-521.	0.5	61
262	Space-time finite element methods for second-order hyperbolic equations. Computer Methods in Applied Mechanics and Engineering, 1990, 84, 327-348.	6.6	257
263	Design and Analysis of Finite Element Methods for the Helmholtz Equation in Exterior Domains. Applied Mechanics Reviews, 1990, 43, S366-S373.	10.1	12
264	A new finite element formulation for computational fluid dynamics: VIII. The galerkin/least-squares method for advective-diffusive equations. Computer Methods in Applied Mechanics and Engineering, 1989, 73, 173-189.	6.6	1,186
265	An improved implicit-explicit time integration method for structural dynamics. Earthquake Engineering and Structural Dynamics, 1989, 18, 643-653.	4.4	97
266	A multi-element group preconditioned GMRES algorithm for nonsymmetric systems arising in finite element analysis. Computer Methods in Applied Mechanics and Engineering, 1989, 75, 415-456.	6.6	117
267	On drilling degrees of freedom. Computer Methods in Applied Mechanics and Engineering, 1989, 72, 105-121.	6.6	273
268	Extended comparison of the Hilber-Hughes-Taylor $\hat{\pm}$ -method and the. Computer Methods in Applied Mechanics and Engineering, 1989, 76, 87-93.	6.6	25
269	On mixed finite element methods for axisymmetric shell analysis. Computer Methods in Applied Mechanics and Engineering, 1989, 72, 201-231.	6.6	11
270	New directions in computational mechanics. Nuclear Engineering and Design, 1989, 114, 197-210.	1.7	5

#	ARTICLE	IF	CITATIONS
271	Element-By-Element Algorithms for Nonsymmetric Matrix Problems Arising in Fluids. , 1989, , 1-33.		3
272	Convergence of transverse shear stresses in the finite element analysis of plates. Communications in Applied Numerical Methods, 1988, 4, 185-187.	0.5	9
273	A new family of stable elements for nearly incompressible elasticity based on a mixed Petrov-Galerkin finite element formulation. Numerische Mathematik, 1988, 53, 123-141.	1.9	69
274	Space-time finite element methods for elastodynamics: Formulations and error estimates. Computer Methods in Applied Mechanics and Engineering, 1988, 66, 339-363.	6.6	436
275	A mixed finite element formulation for Reissner-mindlin plate theory: Uniform convergence of all higher-order spaces. Computer Methods in Applied Mechanics and Engineering, 1988, 67, 223-240.	6.6	67
276	Two classes of mixed finite element methods. Computer Methods in Applied Mechanics and Engineering, 1988, 69, 89-129.	6.6	235
277	A new finite element formulation for computational fluid dynamics: VI. Convergence analysis of the generalized SUPG formulation for linear time-dependent multidimensional advective-diffusive systems. Computer Methods in Applied Mechanics and Engineering, 1987, 63, 97-112.	6.6	210
278	Petrov-Galerkin formulations of the Timoshenko beam problem. Computer Methods in Applied Mechanics and Engineering, 1987, 63, 115-132.	6.6	20
279	Mixed Petrov-Galerkin methods for the Timoshenko beam problem. Computer Methods in Applied Mechanics and Engineering, 1987, 63, 133-154.	6.6	44
280	Convergence of an element-partitioned subcycling algorithm for the semi-discrete heat equation. Numerical Methods for Partial Differential Equations, 1987, 3, 131-137.	3.6	18
281	An error analysis of truncated starting conditions in step-by-step time integration: Consequences for structural dynamics. Earthquake Engineering and Structural Dynamics, 1987, 15, 901-910.	4.4	37
282	Recent progress in the development and understanding of SUPG methods with special reference to the compressible Euler and Navier-Stokes equations. International Journal for Numerical Methods in Fluids, 1987, 7, 1261-1275.	1.6	215
283	Large-scale vectorized implicit calculations in solid mechanics on a Cray X-MP/48 utilizing EBE preconditioned conjugate gradients. Computer Methods in Applied Mechanics and Engineering, 1987, 61, 215-248.	6.6	168
284	Stability, convergence and accuracy of a new finite element method for the circular arch problem. Computer Methods in Applied Mechanics and Engineering, 1987, 63, 281-303.	6.6	42
285	A new finite element formulation for computational fluid dynamics: VII. The stokes problem with various well-posed boundary conditions: Symmetric formulations that converge for all velocity/pressure spaces. Computer Methods in Applied Mechanics and Engineering, 1987, 65, 85-96.	6.6	351
286	Pseudo-corner theory: a simple enhancement of J2-flow theory for applications involving non-proportional loading. Engineering Computations, 1986, 3, 116-120.	1.4	25
287	A new finite element formulation for computational fluid dynamics: II. Beyond SUPG. Computer Methods in Applied Mechanics and Engineering, 1986, 54, 341-355.	6.6	535
288	A new finite element formulation for computational fluid dynamics: I. Symmetric forms of the compressible Euler and Navier-Stokes equations and the second law of thermodynamics. Computer Methods in Applied Mechanics and Engineering, 1986, 54, 223-234.	6.6	436

#	ARTICLE	IF	CITATIONS
289	A new finite element formulation for computational fluid dynamics: III. The generalized streamline operator for multidimensional advective-diffusive systems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1986, 58, 305-328.	6.6	478
290	A new finite element formulation for computational fluid dynamics: IV. A discontinuity-capturing operator for multidimensional advective-diffusive systems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1986, 58, 329-336.	6.6	286
291	A new finite element formulation for computational fluid dynamics: V. Circumventing the babuÅıka-brezzi condition: a stable Petrov-Galerkin formulation of the stokes problem accommodating equal-order interpolations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1986, 59, 85-99.	6.6	1,190
292	On the Variational Foundations of Assumed Strain Methods. <i>Journal of Applied Mechanics, Transactions ASME</i> , 1986, 53, 51-54.	2.2	351
293	Solution algorithms for nonlinear transient heat conduction analysis employing element-by-element iterative strategies. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1985, 52, 711-815.	6.6	148
294	A Petrov-Galerkin finite element method for convection-dominated flows: An accurate upwinding technique for satisfying the maximum principle. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1985, 50, 181-193.	6.6	108
295	A three-node mindlin plate element with improved transverse shear. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1985, 50, 71-101.	6.6	237
296	Discussion of a numerical study of localized deformation in bi-crystals. <i>Mechanics of Materials</i> , 1985, 4, 437-438.	3.2	0
297	Analysis of some fully-discrete algorithms for the one-dimensional heat equation. <i>International Journal for Numerical Methods in Engineering</i> , 1985, 21, 163-168.	2.8	6
298	Finite element methods for first-order hyperbolic systems with particular emphasis on the compressible euler equations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1984, 45, 217-284.	6.6	348
299	Stability and accuracy analysis of some fully-discrete algorithms for the one-dimensional second-order wave equation. <i>Computers and Structures</i> , 1984, 19, 665-668.	4.4	14
300	Numerical Implementation of Constitutive Models: Rate-Independent Deviatoric Plasticity. , 1984, , 29-63.		123
301	Element-by-element algorithms for heat transfer analysis of structures. , 1984, , .		6
302	Nonlinear finite element shell formulation accounting for large membrane strains. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1983, 39, 69-82.	6.6	86
303	An improved treatment of transverse shear in the mindlin-type four-node quadrilateral element. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1983, 39, 311-335.	6.6	142
304	An element-by-element solution algorithm for problems of structural and solid mechanics. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1983, 36, 241-254.	6.6	228
305	Finite element analysis of the secondary buckling of a flat plate under uniaxial compression. <i>International Journal of Non-Linear Mechanics</i> , 1983, 18, 167-175.	2.6	18
306	Finite element formulations for convection dominated flows with particular emphasis on the compressible Euler equations. , 1983, , .		122

#	ARTICLE	IF	CITATIONS
307	Elementary Element Implicit Algorithms for Heat Conduction. Journal of Engineering Mechanics - ASCE, 1983, 109, 576-585.	2.9	66
308	A Precis of Developments in Computational Methods for Transient Analysis. Journal of Applied Mechanics, Transactions ASME, 1983, 50, 1033-1041.	2.2	145
309	Streamline upwind/Petrov-Galerkin formulations for convection dominated flows with particular emphasis on the incompressible Navier-Stokes equations. Computer Methods in Applied Mechanics and Engineering, 1982, 32, 199-259.	6.6	4,288
310	A profile solver for specially structured symmetric-unsymmetric equation systems. Advances in Engineering Software (1978), 1982, 4, 64-67.	0.1	2
311	Finite-Element Solution of Elastic-Plastic Boundary-Value Problems. Journal of Applied Mechanics, Transactions ASME, 1981, 48, 69-74.	2.2	29
312	Convergence of implicit-explicit algorithms in nonlinear transient analysis. International Journal of Engineering Science, 1981, 19, 295-302.	5.0	12
313	Nonlinear finite element analysis of shells: Part I. three-dimensional shells. Computer Methods in Applied Mechanics and Engineering, 1981, 26, 331-362.	6.6	511
314	Nonlinear finite element analysis of shells-part II. two-dimensional shells. Computer Methods in Applied Mechanics and Engineering, 1981, 27, 167-181.	6.6	201
315	Lagrangian-Eulerian finite element formulation for incompressible viscous flows. Computer Methods in Applied Mechanics and Engineering, 1981, 29, 329-349.	6.6	1,255
316	A large deformation formulation for shell analysis by the finite element method. Computers and Structures, 1981, 13, 19-27.	4.4	38
317	Finite Elements Based Upon Mindlin Plate Theory With Particular Reference to the Four-Node Bilinear Isoparametric Element. Journal of Applied Mechanics, Transactions ASME, 1981, 48, 587-596.	2.2	553
318	A LARGE DEFORMATION FORMULATION FOR SHELL ANALYSIS BY THE FINITE ELEMENT METHOD. , 1981, , 19-27.		3
319	Analysis of Gravity Offshore Structure Foundations. JPT, Journal of Petroleum Technology, 1980, 32, 199-209.	0.2	2
320	Recent developments in computer methods for structural analysis. Nuclear Engineering and Design, 1980, 57, 427-439.	1.7	17
321	Techniques for developing "special" finite element shape functions with particular reference to singularities. International Journal for Numerical Methods in Engineering, 1980, 15, 733-751.	2.8	75
322	Generalization of selective integration procedures to anisotropic and nonlinear media. International Journal for Numerical Methods in Engineering, 1980, 15, 1413-1418.	2.8	766
323	Finite rotation effects in numerical integration of rate constitutive equations arising in large-deformation analysis. International Journal for Numerical Methods in Engineering, 1980, 15, 1862-1867.	2.8	688
324	Finite element analysis of incompressible viscous flows by the penalty function formulation. Journal of Computational Physics, 1979, 30, 1-60.	3.8	517

#	ARTICLE	IF	CITATIONS
325	Implicit-explicit finite elements in nonlinear transient analysis. Computer Methods in Applied Mechanics and Engineering, 1979, 17-18, 159-182.	6.6	239
326	Classical elastodynamics as a linear symmetric hyperbolic system. Journal of Elasticity, 1978, 8, 97-110.	1.9	32
327	Mixed finite element methods "Reduced and selective integration techniques: A unification of concepts. Computer Methods in Applied Mechanics and Engineering, 1978, 15, 63-81.	6.6	854
328	Unconditionally stable algorithms for quasi-static elasto/visco-plastic finite element analysis. Computers and Structures, 1978, 8, 169-173.	4.4	183
329	The "heterosis" finite element for plate bending. Computers and Structures, 1978, 9, 445-450.	4.4	191
330	Consistent linearization in mechanics of solids and structures. Computers and Structures, 1978, 8, 391-397.	4.4	140
331	Reduced and selective integration techniques in the finite element analysis of plates. Nuclear Engineering and Design, 1978, 46, 203-222.	1.7	536
332	Collocation, dissipation and [overshoot] for time integration schemes in structural dynamics. Earthquake Engineering and Structural Dynamics, 1978, 6, 99-117.	4.4	366
333	A simple scheme for developing "upwind" finite elements. International Journal for Numerical Methods in Engineering, 1978, 12, 1359-1365.	2.8	221
334	Product formulas and numerical algorithms. Communications on Pure and Applied Mathematics, 1978, 31, 205-256.	3.1	291
335	Implicit-Explicit Finite Elements in Transient Analysis: Implementation and Numerical Examples. Journal of Applied Mechanics, Transactions ASME, 1978, 45, 375-378.	2.2	181
336	Implicit-Explicit Finite Elements in Transient Analysis: Stability Theory. Journal of Applied Mechanics, Transactions ASME, 1978, 45, 371-374.	2.2	287
337	Finite-Element Methods for Nonlinear Elastodynamics Which Conserve Energy. Journal of Applied Mechanics, Transactions ASME, 1978, 45, 366-370.	2.2	143
338	Analysis Of Gravity Offshore Structure Foundations Subjected To Cyclic Wave Loading. , 1978, , .		1
339	Equivalence of Finite Elements for Nearly Incompressible Elasticity. Journal of Applied Mechanics, Transactions ASME, 1977, 44, 181-183.	2.2	115
340	Some applications of geometry is continuum mechanics. Reports on Mathematical Physics, 1977, 12, 35-44.	0.8	15
341	Unconditionally stable algorithms for nonlinear heat conduction. Computer Methods in Applied Mechanics and Engineering, 1977, 10, 135-139.	6.6	149
342	Improved numerical dissipation for time integration algorithms in structural dynamics. Earthquake Engineering and Structural Dynamics, 1977, 5, 283-292.	4.4	1,886

#	ARTICLE	IF	CITATIONS
343	A note on the stability of Newmark's algorithm in nonlinear structural dynamics. International Journal for Numerical Methods in Engineering, 1977, 11, 383-386.	2.8	51
344	A simple and efficient finite element for plate bending. International Journal for Numerical Methods in Engineering, 1977, 11, 1529-1543.	2.8	623
345	Well-posed quasi-linear second-order hyperbolic systems with applications to nonlinear elastodynamics and general relativity. Archive for Rational Mechanics and Analysis, 1977, 63, 273-294.	2.4	303
346	A finite element method for a class of contact-impact problems. Computer Methods in Applied Mechanics and Engineering, 1976, 8, 249-276.	6.6	407
347	Reduction scheme for some structural eigenvalue problems by a variational theorem. International Journal for Numerical Methods in Engineering, 1976, 10, 845-852.	2.8	8
348	Stability, convergence and growth and decay of energy of the average acceleration method in nonlinear structural dynamics. Computers and Structures, 1976, 6, 313-324.	4.4	109
349	A reduction scheme for problems of structural dynamics. International Journal of Solids and Structures, 1976, 12, 749-767.	2.7	22
350	On the one-dimensional theory of blood flow in the larger vessels. Mathematical Biosciences, 1973, 18, 161-170.	1.9	168
351	Finite element method for piezoelectric vibration. International Journal for Numerical Methods in Engineering, 1970, 2, 151-157.	2.8	841
352	Appendix A: Connectivity Arrays. , 0, , 313-321.		0
353	From CAD and FEA to Isogeometric Analysis: An Historical Perspective. , 0, , 1-18.		0
354	Linear Elasticity. , 0, , 109-147.		0
355	Vibrations and Wave Propagation. , 0, , 149-184.		0
356	Nonlinear Isogeometric Analysis. , 0, , 197-209.		3
357	Nearly Incompressible Solids. , 0, , 211-225.		0
358	Fluids. , 0, , 227-251.		0