

Charbel Farhat

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/8408641/charbel-farhat-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

214
papers

15,002
citations

67
h-index

118
g-index

235
ext. papers

16,949
ext. citations

3.2
avg, IF

6.81
L-index

#	Paper	IF	Citations
214	Quadratic approximation manifold for mitigating the Kolmogorov barrier in nonlinear projection-based model order reduction. <i>Journal of Computational Physics</i> , 2022 , 464, 111348	4.1	0
213	Homogenized Flux-Body Force Treatment of Compressible Viscous Porous Wall Boundary Conditions. <i>AIAA Journal</i> , 2021 , 59, 2045-2059	2.1	0
212	The DGDD method for reduced-order modeling of conservation laws. <i>Journal of Computational Physics</i> , 2021 , 437, 110336	4.1	0
211	Mesh sampling and weighting for the hyperreduction of nonlinear Petrov-Galerkin reduced-order models with local reduced-order bases. <i>International Journal for Numerical Methods in Engineering</i> , 2021 , 122, 1846-1874	2.4	5
210	Active Manifold and Model Reduction for Multidisciplinary Analysis and Optimization 2021 ,		1
209	A computationally tractable framework for nonlinear dynamic multiscale modeling of membrane woven fabrics. <i>International Journal for Numerical Methods in Engineering</i> , 2021 , 122, 2598-2625	2.4	4
208	Model Reduction Framework with a New Take on Active Subspaces for Optimization Problems with Linearized Fluid-Structure Interaction Constraints. <i>International Journal for Numerical Methods in Engineering</i> , 2020 , 122, 5450	2.4	3
207	Discrete embedded boundary method with smooth dependence on the evolution of a fluid-structure interface. <i>International Journal for Numerical Methods in Engineering</i> , 2020 , 122, 5353	2.4	0
206	On the stability of projection-based model order reduction for convection-dominated laminar and turbulent flows. <i>Journal of Computational Physics</i> , 2020 , 419, 109681	4.1	18
205	In situ adaptive reduction of nonlinear multiscale structural dynamics models. <i>International Journal for Numerical Methods in Engineering</i> , 2020 , 121, 4971-4988	2.4	4
204	Modeling, Simulation and Validation of Supersonic Parachute Inflation Dynamics during Mars Landing 2020 ,		5
203	An embedded boundary approach for resolving the contribution of cable subsystems to fully coupled fluid-structure interaction. <i>International Journal for Numerical Methods in Engineering</i> , 2020 , 122, 5409	2.4	1
202	Learning constitutive relations from indirect observations using deep neural networks. <i>Journal of Computational Physics</i> , 2020 , 416, 109491	4.1	30
201	Hyperreduction of CFD Models of Turbulent Flows using a Machine Learning Approach 2020 ,		2
200	Fast Neural Network Predictions from Constrained Aerodynamics Datasets 2020 ,		3
199	Gradient-based constrained optimization using a database of linear reduced-order models. <i>Journal of Computational Physics</i> , 2020 , 423, 109787	4.1	15
198	Feasible Probabilistic Learning Method for Model-Form Uncertainty Quantification in Vibration Analysis. <i>AIAA Journal</i> , 2019 , 57, 4978-4991	2.1	11

197	Mesh adaptation framework for embedded boundary methods for computational fluid dynamics and fluid-structure interaction. <i>International Journal for Numerical Methods in Fluids</i> , 2019 , 90, 389-424	1.9	16
196	Towards a Validated FSI Computational Framework for Supersonic Parachute Deployments 2019 ,		1
195	Fast computation of the wall distance in unsteady Eulerian fluid-structure computations. <i>International Journal for Numerical Methods in Fluids</i> , 2019 , 89, 143-161	1.9	3
194	Probabilistic learning for modeling and quantifying model-form uncertainties in nonlinear computational mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 2019 , 117, 819-843 ^{2,4}		10
193	Parameterization Framework for the MDAO of Wing Structural Layouts. <i>AIAA Journal</i> , 2018 , 56, 1627-1638		4
192	A Stochastic Projection-Based Hyperreduced Order Model for Model-Form Uncertainties in Vibration Analysis 2018 ,		3
191	An Adaptive Mesh Refinement Concept for Viscous Fluid-Structure Computations Using Eulerian Vertex-Based Finite Volume Methods 2018 ,		3
190	Simulation of Parachute Inflation Dynamics Using an Eulerian Computational Framework for Fluid-Structure Interfaces Evolving in High-Speed Turbulent Flows 2018 ,		12
189	Preliminary Verification and Validation Test Suite for the CFD Component of Supersonic Parachute Deployment FSI Simulations 2018 ,		3
188	A family of position- and orientation-independent embedded boundary methods for viscous flow and fluid-structure interaction problems. <i>Journal of Computational Physics</i> , 2018 , 365, 74-104	4.1	19
187	Modeling and Quantification of Model-Form Uncertainties in Eigenvalue Computations Using a Stochastic Reduced Model. <i>AIAA Journal</i> , 2018 , 56, 1198-1210	2.1	14
186	A multilevel FETI-DP method and its performance for problems with billions of degrees of freedom. <i>International Journal for Numerical Methods in Engineering</i> , 2018 , 116, 661-682	2.4	15
185	A nonparametric probabilistic approach for quantifying uncertainties in low-dimensional and high-dimensional nonlinear models. <i>International Journal for Numerical Methods in Engineering</i> , 2017 , 109, 837-888	2.4	19
184	A high-order discontinuous Galerkin method for unsteady advection-diffusion problems. <i>Journal of Computational Physics</i> , 2017 , 332, 520-537	4.1	9
183	A multilevel projection-based model order reduction framework for nonlinear dynamic multiscale problems in structural and solid mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 2017 , 112, 855-881	2.4	26
182	A discontinuous Galerkin method with Lagrange multipliers for spatially-dependent advection-diffusion problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017 , 327, 93-117 ^{5,7}		9
181	An enhanced FIVER method for multi-material flow problems with second-order convergence rate. <i>Journal of Computational Physics</i> , 2017 , 329, 141-172	4.1	21
180	Accelerated mesh sampling for the hyper reduction of nonlinear computational models. <i>International Journal for Numerical Methods in Engineering</i> , 2017 , 109, 1623-1654	2.4	26

179	A High-order Discontinuous Galerkin Method for Unsteady Flow Problems 2016 ,		1
178	On the Use of Discrete Nonlinear Reduced-Order Models for the Prediction of Steady-State Flows Past Parametrically Deformed Complex Geometries 2016 ,		12
177	Projection-based model reduction for contact problems. <i>International Journal for Numerical Methods in Engineering</i> , 2016 , 106, 644-663	2.4	24
176	Real-time solution of linear computational problems using databases of parametric reduced-order models with arbitrary underlying meshes. <i>Journal of Computational Physics</i> , 2016 , 326, 373-397	4.1	18
175	Structure-preserving, stability, and accuracy properties of the energy-conserving sampling and weighting method for the hyper reduction of nonlinear finite element dynamic models. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 102, 1077-1110	2.4	107
174	Progressive construction of a parametric reduced-order model for PDE-constrained optimization. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 102, 1111-1135	2.4	73
173	A Practical Factorization of a Schur Complement for PDE-Constrained Distributed Optimal Control. <i>Journal of Scientific Computing</i> , 2015 , 65, 576-597	2.3	10
172	A computational framework for the simulation of high-speed multi-material fluid-structure interaction problems with dynamic fracture. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 104, 585-623	2.4	34
171	Design optimization using hyper-reduced-order models. <i>Structural and Multidisciplinary Optimization</i> , 2015 , 51, 919-940	3.6	76
170	A second-order time-accurate implicit finite volume method with exact two-phase Riemann problems for compressible multi-phase fluid and fluid-structure problems. <i>Journal of Computational Physics</i> , 2014 , 258, 613-633	4.1	14
169	An embedded boundary framework for compressible turbulent flow and fluid-structure computations on structured and unstructured grids. <i>International Journal for Numerical Methods in Fluids</i> , 2014 , 76, 366-395	1.9	17
168	Reduction of nonlinear embedded boundary models for problems with evolving interfaces. <i>Journal of Computational Physics</i> , 2014 , 274, 489-504	4.1	13
167	The discontinuous enrichment method for medium-frequency Helmholtz problems with a spatially variable wavenumber. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014 , 268, 126-140	5.7	22
166	Predictive Simulation of Underwater Implosion: Coupling Multi-Material Compressible Fluids With Cracking Structures 2014 ,		2
165	Nonlinear Aeroelastic Analysis of Highly Flexible Flapping Wings Using an ALE Formulation of Embedded Boundary Method 2014 ,		4
164	A hybrid discontinuous in space and time Galerkin method for wave propagation problems. <i>International Journal for Numerical Methods in Engineering</i> , 2014 , 99, 263-289	2.4	13
163	Dimensional reduction of nonlinear finite element dynamic models with finite rotations and energy-based mesh sampling and weighting for computational efficiency. <i>International Journal for Numerical Methods in Engineering</i> , 2014 , 98, 625-662	2.4	139
162	An ALE formulation of embedded boundary methods for tracking boundary layers in turbulent fluid-structure interaction problems. <i>Journal of Computational Physics</i> , 2014 , 263, 53-70	4.1	43

161	On the Stability of Reduced-Order Linearized Computational Fluid Dynamics Models Based on POD and Galerkin Projection: Descriptor vs Non-Descriptor Forms 2014 , 215-233		1
160	Modeling of Fuel Sloshing and its Physical Effects on Flutter. <i>AIAA Journal</i> , 2013 , 51, 2252-2265	2.1	34
159	Multiphysics simulations: Challenges and opportunities. <i>International Journal of High Performance Computing Applications</i> , 2013 , 27, 4-83	1.8	179
158	Dynamic implosion of underwater cylindrical shells: Experiments and Computations. <i>International Journal of Solids and Structures</i> , 2013 , 50, 2943-2961	3.1	84
157	The GNAT method for nonlinear model reduction: Effective implementation and application to computational fluid dynamics and turbulent flows. <i>Journal of Computational Physics</i> , 2013 , 242, 623-647	4.1	305
156	A high-order discontinuous Galerkin method with Lagrange multipliers for advection-diffusion problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013 , 264, 49-66	5.7	9
155	An ALE-Eulerian Formulation of Embedded Boundary Methods for Turbulent Fluid-Structure Interaction Problems 2013 ,		3
154	An adaptive scheme for a class of interpolatory model reduction methods for frequency response problems. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 93, 1109-1124	2.4	26
153	Construction of Parametrically-Robust CFD-Based Reduced-Order Models for PDE-Constrained Optimization 2013 ,		6
152	A Domain Decomposition Solver for the Discontinuous Enrichment Method for the Helmholtz Equation. <i>Lecture Notes in Computational Science and Engineering</i> , 2013 , 207-214	0.3	
151	A systematic approach for constructing higher-order immersed boundary and ghost fluid methods for fluid-structure interaction problems. <i>Journal of Computational Physics</i> , 2012 , 231, 2892-2923	4.1	30
150	A hybrid discontinuous Galerkin method for computing the ground state solution of Bose-Einstein condensates. <i>Journal of Computational Physics</i> , 2012 , 231, 4709-4722	4.1	3
149	Overview of the discontinuous enrichment method, the ultra-weak variational formulation, and the partition of unity method for acoustic scattering in the medium frequency regime and performance comparisons. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 89, 403-417	2.4	33
148	A dual-primal FETI method for solving a class of fluid-structure interaction problems in the frequency domain. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 89, 418-437	2.4	9
147	Stabilization of projection-based reduced-order models. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 91, 358-377	2.4	105
146	FIVER: A finite volume method based on exact two-phase Riemann problems and sparse grids for multi-material flows with large density jumps. <i>Journal of Computational Physics</i> , 2012 , 231, 6360-6379	4.1	47
145	An Embedded Boundary Method for Viscous Fluid/Structure Interaction Problems and Application to Flexible Flapping Wings 2012 ,		2
144	Review and assessment of interpolatory model order reduction methods for frequency response structural dynamics and acoustics problems. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 90, 1636-1662	2.4	45

143	Nonlinear model order reduction based on local reduced-order bases. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 92, 891-916	2.4	198
142	Provably stable and time-accurate extensions of Runge-Kutta schemes for CFD computations on moving grids. <i>International Journal for Numerical Methods in Fluids</i> , 2012 , 69, 1249-1270	1.9	3
141	Computational algorithms for tracking dynamic fluid-structure interfaces in embedded boundary methods. <i>International Journal for Numerical Methods in Fluids</i> , 2012 , 70, 515-535	1.9	41
140	On the Stability of Linearized Reduced-Order Models: Descriptor vs. Non-Descriptor Form and Application to Fluid-Structure Interaction 2012 ,		4
139	Nonlinear Model Reduction for CFD Problems Using Local Reduced-Order Bases 2012 ,		17
138	The GNAT nonlinear model reduction method and its application to fluid dynamics problems 2011 ,		16
137	An Online Method for Interpolating Linear Parametric Reduced-Order Models. <i>SIAM Journal of Scientific Computing</i> , 2011 , 33, 2169-2198	2.6	175
136	Efficient non-linear model reduction via a least-squares Petrov-Galerkin projection and compressive tensor approximations. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 86, 155-181	2.4	319
135	A discontinuous enrichment method for variable-coefficient advection-diffusion at high Péclet number. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 87, 309-335	2.4	24
134	A low-cost, goal-oriented compact proper orthogonal decomposition basis for model reduction of static systems. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 86, 381-402	2.4	63
133	Algorithms for interface treatment and load computation in embedded boundary methods for fluid and fluid-structure interaction problems. <i>International Journal for Numerical Methods in Fluids</i> , 2011 , 67, 1175-1206	1.9	67
132	Total energy conservation in ALE schemes for compressible flows. <i>European Journal of Computational Mechanics</i> , 2010 , 19, 337-363	0.5	4
131	Towards Real-Time Computational-Fluid-Dynamics-Based Aeroelastic Computations Using a Database of Reduced-Order Information. <i>AIAA Journal</i> , 2010 , 48, 2029-2037	2.1	94
130	A higher-order discontinuous enrichment method for the solution of high Péclet advection-diffusion problems on unstructured meshes. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 81, 604-636	2.4	21
129	Robust and provably second-order explicit-explicit and implicit-explicit staggered time-integrators for highly non-linear compressible fluid-structure interaction problems. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 84, 73-107	2.4	71
128	A time-parallel implicit method for accelerating the solution of non-linear structural dynamics problems. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 77, 451-470	2.4	20
127	A space-time discontinuous Galerkin method for the solution of the wave equation in the time domain. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 78, 275-295	2.4	37
126	A domain decomposition method for discontinuous Galerkin discretizations of Helmholtz problems with plane waves and Lagrange multipliers. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 78, 1513-1531	2.4	33

125	A PadÉbased factorization-free algorithm for identifying the eigenvalues missed by a generalized symmetric eigensolver. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 79, 239-252	2.4	4
124	A FETI-preconditioned conjugate gradient method for large-scale stochastic finite element problems. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 80, 914-931	2.4	38
123	A method for interpolating on manifolds structural dynamics reduced-order models. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 80, 1241-1258	2.4	136
122	A discontinuous enrichment method for the finite element solution of high PÉlet advection-diffusion problems. <i>Finite Elements in Analysis and Design</i> , 2009 , 45, 238-250	2.2	26
121	The FETI family of domain decomposition methods for inequality-constrained quadratic programming: Application to contact problems with conforming and nonconforming interfaces. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2009 , 198, 1673-1683	5.7	33
120	Effects of Fuel Slosh on Flutter Prediction 2009 ,		9
119	On-Demand CFD-Based Aeroelastic Predictions Using a Database of Reduced-Order Bases and Models 2009 ,		27
118	Convergence Analysis of a Discontinuous Galerkin Method with Plane Waves and Lagrange Multipliers for the Solution of Helmholtz Problems. <i>SIAM Journal on Numerical Analysis</i> , 2009 , 47, 1038-1066	2.4	27
117	Sonic boom mitigation via shape optimization using an adjoint method and application to a supersonic fighter aircraft. <i>European Journal of Computational Mechanics</i> , 2008 , 17, 217-243	0.5	4
116	Interpolation Method for Adapting Reduced-Order Models and Application to Aeroelasticity. <i>AIAA Journal</i> , 2008 , 46, 1803-1813	2.1	387
115	Strain and stress computations in stochastic finite element methods. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 74, 1219-1239	2.4	32
114	A discontinuous enrichment method for three-dimensional multiscale harmonic wave propagation problems in multi-fluid and fluid-solid media. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 76, 400-425	2.4	21
113	A higher-order generalized ghost fluid method for the poor for the three-dimensional two-phase flow computation of underwater implosions. <i>Journal of Computational Physics</i> , 2008 , 227, 7674-7700	4.1	83
112	A discontinuous enrichment method for capturing evanescent waves in multiscale fluid and fluid/solid problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2008 , 197, 1680-1698	5.7	41
111	Fast frequency sweep computations using a multi-point PadÉbased reconstruction method and an efficient iterative solver. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 69, 2848-2875	2.4	35
110	Incorporation of linear multipoint constraints in domain-decomposition-based iterative solvers □ Part II: Blending FETI-DP and mortar methods and assembling floating substructures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2007 , 196, 1347-1368	5.7	13
109	Adaptation of Aeroelastic Reduced-Order Models and Application to an F-16 Configuration. <i>AIAA Journal</i> , 2007 , 45, 1244-1257	2.1	112
108	Shape Optimization Methodology for Reducing the Sonic Boom Initial Pressure Rise. <i>AIAA Journal</i> , 2007 , 45, 1007-1018	2.1	20

107	Compressed Sensing and Time-Parallel Reduced-Order Modeling for Structural Health Monitoring Using a DDDAS. <i>Lecture Notes in Computer Science</i> , 2007 , 1171-1179	0.9	20
106	Three-dimensional discontinuous Galerkin elements with plane waves and Lagrange multipliers for the solution of mid-frequency Helmholtz problems. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 66, 796-815	2.4	64
105	The discontinuous enrichment method for elastic wave propagation in the medium-frequency regime. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 66, 2086-2114	2.4	38
104	Time-parallel implicit integrators for the near-real-time prediction of linear structural dynamic responses. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 67, 697-724	2.4	57
103	Provably second-order time-accurate loosely-coupled solution algorithms for transient nonlinear computational aeroelasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2006 , 195, 1973-2001	5.7	248
102	A dynamic variational multiscale method for large eddy simulations on unstructured meshes. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2006 , 195, 1667-1691	5.7	38
101	Reduced-order fluid/structure modeling of a complete aircraft configuration. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2006 , 195, 5730-5742	5.7	199
100	CFD on moving grids: from theory to realistic flutter, maneuvering, and multidisciplinary optimization. <i>International Journal of Computational Fluid Dynamics</i> , 2005 , 19, 595-603	1.2	12
99	A FETI-DP method for the parallel iterative solution of indefinite and complex-valued solid and shell vibration problems. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 63, 398-427	2.4	27
98	An iterative domain decomposition method for the solution of a class of indefinite problems in computational structural dynamics. <i>Applied Numerical Mathematics</i> , 2005 , 54, 150-166	2.5	21
97	FETI-DPH: A DUAL-PRIMAL DOMAIN DECOMPOSITION METHOD FOR ACOUSTIC SCATTERING. <i>Journal of Computational Acoustics</i> , 2005 , 13, 499-524		76
96	A discontinuous Galerkin method with plane waves and Lagrange multipliers for the solution of short wave exterior Helmholtz problems on unstructured meshes. <i>Wave Motion</i> , 2004 , 39, 307-317	1.8	35
95	Higher-order extensions of a discontinuous Galerkin method for mid-frequency Helmholtz problems. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 61, 1938-1956	2.4	58
94	Design and analysis of robust ALE time-integrators for the solution of unsteady flow problems on moving grids. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2004 , 193, 4073-4095	5.7	70
93	A variational multiscale method for the large eddy simulation of compressible turbulent flows on unstructured meshes—application to vortex shedding. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2004 , 193, 1367-1383	5.7	125
92	A numerically scalable dual-primal substructuring method for the solution of contact problems—part I: the frictionless case. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2004 , 193, 2403-2426	5.7	41
91	Sensitivity analysis and design optimization of three-dimensional non-linear aeroelastic systems by the adjoint method. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 56, 911-933	2.4	96
90	A fictitious domain decomposition method for the solution of partially axisymmetric acoustic scattering problems. Part 2: Neumann boundary conditions. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 58, 63-81	2.4	9

89	Time-decomposed parallel time-integrators: theory and feasibility studies for fluid, structure, and fluid-structure applications. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 58, 1397-1434	2.4	141
88	Design and analysis of ALE schemes with provable second-order time-accuracy for inviscid and viscous flow simulations. <i>Journal of Computational Physics</i> , 2003 , 191, 206-227	4.1	109
87	A discontinuous Galerkin method with Lagrange multipliers for the solution of Helmholtz problems in the mid-frequency regime. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2003 , 192, 1389-1419	5.7	182
86	The discontinuous enrichment method for multiscale analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2003 , 192, 3195-3209	5.7	69
85	Application of a three-field nonlinear fluid-structure formulation to the prediction of the aeroelastic parameters of an F-16 fighter. <i>Computers and Fluids</i> , 2003 , 32, 3-29	2.8	172
84	Aeroelastic Dynamic Analysis of a Full F-16 Configuration for Various Flight Conditions. <i>AIAA Journal</i> , 2003 , 41, 363-371	2.1	139
83	Three-dimensional finite element calculations in acoustic scattering using arbitrarily shaped convex artificial boundaries. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 53, 1461-1476	2.4	47
82	A fictitious domain decomposition method for the solution of partially axisymmetric acoustic scattering problems. Part I: Dirichlet boundary conditions. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 54, 1309-1332	2.4	18
81	A three-dimensional torsional spring analogy method for unstructured dynamic meshes. <i>Computers and Structures</i> , 2002 , 80, 305-316	4.5	218
80	On the solution of three-dimensional inverse obstacle acoustic scattering problems by a regularized Newton method. <i>Inverse Problems</i> , 2002 , 18, 1229-1246	2.3	46
79	Salinas: A Scalable Software for High-Performance Structural and Solid Mechanics Simulations 2002 ,		37
78	Multidisciplinary Simulation of the Maneuvering of an Aircraft. <i>Engineering With Computers</i> , 2001 , 17, 16-27	4.5	21
77	A linearized method for the frequency analysis of three-dimensional fluid/structure interaction problems in all flow regimes. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2001 , 190, 3121-3146	5.7	55
76	Partitioned procedures for the transient solution of coupled aeroelastic problems [Part II: energy transfer analysis and three-dimensional applications. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2001 , 190, 3147-3170	5.7	210
75	Partitioned analysis of coupled mechanical systems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2001 , 190, 3247-3270	5.7	453
74	The discontinuous enrichment method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2001 , 190, 6455-6479	5.7	276
73	A numerically scalable domain decomposition method for the solution of frictionless contact problems. <i>International Journal for Numerical Methods in Engineering</i> , 2001 , 50, 2643-2666	2.4	78
72	Iterative solution of large-scale acoustic scattering problems with multiple right hand-sides by a domain decomposition method with Lagrange multipliers. <i>International Journal for Numerical Methods in Engineering</i> , 2001 , 51, 1175-1193	2.4	23

71	FETI-DP: a dual-primal unified FETI method—part I: A faster alternative to the two-level FETI method. <i>International Journal for Numerical Methods in Engineering</i> , 2001 , 50, 1523-1544	2.4	399
70	A Fast Method for Solving Acoustic Scattering Problems in Frequency Bands. <i>Journal of Computational Physics</i> , 2001 , 168, 412-432	4.1	27
69	The Discrete Geometric Conservation Law and the Nonlinear Stability of ALE Schemes for the Solution of Flow Problems on Moving Grids. <i>Journal of Computational Physics</i> , 2001 , 174, 669-694	4.1	248
68	CFD-Based Aeroelastic Eigensolver for the Subsonic, Transonic, and Supersonic Regimes. <i>Journal of Aircraft</i> , 2001 , 38, 628-635	1.6	14
67	Application of the FETI method to ASCI problems—scalability results on 1000 processors and discussion of highly heterogeneous problems. <i>International Journal for Numerical Methods in Engineering</i> , 2000 , 47, 513-535	2.4	73
66	A scalable dual-primal domain decomposition method. <i>Numerical Linear Algebra With Applications</i> , 2000 , 7, 687-714	1.6	230
65	On the significance of the geometric conservation law for flow computations on moving meshes. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2000 , 190, 1467-1482	5.7	137
64	Two efficient staggered algorithms for the serial and parallel solution of three-dimensional nonlinear transient aeroelastic problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2000 , 182, 499-515	5.7	302
63	Two-level domain decomposition methods with Lagrange multipliers for the fast iterative solution of acoustic scattering problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2000 , 184, 213-239	5.7	94
62	The second generation FETI methods and their application to the parallel solution of large-scale linear and geometrically non-linear structural analysis problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2000 , 184, 333-374	5.7	108
61	A two-level domain decomposition method for the iterative solution of high frequency exterior Helmholtz problems. <i>Numerische Mathematik</i> , 2000 , 85, 283-308	2.2	94
60	FINITE ELEMENT SOLUTION OF TWO-DIMENSIONAL ACOUSTIC SCATTERING PROBLEMS USING ARBITRARILY SHAPED CONVEX ARTIFICIAL BOUNDARIES. <i>Journal of Computational Acoustics</i> , 2000 , 08, 81-99		26
59	Design of Efficient Partitioned Procedures for the Transient Solution of Aeroelastic Problems. <i>Revue Europeenne Des Elements</i> , 2000 , 9, 655-680		9
58	Second-order time-accurate and geometrically conservative implicit schemes for flow computations on unstructured dynamic meshes. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1999 , 170, 103-129	5.7	131
57	A simple and efficient extension of a class of substructure based preconditioners to heterogeneous structural mechanics problems. <i>International Journal for Numerical Methods in Engineering</i> , 1999 , 44, 489-516	2.4	104
56	Theoretical comparison of the FETI and algebraically partitioned FETI methods, and performance comparisons with a direct sparse solver. <i>International Journal for Numerical Methods in Engineering</i> , 1999 , 46, 501-533	2.4	45
55	On the implicit time integration of semi-discrete viscous fluxes on unstructured dynamic meshes. <i>International Journal for Numerical Methods in Fluids</i> , 1999 , 29, 975-996	1.9	17
54	A Scalable Substructuring Method by Lagrange Multipliers for Plate Bending Problems. <i>SIAM Journal on Numerical Analysis</i> , 1999 , 36, 1370-1391	2.4	54

53	A simple and efficient extension of a class of substructure based preconditioners to heterogeneous structural mechanics problems 1999 , 44, 489		9
52	Theoretical comparison of the FETI and algebraically partitioned FETI methods, and performance comparisons with a direct sparse solver 1999 , 46, 501		1
51	On the general solution by a direct method of a large-scale singular system of linear equations: application to the analysis of floating structures. <i>International Journal for Numerical Methods in Engineering</i> , 1998 , 41, 675-696	2.4	63
50	A unified framework for accelerating the convergence of iterative substructuring methods with Lagrange multipliers. <i>International Journal for Numerical Methods in Engineering</i> , 1998 , 42, 257-288	2.4	47
49	Incorporation of linear multipoint constraints in substructure based iterative solvers. Part 1: a numerically scalable algorithm. <i>International Journal for Numerical Methods in Engineering</i> , 1998 , 43, 997-1016	2.4	38
48	Unusual stabilized finite element methods and residual free bubbles. <i>International Journal for Numerical Methods in Fluids</i> , 1998 , 27, 159-168	1.9	29
47	The two-level FETI method Part II: Extension to shell problems, parallel implementation and performance results. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1998 , 155, 153-179	5.7	73
46	The two-level FETI method for static and dynamic plate problems Part I: An optimal iterative solver for biharmonic systems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1998 , 155, 129-151	5.7	110
45	Load and motion transfer algorithms for fluid/structure interaction problems with non-matching discrete interfaces: Momentum and energy conservation, optimal discretization and application to aeroelasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1998 , 157, 95-114	5.7	435
44	Torsional springs for two-dimensional dynamic unstructured fluid meshes. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1998 , 163, 231-245	5.7	333
43	Higher-Order Subiteration-Free Staggered Algorithm for Nonlinear Transient Aeroelastic Problems. <i>AIAA Journal</i> , 1998 , 36, 1754-1757	2.1	83
42	A minimum overlap restricted additive Schwarz preconditioner and applications in 3D flow simulations. <i>Contemporary Mathematics</i> , 1998 , 479-485	1.6	29
41	Numerical simulation of vortex shedding flows past moving obstacles using the $k-\epsilon$ turbulence model on unstructured dynamic meshes. <i>Revue Europeenne Des Elements</i> , 1997 , 6, 611-642		1
40	Residual-free bubbles for the Helmholtz equation. <i>International Journal for Numerical Methods in Engineering</i> , 1997 , 40, 4003-4009	2.4	121
39	Improved damage location accuracy using strain energy-based mode selection criteria. <i>AIAA Journal</i> , 1997 , 35, 693-699	2.1	2
38	Geometric conservation laws for flow problems with moving boundaries and deformable meshes, and their impact on aeroelastic computations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1996 , 134, 71-90	5.7	268
37	Bubble functions prompt unusual stabilized finite element methods. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1995 , 123, 299-308	5.7	153
36	Implicit time integration of a class of constrained hybrid formulations Part I: Spectral stability theory. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1995 , 125, 71-107	5.7	30

35	Partitioned procedures for the transient solution of coupled aeroelastic problems Part I: Model problem, theory and two-dimensional application. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1995 , 124, 79-112	5.7	246
34	Geometric conservation laws for aeroelastic computations using unstructured dynamic meshes 1995 ,		25
33	Mesh partitioning for implicit computations via iterative domain decomposition: Impact and optimization of the subdomain aspect ratio. <i>International Journal for Numerical Methods in Engineering</i> , 1995 , 38, 989-1000	2.4	55
32	A scalable Lagrange multiplier based domain decomposition method for time-dependent problems. <i>International Journal for Numerical Methods in Engineering</i> , 1995 , 38, 3831-3853	2.4	92
31	Mixed explicit/implicit time integration of coupled aeroelastic problems: Three-field formulation, geometric conservation and distributed solution. <i>International Journal for Numerical Methods in Fluids</i> , 1995 , 21, 807-835	1.9	267
30	TOP/DOMDECA software tool for mesh partitioning and parallel processing. <i>Computing Systems in Engineering: an International Journal</i> , 1995 , 6, 13-26		48
29	Matching fluid and structure meshes for aeroelastic computations: A parallel approach. <i>Computers and Structures</i> , 1995 , 54, 779-785	4.5	118
28	A transient FETI methodology for large-scale parallel implicit computations in structural mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 1994 , 37, 1945-1975	2.4	70
27	Simulation of compressible viscous flows on a variety of MPPs: computational algorithms for unstructured dynamic meshes and performance results. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1994 , 119, 35-60	5.7	39
26	Optimal convergence properties of the FETI domain decomposition method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1994 , 115, 365-385	5.7	243
25	Extending substructure based iterative solvers to multiple load and repeated analyses. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1994 , 117, 195-209	5.7	73
24	On a component mode synthesis method and its application to incompatible substructures. <i>Computers and Structures</i> , 1994 , 51, 459-473	4.5	56
23	Tailoring domain decomposition methods for efficient parallel coarse grid solution and for systems with many right-hand sides. <i>Contemporary Mathematics</i> , 1994 , 401-406	1.6	17
22	SELECTION OF EXPERIMENTAL MODAL DATA SETS FOR DAMAGE DETECTION VIA MODEL UPDATE 1993 ,		11
21	Updating finite element dynamic models using an element-by-element sensitivity methodology. <i>AIAA Journal</i> , 1993 , 31, 1702-1711	2.1	200
20	Stability analysis of dynamic meshes for transient aeroelastic computations 1993 ,		22
19	Automatic partitioning of unstructured meshes for the parallel solution of problems in computational mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 1993 , 36, 745-764	2.4	146
18	A natural partitioning scheme for parallel simulation of multibody systems. <i>International Journal for Numerical Methods in Engineering</i> , 1993 , 36, 945-967	2.4	8

17	Two-dimensional viscous flow computations on the Connecti on Machine: Unstructured meshes, upwind schemes and massively parallel computations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1993 , 102, 61-88	5-7	39
16	IMPLICIT TRANSIENT FINITE ELEMENT STRUCTURAL COMPUTATIONS ON MIMD SYSTEMS: FETI V.S. DIRECT SOLVERS 1993 ,		1
15	An Unconventional Domain Decomposition Method for an Efficient Parallel Solution of Large-Scale Finite Element Systems. <i>SIAM Journal on Scientific and Statistical Computing</i> , 1992 , 13, 379-396		128
14	A method of finite element tearing and interconnecting and its parallel solution algorithm. <i>International Journal for Numerical Methods in Engineering</i> , 1991 , 32, 1205-1227	2.4	806
13	Parallel/vector improvements of the frontal method. <i>International Journal for Numerical Methods in Engineering</i> , 1991 , 32, 1267-1281	2.4	20
12	A modular multibody analysis capability for high-precision, active control and real-time applications. <i>International Journal for Numerical Methods in Engineering</i> , 1991 , 32, 1767-1798	2.4	24
11	An unconditionally stable staggered algorithm for transient finite element analysis of coupled thermoelastic problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1991 , 85, 349-365	5-7	61
10	A lagrange multiplier based divide and conquer finite element algorithm. <i>Computing Systems in Engineering: an International Journal</i> , 1991 , 2, 149-156		58
9	Transient finite element computations on 65536 processors: The connection machine. <i>International Journal for Numerical Methods in Engineering</i> , 1990 , 30, 27-55	2.4	33
8	A coarse/fine preconditioner for very ill-conditioned finite element problems. <i>International Journal for Numerical Methods in Engineering</i> , 1989 , 28, 1715-1723	2.4	15
7	Towards parallel I/O in finite element simulations. <i>International Journal for Numerical Methods in Engineering</i> , 1989 , 28, 2541-2553	2.4	4
6	A general approach to nonlinear FE computations on shared-memory multiprocessors. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1989 , 72, 153-171	5-7	61
5	A simple and efficient automatic fem domain decomposer. <i>Computers and Structures</i> , 1988 , 28, 579-602	4.5	222
4	A parallel active column equation solver. <i>Computers and Structures</i> , 1988 , 28, 289-304	4.5	73
3	Solution of finite element systems on concurrent processing computers. <i>Engineering With Computers</i> , 1987 , 2, 157-165	4.5	51
2	A new finite element concurrent computer program architecture. <i>International Journal for Numerical Methods in Engineering</i> , 1987 , 24, 1771-1792	2.4	80
1	Active Manifold and Model-Order Reduction to Accelerate Multidisciplinary Analysis and Optimization. <i>AIAA Journal</i> , 1-15	2.1	2