

Klaus-Jürgen Bathe

List of Publications by Year in descending order

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198
papers

15,921
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121
g-index

204
all docs

204
docs citations

204
times ranked

5240
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | A four-node plate bending element based on Mindlin/Reissner plate theory and a mixed interpolation. International Journal for Numerical Methods in Engineering, 1985, 21, 367-383. | 1.5 | 880 |
| 2 | Finite element formulations for large deformation dynamic analysis. International Journal for Numerical Methods in Engineering, 1975, 9, 353-386. | 1.5 | 720 |
| 3 | A study of three-node triangular plate bending elements. International Journal for Numerical Methods in Engineering, 1980, 15, 1771-1812. | 1.5 | 719 |
| 4 | A formulation of general shell elements—the use of mixed interpolation of tensorial components. International Journal for Numerical Methods in Engineering, 1986, 22, 697-722. | 1.5 | 700 |
| 5 | Large displacement analysis of three-dimensional beam structures. International Journal for Numerical Methods in Engineering, 1979, 14, 961-986. | 1.5 | 570 |
| 6 | A solution method for planar and axisymmetric contact problems. International Journal for Numerical Methods in Engineering, 1985, 21, 65-88. | 1.5 | 405 |
| 7 | A finite element formulation for nonlinear incompressible elastic and inelastic analysis. Computers and Structures, 1987, 26, 357-409. | 2.4 | 394 |
| 8 | Performance of a new partitioned procedure versus a monolithic procedure in fluid–structure interaction. Computers and Structures, 2009, 87, 793-801. | 2.4 | 325 |
| 9 | Conserving energy and momentum in nonlinear dynamics: A simple implicit time integration scheme. Computers and Structures, 2007, 85, 437-445. | 2.4 | 323 |
| 10 | On a composite implicit time integration procedure for nonlinear dynamics. Computers and Structures, 2005, 83, 2513-2524. | 2.4 | 302 |
| 11 | A hyperelastic-based large strain elasto-plastic constitutive formulation with combined isotropic-kinematic hardening using the logarithmic stress and strain measures. International Journal for Numerical Methods in Engineering, 1990, 30, 1099-1114. | 1.5 | 300 |
| 12 | A solution method for static and dynamic analysis of three-dimensional contact problems with friction. Computers and Structures, 1986, 24, 855-873. | 2.4 | 250 |
| 13 | The inf–sup condition and its evaluation for mixed finite element methods. Computers and Structures, 2001, 79, 243-252. | 2.4 | 239 |
| 14 | Effects of element distortions on the performance of isoparametric elements. International Journal for Numerical Methods in Engineering, 1993, 36, 3553-3576. | 1.5 | 227 |
| 15 | A geometric and material nonlinear plate and shell element. Computers and Structures, 1980, 11, 23-48. | 2.4 | 215 |
| 16 | Development of MITC isotropic triangular shell finite elements. Computers and Structures, 2004, 82, 945-962. | 2.4 | 215 |
| 17 | Finite element developments for general fluid flows with structural interactions. International Journal for Numerical Methods in Engineering, 2004, 60, 213-232. | 1.5 | 213 |
| 18 | Mixed-interpolated elements for Reissner-Mindlin plates. International Journal for Numerical Methods in Engineering, 1989, 28, 1787-1801. | 1.5 | 212 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | An explicit time integration scheme for the analysis of wave propagations. Computers and Structures, 2013, 129, 178-193. | 2.4 | 210 |
| 20 | On the automatic solution of nonlinear finite element equations. Computers and Structures, 1983, 17, 871-879. | 2.4 | 204 |
| 21 | Insight into an implicit time integration scheme for structural dynamics. Computers and Structures, 2012, 98-99, 1-6. | 2.4 | 203 |
| 22 | A discourse on the stability conditions for mixed finite element formulations. Computer Methods in Applied Mechanics and Engineering, 1990, 82, 27-57. | 3.4 | 202 |
| 23 | Finite element analysis of fluid flows fully coupled with structural interactions. Computers and Structures, 1999, 72, 1-16. | 2.4 | 199 |
| 24 | An efficient algorithm for analysis of nonlinear heat transfer with phase changes. International Journal for Numerical Methods in Engineering, 1982, 18, 119-134. | 1.5 | 189 |
| 25 | An evaluation of the MITC shell elements. Computers and Structures, 2000, 75, 1-30. | 2.4 | 188 |
| 26 | A posteriori error estimation techniques in practical finite element analysis. Computers and Structures, 2005, 83, 235-265. | 2.4 | 185 |
| 27 | Analysis of fluid-structure interactions. a direct symmetric coupled formulation based on the fluid velocity potential. Computers and Structures, 1985, 21, 21-32. | 2.4 | 178 |
| 28 | Finite element free surface seepage analysis without mesh iteration. International Journal for Numerical and Analytical Methods in Geomechanics, 1979, 3, 13-22. | 1.7 | 170 |
| 29 | A simple and effective element for analysis of general shell structures. Computers and Structures, 1981, 13, 673-681. | 2.4 | 168 |
| 30 | Solution methods for eigenvalue problems in structural mechanics. International Journal for Numerical Methods in Engineering, 1973, 6, 213-226. | 1.5 | 156 |
| 31 | The Finite Element Analysis of Shells – Fundamentals. Computational Fluid and Solid Mechanics, 2003, , . | 0.5 | 156 |
| 32 | A finite element method enriched for wave propagation problems. Computers and Structures, 2012, 94-95, 1-12. | 2.4 | 154 |
| 33 | Stability and patch test performance of contact discretizations and a new solution algorithm. Computers and Structures, 2001, 79, 1473-1486. | 2.4 | 145 |
| 34 | A study of displacement-based fluid finite elements for calculating frequencies of fluid and fluid-structure systems. Nuclear Engineering and Design, 1983, 76, 137-151. | 0.8 | 138 |
| 35 | On nonlinear dynamic analysis using substructuring and mode superposition. Computers and Structures, 1981, 13, 699-707. | 2.4 | 137 |
| 36 | DISPLACEMENT/PRESSURE BASED MIXED FINITE ELEMENT FORMULATIONS FOR ACOUSTIC FLUID-STRUCTURE INTERACTION PROBLEMS. International Journal for Numerical Methods in Engineering, 1997, 40, 2001-2017. | 1.5 | 135 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Error indicators and adaptive remeshing in large deformation finite element analysis. <i>Finite Elements in Analysis and Design</i> , 1994, 16, 99-139. | 1.7 | 128 |
| 38 | The method of finite spheres with improved numerical integration. <i>Computers and Structures</i> , 2001, 79, 2183-2196. | 2.4 | 119 |
| 39 | Large Eigenvalue Problems in Dynamic Analysis. <i>Journal of the Engineering Mechanics Division</i> , 1972, 98, 1471-1485. | 0.4 | 118 |
| 40 | Performance of an implicit time integration scheme in the analysis of wave propagations. <i>Computers and Structures</i> , 2013, 123, 93-105. | 2.4 | 117 |
| 41 | An accelerated subspace iteration method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1980, 23, 313-331. | 3.4 | 116 |
| 42 | The MITC3+ shell element and its performance. <i>Computers and Structures</i> , 2014, 138, 12-23. | 2.4 | 114 |
| 43 | The Bathe time integration method with controllable spectral radius: The $\tilde{\alpha}$ -Bathe method. <i>Computers and Structures</i> , 2019, 212, 299-310. | 2.4 | 111 |
| 44 | A solution procedure for thermo-elastic-plastic and creep problems. <i>Nuclear Engineering and Design</i> , 1981, 64, 49-80. | 0.8 | 108 |
| 45 | Studies of finite element procedures – Stress solution of a closed elastic strain path with stretching and shearing using the updated Lagrangian Jaumann formulation. <i>Computers and Structures</i> , 1987, 26, 175-179. | 2.4 | 106 |
| 46 | Towards improving the MITC9 shell element. <i>Computers and Structures</i> , 2003, 81, 477-489. | 2.4 | 101 |
| 47 | The MITC7 and MITC9 Plate bending elements. <i>Computers and Structures</i> , 1989, 32, 797-814. | 2.4 | 96 |
| 48 | A mesh adaptivity procedure for CFD and fluid-structure interactions. <i>Computers and Structures</i> , 2009, 87, 604-617. | 2.4 | 95 |
| 49 | The $\tilde{\sigma}$ -effective-stress-function™ algorithm for thermo-elasto-plasticity and creep. <i>International Journal for Numerical Methods in Engineering</i> , 1987, 24, 1509-1532. | 1.5 | 87 |
| 50 | A model of incompressible isotropic hyperelastic material behavior using spline interpolations of tension–compression test data. <i>Communications in Numerical Methods in Engineering</i> , 2009, 25, 53-63. | 1.3 | 83 |
| 51 | A flow-condition-based interpolation finite element procedure for incompressible fluid flows. <i>Computers and Structures</i> , 2002, 80, 1267-1277. | 2.4 | 82 |
| 52 | Benchmark problems for incompressible fluid flows with structural interactions. <i>Computers and Structures</i> , 2007, 85, 628-644. | 2.4 | 79 |
| 53 | The Finite Element Analysis of Shells - Fundamentals. <i>Computational Fluid and Solid Mechanics</i> , 2011, , . | 0.5 | 79 |
| 54 | The MITC3+ shell element in geometric nonlinear analysis. <i>Computers and Structures</i> , 2015, 146, 91-104. | 2.4 | 79 |

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| 55 | Finite element formulation and solution of nonlinear heat transfer. Nuclear Engineering and Design, 1979, 51, 389-401. | 0.8 | 78 |
| 56 | Measuring convergence of mixed finite element discretizations: an application to shell structures. Computers and Structures, 2003, 81, 639-654. | 2.4 | 76 |
| 57 | A finite element procedure for the analysis of thermo-mechanical solids in contact. Computers and Structures, 2000, 75, 551-573. | 2.4 | 72 |
| 58 | The quadratic MITC plate and MITC shell elements in plate bending. Advances in Engineering Software, 2010, 41, 712-728. | 1.8 | 72 |
| 59 | The Bathe time integration method revisited for prescribing desired numerical dissipation. Computers and Structures, 2019, 212, 289-298. | 2.4 | 67 |
| 60 | Elastic-plastic large deformation static and dynamic analysis. Computers and Structures, 1976, 6, 81-92. | 2.4 | 66 |
| 61 | A new MITC4+ shell element. Computers and Structures, 2017, 182, 404-418. | 2.4 | 66 |
| 62 | Direct solution of large systems of linear equations. Computers and Structures, 1974, 4, 363-372. | 2.4 | 65 |
| 63 | On three-dimensional nonlinear analysis of concrete structures. Nuclear Engineering and Design, 1979, 52, 385-409. | 0.8 | 64 |
| 64 | The mathematical shell model underlying general shell elements. International Journal for Numerical Methods in Engineering, 2000, 48, 289-313. | 1.5 | 64 |
| 65 | An inf-sup test for shell finite elements. Computers and Structures, 2000, 75, 439-456. | 2.4 | 62 |
| 66 | The subspace iteration method "Revisited". Computers and Structures, 2013, 126, 177-183. | 2.4 | 62 |
| 67 | Nonlinear analysis of concrete structures. Computers and Structures, 1989, 32, 563-590. | 2.4 | 61 |
| 68 | On the asymptotic behavior of shell structures and the evaluation in finite element solutions. Computers and Structures, 2002, 80, 235-255. | 2.4 | 61 |
| 69 | The MITC3 shell finite element enriched by interpolation covers. Computers and Structures, 2014, 134, 128-142. | 2.4 | 61 |
| 70 | The MITC4+ shell element and its performance. Computers and Structures, 2016, 169, 57-68. | 2.4 | 60 |
| 71 | On the stability of mixed finite elements in large strain analysis of incompressible solids. Finite Elements in Analysis and Design, 1997, 28, 83-104. | 1.7 | 57 |
| 72 | The finite element method enriched by interpolation covers. Computers and Structures, 2013, 116, 35-49. | 2.4 | 56 |

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| 73 | Modeling large strain anisotropic elasto-plasticity with logarithmic strain and stress measures. Computers and Structures, 2011, 89, 826-843. | 2.4 | 52 |
| 74 | Transient implicit wave propagation dynamics with overlapping finite elements. Computers and Structures, 2018, 199, 18-33. | 2.4 | 52 |
| 75 | Further insights into an implicit time integration scheme for structural dynamics. Computers and Structures, 2018, 202, 15-24. | 2.4 | 52 |
| 76 | On evaluating the inf-sup condition for plate bending elements. International Journal for Numerical Methods in Engineering, 1997, 40, 3639-3663. | 1.5 | 49 |
| 77 | Insight into finite element shell discretizations by use of the "basic shell mathematical model". Computers and Structures, 2005, 83, 69-90. | 2.4 | 49 |
| 78 | Crushing and crashing of tubes with implicit time integration. International Journal of Impact Engineering, 2012, 42, 80-88. | 2.4 | 49 |
| 79 | Insight into 3-node triangular shell finite elements: the effects of element isotropy and mesh patterns. Computers and Structures, 2007, 85, 404-418. | 2.4 | 47 |
| 80 | A triangular six-node shell element. Computers and Structures, 2009, 87, 1451-1460. | 2.4 | 46 |
| 81 | Measuring the convergence behavior of shell analysis schemes. Computers and Structures, 2011, 89, 285-301. | 2.4 | 46 |
| 82 | Performance of the MITC3+ and MITC4+ shell elements in widely-used benchmark problems. Computers and Structures, 2017, 193, 187-206. | 2.4 | 46 |
| 83 | Displacement/pressure mixed interpolation in the method of finite spheres. International Journal for Numerical Methods in Engineering, 2001, 51, 275-292. | 1.5 | 45 |
| 84 | Transient wave propagation in inhomogeneous media with enriched overlapping triangular elements. Computers and Structures, 2020, 237, 106273. | 2.4 | 45 |
| 85 | A stress improvement procedure. Computers and Structures, 2012, 112-113, 311-326. | 2.4 | 44 |
| 86 | The gradient of the finite element variational indicator with respect to nodal and applications in fracture mechanics and mesh optimization. International Journal for Numerical Methods in Engineering, 1985, 21, 763-774. | 1.5 | 42 |
| 87 | Computational issues in large strain elasto-plasticity: an algorithm for mixed hardening and plastic spin. International Journal for Numerical Methods in Engineering, 2005, 63, 159-196. | 1.5 | 42 |
| 88 | A 4-node 3D-shell element to model shell surface tractions and incompressible behavior. Computers and Structures, 2008, 86, 2027-2041. | 2.4 | 42 |
| 89 | A new 4-node MITC element for analysis of two-dimensional solids and its formulation in a shell element. Computers and Structures, 2017, 192, 34-49. | 2.4 | 41 |
| 90 | For direct time integrations: A comparison of the Newmark and Bathe schemes. Computers and Structures, 2019, 225, 106079. | 2.4 | 41 |

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| 91 | A FOUR-NODE QUADRILATERAL MIXED-INTERPOLATED ELEMENT FOR SOLIDS AND FLUIDS. Mathematical Models and Methods in Applied Sciences, 1995, 05, 1113-1128. | 1.7 | 40 |
| 92 | The MITC3+ shell element enriched in membrane displacements by interpolation covers. Computer Methods in Applied Mechanics and Engineering, 2018, 337, 458-480. | 3.4 | 39 |
| 93 | Component mode synthesis with subspace iterations for controlled accuracy of frequency and mode shape solutions. Computers and Structures, 2014, 139, 28-32. | 2.4 | 37 |
| 94 | The finite element method with overlapping elements – A new paradigm for CAD driven simulations. Computers and Structures, 2017, 182, 526-539. | 2.4 | 37 |
| 95 | On the displacement formulation of torsion of shafts with rectangular cross-sections. International Journal for Numerical Methods in Engineering, 1982, 18, 1565-1568. | 1.5 | 36 |
| 96 | A shell problem highly sensitive to thickness changes. International Journal for Numerical Methods in Engineering, 2003, 57, 1039-1052. | 1.5 | 36 |
| 97 | An analysis of implicit time integration schemes for wave propagations. Computers and Structures, 2020, 230, 106188. | 2.4 | 36 |
| 98 | The Mechanics of Solids and Structures - Hierarchical Modeling and the Finite Element Solution. Computational Fluid and Solid Mechanics, 2011, , . | 0.5 | 36 |
| 99 | Goal-oriented error estimation in the analysis of fluid flows with structural interactions. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 5673-5684. | 3.4 | 34 |
| 100 | A finite element procedure for multiscale wave equations with application to plasma waves. Computers and Structures, 2010, 88, 87-94. | 2.4 | 33 |
| 101 | The use of nodal point forces to improve element stresses. Computers and Structures, 2011, 89, 485-495. | 2.4 | 33 |
| 102 | Transient implicit wave propagation dynamics with the method of finite spheres. Computers and Structures, 2016, 173, 50-60. | 2.4 | 32 |
| 103 | Direct and iterative computing of fluid flows fully coupled with structures. , 2001, , 1440-1443. | | 32 |
| 104 | On some current procedures and difficulties in finite element analysis of elastic-plastic response. Computers and Structures, 1980, 12, 607-624. | 2.4 | 31 |
| 105 | On the use of hierarchical models in engineering analysis. Computer Methods in Applied Mechanics and Engineering, 1990, 82, 5-26. | 3.4 | 31 |
| 106 | The MITC4+ shell element in geometric nonlinear analysis. Computers and Structures, 2017, 185, 1-14. | 2.4 | 31 |
| 107 | Inf-sup testing of upwind methods. International Journal for Numerical Methods in Engineering, 2000, 48, 745-760. | 1.5 | 29 |
| 108 | 3D-shell elements for structures in large strains. Computers and Structures, 2013, 122, 2-12. | 2.4 | 29 |

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| 109 | On the application of the finite element method to metal forming processes " part I. Computer Methods in Applied Mechanics and Engineering, 1979, 17-18, 597-608. | 3.4 | 28 |
| 110 | On Mixed Elements for Acoustic Fluid-Structure Interactions. Mathematical Models and Methods in Applied Sciences, 1997, 07, 329-343. | 1.7 | 28 |
| 111 | The method of finite spheres for wave propagation problems. Computers and Structures, 2014, 142, 1-14. | 2.4 | 28 |
| 112 | The modal behavior of the MITC3+ triangular shell element. Computers and Structures, 2015, 153, 148-164. | 2.4 | 28 |
| 113 | An evaluation of the Lyapunov characteristic exponent of chaotic continuous systems. International Journal for Numerical Methods in Engineering, 2003, 56, 145-163. | 1.5 | 27 |
| 114 | A flow-condition-based interpolation finite element procedure for triangular grids. International Journal for Numerical Methods in Fluids, 2006, 51, 673-699. | 0.9 | 27 |
| 115 | Advances in crush analysis. Computers and Structures, 1999, 72, 31-47. | 2.4 | 26 |
| 116 | Coupling and enrichment schemes for finite element and finite sphere discretizations. Computers and Structures, 2005, 83, 1386-1395. | 2.4 | 26 |
| 117 | Improved stresses for the 4-node tetrahedral element. Computers and Structures, 2011, 89, 1265-1273. | 2.4 | 25 |
| 118 | A simple and effective pipe elbow element"some nonlinear capabilities. Computers and Structures, 1983, 17, 659-667. | 2.4 | 24 |
| 119 | Towards a procedure to automatically improve finite element solutions by interpolation covers. Computers and Structures, 2014, 131, 81-97. | 2.4 | 24 |
| 120 | On effective implicit time integration in analysis of fluid-structure problems. International Journal for Numerical Methods in Engineering, 1980, 15, 943-948. | 1.5 | 23 |
| 121 | Overlapping finite elements for a new paradigm of solution. Computers and Structures, 2017, 187, 64-76. | 2.4 | 23 |
| 122 | The new paradigm of finite element solutions with overlapping elements in CAD " Computational efficiency of the procedure. Computers and Structures, 2018, 199, 1-17. | 2.4 | 23 |
| 123 | A numerical study of a natural convection flow in a cavity. International Journal for Numerical Methods in Fluids, 2002, 40, 1045-1057. | 0.9 | 22 |
| 124 | Studies of finite element procedures" On mesh selection. Computers and Structures, 1985, 21, 257-264. | 2.4 | 21 |
| 125 | A Simplified Analysis of Two Plate Bending Elements " the MITC4 and MITC9 Elements. , 1987, , 407-417. | | 21 |
| 126 | A FLOW-CONDITION-BASED INTERPOLATION MIXED FINITE ELEMENT PROCEDURE FOR HIGHER REYNOLDS NUMBER FLUID FLOWS. Mathematical Models and Methods in Applied Sciences, 2002, 12, 525-539. | 1.7 | 21 |

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| 127 | Insight into a model for large strain anisotropic elasto-plasticity. Computational Mechanics, 2009, 44, 651-668. | 2.2 | 21 |
| 128 | Thermo-elastic-plastic and creep analysis of shell structures. Computers and Structures, 1987, 26, 135-143. | 2.4 | 20 |
| 129 | The MITC9 shell element in plate bending: mathematical analysis of a simplified case. Computational Mechanics, 2011, 47, 617-626. | 2.2 | 20 |
| 130 | Computing Nonequilibrium Conformational Dynamics of Structured Nucleic Acid Assemblies. Journal of Chemical Theory and Computation, 2016, 12, 261-273. | 2.3 | 20 |
| 131 | Quadrilateral overlapping elements and their use in the AMORE paradigm. Computers and Structures, 2019, 222, 25-35. | 2.4 | 20 |
| 132 | New insights into the $\hat{\tau}^2/\hat{\tau}^2$ -Bathe time integration scheme when L-stable. Computers and Structures, 2021, 245, 106433. | 2.4 | 20 |
| 133 | On upwind methods for parabolic finite elements in incompressible flows. International Journal for Numerical Methods in Engineering, 2000, 47, 317-340. | 1.5 | 19 |
| 134 | ON THE INF $\hat{\epsilon}$ -SUP CONDITION OF MIXED FINITE ELEMENT FORMULATIONS FOR ACOUSTIC FLUIDS. Mathematical Models and Methods in Applied Sciences, 2001, 11, 883-901. | 1.7 | 19 |
| 135 | Selecting the load at the intermediate time point of the $\hat{\tau}$ -Bathe time integration scheme. Computers and Structures, 2021, 254, 106559. | 2.4 | 19 |
| 136 | On finite element large displacement and elastic-plastic dynamic analysis of shell structures. Computers and Structures, 1980, 12, 309-318. | 2.4 | 18 |
| 137 | Studies of finite element proceduresan evaluation of preconditioned iterative solvers. Computers and Structures, 1989, 32, 671-677. | 2.4 | 18 |
| 138 | The solution of Maxwell $\hat{\epsilon}$'s equations in multiphysics. Computers and Structures, 2014, 132, 99-112. | 2.4 | 18 |
| 139 | Spurious modes in geometrically nonlinear small displacement finite elements with incompatible modes. Computers and Structures, 2014, 140, 14-22. | 2.4 | 18 |
| 140 | Accurate solution of wave propagation problems in elasticity. Computers and Structures, 2021, 249, 106502. | 2.4 | 17 |
| 141 | On elastic-plastic analysis of I-beams in bending and torsion. Computers and Structures, 1983, 17, 711-718. | 2.4 | 16 |
| 142 | Studies of finite element procedures $\hat{\epsilon}$ the use of ADIANA-F in fluid flow analyses. Computers and Structures, 1989, 32, 499-516. | 2.4 | 15 |
| 143 | The AMORE paradigm for finite element analysis. Advances in Engineering Software, 2019, 130, 1-13. | 1.8 | 15 |
| 144 | Transient wave propagations with the Noh-Bathe scheme and the spectral element method. Computers and Structures, 2021, 254, 106531. | 2.4 | 15 |

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| 145 | On modeling mixed hardening in computational plasticity. Computers and Structures, 2004, 82, 535-539. | 2.4 | 14 |
| 146 | Transient solution of 3D free surface flows using large time steps. Computers and Structures, 2015, 158, 346-354. | 2.4 | 14 |
| 147 | Solution of incompressible viscous fluid flow with heat transfer using ADINA-F. Computers and Structures, 1987, 26, 17-31. | 2.4 | 13 |
| 148 | A note on the use of the additive decomposition of the strain tensor in finite deformation inelasticity. Computer Methods in Applied Mechanics and Engineering, 1991, 93, 31-38. | 3.4 | 13 |
| 149 | On the ellipticity condition for model-parameter dependent mixed formulations. Computers and Structures, 2010, 88, 581-587. | 2.4 | 13 |
| 150 | The subspace iteration method in protein normal mode analysis. Journal of Computational Chemistry, 2010, 31, 66-74. | 1.5 | 13 |
| 151 | On the convergence of overlapping elements and overlapping meshes. Computers and Structures, 2021, 244, 106429. | 2.4 | 13 |
| 152 | Finite elements in CAD and ADINA. Nuclear Engineering and Design, 1986, 98, 57-67. | 0.8 | 12 |
| 153 | On higher-order-accuracy points in isoparametric finite element analysis and an application to error assessment. Computers and Structures, 2001, 79, 1275-1285. | 2.4 | 12 |
| 154 | The Bathe subspace iteration method enriched by turning vectors. Computers and Structures, 2017, 186, 11-21. | 2.4 | 12 |
| 155 | On the Reliable Solution of Contact Problems in Engineering Design. International Journal of Mechanics and Materials in Design, 2004, 1, 3-16. | 1.7 | 11 |
| 156 | The method of finite spheres in three-dimensional linear static analysis. Computers and Structures, 2016, 173, 161-173. | 2.4 | 11 |
| 157 | A nine-node quadrilateral FCBI element for incompressible fluid flows. Communications in Numerical Methods in Engineering, 2006, 22, 917-931. | 1.3 | 10 |
| 158 | An enhancement of overlapping finite elements. Computers and Structures, 2022, 260, 106704. | 2.4 | 10 |
| 159 | Time splitting ratio in the Bathe time integration method for higher-order accuracy in structural dynamics and heat transfer. Computers and Structures, 2022, 270, 106814. | 2.4 | 10 |
| 160 | The CIP method embedded in finite element discretizations of incompressible fluid flows. International Journal for Numerical Methods in Engineering, 2007, 71, 66-80. | 1.5 | 9 |
| 161 | A Holistic Method to Design an Optimized Energy Scenario and Quantitatively Evaluate Promising Technologies for Implementation. International Journal of Green Energy, 2009, 6, 1-21. | 2.1 | 9 |
| 162 | A new 8-node element for analysis of three-dimensional solids. Computers and Structures, 2018, 202, 85-104. | 2.4 | 9 |

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| 163 | Overlapping finite element meshes in AMORE. <i>Advances in Engineering Software</i> , 2020, 144, 102791. | 1.8 | 8 |
| 164 | The finite element method with "overlapping finite elements", 2016, , 2-7. | | 8 |
| 165 | AN ASSESSMENT OF CURRENT FINITE ELEMENT ANALYSIS OF NONLINEAR PROBLEMS IN SOLID MECHANICS. , 1976, , 117-164. | | 7 |
| 166 | Optimal consistency errors for general shell elements. <i>Comptes Rendus Mathematique</i> , 2001, 332, 771-776. | 0.5 | 6 |
| 167 | Influence functions and goal-oriented error estimation for finite element analysis of shell structures. <i>International Journal for Numerical Methods in Engineering</i> , 2005, 63, 709-736. | 1.5 | 6 |
| 168 | On the current state of finite element methods and our ADINA endeavours. <i>Advances in Engineering Software</i> (1978), 1980, 2, 59-65. | 0.1 | 5 |
| 169 | The ADINA system in engineering practice. <i>Finite Elements in Analysis and Design</i> , 1986, 2, 41-60. | 1.7 | 5 |
| 170 | Some advances in the analysis of semideformable media. <i>Computers and Structures</i> , 1988, 30, 105-112. | 2.4 | 5 |
| 171 | A framework of finite element procedures for the analysis of proteins. <i>Computers and Structures</i> , 2018, 196, 24-35. | 2.4 | 5 |
| 172 | Inf-sup testing of some three-dimensional low-order finite elements for the analysis of solids. <i>Computers and Structures</i> , 2018, 209, 1-13. | 2.4 | 4 |
| 173 | Finite Element Formulation, Modeling, and Solution of Nonlinear Dynamic Problems. , 1979, , 1-40. | | 3 |
| 174 | On finite element analysis of fluid flow in ducts with boundary layer correction. <i>Computers and Structures</i> , 1985, 21, 105-111. | 2.4 | 3 |
| 175 | On the stress integration in large strain elasto-plasticity. , 2003, , 494-497. | | 3 |
| 176 | The method of finite spheres in acoustic wave propagation through nonhomogeneous media: Inf-sup stability conditions. <i>Vietnam Journal of Mechanics</i> , 2020, 42, 209-237. | 0.2 | 3 |
| 177 | Influence of the Thickness in the Finite Element Approximation. <i>Computational Fluid and Solid Mechanics</i> , 2011, , 259-314. | 0.5 | 2 |
| 178 | Acoustic scattering in nonhomogeneous media and the problem of discontinuous gradients: Analysis and inf-sup stability in the method of finite spheres. <i>International Journal for Numerical Methods in Engineering</i> , 2021, 122, 3141-3170. | 1.5 | 2 |
| 179 | Displacement-Based Shell Finite Elements. <i>Computational Fluid and Solid Mechanics</i> , 2011, , 219-258. | 0.5 | 2 |
| 180 | Some advances in modeling multiphysics-biomedical applications. , 2003, , 1676-1679. | | 2 |

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