

# John W Barrett

## List of Publications by Year in descending order

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135  
papers

3,962  
citations

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136  
all docs

136  
docs citations

136  
times ranked

1382  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Finite Element Approximation of the Cahn–Hilliard Equation with Degenerate Mobility. SIAM Journal on Numerical Analysis, 1999, 37, 286-318.   | 2.3 | 178       |
| 2  | Fitted and Unfitted Finite-Element Methods for Elliptic Equations with Smooth Interfaces. IMA Journal of Numerical Analysis, 1987, 7, 283-300.  | 2.9 | 124       |
| 3  | A parametric finite element method for fourth order geometric evolution equations. Journal of Computational Physics, 2007, 222, 441-467.  | 3.8 | 120       |
| 4  | Approximate symmetrization and Petrov-Galerkin methods for diffusion-convection problems. Computer Methods in Applied Mechanics and Engineering, 1984, 45, 97-122.  | 6.6 | 112       |
| 5  | Finite element approximation of the $\Delta$ -Laplacian. Mathematics of Computation, 1993, 61, 523-537.   | 2.1 | 110       |
| 6  | Finite element approximation of the Cahn-Hilliard equation with concentration dependent mobility. Mathematics of Computation, 1999, 68, 487-518.  | 2.1 | 107       |
| 7  | Finite Element Approximation of the Parabolic $p$ -Laplacian. SIAM Journal on Numerical Analysis, 1994, 31, 413-428.  | 2.3 | 103       |
| 8  | Quasi-norm error bounds for the finite element approximation of a non-Newtonian flow. Numerische Mathematik, 1994, 68, 437-456.   | 1.9 | 94        |
| 9  | On the parametric finite element approximation of evolving hypersurfaces in $\mathbb{R}^3$ . Journal of Computational Physics, 2008, 227, 4281-4307.  | 3.8 | 94        |
| 10 | Parametric Approximation of Willmore Flow and Related Geometric Evolution Equations. SIAM Journal of Scientific Computing, 2008, 31, 225-253.   | 2.8 | 80        |
| 11 | Finite element approximation of the Dirichlet problem using the boundary penalty method. Numerische Mathematik, 1986, 49, 343-366.  | 1.9 | 74        |
| 12 | EXISTENCE OF GLOBAL WEAK SOLUTIONS FOR SOME POLYMERIC FLOW MODELS. Mathematical Models and Methods in Applied Sciences, 2005, 15, 939-983.  | 3.3 | 74        |
| 13 | EXISTENCE AND EQUILIBRATION OF GLOBAL WEAK SOLUTIONS TO KINETIC MODELS FOR DILUTE POLYMERS I: FINITELY EXTENSIBLE NONLINEAR BEAD-SPRING CHAINS. Mathematical Models and Methods in Applied Sciences, 2011, 21, 1211-1289. | 3.3 | 73        |
| 14 | Finite Element Approximation of a Phase Field Model for Void Electromigration. SIAM Journal on Numerical Analysis, 2004, 42, 738-772.   | 2.3 | 72        |
| 15 | Finite element approximation of a fourth order nonlinear degenerate parabolic equation. Numerische Mathematik, 1998, 80, 525-556.   | 1.9 | 65        |
| 16 | On the Variational Approximation of Combined Second and Fourth Order Geometric Evolution Equations. SIAM Journal of Scientific Computing, 2007, 29, 1006-1041.  | 2.8 | 63        |
| 17 | On fully practical finite element approximations of degenerate Cahn-Hilliard systems. ESAIM: Mathematical Modelling and Numerical Analysis, 2001, 35, 713-748.  | 1.9 | 57        |
| 18 | Finite element approximation of a nonlinear cross-diffusion population model. Numerische Mathematik, 2004, 98, 195-221.   | 1.9 | 56        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Existence of Global Weak Solutions to Some Regularized Kinetic Models for Dilute Polymers. Multiscale Modeling and Simulation, 2007, 6, 506-546.   | 1.6 | 55        |
| 20 | A Remark on the Regularity of the Solutions of the p-Laplacian and Its Application to Their Finite Element Approximation. Journal of Mathematical Analysis and Applications, 1993, 178, 470-487.           | 1.0 | 54        |
| 21 | An error bound for the finite element approximation of the Cahn-Hilliard equation with logarithmic free energy. Numerische Mathematik, 1995, 72, 1-20.   | 1.9 | 53        |
| 22 | Finite element approximation of a model for phase separation of a multi-component alloy with non-smooth free energy. Numerische Mathematik, 1997, 77, 1-34.  | 1.9 | 52        |
| 23 | Finite element error analysis of a quasi-Newtonian flow obeying the Carreau or power law. Numerische Mathematik, 1993, 64, 433-453.  | 1.9 | 51        |
| 24 | Finite element approximation of a sixth order nonlinear degenerate parabolic equation. Numerische Mathematik, 2004, 96, 401-434.   | 1.9 | 48        |
| 25 | Numerical computations of faceted pattern formation in snow crystal growth. Physical Review E, 2012, 86, 011604.   | 2.1 | 48        |
| 26 | Bean's critical-state model as the $p \rightarrow \infty$ limit of an evolutionary p-Laplacian equation. Nonlinear Analysis: Theory, Methods & Applications, 2000, 42, 977-993.                            | 1.1 | 46        |
| 27 | EXISTENCE AND APPROXIMATION OF A (REGULARIZED) OLDROYD-B MODEL. Mathematical Models and Methods in Applied Sciences, 2011, 21, 1783-1837.  | 3.3 | 46        |
| 28 | The approximation of planar curve evolutions by stable fully implicit finite element schemes that equidistribute. Numerical Methods for Partial Differential Equations, 2011, 27, 1-30.                    | 3.6 | 44        |
| 29 | EXISTENCE AND EQUILIBRATION OF GLOBAL WEAK SOLUTIONS TO KINETIC MODELS FOR DILUTE POLYMERS II: HOOKEAN-TYPE MODELS. Mathematical Models and Methods in Applied Sciences, 2012, 22, 1150024.                | 3.3 | 44        |
| 30 | Numerical approximation of gradient flows for closed curves in $\mathbb{R}^d$ . IMA Journal of Numerical Analysis, 2010, 30, 4-60.   | 2.9 | 41        |
| 31 | A variational formulation of anisotropic geometric evolution equations in higher dimensions. Numerische Mathematik, 2008, 109, 1-44.   | 1.9 | 40        |
| 32 | Finite Element Approximation of The Transport of Reactive Solutes in Porous Media. Part II: Error Estimates for Equilibrium Adsorption Processes. SIAM Journal on Numerical Analysis, 1997, 34, 455-479.   | 2.3 | 39        |
| 33 | Numerical approximation of anisotropic geometric evolution equations in the plane. IMA Journal of Numerical Analysis, 2007, 28, 292-330.   | 2.9 | 39        |
| 34 | A QUASI-VARIATIONAL INEQUALITY PROBLEM IN SUPERCONDUCTIVITY. Mathematical Models and Methods in Applied Sciences, 2010, 20, 679-706.   | 3.3 | 39        |
| 35 | Finite Element Approximation of the Transport of Reactive Solutes in Porous Media. Part 1: Error Estimates for Nonequilibrium Adsorption Processes. SIAM Journal on Numerical Analysis, 1997, 34, 201-227. | 2.3 | 38        |
| 36 | A Finite-element Method for Solving Elliptic Equations with Neumann Data on a Curved Boundary Using Unfitted Meshes. IMA Journal of Numerical Analysis, 1984, 4, 309-325.                                  | 2.9 | 36        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Finite Element Approximation of Some Degenerate Monotone Quasilinear Elliptic Systems. SIAM Journal on Numerical Analysis, 1996, 33, 88-106.  | 2.3 | 36        |
| 38 | Optimal finite element solutions to diffusion-convection problems in one dimension. International Journal for Numerical Methods in Engineering, 1980, 15, 1457-1474.  | 2.8 | 35        |
| 39 | Parametric approximation of isotropic and anisotropic elastic flow for closed and open curves. Numerische Mathematik, 2012, 120, 489-542.   | 1.9 | 35        |
| 40 | EXISTENCE OF GLOBAL WEAK SOLUTIONS TO DUMBBELL MODELS FOR DILUTE POLYMERS WITH MICROSCOPIC CUT-OFF. Mathematical Models and Methods in Applied Sciences, 2008, 18, 935-971.   | 3.3 | 34        |
| 41 | On stable parametric finite element methods for the Stefan problem and the Mullinsâ€“Sekerka problem with applications to dendritic growth. Journal of Computational Physics, 2010, 229, 6270-6299.                   | 3.8 | 34        |
| 42 | A stable numerical method for the dynamics of fluidic membranes. Numerische Mathematik, 2016, 134, 783-822.   | 1.9 | 33        |
| 43 | An error bound for the finite element approximation of a model for phase separation of a multi-component alloy. IMA Journal of Numerical Analysis, 1996, 16, 257-287.   | 2.9 | 32        |
| 44 | Numerical computations of the dynamics of fluidic membranes and vesicles. Physical Review E, 2015, 92, 052704.  | 2.1 | 31        |
| 45 | Total Flux Estimates for a Finite-Element Approximation of Elliptic Equations. IMA Journal of Numerical Analysis, 1987, 7, 129-148.   | 2.9 | 30        |
| 46 | Existence of global weak solutions to finitely extensible nonlinear beadâ€“spring chain models for dilute polymers with variable density and viscosity. Journal of Differential Equations, 2012, 253, 3610-3677.      | 2.2 | 30        |
| 47 | Existence of large-data finite-energy global weak solutions to a compressible Oldroyd-B model. Communications in Mathematical Sciences, 2017, 15, 1265-1323.  | 1.0 | 30        |
| 48 | Finite Element Approximation of Surfactant Spreading on a Thin Film. SIAM Journal on Numerical Analysis, 2003, 41, 1427-1464.   | 2.3 | 29        |
| 49 | A Convergent and Constraintâ€“Preserving Finite Element Method for the pâ€“Harmonic Flow into Spheres. SIAM Journal on Numerical Analysis, 2007, 45, 905-927.   | 2.3 | 29        |
| 50 | A further remark on the regularity of the solutions of the p-Laplacian and its applications to their finite element approximation. Nonlinear Analysis: Theory, Methods & Applications, 1993, 21, 379-387.             | 1.1 | 28        |
| 51 | Quasi-norm error bounds for the finite element approximation of some degenerate quasilinear elliptic equations and variational inequalities. ESAIM: Mathematical Modelling and Numerical Analysis, 1994, 28, 725-744. | 1.9 | 28        |
| 52 | Convergence of a finite-element approximation of surfactant spreading on a thin film in the presence of van der Waals forces. IMA Journal of Numerical Analysis, 2004, 24, 323-363.                                   | 2.9 | 28        |
| 53 | A Stable Parametric Finite Element Discretization of Two-Phase Navierâ€“Stokes Flow. Journal of Scientific Computing, 2015, 63, 78-117.   | 2.3 | 28        |
| 54 | Finite-element approximation of coupled surface and grain boundary motion with applications to thermal grooving and sintering. European Journal of Applied Mathematics, 2010, 21, 519-556.                            | 2.9 | 27        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Eliminating spurious velocities with a stable approximation of viscous incompressible two-phase Stokes flow. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013, 267, 511-530.                 | 6.6 | 27        |
| 56 | Finite element approximation of a model reaction-diffusion problem with a non-Lipschitz nonlinearity. <i>Numerische Mathematik</i> , 1991, 59, 217-242.   | 1.9 | 25        |
| 57 | Parametric approximation of surface clusters driven by isotropic and anisotropic surface energies. <i>Interfaces and Free Boundaries</i> , 2010, 12, 187-234.   | 0.8 | 25        |
| 58 | Finite element approximation of a model for phase separation of a multi-component alloy with a concentration-dependent mobility matrix. <i>IMA Journal of Numerical Analysis</i> , 1998, 18, 287-328.           | 2.9 | 23        |
| 59 | Finite Element Approximation of a Degenerate Allen-Cahn/Cahn-Hilliard System. <i>SIAM Journal on Numerical Analysis</i> , 2002, 39, 1598-1624.  | 2.3 | 23        |
| 60 | Parametric finite element approximations of curvature-driven interface evolutions. <i>Handbook of Numerical Analysis</i> , 2020, 21, 275-423.   | 1.8 | 23        |
| 61 | A priori and a posteriori error bounds for a nonconforming linear finite element approximation of a non-newtonian flow. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 1998, 32, 843-858.        | 1.9 | 22        |
| 62 | Optimal Petrov-Galerkin Methods through Approximate Symmetrization. <i>IMA Journal of Numerical Analysis</i> , 1981, 1, 439-468.  | 2.9 | 21        |
| 63 | A quasi-variational inequality problem arising in the modeling of growing sandpiles. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2013, 47, 1133-1165.   | 1.9 | 21        |
| 64 | Finite Element Approximation of the p-Laplacian. <i>Mathematics of Computation</i> , 1993, 61, 523.   | 2.1 | 20        |
| 65 | Finite element approximation of finitely extensible nonlinear elastic dumbbell models for dilute polymers. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2012, 46, 949-978.                     | 1.9 | 20        |
| 66 | Existence of global weak solutions to compressible isentropic finitely extensible bead-spring chain models for dilute polymers. <i>Mathematical Models and Methods in Applied Sciences</i> , 2016, 26, 469-568. | 3.3 | 20        |
| 67 | Numerical Analysis for a System Coupling Curve Evolution to Reaction Diffusion on the Curve. <i>SIAM Journal on Numerical Analysis</i> , 2017, 55, 1080-1100.   | 2.3 | 20        |
| 68 | A practical finite element approximation of a semi-definite Neumann problem on a curved domain. <i>Numerische Mathematik</i> , 1987, 51, 23-36.   | 1.9 | 19        |
| 69 | A Mixed Formulation of the Monge-Kantorovich Equations. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2007, 41, 1041-1060.  | 1.9 | 19        |
| 70 | Finite element methods for fourth order axisymmetric geometric evolution equations. <i>Journal of Computational Physics</i> , 2019, 376, 733-766.   | 3.8 | 19        |
| 71 | Reflections on Dubinski's nonlinear compact embedding theorem. <i>Publications De L'Institut Mathematique</i> , 2012, 91, 95-110.   | 0.2 | 18        |
| 72 | Stable phase field approximations of anisotropic solidification. <i>IMA Journal of Numerical Analysis</i> , 2014, 34, 1289-1327.  | 2.9 | 18        |

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|----|---|-----|-----------|
| 73 | Finite element approximation for the dynamics of fluidic two-phase biomembranes. ESAIM: Mathematical Modelling and Numerical Analysis, 2017, 51, 2319-2366.   | 1.9 | 18        |
| 74 | Fixed mesh finite element approximations to a free boundary problem for an elliptic equation with an oblique derivative boundary condition. Computers and Mathematics With Applications, 1985, 11, 335-345.                             | 2.7 | 17        |
| 75 | Higher-Order Regularity for the Solutions of Some Degenerate Quasilinear Elliptic Equations in the Plane. SIAM Journal on Mathematical Analysis, 1993, 24, 1522-1536.   | 1.9 | 17        |
| 76 | Finite element approximation of an Allen-Cahn/Cahn-Hilliard system. IMA Journal of Numerical Analysis, 2002, 22, 11-71.   | 2.9 | 17        |
| 77 | Electric field formulation for thin film magnetization problems. Superconductor Science and Technology, 2012, 25, 104002.   | 3.5 | 17        |
| 78 | Sandpiles and superconductors: nonconforming linear finite element approximations for mixed formulations of quasi-variational inequalities. IMA Journal of Numerical Analysis, 2015, 35, 1-38.  | 2.9 | 17        |
| 79 | An Improved Error Bound for a Lagrange–Galerkin Method for Contaminant Transport with Non-Lipschitzian Adsorption Kinetics. SIAM Journal on Numerical Analysis, 1998, 35, 1862-1882.  | 2.3 | 16        |
| 80 | Finite element approximation of a phase field model for surface diffusion of voids in a stressed solid. Mathematics of Computation, 2005, 75, 7-42.   | 2.1 | 16        |
| 81 | Existence of global weak solutions to compressible isentropic finitely extensible nonlinear bead–spring chain models for dilute polymers: The two-dimensional case. Journal of Differential Equations, 2016, 261, 592-626.              | 2.2 | 16        |
| 82 | Convergence of a fully discrete finite element method for a degenerate parabolic system modelling nematic liquid crystals with variable degree of orientation. ESAIM: Mathematical Modelling and Numerical Analysis, 2006, 40, 175-199. | 1.9 | 16        |
| 83 | Finite-Element Approximation of Elliptic Equations with a Neumann or Robin Condition on a Curved Boundary. IMA Journal of Numerical Analysis, 1988, 8, 321-342.   | 2.9 | 15        |
| 84 | On the stable discretization of strongly anisotropic phase field models with applications to crystal growth. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2013, 93, 719-732.  | 1.6 | 15        |
| 85 | Transport current and magnetization problems for thin type-II superconducting films. Superconductor Science and Technology, 2013, 26, 105009.   | 3.5 | 15        |
| 86 | Stable finite element approximations of two-phase flow with soluble surfactant. Journal of Computational Physics, 2015, 297, 530-564.   | 3.8 | 15        |
| 87 | Existence of global weak solutions to the kinetic Hookean dumbbell model for incompressible dilute polymeric fluids. Nonlinear Analysis: Real World Applications, 2018, 39, 362-395.  | 1.7 | 15        |
| 88 | Lakes and rivers in the landscape: A quasi-variational inequality approach. Interfaces and Free Boundaries, 2014, 16, 269-296.  | 0.8 | 15        |
| 89 | Variational discretization of axisymmetric curvature flows. Numerische Mathematik, 2019, 141, 791-837.  | 1.9 | 14        |
| 90 | ELASTIC FLOW WITH JUNCTIONS: VARIATIONAL APPROXIMATION AND APPLICATIONS TO NONLINEAR SPLINES. Mathematical Models and Methods in Applied Sciences, 2012, 22, .  | 3.3 | 13        |

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|-----|---|-----|-----------|
| 91  | Error bounds for the finite element approximation of a degenerate quasilinear parabolic variational inequality. <i>Advances in Computational Mathematics</i> , 1993, 1, 223-239.  | 1.6 | 12        |
| 92  | FINITE ELEMENT APPROXIMATION OF A MODEL FOR PHASE SEPARATION OF A MULTI-COMPONENT ALLOY WITH NONSMOOTH FREE ENERGY AND A CONCENTRATION DEPENDENT MOBILITY MATRIX. <i>Mathematical Models and Methods in Applied Sciences</i> , 1999, 09, 627-663. | 3.3 | 12        |
| 93  | Finite element approximation of kinetic dilute polymer models with microscopic cut-off. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2011, 45, 39-89.  | 1.9 | 12        |
| 94  | Optimal Recovery in the Finite-Element Method, Part 2: Defect Correction for Ordinary Differential Equations. <i>IMA Journal of Numerical Analysis</i> , 1988, 8, 527-540.  | 2.9 | 11        |
| 95  | An improved error bound for a finite element approximation of a model for phase separation of a multi-component alloy. <i>IMA Journal of Numerical Analysis</i> , 1999, 19, 147-168.  | 2.9 | 11        |
| 96  | On $p$ -Harmonic Map Heat Flows for $\mathbb{R}^n$ and Their Finite Element Approximations. <i>SIAM Journal on Mathematical Analysis</i> , 2008, 40, 1471-1498.   | 1.9 | 11        |
| 97  | Phase Field Models Versus Parametric Front Tracking Methods: Are They Accurate and Computationally Efficient?. <i>Communications in Computational Physics</i> , 2014, 15, 506-555.  | 1.7 | 11        |
| 98  | On the Energy-Based Variational Model for Vector Magnetic Hysteresis. <i>IEEE Transactions on Magnetics</i> , 2016, 52, 1-11.   | 2.1 | 11        |
| 99  | Quasi-norm error bounds for the finite element approximation of some degenerate quasilinear parabolic equations and variational inequalities. <i>Numerical Functional Analysis and Optimization</i> , 1995, 16, 1309-1321.                        | 1.4 | 10        |
| 100 | Computational Parametric Willmore Flow with Spontaneous Curvature and Area Difference Elasticity Effects. <i>SIAM Journal on Numerical Analysis</i> , 2016, 54, 1732-1762.  | 2.3 | 10        |
| 101 | Optimal Recovery in the Finite-Element Method, Part 1: Recovery from Weighted L2 Fits. <i>IMA Journal of Numerical Analysis</i> , 1988, 8, 149-184.   | 2.9 | 9         |
| 102 | A finite element error analysis for axisymmetric mean curvature flow. <i>IMA Journal of Numerical Analysis</i> , 2021, 41, 1641-1667.   | 2.9 | 9         |
| 103 | Stable numerical approximation of two-phase flow with a Boussinesq-Scriven surface fluid. <i>Communications in Mathematical Sciences</i> , 2015, 13, 1829-1874.   | 1.0 | 9         |
| 104 | An improved error bound for a finite element approximation of a model for phase separation of a multi-component alloy with a concentration dependent mobility matrix. <i>Numerische Mathematik</i> , 2001, 88, 255-297.                           | 1.9 | 8         |
| 105 | Finite Element Approximation of Soluble Surfactant Spreading on a Thin Film. <i>SIAM Journal on Numerical Analysis</i> , 2006, 44, 1218-1247.   | 2.3 | 8         |
| 106 | Finite element approximation for the dynamics of asymmetric fluidic biomembranes. <i>Mathematics of Computation</i> , 2016, 86, 1037-1069.  | 2.1 | 8         |
| 107 | Finite element approximation of the FENE-P model. <i>IMA Journal of Numerical Analysis</i> , 2018, 38, 1599-1660.   | 2.9 | 8         |
| 108 | Finite element approximation of the volume-matching problem. <i>Numerische Mathematik</i> , 1991, 60, 291-313.  | 1.9 | 7         |



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|-----|--|-----|-----------|
| 109 | Numerical approximation of corotational dumbbell models for dilute polymers. IMA Journal of Numerical Analysis, 2009, 29, 937-959.   | 2.9 | 7         |
| 110 | Existence and approximation of a mixed formulation for thin film magnetization problems in superconductivity. Mathematical Models and Methods in Applied Sciences, 2014, 24, 991-1015.                                     | 3.3 | 7         |
| 111 | Gradient flow dynamics of two-phase biomembranes: Sharp interface variational formulation and finite element approximation. SMAI Journal of Computational Mathematics, 0, 4, 151-195.                                      | 0.0 | 7         |
| 112 | Finite element approximation of a Stefan problem with degenerate Joule heating. ESAIM: Mathematical Modelling and Numerical Analysis, 2004, 38, 633-652.   | 1.9 | 6         |
| 113 | EXISTENCE, UNIQUENESS AND APPROXIMATION OF A DOUBLY-DEGENERATE NONLINEAR PARABOLIC SYSTEM MODELLING BACTERIAL EVOLUTION. Mathematical Models and Methods in Applied Sciences, 2007, 17, 1095-1127.                         | 3.3 | 6         |
| 114 | 3D modeling of magnetic atom traps on type-II superconductor chips. Superconductor Science and Technology, 2014, 27, 124004.   | 3.5 | 6         |
| 115 | Finite Element Approximation of a Rigid Punch Indenting a Membrane. IMA Journal of Numerical Analysis, 1991, 11, 579-594.  | 2.9 | 5         |
| 116 | Stable Discretizations of Elastic Flow in Riemannian Manifolds. SIAM Journal on Numerical Analysis, 2019, 57, 1987-2018.   | 2.3 | 5         |
| 117 | Stable approximations for axisymmetric Willmore flow for closed and open surfaces. ESAIM: Mathematical Modelling and Numerical Analysis, 2021, 55, 833-885.  | 1.9 | 5         |
| 118 | Finite element approximation of a free boundary problem arising in the theory of liquid drops and plasma physics. ESAIM: Mathematical Modelling and Numerical Analysis, 1991, 25, 213-252.                                 | 1.9 | 5         |
| 119 | An optimal error bound for a finite element approximation of a model for phase separation of a multi-component alloy with non-smooth free energy. ESAIM: Mathematical Modelling and Numerical Analysis, 1999, 33, 971-987. | 1.9 | 5         |
| 120 | On sharp interface limits of Allen–Cahn/Cahn–Hilliard variational inequalities. Discrete and Continuous Dynamical Systems - Series S, 2008, 1, 1-14.   | 1.1 | 5         |
| 121 | Finite element approximation of a two-layered liquid film in the presence of insoluble surfactants. ESAIM: Mathematical Modelling and Numerical Analysis, 2008, 42, 749-775.   | 1.9 | 4         |
| 122 | On the stable numerical approximation of two-phase flow with insoluble surfactant. ESAIM: Mathematical Modelling and Numerical Analysis, 0, , .  | 1.9 | 4         |
| 123 | Numerical approximation of curve evolutions in Riemannian manifolds. IMA Journal of Numerical Analysis, 2020, 40, 1601-1651.   | 2.9 | 4         |
| 124 | Finite-Element Approximation of a Plasma Equilibrium Problem. IMA Journal of Numerical Analysis, 1989, 9, 443-464.   | 2.9 | 3         |
| 125 | Existence of large-data global-in-time finite-energy weak solutions to a compressible FENE-P model. Mathematical Models and Methods in Applied Sciences, 2018, 28, 1929-2000.  | 3.3 | 3         |
| 126 | Remarks concerning a free boundary problem arising in the theory of liquid drops and in plasma physics. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 1989, 111, 169-181.                          | 1.2 | 1         |



| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 127 | Total flux estimates for a finite element approximation of the Dirichlet problem using the boundary penalty method. <i>Numerische Mathematik</i> , 1990, 57, 351-363.      | 1.9 | 1         |
| 128 | The finite element approximation of a coupled reaction-diffusion problem with non-Lipschitz nonlinearities. <i>Numerische Mathematik</i> , 1995, 71, 135-157.              | 1.9 | 1         |
| 129 | Corrigendum to: Finite element approximation of the FENE-P model. <i>IMA Journal of Numerical Analysis</i> , 2018, 38, 2166-2168.  | 2.9 | 1         |
| 130 | Existence and approximation of a nonlinear degenerate parabolic system modelling acid-mediated tumour invasion. <i>Interfaces and Free Boundaries</i> , 2012, 14, 343-363. | 0.8 | 1         |
| 131 | Total Flux Estimates for a Finite-Element Approximation of Parabolic Equations. <i>IMA Journal of Numerical Analysis</i> , 1986, 6, 253-264.                               | 2.9 | 0         |
| 132 | Finite element approximation of a model vortex problem. <i>Numerical Functional Analysis and Optimization</i> , 1995, 16, 261-285.   | 1.4 | 0         |
| 133 | Finite element approximation of a semilinear elliptic problem with a singular nonlinearity. <i>Numerische Mathematik</i> , 1999, 82, 21-56.                                | 1.9 | 0         |
| 134 | Stable variational approximations of boundary value problems for Willmore flow with Gaussian curvature. <i>IMA Journal of Numerical Analysis</i> , 0, , .                  | 2.9 | 0         |
| 135 | A practical phase field method for an elliptic surface PDE. <i>IMA Journal of Numerical Analysis</i> , 2021, 41, 1668-1695.  | 2.9 | 0         |