

Martin Stynes

List of Publications by Year in descending order

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147
papers

5,171
citations

101543

36
h-index

106344

65
g-index

151
all docs

151
docs citations

151
times ranked

1284
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Numerical Methods for Singularly Perturbed Differential Equations. Springer Series in Computational Mathematics, 1996, , . | 0.2 | 609 |
| 2 | Error Analysis of a Finite Difference Method on Graded Meshes for a Time-Fractional Diffusion Equation. SIAM Journal on Numerical Analysis, 2017, 55, 1057-1079. | 2.3 | 577 |
| 3 | Numerical Treatment of Partial Differential Equations. , 2007, , . | | 191 |
| 4 | Steady-state convection-diffusion problems. Acta Numerica, 2005, 14, 445-508. | 10.7 | 141 |
| 5 | The midpoint upwind scheme. Applied Numerical Mathematics, 1997, 23, 361-374. | 2.1 | 123 |
| 6 | Asymptotic Analysis and Shishkin-Type Decomposition for an Elliptic Convectionâ€“Diffusion Problem. Journal of Mathematical Analysis and Applications, 2001, 261, 604-632. | 1.0 | 116 |
| 7 | Too Much Regularity May Force Too Much Uniqueness. Fractional Calculus and Applied Analysis, 2016, 19, 1554-1562. | 2.2 | 113 |
| 8 | A Uniformly Convergent Galerkin Method on a Shishkin Mesh for a Convection-Diffusion Problem. Journal of Mathematical Analysis and Applications, 1997, 214, 36-54. | 1.0 | 108 |
| 9 | On the stability of residual-free bubbles for convection-diffusion problems and their approximation by a two-level finite element method. Computer Methods in Applied Mechanics and Engineering, 1998, 166, 35-49. | 6.6 | 104 |
| 10 | A Robust Adaptive Method for a Quasi-Linear One-Dimensional Convection-Diffusion Problem. SIAM Journal on Numerical Analysis, 2001, 39, 1446-1467. | 2.3 | 104 |
| 11 | The SDFEM for a Convection-Diffusion Problem with a Boundary Layer: Optimal Error Analysis and Enhancement of Accuracy. SIAM Journal on Numerical Analysis, 2003, 41, 1620-1642. | 2.3 | 103 |
| 12 | Error Analysis of a Second-Order Method on Fitted Meshes for a Time-Fractional Diffusion Problem. Journal of Scientific Computing, 2019, 79, 624-647. | 2.3 | 96 |
| 13 | Why Fractional Derivatives with Nonsingular Kernels Should Not Be Used. Fractional Calculus and Applied Analysis, 2020, 23, 610-634. | 2.2 | 88 |
| 14 | A Balanced Finite Element Method for Singularly Perturbed Reaction-Diffusion Problems. SIAM Journal on Numerical Analysis, 2012, 50, 2729-2743. | 2.3 | 69 |
| 15 | Corner singularities and boundary layers in a simple convectionâ€“diffusion problem. Journal of Differential Equations, 2005, 213, 81-120. | 2.2 | 67 |
| 16 | A hybrid difference scheme on a Shishkin mesh for linear convectionâ€“diffusion problems. Applied Numerical Mathematics, 1999, 31, 255-270. | 2.1 | 62 |
| 17 | Numerical methods on Shishkin meshes for linear convectionâ€“diffusion problems. Computer Methods in Applied Mechanics and Engineering, 2001, 190, 3527-3542. | 6.6 | 60 |
| 18 | Blow-up of error estimates in time-fractional initial-boundary value problems. IMA Journal of Numerical Analysis, 2021, 41, 974-997. | 2.9 | 60 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Numerical methods for time-dependent convection-diffusion equations. <i>Journal of Computational and Applied Mathematics</i> , 1988, 21, 289-310. | 2.0 | 58 |
| 20 | Finite-element methods for singularly perturbed high-order elliptic two-point boundary value problems. I: reaction-diffusion-type problems. <i>IMA Journal of Numerical Analysis</i> , 1995, 15, 117-139. | 2.9 | 56 |
| 21 | A finite difference method for a two-point boundary value problem with a Caputo fractional derivative. <i>IMA Journal of Numerical Analysis</i> , 2015, 35, 698-721. | 2.9 | 56 |
| 22 | Richardson extrapolation for a convectionâ€“diffusion problem using a Shishkin mesh. <i>Applied Numerical Mathematics</i> , 2003, 45, 315-329. | 2.1 | 49 |
| 23 | Uniformly convergent difference schemes for singularly perturbed parabolic diffusion-convection problems without turning points. <i>Numerische Mathematik</i> , 1989, 55, 521-544. | 1.9 | 48 |
| 24 | A finite element method for a singularly perturbed boundary value problem. <i>Numerische Mathematik</i> , 1986, 50, 1-15. | 1.9 | 47 |
| 25 | A Uniformly Accurate Finite-Element Method for a Singularly Perturbed One-Dimensional Reaction-Diffusion Problem. <i>Mathematics of Computation</i> , 1986, 47, 555. | 2.1 | 46 |
| 26 | A finite difference analysis of a streamline diffusion method on a Shishkin mesh. <i>Numerical Algorithms</i> , 1998, 18, 337-360. | 1.9 | 45 |
| 27 | Sharpened bounds for corner singularities and boundary layers in a simple convectionâ€“diffusion problem. <i>Applied Mathematics Letters</i> , 2007, 20, 539-544. | 2.7 | 44 |
| 28 | On faster convergence of the bisection method for all triangles. <i>Mathematics of Computation</i> , 1980, 35, 1195-1195. | 2.1 | 43 |
| 29 | A globally uniformly convergent finite element method for a singularly perturbed elliptic problem in two dimensions. <i>Mathematics of Computation</i> , 1991, 57, 47-47. | 2.1 | 43 |
| 30 | A Globally Uniformly Convergent Finite Element Method for a Singularly Perturbed Elliptic Problem in Two Dimensions. <i>Mathematics of Computation</i> , 1991, 57, 47. | 2.1 | 43 |
| 31 | Grid equidistribution for reactionâ€“diffusion problems in one dimension. <i>Numerical Algorithms</i> , 2005, 40, 305-322. | 1.9 | 43 |
| 32 | Collocation Methods for General Caputo Two-Point Boundary Value Problems. <i>Journal of Scientific Computing</i> , 2018, 76, 390-425. | 2.3 | 43 |
| 33 | A two-scale sparse grid method for a singularly perturbed reaction-diffusion problem in two dimensions. <i>IMA Journal of Numerical Analysis</i> , 2009, 29, 986-1007. | 2.9 | 42 |
| 34 | An efficient collocation method for a Caputo two-point boundary value problem. <i>BIT Numerical Mathematics</i> , 2015, 55, 1105-1123. | 2.0 | 41 |
| 35 | Convergence in Positive Time for a Finite Difference Method Applied to a Fractional Convection-Diffusion Problem. <i>Computational Methods in Applied Mathematics</i> , 2018, 18, 33-42. | 0.8 | 41 |
| 36 | The sdfem on Shishkin meshes for linear convection-diffusion problems. <i>Numerische Mathematik</i> , 2001, 87, 457-484. | 1.9 | 38 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | A Comparison of Uniformly Convergent Difference Schemes for Two-Dimensional Convection–Diffusion Problems. <i>Journal of Computational Physics</i> , 1993, 105, 24-32. | 3.8 | 37 |
| 38 | Using rectangular elements in the SDFEM for a convection–diffusion problem with a boundary layer. <i>Applied Numerical Mathematics</i> , 2008, 58, 1789-1802. | 2.1 | 35 |
| 39 | Numerical analysis of a singularly perturbed nonlinear reaction–diffusion problem with multiple solutions. <i>Applied Numerical Mathematics</i> , 2004, 51, 273-288. | 2.1 | 33 |
| 40 | Fractional-order derivatives defined by continuous kernels are too restrictive. <i>Applied Mathematics Letters</i> , 2018, 85, 22-26. | 2.7 | 33 |
| 41 | Optimal $L^\infty(L^2)$ error analysis of a direct discontinuous Galerkin method for a time-fractional reaction-diffusion problem. <i>BIT Numerical Mathematics</i> , 2018, 58, 661-690. | 2.0 | 33 |
| 42 | Numerical Solution of Systems of Singularly Perturbed Differential Equations. <i>Computational Methods in Applied Mathematics</i> , 2009, 9, 165-191. | 0.8 | 32 |
| 43 | Central difference approximation of convection in Caputo fractional derivative two-point boundary value problems. <i>Journal of Computational and Applied Mathematics</i> , 2015, 273, 103-115. | 2.0 | 32 |
| 44 | Analysis and numerical solution of a Riemann-Liouville fractional derivative two-point boundary value problem. <i>Advances in Computational Mathematics</i> , 2017, 43, 77-99. | 1.6 | 32 |
| 45 | Good (and Not So Good) Practices in Computational Methods for Fractional Calculus. <i>Mathematics</i> , 2020, 8, 324. | 2.2 | 32 |
| 46 | On faster convergence of the bisection method for certain triangles. <i>Mathematics of Computation</i> , 1979, 33, 717-721. | 2.1 | 31 |
| 47 | A finite difference method on layer-adapted meshes for an elliptic reaction-diffusion system in two dimensions. <i>Mathematics of Computation</i> , 2008, 77, 2085-2096. | 2.1 | 31 |
| 48 | Some Open Questions in the Numerical Analysis of Singularly Perturbed Differential Equations. <i>Computational Methods in Applied Mathematics</i> , 2015, 15, 531-550. | 0.8 | 30 |
| 49 | Optimal spatial $L^\infty(L^2)$ error analysis of a finite element method for a time-fractional diffusion equation. <i>Journal of Computational and Applied Mathematics</i> , 2020, 367, 112-125. | 2.0 | 30 |
| 50 | Superconvergence of a Finite Element Method for the Multi-term Time-Fractional Diffusion Problem. <i>Journal of Scientific Computing</i> , 2020, 82, 1. | 2.3 | 30 |
| 51 | A parameter-robust numerical method for a system of reaction–diffusion equations in two dimensions. <i>Numerical Methods for Partial Differential Equations</i> , 2008, 24, 312-334. | 3.6 | 28 |
| 52 | Numerical analysis of a strongly coupled system of two singularly perturbed convection–diffusion problems. <i>Advances in Computational Mathematics</i> , 2009, 30, 101-121. | 1.6 | 27 |
| 53 | A Fitted Scheme for a Caputo Initial-Boundary Value Problem. <i>Journal of Scientific Computing</i> , 2018, 76, 583-609. | 2.3 | 27 |
| 54 | An analysis of the Gr $\frac{1}{4}$ nwald–Letnikov scheme for initial-value problems with weakly singular solutions. <i>Applied Numerical Mathematics</i> , 2019, 139, 52-61. | 2.1 | 27 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | An analysis of a singularly perturbed two-point boundary value problem using only finite element techniques. <i>Mathematics of Computation</i> , 1991, 56, 663-675. | 2.1 | 26 |
| 56 | The streamline-diffusion method for nonconforming Qrot1 elements on rectangular tensor-product meshes. <i>IMA Journal of Numerical Analysis</i> , 2001, 21, 123-142. | 2.9 | 26 |
| 57 | Error Analysis of a Finite Difference Method on Graded Meshes for a Multiterm Time-Fractional Initial-Boundary Value Problem. <i>Computational Methods in Applied Mathematics</i> , 2020, 20, 815-825. | 0.8 | 26 |
| 58 | An almost fourth order uniformly convergent difference scheme for a semilinear singularly perturbed reaction-diffusion problem. <i>Numerische Mathematik</i> , 1995, 70, 487-500. | 1.9 | 25 |
| 59 | Approximation of derivatives in a convection-diffusion two-point boundary value problem. <i>Applied Numerical Mathematics</i> , 2001, 39, 47-60. | 2.1 | 25 |
| 60 | \hat{L}_2 -robust error analysis of a mixed finite element method for a time-fractional biharmonic equation. <i>Numerical Algorithms</i> , 2021, 87, 1749-1766. | 1.9 | 25 |
| 61 | A Uniformly Accurate Finite Element Method for a Singular Perturbation Problem in Conservative Form. <i>SIAM Journal on Numerical Analysis</i> , 1986, 23, 369-375. | 2.3 | 24 |
| 62 | Optimal H^1 spatial convergence of a fully discrete finite element method for the time-fractional Allen-Cahn equation. <i>Advances in Computational Mathematics</i> , 2020, 46, 1. | 1.6 | 24 |
| 63 | An algorithm for numerical calculation of topological degree. <i>Applicable Analysis</i> , 1979, 9, 63-77. | 1.3 | 23 |
| 64 | Finite element methods on piecewise equidistant meshes for interior turning point problems. <i>Numerical Algorithms</i> , 1994, 8, 111-129. | 1.9 | 23 |
| 65 | A simpler analysis of a hybrid numerical method for time-dependent convection-diffusion problems. <i>Journal of Computational and Applied Mathematics</i> , 2011, 235, 5240-5248. | 2.0 | 23 |
| 66 | An Analysis of a Superconvergence Result for a Singularly Perturbed Boundary Value Problem. <i>Mathematics of Computation</i> , 1986, 46, 81. | 2.1 | 22 |
| 67 | Collocation methods for general Riemann-Liouville two-point boundary value problems. <i>Advances in Computational Mathematics</i> , 2019, 45, 897-928. | 1.6 | 22 |
| 68 | Finite element methods for convection-diffusion problems using exponential splines on triangles. <i>Computers and Mathematics With Applications</i> , 1998, 35, 35-45. | 2.7 | 21 |
| 69 | Process optimization strategies to diminish variability in the quality of discrete packaged foods during thermal processing. <i>Journal of Food Engineering</i> , 2003, 60, 147-155. | 5.2 | 21 |
| 70 | Existence, uniqueness and regularity of the solution of the time-fractional Fokker-Planck equation with general forcing. <i>Communications on Pure and Applied Analysis</i> , 2019, 18, 2765-2787. | 0.8 | 21 |
| 71 | Stabilised approximation of interior-layer solutions of a singularly perturbed semilinear reaction-diffusion problem. <i>Numerische Mathematik</i> , 2011, 119, 787-810. | 1.9 | 20 |
| 72 | Supercloseness of continuous interior penalty method for convection-diffusion problems with characteristic layers. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 319, 549-566. | 6.6 | 20 |

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|----|--|-----|-----------|
| 73 | An ϵ -robust finite element method for a multi-term time-fractional diffusion problem. <i>Journal of Computational and Applied Mathematics</i> , 2021, 389, 113334. | 2.0 | 20 |
| 74 | A simplification of Stenger's topological degree formula. <i>Numerische Mathematik</i> , 1979, 33, 147-155. | 1.9 | 19 |
| 75 | On the construction of sufficient refinements for computation of topological degree. <i>Numerische Mathematik</i> , 1981, 37, 453-462. | 1.9 | 18 |
| 76 | A uniformly convergent method for a singularly perturbed semilinear reaction-diffusion problem with multiple solutions. <i>Mathematics of Computation</i> , 1996, 65, 1085-1110. | 2.1 | 18 |
| 77 | A spectral collocation method for a weakly singular Volterra integral equation of the second kind. <i>Advances in Computational Mathematics</i> , 2016, 42, 1015-1030. | 1.6 | 18 |
| 78 | EFFICIENT GENERATION OF ORIENTED MESHES FOR SOLVING CONVECTION-DIFFUSION PROBLEMS. <i>International Journal for Numerical Methods in Engineering</i> , 1997, 40, 565-576. | 2.8 | 17 |
| 79 | Finite element analysis of exponentially fitted Lumped schemes for time-dependent convection-diffusion problems. <i>Numerische Mathematik</i> , 1993, 66, 347-371. | 1.9 | 15 |
| 80 | L^1 and L^∞ Uniform convergence of a difference scheme for a semilinear singular perturbation problem. <i>Numerische Mathematik</i> , 1987, 50, 519-531. | 1.9 | 14 |
| 81 | Necessary L^2 -uniform convergence conditions for difference schemes for two-dimensional convection-diffusion problems. <i>Computers and Mathematics With Applications</i> , 1995, 29, 45-53. | 2.7 | 14 |
| 82 | Supercloseness of edge stabilization on Shishkin rectangular meshes for convection-diffusion problems with exponential layers. <i>IMA Journal of Numerical Analysis</i> , 2018, 38, 2105-2122. | 2.9 | 14 |
| 83 | A Sharp α -Robust $L^\infty(H^1)$ Error Bound for a Time-Fractional Allen-Cahn Problem Discretised by the Alikhanov L^2 - σ Scheme and a Standard FEM. <i>Journal of Scientific Computing</i> , 2022, 91, 1. | 2.3 | 14 |
| 84 | A balanced finite element method for a system of singularly perturbed reaction-diffusion two-point boundary value problems. <i>Numerical Algorithms</i> , 2015, 70, 691-707. | 1.9 | 13 |
| 85 | A direct discontinuous Galerkin method for a time-fractional diffusion equation with a Robin boundary condition. <i>Applied Numerical Mathematics</i> , 2019, 135, 15-29. | 2.1 | 13 |
| 86 | A discrete comparison principle for the time-fractional diffusion equation. <i>Computers and Mathematics With Applications</i> , 2020, 80, 917-922. | 2.7 | 13 |
| 87 | Galerkin and streamline diffusion finite element methods on a Shishkin mesh for a convection-diffusion problem with corner singularities. <i>Mathematics of Computation</i> , 2011, 81, 661-685. | 2.1 | 11 |
| 88 | The Green's function and a maximum principle for a Caputo two-point boundary value problem with a convection term. <i>Journal of Mathematical Analysis and Applications</i> , 2018, 461, 198-218. | 1.0 | 11 |
| 89 | Barrier Function Local and Global Analysis of an L^1 Finite Element Method for a Multiterm Time-Fractional Initial-Boundary Value Problem. <i>Journal of Scientific Computing</i> , 2020, 84, 1. | 2.3 | 11 |
| 90 | An Adaptive Uniformly Convergent Numerical Method for a Semilinear Singular Perturbation Problem. <i>SIAM Journal on Numerical Analysis</i> , 1989, 26, 442-455. | 2.3 | 10 |

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|-----|---|-----|-----------|
| 91 | Linear enhancements of the streamline diffusion method for convection-diffusion problems. <i>Computers and Mathematics With Applications</i> , 1996, 32, 29-42. | 2.7 | 10 |
| 92 | Optimal Approximability of Solutions of Singularly Perturbed Two-Point Boundary Value Problems. <i>SIAM Journal on Numerical Analysis</i> , 1997, 34, 1808-1816. | 2.3 | 10 |
| 93 | Layers and corner singularities in singularly perturbed elliptic problems. <i>BIT Numerical Mathematics</i> , 2008, 48, 309-314. | 2.0 | 10 |
| 94 | Boundary Layers in a Two-Point Boundary Value Problem with a Caputo Fractional Derivative. <i>Computational Methods in Applied Mathematics</i> , 2015, 15, 79-95. | 0.8 | 10 |
| 95 | A new analysis of a numerical method for the time-fractional Fokker-Planck equation with general forcing. <i>IMA Journal of Numerical Analysis</i> , 2020, 40, 1217-1240. | 2.9 | 10 |
| 96 | Block boundary value methods for linear weakly singular Volterra integro-differential equations. <i>BIT Numerical Mathematics</i> , 2021, 61, 691-720. | 2.0 | 10 |
| 97 | Two Finite Difference Schemes for Multi-Dimensional Fractional Wave Equations with Weakly Singular Solutions. <i>Computational Methods in Applied Mathematics</i> , 2021, 21, 913-928. | 0.8 | 10 |
| 98 | A singularly perturbed convection-diffusion problem in a half-plane. <i>Applicable Analysis</i> , 2006, 85, 1471-1485. | 1.3 | 9 |
| 99 | Numerical analysis of singularly perturbed nonlinear reaction-diffusion problems with multiple solutions. <i>Computers and Mathematics With Applications</i> , 2006, 51, 857-864. | 2.7 | 9 |
| 100 | The combination technique for a two-dimensional convection-diffusion problem with exponential layers. <i>Applications of Mathematics</i> , 2009, 54, 203-223. | 0.9 | 9 |
| 101 | Optimal uniform-convergence results for convection-diffusion problems in one dimension using preconditioning. <i>Journal of Computational and Applied Mathematics</i> , 2018, 338, 227-238. | 2.0 | 9 |
| 102 | Convergence analysis of a finite difference scheme for a two-point boundary value problem with a Riemann-Liouville-Caputo fractional derivative. <i>BIT Numerical Mathematics</i> , 2020, 60, 411-439. | 2.0 | 9 |
| 103 | Error analysis of a finite element method with GMMP temporal discretisation for a time-fractional diffusion equation. <i>Computers and Mathematics With Applications</i> , 2020, 79, 2784-2794. | 2.7 | 9 |
| 104 | A weighted and balanced FEM for singularly perturbed reaction-diffusion problems. <i>Calcolo</i> , 2021, 58, 1. | 1.1 | 9 |
| 105 | A nonconforming finite element method for a singularly perturbed boundary value problem. <i>Computing (Vienna/New York)</i> , 1995, 54, 1-25. | 4.8 | 8 |
| 106 | A Posteriori Error Analysis for Variable-Coefficient Multiterm Time-Fractional Subdiffusion Equations. <i>Journal of Scientific Computing</i> , 2022, 92, . | 2.3 | 8 |
| 107 | n-Widths and Singularly Perturbed Boundary Value Problems. <i>SIAM Journal on Numerical Analysis</i> , 1999, 36, 1604-1620. | 2.3 | 7 |
| 108 | Analysis of the streamline-diffusion finite element method on a piecewise uniform mesh for a convection-diffusion problem with exponential layers. <i>Journal of Numerical Mathematics</i> , 2001, 9, . | 3.5 | 7 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | Preprocessing schemes for fractional-derivative problems to improve their convergence rates. Applied Mathematics Letters, 2017, 74, 187-192. | 2.7 | 7 |
| 110 | Using Complete Monotonicity to Deduce Local Error Estimates for Discretisations of a Multi-Term Time-Fractional Diffusion Equation. Computational Methods in Applied Mathematics, 2022, 22, 15-29. | 0.8 | 7 |
| 111 | The image of mathematics held by Irish post-primary students. International Journal of Mathematical Education in Science and Technology, 2014, 45, 879-891. | 1.4 | 6 |
| 112 | Formal Consistency Versus Actual Convergence Rates of Difference Schemes for Fractional-Derivative Boundary Value Problems. Fractional Calculus and Applied Analysis, 2015, 18, 419-436. | 2.2 | 6 |
| 113 | Superconvergence of the direct discontinuous Galerkin method for a time-fractional initial-boundary value problem. Numerical Methods for Partial Differential Equations, 2019, 35, 2076-2090. | 3.6 | 6 |
| 114 | Singularities. , 2019, , 287-306. | | 6 |
| 115 | A Jeune Heuristic Mesh Theorem. Computational Methods in Applied Mathematics, 2003, 3, 488-492. | 0.8 | 5 |
| 116 | Balanced-norm error estimates for sparse grid finite element methods applied to singularly perturbed reaction-diffusion problems. Journal of Numerical Mathematics, 2019, 27, 37-55. | 3.5 | 5 |
| 117 | Green's functions, positive solutions, and a Lyapunov inequality for a Caputo fractional-derivative boundary value problem. Fractional Calculus and Applied Analysis, 2019, 22, 750-766. | 2.2 | 5 |
| 118 | Convergence analysis of the Adini element on a Shishkin mesh for a singularly perturbed fourth-order problem in two dimensions. Advances in Computational Mathematics, 2019, 45, 1105-1128. | 1.6 | 5 |
| 119 | An Iterative Numerical Algorithm for a Strongly Coupled System of Singularly Perturbed Convection-Diffusion Problems. Lecture Notes in Computer Science, 2009, , 104-115. | 1.3 | 5 |
| 120 | An analysis of a superconvergence result for a singularly perturbed boundary value problem. Mathematics of Computation, 1986, 46, 81-92. | 2.1 | 4 |
| 121 | Convection-diffusion-reaction problems, SDFEM/SUPG and a priori meshes. International Journal of Computing Science and Mathematics, 2007, 1, 412. | 0.3 | 4 |
| 122 | Sharp anisotropic interpolation error estimates for rectangular Raviart-Thomas elements. Mathematics of Computation, 2014, 83, 2675-2689. | 2.1 | 4 |
| 123 | An α -Robust Semidiscrete Finite Element Method for a Fokker-Planck Initial-Boundary Value Problem with Variable-Order Fractional Time Derivative. Journal of Scientific Computing, 2021, 86, 1. | 2.3 | 4 |
| 124 | Research announcement an algorithm for numerical calculation of topological degree. Applicable Analysis, 1977, 6, 319-320. | 1.3 | 3 |
| 125 | n-Widths and Singularly Perturbed Boundary Value Problems II. SIAM Journal on Numerical Analysis, 2001, 39, 690-707. | 2.3 | 3 |
| 126 | Regularity and derivative bounds for a convection-diffusion problem with a Neumann outflow condition. Journal of Differential Equations, 2009, 247, 2495-2516. | 2.2 | 3 |

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|-----|--|-----|-----------|
| 127 | Postprocessed Two-Scale Finite Element Discretizations, Part I. SIAM Journal on Numerical Analysis, 2011, 49, 1947-1971. | 2.3 | 3 |
| 128 | Spectral Galerkin methods for a weakly singular Volterra integral equation of the second kind. IMA Journal of Numerical Analysis, 0, , dnw034. | 2.9 | 3 |
| 129 | Convergence Outside the Initial Layer for a Numerical Method for the Time-Fractional Heat Equation. Lecture Notes in Computer Science, 2017, , 82-94. | 1.3 | 3 |
| 130 | An ϵ -robust finite difference method for a time-fractional radially symmetric diffusion problem. Computers and Mathematics With Applications, 2021, 97, 386-393. | 2.7 | 3 |
| 131 | Block boundary value methods for solving linear neutral Volterra integro-differential equations with weakly singular kernels. Journal of Computational and Applied Mathematics, 2022, 401, 113747. | 2.0 | 3 |
| 132 | A Caputo Two-Point Boundary Value Problem: Existence, Uniqueness and Regularity of a Solution. Modelirovanie I Analiz Informacionnyh Sistem, 2016, 23, 370-376. | 0.3 | 3 |
| 133 | Finite element analysis of an exponentially fitted non-lumped scheme for advection-diffusion equations. Applied Numerical Mathematics, 1994, 15, 375-393. | 2.1 | 2 |
| 134 | A robust finite difference method for a singularly perturbed degenerate parabolic problem II. IMA Journal of Numerical Analysis, 2013, 33, 460-480. | 2.9 | 2 |
| 135 | Necessary conditions for convergence of difference schemes for fractional-derivative two-point boundary value problems. BIT Numerical Mathematics, 2016, 56, 1455-1477. | 2.0 | 2 |
| 136 | A direct discontinuous Galerkin finite element method for convection-dominated two-point boundary value problems. Numerical Algorithms, 2020, 83, 741-765. | 1.9 | 2 |
| 137 | Regularity and Derivative Bounds for a Convection-Diffusion Problem with Neumann Boundary Conditions on Characteristic Boundaries. Zeitschrift Fur Analysis Und Ihre Anwendung, 2010, 29, 163-181. | 0.6 | 2 |
| 138 | Finite difference scheme for the accurate modelling of boundary layers in microchannels. , 2008, , . | | 1 |
| 139 | A finite difference method for an initial-boundary value problem with a Riemann-Liouville-Caputo spatial fractional derivative. Journal of Computational and Applied Mathematics, 2021, 381, 113020. | 2.0 | 1 |
| 140 | Balanced-Norm and Energy-Norm Error Analyses for a Backward Euler/FEM Solving a Singularly Perturbed Parabolic Reaction-Diffusion Problem. Journal of Scientific Computing, 2022, 92, . | 2.3 | 1 |
| 141 | An N-Dimensional bisection method for solving systems of n equations in N unknowns. Applicable Analysis, 1979, 9, 295-296. | 1.3 | 0 |
| 142 | A streamline diffusion finite element method on a shishkin mesh for a convection-diffusion problem. Milan Journal of Mathematics, 1994, 64, 129-140. | 0.1 | 0 |
| 143 | FINITE DIFFERENCE SCHEME FOR A SINGULARLY PERTURBED PARABOLIC EQUATIONS IN THE PRESENCE OF INITIAL AND BOUNDARY LAYERS. Mathematical Modelling and Analysis, 2008, 13, 483-492. | 1.5 | 0 |
| 144 | Singularly Perturbed Convection Diffusion Problems in One Dimension: Bounds on Derivatives. Computational Methods in Applied Mathematics, 2009, 9, 281-291. | 0.8 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 145 | Post-primary students' images of mathematics: findings from a survey of Irish ordinary level mathematics students. <i>International Journal of Mathematical Education in Science and Technology</i> , 2016, 47, 1009-1027. | 1.4 | 0 |
| 146 | Fundamental Properties of the Solution of a Singularly Perturbed Degenerate Parabolic Problem. <i>Lecture Notes in Computational Science and Engineering</i> , 2011, , 235-243. | 0.3 | 0 |
| 147 | Boundary Layers in a Riemann-Liouville Fractional Derivative Two-Point Boundary Value Problem. <i>Lecture Notes in Computational Science and Engineering</i> , 2015, , 87-98. | 0.3 | 0 |