# Helge Holden

List of Publications by Year
in descending order

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|---|---|---|---|
| 90 papers | 3,143 citations | 172457 29 h-index | 197818 49 g-index |
| 96 all docs | 96 docs citations | 96 times ranked | 1052 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Uniqueness of conservative solutions for the Hunterâ€“Saxton equation. Research in Mathematical Sciences, 2022, 9, 1. | 1.0 | 2 |
| 2 | Strong solutions of a stochastic differential equation with irregular random drift. Stochastic Processes and Their Applications, 2022, 150, 655-677. | 0.9 | 1 |
| 3 | The Hunterâ€“Saxton equation with noise. Journal of Differential Equations, 2021, 270, 725-786. | 2.2 | 13 |
| 4 | Evolutionarily stable strategies in stable and periodically fluctuating populations: The Rosenzweigâ€“MacArthur predatorâ€“prey model. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2017463118. | 7.1 | 25 |
| 5 | Singular diffusion with Neumann boundary conditions. Nonlinearity, 2021, 34, 1633-1662. | 1.4 | 0 |
| 6 | Reply to Best and Ashby: The concept of evolutionarily stable strategies (ESS) helps link ecology and evolution. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2102861118. | 7.1 | 0 |
| 7 | On the Microscopic Modeling of Vehicular Traffic on General Networks. SIAM Journal on Applied Mathematics, 2020, 80, 1377-1391. | 1.8 | 2 |
| 8 | A LIPSCHITZ METRIC FOR THE CAMASSAâ€“HOLM EQUATION. Forum of Mathematics, Sigma, 2020, 8, . | 0.7 | 0 |
| 9 | A Lipschitz metric for the Hunterâ€“Saxton equation. Communications in Partial Differential Equations, 2019, 44, 309-334. | 2.2 | 8 |
| 10 | Models for Dense Multilane Vehicular Traffic. SIAM Journal on Mathematical Analysis, 2019, 51, 3694-3713. | 1.9 | 13 |
| 11 | An improvement of the Kolmogorovâ€“Riesz compactness theorem. , 2019, 37, 84-91. | | 16 |
| 12 | On the Equivalence of Eulerian and Lagrangian Variables for the Two-Component Camassaâ€“Holm System. Springer Optimization and Its Applications, 2018, , 157-201. | 0.9 | 2 |
| 13 | The continuum limit of Follow-the-Leader models â€” a short proof. Discrete and Continuous Dynamical Systems, 2018, 38, 715-722. | 0.9 | 18 |
| 14 | Follow-the-Leader models can be viewed as a numerical approximation to the Lighthill-Whitham-Richards model for traffic flow. Networks and Heterogeneous Media, 2018, 13, 409-421. | 1.1 | 15 |
| 15 | Real-Valued Algebro-Geometric Solutions of the Two-Component Camassaâ€“Holm Hierarchy. Annales De L'Institut Fourier, 2017, 67, 1185-1230. | 0.6 | 9 |
| 16 | On the index of meromorphic operator-valued functions and some applications. , 2017, , 95-127. | | 2 |
| 17 | Addendum to â€œThe Kolmogorovâ€“Riesz compactness theoremâ€•[Expo. Math. 28 (2010) 385â€“394]. , 2016, 34, 243-245. | | 2 |
| 18 | The general peakonâ€“antipeakon solution for the Camassaâ€“Holm equation. Journal of Hyperbolic Differential Equations, 2016, 13, 353-380. | 0.5 | 10 |

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|---|---|---|---|
| 19 | Isentropic fluid dynamics in a curved pipe. Zeitschrift Fur Angewandte Mathematik Und Physik, 2016, 67, 1. | 1.4 | 2 |
| 20 | Dirichlet-to-Neumann maps, abstract Weylâ€“Titchmarsh M-functions, and a generalized index of unbounded meromorphic operator-valued functions. Journal of Differential Equations, 2016, 261, 3551-3587. | 2.2 | 8 |
| 21 | Convergence of finite difference schemes for the Benjaminâ€“Ono equation. Numerische Mathematik, 2016, 134, 249-274. | 1.9 | 5 |
| 22 | On the Braess Paradox with Nonlinear Dynamics and Control Theory. Journal of Optimization Theory and Applications, 2016, 168, 216-230. | 1.5 | 5 |
| 23 | Convergence of a fully discrete finite difference scheme for the Kortewegâ€“de Vries equation. IMA Journal of Numerical Analysis, 2015, 35, 1047-1077. | 2.9 | 19 |
| 24 | A CONTINUOUS INTERPOLATION BETWEEN CONSERVATIVE AND DISSIPATIVE SOLUTIONS FOR THE TWO-COMPONENT CAMASSAâ€“HOLM SYSTEM. Forum of Mathematics, Sigma, 2015, 3, . | 0.7 | 17 |
| 25 | On Factorizations of Analytic Operator-Valued Functions and Eigenvalue Multiplicity Questions. Integral Equations and Operator Theory, 2015, 82, 61-94. | 0.8 | 5 |
| 26 | Camassaâ€“Holm Equations. , 2015, , 176-178. | | 0 |
| 27 | On an inverse problem for scalar conservation laws. Inverse Problems, 2014, 30, 035015. | 2.0 | 11 |
| 28 | Global dissipative solutions of the two-component Camassaâ€“Holm system for initial data with nonvanishing asymptotics. Nonlinear Analysis: Real World Applications, 2014, 17, 203-244. | 1.7 | 14 |
| 29 | Operator Splitting for Well-Posed Active Scalar Equations. SIAM Journal on Mathematical Analysis, 2013, 45, 152-180. | 1.9 | 2 |
| 30 | Optimal rebalancing of portfolios with transaction costs. Stochastics, 2013, 85, 371-394. | 1.1 | 4 |
| 31 | Lipschitz metric for the Camassa–Holm equation on the line. Discrete and Continuous Dynamical Systems, 2013, 33, 2809-2827. | 0.9 | 26 |
| 32 | Operator splitting for partial differential equations with Burgers nonlinearity. Mathematics of Computation, 2012, 82, 173-185. | 2.1 | 57 |
| 33 | Operator splitting for two-dimensional incompressible fluid equations. Mathematics of Computation, 2012, 82, 719-748. | 2.1 | 4 |
| 34 | Abstract wave equations and associated Dirac-type operators. Annali Di Matematica Pura Ed Applicata, 2012, 191, 631-676. | 1.0 | 16 |
| 35 | Global Solutions for the Two-Component Camassaâ€“Holm System. Communications in Partial Differential Equations, 2012, 37, 2245-2271. | 2.2 | 41 |
| 36 | Global conservative solutions to the Camassa–Holm equation for initial data with nonvanishing asymptotics. Discrete and Continuous Dynamical Systems, 2012, 32, 4209-4227. | 0.9 | 18 |

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|---|---|---|---|
| 37 | Global Semigroup of Conservative Solutions of the Nonlinear Variational Wave Equation. Archive for Rational Mechanics and Analysis, 2011, 201, 871-964. | 2.4 | 37 |
| 38 | Lipschitz metric for the periodic Camassaâ€“Holm equation. Journal of Differential Equations, 2011, 250, 1460-1492. | 2.2 | 27 |
| 39 | The damped string problem revisited. Journal of Differential Equations, 2011, 251, 1086-1127. | 2.2 | 16 |
| 40 | $L^infty$ Solutions for a Model of Nonisothermal Polytropic Gas Flow. SIAM Journal on Mathematical Analysis, 2011, 43, 2253-2274. | 1.9 | 3 |
| 41 | Operator splitting for the KdV equation. Mathematics of Computation, 2011, 80, 821-821. | 2.1 | 58 |
| 42 | Front tracking for a model of immiscible gas flow withÂlarge data. BIT Numerical Mathematics, 2010, 50, 331-376. | 2.0 | 8 |
| 43 | Contract adjustment under uncertainty. Journal of Economic Dynamics and Control, 2010, 34, 657-680. | 1.6 | 4 |
| 44 | Lipschitz metric for the Hunterâ€“Saxton equation. Journal Des Mathematiques Pures Et Appliquees, 2010, 94, 68-92. | 1.6 | 43 |
| 45 | The Kolmogorovâ€“Riesz compactness theorem. , 2010, 28, 385-394. | | 145 |
| 46 | Ground states of the SchrÃ¶dinger-Maxwell system with dirac mass: Existence and asymptotics. Discrete and Continuous Dynamical Systems, 2010, 27, 117-132. | 0.9 | 1 |
| 47 | THE SOLUTION OF THE CAUCHY PROBLEM WITH LARGE DATA FOR A MODEL OF A MIXTURE OF GASES. Journal of Hyperbolic Differential Equations, 2009, 06, 25-106. | 0.5 | 14 |
| 48 | Strong compactness of approximate solutions to degenerate elliptic-hyperbolic equations with discontinuous flux function. Acta Mathematica Scientia, 2009, 29, 1573-1612. | 1.0 | 10 |
| 49 | Dissipative solutions for the Camassa-Holm equation. Discrete and Continuous Dynamical Systems, 2009, 24, 1047-1112. | 0.9 | 123 |
| 50 | Local Conservation Laws and the Hamiltonian Formalism for the Ablowitzâ€“Ladik Hierarchy. Studies in Applied Mathematics, 2008, 120, 361-423. | 2.4 | 12 |
| 51 | Real-valued algebro-geometric solutions of the Camassaâ€“Holm hierarchy. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 1025-1054. | 3.4 | 33 |
| 52 | The algebro-geometric Toda hierarchy initial value problem for complex-valued initial data. Revista Matematica Iberoamericana, 2008, 24, 117-182. | 0.9 | 6 |
| 53 | Periodic conservative solutions of the Camassaâ€“Holm equation. Annales De L'Institut Fourier, 2008, 58, 945-988. | 0.6 | 47 |
| 54 | The Ablowitz-Ladik Hierarchy Revisited. , 2008, , 139-190. | | 2 |

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|---|---|---|---|
| 55 | GLOBAL CONSERVATIVE MULTIPEAKON SOLUTIONS OF THE CAMASSAâ€“HOLM EQUATION. Journal of Hyperbolic Differential Equations, 2007, 04, 39-64. | 0.5 | 49 |
| 56 | Global Conservative Solutions of the Camassaâ€“Holm Equationâ€”A Lagrangian Point of View. Communications in Partial Differential Equations, 2007, 32, 1511-1549. | 2.2 | 194 |
| 57 | Global conservative solutions of the generalized hyperelastic-rod wave equation. Journal of Differential Equations, 2007, 233, 448-484. | 2.2 | 49 |
| 58 | Convergence of a Finite Difference Scheme for the Camassaâ€“Holm Equation. SIAM Journal on Numerical Analysis, 2006, 44, 1655-1680. | 2.3 | 51 |
| 59 | A convergent numerical scheme for the Camassa–Holm equation based on multipeakons. Discrete and Continuous Dynamical Systems, 2006, 14, 505-523. | 0.9 | 79 |
| 60 | Algebro-Geometric Solutions of the Baxterâ€“SzegÅ‘ Difference Equation. Communications in Mathematical Physics, 2005, 258, 149-177. | 2.2 | 65 |
| 61 | Stability of solutions of quasilinear parabolic equations. Journal of Mathematical Analysis and Applications, 2005, 308, 221-239. | 1.0 | 15 |
| 62 | Wellposedness for a parabolic-elliptic system. Discrete and Continuous Dynamical Systems, 2005, 13, 659-682. | 0.9 | 95 |
| 63 | Front Tracking for Hyperbolic Conservation Laws. Applied Mathematical Sciences (Switzerland), 2002, , . | 0.8 | 152 |
| 64 | Operator Splitting for Convection-Dominated Nonlinear Partial Differential Equations. , 2001, , 469-475. | | 1 |
| 65 | Borg-Type Theorems for Matrix-Valued SchrÃ¶dinger Operators. Journal of Differential Equations, 2000, 167, 181-210. | 2.2 | 46 |
| 66 | Title is missing!. Computational Geosciences, 2000, 4, 287-322. | 2.4 | 30 |
| 67 | Riemann Problems with a Kink. SIAM Journal on Mathematical Analysis, 1999, 30, 497-515. | 1.9 | 24 |
| 68 | Unconditionally Stable Splitting Methods for the Shallow Water Equations. BIT Numerical Mathematics, 1999, 39, 451-472. | 2.0 | 26 |
| 69 | An Unconditionally Stable Method for the Euler Equations. Journal of Computational Physics, 1999, 150, 76-96. | 3.8 | 32 |
| 70 | Operator Splitting Methods for Generalized Kortewegâ€“De Vries Equations. Journal of Computational Physics, 1999, 153, 203-222. | 3.8 | 47 |
| 71 | A Mathematical Model of Traffic Flow on a Network of Unidirectional Roads. SIAM Journal on Mathematical Analysis, 1995, 26, 999-1017. | 1.9 | 230 |
| 72 | Stochastic boundary value problems: a white noise functional approach. Probability Theory and Related Fields, 1993, 95, 391-419. | 1.8 | 22 |

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|---|---|---|---|
| 73 | A method of fractional steps for scalar conservation laws without the CFL condition. Mathematics of Computation, 1993, 60, 221-232. | 2.1 | 39 |
| 74 | A New Front-Tracking Method for Reservoir Simulation. SPE Reservoir Engineering, 1992, 7, 107-116. | 0.5 | 57 |
| 75 | Discrete wick calculus and stochastic functional equations. Potential Analysis, 1992, 1, 291-306. | 0.9 | 14 |
| 76 | Explicit construction of solutions of the modified Kadomtsev-Petviashvili equation. Journal of Functional Analysis, 1991, 98, 211-228. | 1.4 | 16 |
| 77 | Stochastic Properties of the Scalar Buckley-Leverett Equation. SIAM Journal on Applied Mathematics, 1991, 51, 1472-1488. | 1.8 | 13 |
| 78 | Representation and construction of multiplicative noise. Journal of Functional Analysis, 1989, 87, 250-272. | 1.4 | 19 |
| 79 | A law of large numbers and a central limit theorem for the Schrï¿½dinger operator with zero-range potentials. Journal of Statistical Physics, 1988, 51, 205-214. | 1.2 | 19 |
| 80 | Trapping and cascading of eigenvalues in the large coupling limit. Communications in Mathematical Physics, 1988, 118, 597-634. | 2.2 | 59 |
| 81 | Stochastic multiplicative measures, generalized Markov semigroups, and group-valued stochastic processes and fields. Journal of Functional Analysis, 1988, 78, 154-184. | 1.4 | 29 |
| 82 | On energy gaps in a new type of analytically solvable model in quantum mechanics. Journal of Mathematical Analysis and Applications, 1988, 134, 9-29. | 1.0 | 21 |
| 83 | A numerical method for first order nonlinear scalar conservation laws in one-dimension. Computers and Mathematics With Applications, 1988, 15, 595-602. | 2.7 | 94 |
| 84 | On the riemann problem for a prototype of a mixed type conservation law. Communications on Pure and Applied Mathematics, 1987, 40, 229-264. | 3.1 | 50 |
| 85 | A unified approach to eigenvalues and resonances of SchrÃ¶dinger operators using Fredholm determinants. Journal of Mathematical Analysis and Applications, 1987, 123, 181-198. | 1.0 | 24 |
| 86 | The Fermi surface for point interactions. Journal of Mathematical Physics, 1986, 27, 385-405. | 1.1 | 4 |
| 87 | On absence of diffusion for low energy for a random SchrÃ¶dinger operator on L2(R). Physica A: Statistical Mechanics and Its Applications, 1984, 124, 413-417. | 2.6 | 0 |
| 88 | On absence of diffusion near the bottom of the spectrum for a random Schrï¿½dinger operator onL 2(?)+. Communications in Mathematical Physics, 1984, 93, 197-217. | 2.2 | 70 |
| 89 | The spectrum of defect periodic point interactions. Letters in Mathematical Physics, 1983, 7, 221-228. | 1.1 | 7 |
| 90 | Symmetric Waves Are Traveling Waves. International Mathematics Research Notices, 0, , . | 1.0 | 5 |