# Elbridge Gerry Puckett

List of Publications by Year
in descending order

| 21 papers | 2,679 citations | 933447<br>10 h-index | 839539<br>18 g-index |
|---|---|---|---|
| 22 all docs | 22 docs citations | 22 times ranked | 1726 citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------| 
| 1 | Implementation of a Volume-of-Fluid method in a finite element code with applications to thermochemical convection in a density stratified fluid in the Earth's mantle. Computers and Fluids, 2019, 190, 217-253. | 2.5 | 8 |
| 2 | Evaluating the accuracy of hybrid finite element/particle-in-cell methods for modelling incompressible Stokes flow. Geophysical Journal International, 2019, 219, 1915-1938. | 2.4 | 11 |
| 3 | New numerical approaches for modeling thermochemical convection in a compositionally stratified fluid. Physics of the Earth and Planetary Interiors, 2018, 276, 10-35. | 1.9 | 10 |
| 4 | Flexible and Scalable Particle‐in‐Cell Methods With Adaptive Mesh Refinement for Geodynamic Computations. Geochemistry, Geophysics, Geosystems, 2018, 19, 3596-3604. | 2.5 | 34 |
| 5 | A discontinuous Galerkin method with a bound preserving limiter for the advection of non-diffusive fields in solid Earth geodynamics. Physics of the Earth and Planetary Interiors, 2017, 263, 23-37. | 1.9 | 20 |
| 6 | The refraction of shock pairs. Shock Waves, 2014, 24, 553-572. | 1.9 | 2 |
| 7 | A Neumann–Neumann preconditioned iterative substructuring approach for computing solutions to Poisson's equation with prescribed jumps on an embedded boundary. Journal of Computational Physics, 2013, 235, 683-700. | 3.8 | 2 |
| 8 | Supply-demand Diagrams and a New Framework for Analyzing the Inhomogeneous Lighthill-Whitham-Richards Model. , 2009, , 603-635. |  | 20 |
| 9 | Second-order accurate volume-of-fluid algorithms for tracking material interfaces. Journal of Computational Physics, 2004, 199, 465-502. | 3.8 | 519 |
| 10 | A Coupled Level Set and Volume-of-Fluid Method for Computing 3D and Axisymmetric Incompressible Two-Phase Flows. Journal of Computational Physics, 2000, 162, 301-337. | 3.8 | 1,317 |
| 11 | A High-Order Projection Method for Tracking Fluid Interfaces in Variable Density Incompressible Flows. Journal of Computational Physics, 1997, 130, 269-282. | 3.8 | 418 |
| 12 | An Ising model approach to the behavior of the Earth's magnetic field: A progress report. Surveys in Geophysics, 1996, 17, 225-228. | 4.6 | 0 |
| 13 | A High-Order Godunov Method for Multiple Condensed Phases. Journal of Computational Physics, 1996, 128, 134-164. | 3.8 | 176 |
| 14 | Edge effects in molybdenum‐encapsulated molten silicate shock wave targets. Journal of Applied Physics, 1994, 75, 1426-1434. | 2.5 | 12 |
| 15 | Vortex Methods: An Introduction and Survey of Selected Research Topics. , 1993, , 335-408. |  | 28 |
| 16 | A 3D adaptive mesh refinement algorithm for multimaterial gas dynamics. Physica D: Nonlinear Phenomena, 1992, 60, 84-93. | 2.8 | 45 |
| 17 | A Numerical Study of Shock Wave Refraction at a CO2/CH4 Interface. The IMA Volumes in Mathematics and Its Applications, 1991, , 261-280. | 0.5 | 2 |
| 18 | A fast vortex method for computing 2D viscous flow. Journal of Computational Physics, 1990, 91, 278-297. | 3.8 | 8 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 19 | Convergence of a Random Particle Method to Solutions of the Kolmogorov Equation u t = ½u xx + u(1 -) Tj ETQq1.1 0.784314 rgBT | 2.1 | 5 |
| 20 | A Study of the Vortex Sheet Method and its Rate of Convergence. SIAM Journal on Scientific and Statistical Computing, 1989, 10, 298-327. | 1.5 | 24 |
| 21 | Convergence of a random particle method to solutions of the Kolmogorov equation $usb t=u usb {xx}+u(1-u)$. Mathematics of Computation, 1989, 52, 615-615. | 2.1 | 18 |