Sigal Gottlieb

List of Publications by Year
in descending order

38 papers	5,452 citations	489802 18 h-index	371746 37 g-index
43 all docs	43 docs citations	43 times ranked	3236 citing authors

#	Article	IF	Citations
1	Preface to the Focused Issue on WENO Schemes. Communications on Applied Mathematics and Computation, 2023, 5, 1-2.	0.7	0
2	A general linear method approach to the design and optimization of efficient, accurate, and easily implemented time-stepping methods in CFD. Journal of Computational Physics, 2022, 455, 110927.	1.9	6
3	High Order Strong Stability Preserving MultiDerivative Implicit and IMEX Runge--Kutta Methods with Asymptotic Preserving Properties. SIAM Journal on Numerical Analysis, 2022, 60, 423-449.	1.1	12
4	An EIM-degradation free reduced basis method via over collocation and residual hyper reduction-based error estimation. Journal of Computational Physics, 2021, 444, 110545.	1.9	10
5	Two-Derivative Error Inhibiting Schemes and Enhanced Error Inhibiting Schemes. SIAM Journal on Numerical Analysis, 2020, 58, 3197-3225.	1.1	4
6	Explicit and implicit error inhibiting schemes with post-processing. Computers and Fluids, 2020, 208, 104534.	1.3	4
7	A Strong Stability Preserving Analysis for Explicit Multistage Two-Derivative Time-Stepping Schemes Based on Taylor Series Conditions. Communications on Applied Mathematics and Computation, 2019, 1, 21.	0.7	5
8	Strong Stability Preserving Integrating Factor Two-Step Rungeâ€"Kutta Methods. Journal of Scientific Computing, 2019, 81, 1446-1471.	1.1	13
9	Strong Stability Preserving Integrating Factor Runge--Kutta Methods. SIAM Journal on Numerical Analysis, 2018, 56, 3276-3307.	1.1	34
10	Downwinding for preserving strong stability in explicit integrating factor Rungeâ€"Kutta methods. Pure and Applied Mathematics Quarterly, 2018, 14, 3-25.	0.2	4
11	Implicit and Implicitâ€"Explicit Strong Stability Preserving Rungeâ€"Kutta Methods with High Linear Order. Journal of Scientific Computing, 2017, 73, 667-690.	1.1	21
12	Special Issue in Honor of Professor Chi-Wang Shu. Journal of Scientific Computing, 2017, 73, 459-460.	1.1	0
13	Implicit-Explicit Strong Stability Preserving Runge-Kuta Methods with High Linear Order. , 2017, , .		1
14	Explicit Strong Stability Preserving Multistage Two-Derivative Time-Stepping Schemes. Journal of Scientific Computing, 2016, 68, 914-942.	1.1	38
15	Explicit strong stability preserving multistep Rungeâ€"Kutta methods. Mathematics of Computation, 2016, 86, 747-769.	1.1	20
16	A Reduced Radial Basis Function Method for Partial Differential Equations on Irregular Domains. Journal of Scientific Computing, 2016, 66, 67-90.	1.1	11
17	A <scp>Fourier</scp> pseudospectral method for the â€œgoodâ€•<scp>Boussinesq</scp> equation with secondâ€order temporal accuracy. Numerical Methods for Partial Differential Equations, 2015, 31, 202-224.	2.0	59
18	Optimal explicit strong stability preserving Rungeâ€"Kutta methods with high linear order and optimal nonlinear order. Mathematics of Computation, 2015, 84, 2743-2761.	1.1	9

#	Article	IF	Citations
19	Strong Stability Preserving Time Discretizations: A Review. Lecture Notes in Computational Science and Engineering, 2015, , 17-30.	0.1	1
20	Parametric analytical preconditioning and its applications to the reduced collocation methods. Comptes Rendus Mathematique, 2014, 352, 661-666.	0.1	12
21	Reduced Collocation Methods: Reduced Basis Methods in the Collocation Framework. Journal of Scientific Computing, 2013, 55, 718-737.	1.1	15
22	Stability and Convergence Analysis of Fully Discrete Fourier Collocation Spectral Method for 3-D Viscous Burgersâ€™ Equation. Journal of Scientific Computing, 2012, 53, 102-128.	1.1	90
23	A Review of David Gottliebâ€™s Work on the Resolution of the Gibbs Phenomenon. Communications in Computational Physics, 2011, 9, 497-519.	0.7	38
24	Strong Stability Preserving Two-step Rungeâ€“Kutta Methods. SIAM Journal on Numerical Analysis, 2011, 49, 2618-2639.	1.1	47
25	Iterative adaptive RBF methods for detection of edges in two-dimensional functions. Applied Numerical Mathematics, 2011, 61, 77-91.	1.2	17
26	Recovery of High Order Accuracy in Radial Basis Function Approximations of Discontinuous Problems. Journal of Scientific Computing, 2010, 45, 359-381.	1.1	15
27	Optimal implicit strong stability preserving Rungeâ€“Kutta methods. Applied Numerical Mathematics, 2009, 59, 373-392.	1.2	89
28	High Order Strong Stability Preserving Time Discretizations. Journal of Scientific Computing, 2009, 38, 251-289.	1.1	266
29	A Numerical Study of Diagonally Split Rungeâ€“Kutta Methods for PDEs with Discontinuities. Journal of Scientific Computing, 2008, 36, 89-112.	1.1	18
30	A Fifth Order Flux Implicit WENO Method. Journal of Scientific Computing, 2006, 27, 271-287.	1.1	28
31	Optimal Strong-Stability-Preserving Time-Stepping Schemes with Fast Downwind Spatial Discretizations. Journal of Scientific Computing, 2006, 27, 289-303.	1.1	25
32	Recovering High-Order Accuracy in WENO Computations of Steady-State Hyperbolic Systems. Journal of Scientific Computing, 2006, 28, 307-318.	1.1	19
33	One-sided Post-processing for the Discontinuous Galerkin Method Using ENO Type Stencil Choosing and the Local Edge Detection Method. Journal of Scientific Computing, 2006, 28, 167-190.	1.1	5
34	On high order strong stability preserving runge-kutta and multi step time discretizations. Journal of Scientific Computing, 2005, 25, 105-128.	1.1	18
35	On High Order Strong Stability Preserving Rungeâ€“Kutta and Multi Step Time Discretizations. Journal of Scientific Computing, 2005, 25, 105-128.	1.1	177
36	Title is missing!. Journal of Scientific Computing, 2003, 18, 83-109.	1.1	45

#	Article	IF	Citations
37	Strong Stability-Preserving High-Order Time Discretization Methods. SIAM Review, 2001, 43, 89-112.	4.2	1,817
38	Total variation diminishing Runge-Kutta schemes. Mathematics of Computation, 1998, 67, 73-85.	1.1	1,803