

Yong-Tao Zhang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2792980/publications.pdf>

Version: 2024-02-01

43
papers

1,963
citations

279701

23
h-index

289141

40
g-index

43
all docs

43
docs citations

43
times ranked

1157
citing authors

#	ARTICLE	IF	CITATIONS
1	Resolution of high order WENO schemes for complicated flow structures. Journal of Computational Physics, 2003, 186, 690-696.	1.9	236
2	Formation of the BMP Activity Gradient in the Drosophila Embryo. Developmental Cell, 2005, 8, 915-924.	3.1	175
3	High Order Fast Sweeping Methods for Static Hamilton-Jacobi Equations. Journal of Scientific Computing, 2006, 29, 25-56.	1.1	166
4	High-Order WENO Schemes for Hamilton-Jacobi Equations on Triangular Meshes. SIAM Journal of Scientific Computing, 2003, 24, 1005-1030.	1.3	147
5	A Fast Sweeping Method for Static Convex Hamilton-Jacobi Equations. Journal of Scientific Computing, 2007, 31, 237-271.	1.1	132
6	Efficient semi-implicit schemes for stiff systems. Journal of Computational Physics, 2006, 214, 521-537.	1.9	91
7	Bare Bones Pattern Formation: A Core Regulatory Network in Varying Geometries Reproduces Major Features of Vertebrate Limb Development and Evolution. PLoS ONE, 2010, 5, e10892.	1.1	83
8	A Robust Reconstruction for Unstructured WENO Schemes. Journal of Scientific Computing, 2013, 54, 603-621.	1.1	70
9	Application of Discontinuous Galerkin Methods for Reaction-Diffusion Systems in Developmental Biology. Journal of Scientific Computing, 2009, 40, 391-418.	1.1	68
10	Compact integration factor methods in high spatial dimensions. Journal of Computational Physics, 2008, 227, 5238-5255.	1.9	66
11	Numerical viscosity and resolution of high-order weighted essentially nonoscillatory schemes for compressible flows with high Reynolds numbers. Physical Review E, 2003, 68, 046709.	0.8	58
12	Operator splitting implicit integration factor methods for stiff reaction-diffusion-advection systems. Journal of Computational Physics, 2011, 230, 5996-6009.	1.9	55
13	A second order discontinuous Galerkin fast sweeping method for Eikonal equations. Journal of Computational Physics, 2008, 227, 8191-8208.	1.9	47
14	Bifurcation for a free boundary problem modeling the growth of a tumor with a necrotic core. Nonlinear Analysis: Real World Applications, 2012, 13, 694-709.	0.9	47
15	Krylov implicit integration factor methods for spatial discretization on high dimensional unstructured meshes: Application to discontinuous Galerkin methods. Journal of Computational Physics, 2011, 230, 4336-4352.	1.9	44
16	Multiscale Models for Vertebrate Limb Development. Current Topics in Developmental Biology, 2008, 81, 311-340.	1.0	43
17	Fast Sweeping Fifth Order WENO Scheme for Static Hamilton-Jacobi Equations with Accurate Boundary Treatment. Journal of Scientific Computing, 2010, 45, 514-536.	1.1	40
18	Continuation Along Bifurcation Branches for a Tumor Model with a Necrotic Core. Journal of Scientific Computing, 2012, 53, 395-413.	1.1	33

#	ARTICLE	IF	CITATIONS
19	A homotopy method based on WENO schemes for solving steady state problems of hyperbolic conservation laws. <i>Journal of Computational Physics</i> , 2013, 250, 332-346.	1.9	32
20	Computational analysis of BMP gradients in dorsal-ventral patterning of the zebrafish embryo. <i>Journal of Theoretical Biology</i> , 2007, 248, 579-589.	0.8	31
21	Krylov implicit integration factor WENO methods for semilinear and fully nonlinear advection-diffusion-reaction equations. <i>Journal of Computational Physics</i> , 2013, 253, 368-388.	1.9	29
22	Uniformly Accurate Discontinuous Galerkin Fast Sweeping Methods for Eikonal Equations. <i>SIAM Journal of Scientific Computing</i> , 2011, 33, 1873-1896.	1.3	28
23	Mathematical modeling of vertebrate limb development. <i>Mathematical Biosciences</i> , 2013, 243, 1-17.	0.9	26
24	The Morphostatic Limit for a Model of Skeletal Pattern Formation in the Vertebrate Limb. <i>Bulletin of Mathematical Biology</i> , 2008, 70, 460-483.	0.9	25
25	Numerical methods for stiff reaction-diffusion systems. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2007, 7, 515-525.	0.5	23
26	High Order Fixed-Point Sweeping WENO Methods for Steady State of Hyperbolic Conservation Laws and Its Convergence Study. <i>Communications in Computational Physics</i> , 2016, 20, 835-869.	0.7	22
27	Krylov single-step implicit integration factor WENO methods for advection-diffusion-reaction equations. <i>Journal of Computational Physics</i> , 2016, 311, 22-44.	1.9	19
28	The mechanism of sound generation in the interaction between a shock wave and two counter-rotating vortices. <i>Physics of Fluids</i> , 2009, 21, 076101.	1.6	18
29	Effects of shock waves on Rayleigh-Taylor instability. <i>Physics of Plasmas</i> , 2006, 13, 062705.	0.7	15
30	A Third Order Fast Sweeping Method with Linear Computational Complexity for Eikonal Equations. <i>Journal of Scientific Computing</i> , 2015, 62, 198-229.	1.1	13
31	A Modified Fifth Order Finite Difference Hermite WENO Scheme for Hyperbolic Conservation Laws. <i>Journal of Scientific Computing</i> , 2020, 85, 1.	1.1	13
32	Fixed-point Iterative Sweeping Methods for Static Hamilton-Jacobi Equations. <i>Methods and Applications of Analysis</i> , 2006, 13, 299-320.	0.1	13
33	Krylov Integration Factor Method on Sparse Grids for High Spatial Dimension Convection-Diffusion Equations. <i>Journal of Scientific Computing</i> , 2016, 69, 736-763.	1.1	11
34	A conservative numerical method for the fractional nonlinear Schrödinger equation in two dimensions. <i>Science China Mathematics</i> , 2019, 62, 1997-2014.	0.8	9
35	Absolutely convergent fixed-point fast sweeping WENO methods for steady state of hyperbolic conservation laws. <i>Journal of Computational Physics</i> , 2021, 443, 110516.	1.9	9
36	Multiple stable steady states of a reaction-diffusion model on zebrafish dorsal-ventral patterning. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2011, 4, 1413-1428.	0.6	7

#	ARTICLE	IF	CITATIONS
37	Computational Complexity Study on Krylov Integration Factor WENO Method for High Spatial Dimension Convection-Diffusion Problems. <i>Journal of Scientific Computing</i> , 2017, 73, 980-1027.	1.1	6
38	Krylov implicit integration factor discontinuous Galerkin methods on sparse grids for high dimensional reaction-diffusion equations. <i>Journal of Computational Physics</i> , 2019, 388, 90-102.	1.9	6
39	Third order WENO scheme on sparse grids for hyperbolic equations. <i>Pure and Applied Mathematics Quarterly</i> , 2018, 14, 57-86.	0.2	4
40	Fast Sparse Grid Simulations of Fifth Order WENO Scheme for High Dimensional Hyperbolic PDEs. <i>Journal of Scientific Computing</i> , 2021, 87, 1.	1.1	2
41	A Fixed-Point Fast Sweeping WENO Method with Inverse Lax-Wendroff Boundary Treatment for Steady State of Hyperbolic Conservation Laws. <i>Communications on Applied Mathematics and Computation</i> , 2023, 5, 403-427.	0.7	1
42	Cell Biology Modeling Development. , 2015, , 183-189.		0
43	Preface to the Focused Issue on WENO Schemes. <i>Communications on Applied Mathematics and Computation</i> , 2023, 5, 1-2.	0.7	0