

Laurent Gosse

List of Publications by Year in descending order

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citations

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all docs

104
docs citations

104
times ranked

608
citing authors

#	ARTICLE	IF	CITATIONS
1	Diffusive Limit of a Two-Dimensional Well-Balanced Scheme for the Free Klein-Kramers Equation. Multiscale Modeling and Simulation, 2021, 19, 568-587.	0.6	4
2	\mathcal{L} -Splines as Diffusive Limits of Dissipative Kinetic Models. Vietnam Journal of Mathematics, 2021, 49, 651-671.	0.4	2
3	Vaccine Inoculation Route Modulates Early Immunity and Consequently Antigen-Specific Immune Response. Frontiers in Immunology, 2021, 12, 645210.	2.2	38
4	Diffusive limit of a two-dimensional well-balanced approximation to a kinetic model of chemotaxis. SN Partial Differential Equations and Applications, 2021, 2, .	0.3	1
5	A recombinant measles virus vaccine strongly reduces SHIV viremia and virus reservoir establishment in macaques. Npj Vaccines, 2021, 6, 123.	2.9	2
6	An efficient numerical model for the simulation of coupled heat, air, and moisture transfer in porous media. Engineering Reports, 2020, 2, e12099.	0.9	2
7	A Truly Two-Dimensional, Asymptotic-Preserving Scheme for a Discrete Model of Radiative Transfer. SIAM Journal on Numerical Analysis, 2020, 58, 1092-1116.	1.1	6
8	A single lentivector DNA based immunization contains a late heterologous SIVmac251 mucosal challenge infection. Vaccine, 2020, 38, 3729-3739.	1.7	4
9	Aliasing and two-dimensional well-balanced for drift-diffusion equations on square grids. Mathematics of Computation, 2019, 89, 139-168.	1.1	3
10	A Two-Dimensional "Flea on the Elephant" Phenomenon and its Numerical Visualization. Multiscale Modeling and Simulation, 2019, 17, 137-166.	0.6	4
11	Some examples of kinetic schemes whose diffusion limit is \mathbb{L}^{∞} 's exponential-fitting. Numerische Mathematik, 2019, 141, 627-680.	0.9	7
12	Stability of a Kirchhoff-Roe scheme for two-dimensional linearized Euler systems. Annali Dell'Universita Di Ferrara, 2018, 64, 335-360.	0.7	2
13	Reprint of: Dirichlet-to-Neumann mappings and finite-differences for anisotropic diffusion. Computers and Fluids, 2018, 169, 365-372.	1.3	0
14	\mathcal{L} -Splines and Viscosity Limits for Well-Balanced Schemes Acting on Linear Parabolic Equations. Acta Applicandae Mathematicae, 2018, 153, 101-124.	0.5	9
15	Overcoming immunogenicity issues of HIV p24 antigen by the use of innovative nanostructured lipid carriers as delivery systems: evidences in mice and non-human primates. Npj Vaccines, 2018, 3, 46.	2.9	24
16	A Truly Two-Dimensional Discretization of Drift-Diffusion Equations on Cartesian Grids. SIAM Journal on Numerical Analysis, 2018, 56, 2845-2870.	1.1	11
17	Well-Balanced Schemes Based on Elementary Solutions for Kinetic Models of Ionized or Ultra-Relativistic Gas. Journal of Computational and Theoretical Transport, 2017, 46, 1-19.	0.3	1
18	Travelling Chemotactic Aggregates at Mesoscopic Scale and BiStability. SIAM Journal on Applied Mathematics, 2017, 77, 2224-2249.	0.8	6

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19	Dirichlet-to-Neumann mappings and finite-differences for anisotropic diffusion. Computers and Fluids, 2017, 156, 58-65.	1.3	5
20	Hydrodynamic singular regimes in 1 + 1 kinetic models and spectral numerical methods. Journal of Mathematical Analysis and Applications, 2017, 445, 564-603.	0.5	2
21	Concentration Waves of Chemotactic Bacteria: The Discrete Velocity Case. Springer INdAM Series, 2017, , 79-109.	0.4	1
22	Viscous Equations Treated with L^1 -Splines and Steklov-Poincaré Operator in Two Dimensions. Springer INdAM Series, 2017, , 167-195.	0.4	7
23	Filtered Gradient Algorithms for Inverse Design Problems of One-Dimensional Burgers Equation. Springer INdAM Series, 2017, , 197-227.	0.4	7
24	A Numerical Glimpse at Some Non-standard Solutions to Compressible Euler Equations. Springer INdAM Series, 2017, , 111-140.	0.4	1
25	Superior Efficacy of a Human Immunodeficiency Virus Vaccine Combined with Antiretroviral Prevention in Simian-Human Immunodeficiency Virus-Challenged Nonhuman Primates. Journal of Virology, 2016, 90, 5315-5328.	1.5	12
26	Numerical High-Field Limits in Two-Stream Kinetic Models and 1D Aggregation Equations. SIAM Journal of Scientific Computing, 2016, 38, A412-A434.	1.3	12
27	Stringent error estimates for one-dimensional, space-dependent 2 Å— 2 relaxation systems. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2016, 33, 621-654.	0.7	6
28	Error Estimates for well-balanced and time-split schemes on a locally damped wave equation. Mathematics of Computation, 2015, 85, 601-633.	1.1	5
29	A well-balanced and asymptotic-preserving scheme for the one-dimensional linear Dirac equation. BIT Numerical Mathematics, 2015, 55, 433-458.	1.0	16
30	Locally Inertial Approximations of Balance Laws Arising in (1+1)-Dimensional General Relativity. SIAM Journal on Applied Mathematics, 2015, 75, 1301-1328.	0.8	5
31	HIV specific responses induced in nonhuman primates with ANRS HIV-Lipo-5 vaccine combined with rMVA-HIV prime or boost immunizations. Vaccine, 2015, 33, 2354-2359.	1.7	8
32	Error Estimates for Well-Balanced Schemes on Simple Balance Laws. SpringerBriefs in Mathematics, 2015, , .	0.2	18
33	A well-balanced scheme able to cope with hydrodynamic limits for linear kinetic models. Applied Mathematics Letters, 2015, 42, 15-21.	1.5	9
34	Lyapunov FunctionalFunctional for Inertial Approximations. SpringerBriefs in Mathematics, 2015, , 45-79.	0.2	0
35	Local and Global Error Estimates. SpringerBriefs in Mathematics, 2015, , 9-22.	0.2	0
36	Position-Dependent Scalar Balance Laws. SpringerBriefs in Mathematics, 2015, , 23-44.	0.2	0

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37	MUSCL reconstruction and Haar wavelets. Communications in Mathematical Sciences, 2015, 13, 1501-1514.	0.5	2
38	A Two-Dimensional Version of the Godunov Scheme for Scalar Balance Laws. SIAM Journal on Numerical Analysis, 2014, 52, 626-652.	1.1	16
39	Redheffer Products and Numerical Approximation of Currents in One-Dimensional Semiconductor Kinetic Models. Multiscale Modeling and Simulation, 2014, 12, 1533-1560.	0.6	11
40	Compressed sensing with preconditioning for sparse recovery with subsampled matrices of Slepian prolate functions. Annali Dell'Universita Di Ferrara, 2013, 59, 81-116.	0.7	7
41	A well-balanced scheme for kinetic models of chemotaxis derived from one-dimensional local forward-backward problems. Mathematical Biosciences, 2013, 242, 117-128.	0.9	11
42	A Model for Scattering of Forward-Peaked Beams. SIMAI Springer Series, 2013, , 263-268.	0.4	0
43	Aggregation Phenomena with Kinetic Models of Chemotaxis Dynamics. SIMAI Springer Series, 2013, , 191-214.	0.4	0
44	Time-Stabilization on Flat Currents with Non-Degenerate Boltzmann-Poisson Models. SIMAI Springer Series, 2013, , 215-239.	0.4	0
45	Balances in Two Dimensions: Kinetic Semiconductor Equations Again. SIMAI Springer Series, 2013, , 295-313.	0.4	0
46	Conclusion: Outlook and Shortcomings. SIMAI Springer Series, 2013, , 315-321.	0.4	0
47	Early Well-Balanced Derivations for Various Systems. SIMAI Springer Series, 2013, , 63-76.	0.4	0
48	Material Variables, Strings and Infinite Domains. SIMAI Springer Series, 2013, , 117-134.	0.4	0
49	Klein-Kramers Equation and Burgers/Fokker-Planck Model of Spray. SIMAI Springer Series, 2013, , 241-261.	0.4	0
50	The Special Case of 2-Velocity Kinetic Models. SIMAI Springer Series, 2013, , 137-165.	0.4	0
51	Lifting a Non-Resonant Scalar Balance Law. SIMAI Springer Series, 2013, , 21-40.	0.4	0
52	Introduction and Chronological Perspective. SIMAI Springer Series, 2013, , 1-17.	0.4	2
53	Linearized BCK Model of Heat Transfer. SIMAI Springer Series, 2013, , 269-293.	0.4	0
54	Transient L1 error estimates for well-balanced schemes on non-resonant scalar balance laws. Journal of Differential Equations, 2013, 255, 469-502.	1.1	12

#	ARTICLE	IF	CITATIONS
55	Lyapunov Functional for Linear Error Estimates. SIMAI Springer Series, 2013, , 41-61.	0.4	0
56	Computing Qualitatively Correct Approximations of Balance Laws. SIMAI Springer Series, 2013, , .	0.4	60
57	Kinetic Scheme with Reflections and Linear Geometric Optics. SIMAI Springer Series, 2013, , 95-116.	0.4	0
58	Elementary Solutions and Analytical Discrete-Ordinates for Radiative Transfer. SIMAI Springer Series, 2013, , 167-189.	0.4	0
59	Maxwellian Decay for Well-balanced Approximations of a Super-characteristic Chemotaxis Model. SIAM Journal of Scientific Computing, 2012, 34, A520-A545.	1.3	14
60	Asymptotic-Preserving and Well-Balanced schemes for the 1D Cattaneo model of chemotaxis movement in both hyperbolic and diffusive regimes. Journal of Mathematical Analysis and Applications, 2012, 388, 964-983.	0.5	26
61	Well-balanced schemes using elementary solutions for linear models of the Boltzmann equation in one space dimension. Kinetic and Related Models, 2012, 5, 283-323.	0.5	14
62	A Donoho's Stark criterion for stable signal recovery in discrete wavelet subspaces. Journal of Computational and Applied Mathematics, 2011, 235, 5024-5039.	1.1	7
63	Transient radiative transfer in the grey case: Well-balanced and asymptotic-preserving schemes built on Case's elementary solutions. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1995-2012.	1.1	16
64	Analysis and short-time extrapolation of stock market indexes through projection onto discrete wavelet subspaces. Nonlinear Analysis: Real World Applications, 2010, 11, 3139-3154.	0.9	7
65	Effective band-limited extrapolation relying on Slepian series and regularization. Computers and Mathematics With Applications, 2010, 60, 1259-1279.	1.4	13
66	Chirplet Approximation of Band-Limited, Real Signals Made Easy. SIAM Journal of Scientific Computing, 2009, 31, 3922-3945.	1.3	2
67	Impurity bands and quasi-Bloch waves for a one-dimensional model of modulated crystal. Nonlinear Analysis: Real World Applications, 2008, 9, 927-948.	0.9	8
68	Existence, Uniqueness, and a Constructive Solution Algorithm for a Class of Finite Markov Moment Problems. SIAM Journal on Applied Mathematics, 2008, 68, 1618-1640.	0.8	14
69	NUMERICAL ASPECTS OF NONLINEAR SCHRÖDINGER EQUATIONS IN THE PRESENCE OF CAUSTICS. Mathematical Models and Methods in Applied Sciences, 2007, 17, 1531-1553.	1.7	5
70	A Semiclassical Coupled Model for the Transient Simulation of Semiconductor Devices. SIAM Journal of Scientific Computing, 2007, 29, 376-396.	1.3	4
71	The numerical spectrum of a one-dimensional Schrödinger operator with two competing periodic potentials. Communications in Mathematical Sciences, 2007, 5, 485-493.	0.5	9
72	Identification of Asymptotic Decay to Self-Similarity for One-Dimensional Filtration Equations. SIAM Journal on Numerical Analysis, 2006, 43, 2590-2606.	1.1	45

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73	Lagrangian Numerical Approximations to One-Dimensional Convolution-Diffusion Equations. SIAM Journal of Scientific Computing, 2006, 28, 1203-1227.	1.3	40
74	Multiphase semiclassical approximation of an electron in a one-dimensional crystalline lattice – III. From ab initio models to WKB for Schrödinger-Poisson. Journal of Computational Physics, 2006, 211, 326-346.	1.9	24
75	Multiphase semiclassical approximation of the one-dimensional harmonic crystal: I. The periodic case. Journal of Physics A, 2006, 39, 10509-10521.	1.6	5
76	Resolution of the finite Markov moment problem. Comptes Rendus Mathematique, 2005, 341, 775-780.	0.1	16
77	Finite Moment Problems and Applications to Multiphase Computations in Geometric Optics. Communications in Mathematical Sciences, 2005, 3, 373-392.	0.5	10
78	Asymptotic-preserving & well-balanced schemes for radiative transfer and the Rosseland approximation. Numerische Mathematik, 2004, 98, 223-250.	0.9	35
79	Godunov-type approximation for a general resonant balance law with large data. Journal of Differential Equations, 2004, 198, 233-274.	1.1	29
80	Multiphase semiclassical approximation of an electron in a one-dimensional crystalline lattice. Journal of Computational Physics, 2004, 197, 387-417.	1.9	33
81	Multiphase semiclassical approximation of an electron in a one-dimensional crystalline lattice II. Impurities, confinement and Bloch oscillations. Journal of Computational Physics, 2004, 201, 344-375.	1.9	17
82	Decay of positive waves for n times n hyperbolic systems of balance laws. Proceedings of the American Mathematical Society, 2004, 132, 1627-1637.	0.4	9
83	Space Localization and Well-Balanced Schemes for Discrete Kinetic Models in Diffusive Regimes. SIAM Journal on Numerical Analysis, 2003, 41, 641-658.	1.1	51
84	TWO MOMENT SYSTEMS FOR COMPUTING MULTIPHASE SEMICLASSICAL LIMITS OF THE SCHRÖDINGER EQUATION. Mathematical Models and Methods in Applied Sciences, 2003, 13, 1689-1723.	1.7	49
85	Time-Splitting Schemes and Measure Source Terms for a Quasilinear Relaxing System. Mathematical Models and Methods in Applied Sciences, 2003, 13, 1081-1101.	1.7	16
86	Using K-Branch Entropy Solutions for Multivalued Geometric Optics Computations. Journal of Computational Physics, 2002, 180, 155-182.	1.9	53
87	Global BV Entropy Solutions and Uniqueness for Hyperbolic Systems of Balance Laws. Archive for Rational Mechanics and Analysis, 2002, 162, 327-366.	1.1	69
88	Convergence results for an inhomogeneous system arising in various high frequency approximations. Numerische Mathematik, 2002, 90, 721-753.	0.9	26
89	An asymptotic-preserving well-balanced scheme for the hyperbolic heat equations. Comptes Rendus Mathematique, 2002, 334, 337-342.	0.1	93
90	Localization effects and measure source terms in numerical schemes for balance laws. Mathematics of Computation, 2001, 71, 553-583.	1.1	41

#	ARTICLE	IF	CITATIONS
91	A WELL-BALANCED SCHEME USING NON-CONSERVATIVE PRODUCTS DESIGNED FOR HYPERBOLIC SYSTEMS OF CONSERVATION LAWS WITH SOURCE TERMS. <i>Mathematical Models and Methods in Applied Sciences</i> , 2001, 11, 339-365.	1.7	113
92	THE VISCOSITY-DUALITY SOLUTIONS APPROACH TO GEOMETRIC OPTICS FOR THE HELMHOLTZ EQUATION. <i>Series on Advances in Mathematics for Applied Sciences</i> , 2001, , 133-151.	0.0	2
93	A Nonconservative Numerical Approach for Hyperbolic Systems with Source Terms: The Well-Balanced Schemes. , 2001, , 453-461.		1
94	Numerical approximations of one-dimensional linear conservation equations with discontinuous coefficients. <i>Mathematics of Computation</i> , 2000, 69, 987-1016.	1.1	60
95	A well-balanced flux-vector splitting scheme designed for hyperbolic systems of conservation laws with source terms. <i>Computers and Mathematics With Applications</i> , 2000, 39, 135-159.	1.4	150
96	Convergence of relaxation schemes to the equations of elastodynamics. <i>Mathematics of Computation</i> , 2000, 70, 555-578.	1.1	21
97	Two A Posteriori Error Estimates for One-Dimensional Scalar Conservation Laws. <i>SIAM Journal on Numerical Analysis</i> , 2000, 38, 964-988.	1.1	28
98	A priori error estimate for a well-balanced scheme designed for inhomogeneous scalar conservation laws. <i>Comptes Rendus Mathematique</i> , 1998, 327, 467-472.	0.5	18
99	Diffusive limits of 2D well-balanced schemes\for kinetic models of neutron transport. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 0, , .	0.8	2