Roberto Ferretti

List of Publications by Year
in descending order

41 papers	821 citations	759233 12 h-index	526287 27 g-index
44 all docs	44 docs citations	44 times ranked	420 citing authors

#	ARTICLE	IF	CITATIONS
1	Efficient implementation of characteristic-based schemes on unstructured triangular grids. Computational and Applied Mathematics, 2022, 41, 1.	2.2	1
2	Integrating anisotropic filtering, level set methods and convolutional neural networks for fully automatic segmentation of brain tumors in magnetic resonance imaging. Neuroscience Informatics, 2022, , 100095.	4.5	0
3	Error Estimates for Numerical Approximation of Hamilton–Jacobi Equations Related to Hybrid Control Systems. Applied Mathematics and Optimization, 2021, 83, 139-175.	1.6	1
4	Second Order Fully Semi-Lagrangian Discretizations of Advection-Diffusion-Reaction Systems. Journal of Scientific Computing, 2021, 88, 1.	2.3	6
5	Stochastic hybrid differential games and match race problems. Applied Mathematics and Computation, 2020, 372, 124966.	2.2	5
6	A Fully Semi-Lagrangian Method for the Navier–Stokes Equations in Primitive Variables. Lecture Notes in Computational Science and Engineering, 2020, , 55-62.	0.3	2
7	Null Controllability for Parabolic Operators with Interior Degeneracy and One-Sided Control. SIAM Journal on Control and Optimization, 2019, 57, 900-924.	2.1	8
8	Optimal Route Planning for Sailing Boats: A Hybrid Formulation. Journal of Optimization Theory and Applications, 2019, 181, 1015-1032.	1.5	7
9	Stability of Semi-Lagrangian schemes of arbitrary odd degree under constant and variable advection speed. Mathematics of Computation, 2019, 89, 1783-1805.	2.1	2
10	A fully semi-Lagrangian discretization for the 2D incompressible Navier–Stokes equations in the vorticity-streamfunction formulation. Applied Mathematics and Computation, 2018, 323, 132-144.	2.2	16
11	A semi-Lagrangian algorithm in policy space for hybrid optimal control problems. ESAIM - Control, Optimisation and Calculus of Variations, 2018, 24, 965-983.	1.3	3
12	A semi-Lagrangian scheme with radial basis approximation for surface reconstruction. Computing and Visualization in Science, 2017, 18, 103-112.	1.2	5
13	Blended numerical schemes for the advection equation and conservation laws. ESAIM: Mathematical Modelling and Numerical Analysis, 2017, 51, 997-1019.	1.9	3
14	An adaptive multilevel radial basis function scheme for the HJB equation * *This research work has been partially supported by the INDAM-GNCS project Metodi ad alta risoluzione per problemi evolutivi fortemente nonlineari and by TU Munich and Roma Tre University. IFAC-PapersOnLine, 2017, 50, 1643-1648.	0.9	2
15	Numerical Methods for Hamilton–Jacobi Type Equations. Handbook of Numerical Analysis, 2016, , 603-626.	1.8	10
16	Flux form Semi-Lagrangian methods for parabolic problems. Communications in Applied and Industrial Mathematics, 2016, 7, 56-73.	0.3	3
17	Monotone Numerical Schemes and Feedback Construction for Hybrid Control Systems. Journal of Optimization Theory and Applications, 2015, 165, 507-531.	1.5	12
18	Value iteration convergence of ϵ-monotone schemes for stationary Hamilton-Jacobi equations. Discrete and Continuous Dynamical Systems, 2015, 35, 4041-4070.	0.9	16

#	ARTICLE	IF	CITATIONS
19	Semi-Lagrangian Methods for Parabolic Problems in Divergence Form. SIAM Journal of Scientific Computing, 2014, 36, A2458-A2477.	2.8	12
20	Stability of Some Generalized Godunov Schemes With Linear High-Order Reconstructions. Journal of Scientific Computing, 2013, 57, 213-228.	2.3	4
21	On the relationship between Semi-Lagrangian and Lagrange–Galerkin schemes. Numerische Mathematik, 2013, 124, 31-56.	1.9	9
22	Special Issue dedicated to Numerical Methods for Viscosity Solutions and Applications. Applied Numerical Mathematics, 2013, 73, 1.	2.1	0
23	A Semi-Lagrangian approximation for the AMSS model of image processing. Applied Numerical Mathematics, 2013, 73, 16-32.	2.1	7
24	Convergence of a large time-step scheme for mean curvature motion. Interfaces and Free Boundaries, 2010, , 409-441.	0.8	12
25	Equivalence of Semi-Lagrangian and Lagrange-Galerkin Schemes Under Constant Advection Speed. Journal of Computational Mathematics, 2010, 28, 461-473.	0.4	6
26	A Technique for High-order Treatment of Diffusion Terms in Semi-Lagrangian Schemes. Communications in Computational Physics, 2010, 8, 445-470.	1.7	14
27	ON THE STABILITY OF SEMI-LAGRANGIAN ADVECTION SCHEMES UNDER FINITE ELEMENT INTERPOLATIONS. , 2007, , .		2
28	A semi-Lagrangian scheme for the curve shortening flow in codimension-2. Journal of Computational Physics, 2007, 225, 1388-1408.	3.8	4
29	A Time–Adaptive Semi–Lagrangian Approximation to Mean Curvature Motion. , 2006, , 732-739.		7
30	A Weighted Essentially Nonoscillatory, Large Time-Step Scheme for Hamilton–Jacobi Equations. SIAM Journal of Scientific Computing, 2005, 27, 1071-1091.	2.8	53
31	An efficient algorithm for Hamilton–Jacobi equations in high dimension. Computing and Visualization in Science, 2004, 7, 15-29.	1.2	50
32	Consistency of a large time-step scheme for mean curvature motion. , 2003, , 495-502.		4
33	Convergence of Semi-Lagrangian Approximations to Convex Hamilton–Jacobi Equations under (Very) Large Courant Numbers. SIAM Journal on Numerical Analysis, 2002, 40, 2240-2253.	2.3	26
34	Semi-Lagrangian Schemes for Hamilton–Jacobi Equations, Discrete Representation Formulae and Godunov Methods. Journal of Computational Physics, 2002, 175, 559-575.	3.8	97
35	A-Priori Estimates for a Semi-Lagrangian Scheme for the Wave Equation. , 2001, , 293-300.		0
36	Optimal Stopping Time Formulation of Adaptive Image Filtering. Applied Mathematics and Optimization, 2001, 43, 245-258.	1.6	17

#	Article	IF	Citations
37	Convergence Analysis for a Class of High-Order Semi-Lagrangian Advection Schemes. SIAM Journal on Numerical Analysis, 1998, 35, 909-940.	2.3	124
38	High-order approximations of linear control systems via Runge-Kutta schemes. Computing (Vienna/New York), 1997, 58, 351-364.	4.8	24
39	Convergence of semidiscrete approximations to optimal control problems in hilbert spaces: A counterexample. Systems and Control Letters, 1996, 27, 125-128.	2.3	1
40	Discrete time high-order schemes for viscosity solutions of Hamilton-Jacobi-Bellman equations. Numerische Mathematik, 1994, 67, 315-344.	1.9	140
41	Choosing between two fluctuating options: a hybrid control approach. Applied Mathematical Sciences, 0, 8, 139-146.	0.1	0