Hasnaa Zidani

List of Publications by Citations

58 papers	841 citations	13 h-index	27 g-index
62 ext. papers	948 ext. citations	1.5 avg, IF	4.34 L-index

#	Paper	IF	Citations
58	Hamiltonian Pontryagin's Principles for Control Problems Governed by Semilinear Parabolic Equations. *Applied Mathematics and Optimization*, **1999**, 39, 143-177	1.5	81
57	Reachability and Minimal Times for State Constrained Nonlinear Problems without Any Controllability Assumption. *SIAM Journal on Control and Optimization*, **2010**, 48, 4292-4316	1.9	77
56	Some Convergence Results for Howard's Algorithm. *SIAM Journal on Numerical Analysis*, **2009**, 47, 3001-3026	2.4	71
55	Pontryagin's Principle for State-Constrained Control Problems Governed by Parabolic Equations with Unbounded Controls. *SIAM Journal on Control and Optimization*, **1998**, 36, 1853-1879	1.9	65
54	Consistency of Generalized Finite Difference Schemes for the Stochastic HJB Equation. *SIAM Journal on Numerical Analysis*, **2003**, 41, 1008-1021	2.4	63
53	A Hamilton-Jacobi approach to junction problems and application to traffic flows. *ESAIM - Control, Optimisation and Calculus of Variations*, **2013**, 19, 129-166	1	46
52	Pontryagin's Principle For Local Solutions of Control Problems with Mixed Control-State Constraints. *SIAM Journal on Control and Optimization*, **2000**, 39, 1182-1203	1.9	42
51	Anti-Dissipative Schemes for Advection and Application to Hamilton□Jacobi□Bellmann Equations. *Journal of Scientific Computing*, **2007**, 30, 1-33	2.3	34
50	Pontryagin's Principle for Time-Optimal Problems. *Journal of Optimization Theory and Applications*, **1999**, 101, 375-402	1.6	31
49	A general Hamilton-Jacobi framework for non-linear state-constrained control problems. *ESAIM - Control, Optimisation and Calculus of Variations*, **2013**, 19, 337-357	1	30
48	Infinite horizon problems on stratifiable state-constraints sets. *Journal of Differential Equations*, **2015**, 258, 1430-1460	2.1	19
47	An anti-diffusive scheme for viability problems. *Applied Numerical Mathematics*, **2006**, 56, 1147-1162	2.5	18
46	An Efficient Data Structure and Accurate Scheme to Solve Front Propagation Problems. *Journal of Scientific Computing*, **2010**, 42, 251-273	2.3	14
45	MINIMAL TIME PROBLEMS WITH MOVING TARGETS AND OBSTACLES. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2011**, 44, 2589-2593		13
44	Value iteration convergence of $epsilon$-monotone schemes for stationary Hamilton-Jacobi equations. *Discrete and Continuous Dynamical Systems*, **2015**, 35, 4041-4070	2	13
43	State-Constrained Stochastic Optimal Control Problems via Reachability Approach. *SIAM Journal on Control and Optimization*, **2016**, 54, 2568-2593	1.9	12
42	Deterministic state-constrained optimal control problems without controllability assumptions. *ESAIM - Control, Optimisation and Calculus of Variations*, **2011**, 17, 995-1015	1	12

41	Convergence of a non-monotone scheme for HamiltonJacobiBellman equations with discontinous initial data. *Numerische Mathematik*, **2010**, 115, 1-44	2.2	12
40	Monotone Numerical Schemes and Feedback Construction for Hybrid Control Systems. *Journal of Optimization Theory and Applications*, **2015**, 165, 507-531	1.6	11
39	Value function and optimal trajectories for a maximum running cost control problem with state constraints. Application to an abort landing problem. *ESAIM: Mathematical Modelling and Numerical Analysis*, **2018**, 52, 305-335	1.8	11
38	Transmission conditions on interfaces for HamiltonJacobiBellman equations. *Journal of Differential Equations*, **2014**, 257, 3978-4014	2.1	10
37	Dynamic Programming and Error Estimates for Stochastic Control Problems with Maximum Cost. *Applied Mathematics and Optimization*, **2015**, 71, 125-163	1.5	9
36	Solving chance constrained optimal control problems in aerospace via kernel density estimation. *Optimal Control Applications and Methods*, **2018**, 39, 1833-1858	1.7	9
35	State-Constrained Optimal Control Problems of Impulsive Differential Equations. *Applied Mathematics and Optimization*, **2013**, 68, 1-19	1.5	9
34	Minimum time control problems for non-autonomous differential equations. *Systems and Control Letters*, **2009**, 58, 742-746	2.4	9
33	Collision analysis for an UAV **2012**,		9
32	Error estimates for stochastic differential games: the adverse stopping case. *IMA Journal of Numerical Analysis*, **2006**, 26, 188-212	1.8	9
31	Pareto Front Characterization for Multiobjective Optimal Control Problems Using Hamilton--Jacobi Approach. *SIAM Journal on Control and Optimization*, **2019**, 57, 3884-3910	1.9	8
30	HamiltonJacobiBellman equations for optimal control processes with convex state constraints. *Systems and Control Letters*, **2017**, 109, 30-36	2.4	7
29	Zubov's equation for state-constrained perturbed nonlinear systems. *Mathematical Control and Related Fields*, **2015**, 5, 55-71	1.5	7
28	Consistency of a simple multidimensional scheme for HamiltonJacobiBellman equations. *Comptes Rendus Mathematique*, **2005**, 340, 499-502	0.4	7
27	The Mayer and Minimum Time Problems with Stratified State Constraints. *Set-Valued and Variational Analysis*, **2018**, 26, 643-662	1	6
26	Numerical Approximation for a Superreplication Problem under Gamma Constraints. *SIAM Journal on Numerical Analysis*, **2009**, 47, 2289-2320	2.4	6
25	Error Estimates for a Stochastic Impulse Control Problem. *Applied Mathematics and Optimization*, **2007**, 55, 327-357	1.5	6
24	HamiltonJacobiBellman Equations on Multi-domains. *International Series of Numerical Mathematics*, **2013**, 93-116	0.4	6

23	Optimal feedback control for undamped wave equations by solving a HJB equation. *ESAIM - Control, Optimisation and Calculus of Variations*, **2015**, 21, 442-464	1	5
22	L^1-error estimates for numerical approximations of Hamilton-Jacobi-Bellman equations in dimension 1. *Mathematics of Computation*, **2010**, 79, 1395-1426	1.6	4
21	A Fully Discrete Approximation for Control Problems Governed by Parabolic Variational Inequalities. *SIAM Journal on Numerical Analysis*, **2002**, 39, 2014-2033	2.4	4
20	A Hamilton-Jacobi-Bellman approach for the optimal control of an abort landing problem **2016**,		4
19	Infinite Horizon Stochastic Optimal Control Problems with Running Maximum Cost. *SIAM Journal on Control and Optimization*, **2018**, 56, 3296-3319	1.9	4
18	Discontinuous solutions of Hamilton□acobi equations on networks. *Journal of Differential Equations*, **2017**, 263, 8418-8466	2.1	3
17	Payload optimization for multi-stage launchers using HJB approach and application to a SSO mission * *This work is partially supported by Centre National d□udes Spa-tiales (CNES), under the grant RT-NT-4310000-ZZ-1602-ENST, by the French National Research Agency (ANR) through the □CODE Institute project□funded by the IDEX Paris-Saclay ANR-11-IDEX-0003-02, and by the DGA	0.7	3
16	On the minimization of the energy of a free-electron gas with constrained density function. *Nonlinear Analysis: Theory, Methods & Applications*, **1999**, 35, 1073-1090	1.3	3
15	Characterization of the value function of final state constrained control problems with BV trajectories. *Communications on Pure and Applied Analysis*, **2011**, 10, 1567-1587	1.9	3
14	Error estimates for second order Hamilton-Jacobi-Bellman equations. Approximation of probabilistic reachable sets. *Discrete and Continuous Dynamical Systems*, **2015**, 35, 3933-3964	2	3
13	Stability and reachability analysis for a controlled heterogeneous population of cells. *Optimal Control Applications and Methods*, **2020**, 41, 1678-1704	1.7	3
12	Level-Set Approach for Reachability Analysis of Hybrid Systems under Lag Constraints. *SIAM Journal on Control and Optimization*, **2014**, 52, 606-628	1.9	2
11	Optimal control of normalized SIMR models with vaccination and treatment. *Discrete and Continuous Dynamical Systems - Series B*, **2018**, 23, 79-99	1.3	2
10	HJB approach for a multi-boost launcher trajectory optimization problem**This work is partially supported by Centre National d□tudes Spa-tiales (CNES), under the grant RT-CR-430-1304-CNES, by iCODE Institute project funded by the IDEX Paris-Saclay, ANR-11-IDEX-0003-02, and by DGA	0.7	2
9	Relationship between maximum principle and dynamic programming in presence of intermediate and final state constraints. *ESAIM - Control, Optimisation and Calculus of Variations*, **2021**, 27, 91	1	2
8	Optimistic planning algorithms for state-constrained optimal control problems. *Computers and Mathematics With Applications*, **2022**, 109, 158-179	2.7	1
7	Demand response versus storage flexibility in energy: multi-objective programming considerations. *Optimization*, **2021**, 70, 1459-1486	1.2	1
6	Junction conditions for finite horizon optimal control problems on multi-domains with continuous and discontinuous solutions. *ESAIM - Control, Optimisation and Calculus of Variations*, **2019**, 25, 79	1	0

5	Error Estimates for Numerical Approximation of Hamilton–Jacobi Equations Related to Hybrid Control Systems. *Applied Mathematics and Optimization*, **2021**, 83, 139-175	1.5	0
4	A differential game control problem with state constraints. *Mathematical Control and Related Fields* , **2022**,	1.5	0
3	Preface of the Special Issue New Horizons in Optimal Control- a Special Tribute to Helmut Maurer, Urszula Ledzewicz and Heinz Schättler. *Set-Valued and Variational Analysis*, **2019**, 27, 305-307	1	
2	Optimal control problems of BV trajectories with pointwise state constraints. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2011**, 44, 2583-2588		
1	Global Optimization Approach for the Ascent Problem of Multi-stage Launchers **2021**, 1-42		