Hitoshi Ishii

List of Publications by Year
in descending order

95 papers	6,742 citations	147801 31 h-index	60623 81 g-index
97 all docs	97 docs citations	97 times ranked	1579 citing authors

#	Article	IF	Citations
1	User's guide to viscosity solutions of second order partial differential equations. Bulletin of the American Mathematical Society, 1992, 27, 1-67.	1.5	3,288
2	Viscosity solutions of fully nonlinear second-order elliptic partial differential equations. Journal of Differential Equations, 1990, 83, 26-78.	2.2	389
3	Perron's method for Hamilton-Jacobi equations. Duke Mathematical Journal, 1987, 55, 369.	1.5	302
4	On uniqueness and existence of viscosity solutions of fully nonlinear second-order elliptic PDE's. Communications on Pure and Applied Mathematics, 1989, 42, 15-45.	3.1	241
5	On lipschitz continuity of the solution mapping to the skorokhod problem, with applications. Stochastic and Stochastics Reports, 1991, 35, 31-62.	0.6	181
6	Title is missing!. Indiana University Mathematics Journal, 1984, 33, 721.	0.9	150
7	Approximate solutions of the bellman equation of deterministic control theory. Applied Mathematics and Optimization, 1984, 11, 161-181.	1.6	128
8	SDEs with Oblique Reflection on Nonsmooth Domains. Annals of Probability, 1993, 21, 554.	1.8	117
9	The Bellman equation for minimizing the maximum cost. Nonlinear Analysis: Theory, Methods & Applications, 1989, 13, 1067-1090.	1.1	102
10	Viscosity solutions for monotone systems of second–order elliptic PDES. Communications in Partial Differential Equations, 1991, 16, 1095-1128.	2.2	99
11	Asymptotic stability and blowing up of solutions of some nonlinear equations. Journal of Differential Equations, 1977, 26, 291-319.	2.2	98
12	A simple, direct proof of uniqueness for solutions of the Hamilton-Jacobi equations of eikonal type. Proceedings of the American Mathematical Society, 1987, 100, 247-247.	0.8	80
13	Generalized motion of noncompact hypersurfaces with velocity having arbitrary growth on the curvature tensor. Tohoku Mathematical Journal, 1995, 47, 227.	0.2	80
14	Uniqueness of viscosity solutions of Hamilton-Jacobi equations revisited. Journal of the Mathematical Society of Japan, 1987, 39, 581.	0.4	78
15	Asymptotic solutions for large time of Hamilton–Jacobi equations in Euclidean n space. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2008, 25, 231-266.	1.4	72
16	A class of integral equations and approximation of p-Laplace equations. Calculus of Variations and Partial Differential Equations, 2010, 37, 485-522.	1.7	65
17	A New Formulation of State Constraint Problems for First-Order PDEs. SIAM Journal on Control and Optimization, 1996, 34, 554-571.	2.1	54
18	Threshold dynamics type approximation schemes for propagating fronts. Journal of the Mathematical Society of Japan, 1999, 51, 267.	0.4	50

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19	Viscosity solutions for a class of Hamilton-Jacobi equations in Hilbert spaces. Journal of Functional Analysis, 1992, 105, 301-341.	1.4	45
20	The vanishing discount problem and viscosity Mather measures. Part 1: The problem on a torus. Journal Des Mathematiques Pures Et Appliquees, 2017, 108, 125-149.	1.6	45
21	A Viscosity Solution Approach to the Asymptotic Analysis of Queueing Systems. Annals of Probability, 1990, 18, .	1.8	43
22	Fully nonlinear oblique derivative problems for nonlinear second-order elliptic PDEâ€™s. Duke Mathematical Journal, 1991, 62, .	1.5	40
23	Global stability of stationary solutions to a nonlinear diffusion equation in phytoplankton dynamics. Journal of Mathematical Biology, 1982, 16, 1-24.	1.9	38
24	The vanishing discount problem and viscosity Mather measures. Part 2: Boundary value problems. Journal Des Mathematiques Pures Et Appliquees, 2017, 108, 261-305.	1.6	37
25	Representation of solutions of Hamilton-Jacobi equations. Nonlinear Analysis: Theory, Methods & Applications, 1988, 12, 121-146.	1.1	36
26	Boundary regularity and uniqueness for an elliptic equations with gradient constraint. Communications in Partial Differential Equations, 1983, 8, 317-346.	2.2	35
27	On oblique derivative problems for fully nonlinear second-order elliptic PDE's on domains with corners. Hokkaido Mathematical Journal, 1991, 20, 135.	0.3	35
28	Uniqueness results for a class of hamilton-jacobi equations with singular coefficients. Communications in Partial Differential Equations, 1995, 20, 2187-2213.	2.2	35
29	Representation formulas for solutions of Hamilton-Jacobi equations with convex Hamiltonians. Indiana University Mathematics Journal, 2007, 56, 2159-2184.	0.9	33
30	Asymptotic solutions of Hamilton-Jacobi equations in Euclidean n space. Indiana University Mathematics Journal, 2006, 55, 1671-1700.	0.9	32
31	Differential games and nonlinear first order PDE on bounded domains. Manuscripta Mathematica, 1984, 49, 109-139.	0.6	31
32	A convergence result for the ergodic problem for Hamiltonâ€"Jacobi equations with Neumann-type boundary conditions. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2016, 146, 225-242.	1.2	31
33	On oblique derivative problems for fully nonlinear second-order elliptic partial differential equations on nonsmooth domains. Nonlinear Analysis: Theory, Methods & Applications, 1990, 15, 1123-1138.	1.1	29
34	Global Existence of Weak Solutions for Interface Equations Coupled with Diffusion Equations. SIAM Journal on Mathematical Analysis, 1992, 23, 821-835.	1.9	29
35	A family of degenerate elliptic operators: Maximum principle and its consequences. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2018, 35, 417-441.	1.4	29
36	Hamilton-Jacobi Equations: Approximations, Numerical Analysis and Applications. Lecture Notes in Mathematics, 2013, , .	0.2	28

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37	Long-time Behavior of Solutions of Hamilton–Jacobi Equations with Convex and Coercive Hamiltonians. Archive for Rational Mechanics and Analysis, 2009, 194, 383-419.	2.4	27
38	Asymptotic Solutions of Viscous Hamilton–Jacobi Equations with Ornstein–Uhlenbeck Operator. Communications in Partial Differential Equations, 2006, 31, 827-848.	2.2	25
39	Limits of Solutions ofp-Laplace Equations aspGoes to Infinity and Related Variational Problems. SIAM Journal on Mathematical Analysis, 2005, 37, 411-437.	1.9	23
40	Nonlinear oblique derivative problems for singular degenerate parabolic equations on a general domain. Nonlinear Analysis: Theory, Methods & Applications, 2004, 57, 1077-1098.	1.1	22
41	Viscosity solutions of nonlinear second-order partial differential equations in hilbert spaces. Communications in Partial Differential Equations, 1993, 18, 601-650.	2.2	21
42	Asymptotic Solutions of Hamilton–Jacobi Equations with Semi-Periodic Hamiltonians. Communications in Partial Differential Equations, 2008, 33, 784-807.	2.2	21
43	Vanishing contact structure problem and convergence of the viscosity solutions. Communications in Partial Differential Equations, 2019, 44, 801-836.	2.2	20
44	On the existence of almost periodic complete trajectories for contractive almost periodic processes. Journal of Differential Equations, 1982, 43, 66-72.	2.2	19
45	Remarks on elliptic singular perturbation problems. Applied Mathematics and Optimization, 1991, 23, 1-15.	1.6	19
46	Comparison results for hamilton-jacobi equations without grwoth condition on solutions from above. Applicable Analysis, 1997, 67, 357-372.	1.3	18
47	A class of stochastic optimal control problems with state constraint. Indiana University Mathematics Journal, 2002, 51, 1167-1196.	0.9	18
48	Weak KAM aspects of convex Hamilton–Jacobi equations with Neumann type boundary conditions. Journal Des Mathematiques Pures Et Appliquees, 2011, 95, 99-135.	1.6	18
49	Homogenization of Hamilton-Jacobi equations on domains with small scale periodic structure. Indiana University Mathematics Journal, 1998, 47, 0-0.	0.9	17
50	A Short Introduction to Viscosity Solutions and the Large Time Behavior of Solutions of Hamilton–Jacobi Equations. Lecture Notes in Mathematics, 2013, , 111-249.	0.2	17
51	On the Large Time Behavior of Solutions of Hamilton–Jacobi Equations Associated with Nonlinear Boundary Conditions. Archive for Rational Mechanics and Analysis, 2012, 204, 515-558.	2.4	14
52	A new PDE approach to the large time asymptotics of solutions of Hamilton–Jacobi equations. Bulletin of Mathematical Sciences, 2013, 3, 363-388.	0.7	14
53	HAMILTON-JACOBI EQUATIONS WITH PARTIAL GRADIENT AND APPLICATION TO HOMOGENIZATION. Communications in Partial Differential Equations, 2001, 26, 983-1002.	2.2	13
54	Long-time asymptotic solutions of convex Hamilton-Jacobi equations with Neumann type boundary conditions. Calculus of Variations and Partial Differential Equations, 2011, 42, 189-209.	1.7	13

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55	The Large-time Behavior of Solutions of Hamilton-Jacobi Equations on the Real Line. Methods and Applications of Analysis, 2008, 15, 223-242.	0.5	13
56	The vanishing discount problem for Hamilton–Jacobi equations in the Euclidean space. Communications in Partial Differential Equations, 2020, 45, 525-560.	2.2	12
57	On a certain estimate of the free boundary in the Stefan problem. Journal of Differential Equations, 1981, 42, 106-115.	2.2	10
58	A Mathematical Model of the Wearing Process of a Nonconvex Stone. SIAM Journal on Mathematical Analysis, 2001, 33, 860-876.	1.9	9
59	Eigenvalue problem for fully nonlinear second-order elliptic PDE on balls. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2012, 29, 783-812.	1.4	9
60	Asymptotic analysis for the eikonal equation with the dynamical boundary conditions. Mathematische Nachrichten, 2014, 287, 1563-1588.	0.8	8
61	Simultaneous Effects of Homogenization and Vanishing Viscosity in Fully Nonlinear Elliptic Equations. Funkcialaj Ekvacioj, 2003, 46, 63-88.	0.3	8
62	On Representation of Solutions of Hamilton-Jacobi Equations with Convex Hamiltonians. North-Holland Mathematics Studies, 1985, 128, 15-52.	0.2	7
63	A Characterization of the Existence of Solutions for Hamilton—Jacobi Equations in Ergodic Control Problems with Applications. Applied Mathematics and Optimization, 2000, 42, 35-50.	1.6	7
64	A generalization of a theorem of Barron and Jensen and a comparison theorem for lower semicontinuous viscosity solutions. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2001, 131, 137-154.	1.2	7
65	A pde approach to small stochastic perturbations of Hamiltonian flows. Journal of Differential Equations, 2012, 252, 1748-1775.	2.2	7
66	SDEs with oblique reflections on nonsmooth domains. Annals of Probability, 2008, 36, .	1.8	7
67	A level set approach to the wearing process of a nonconvex stone. Calculus of Variations and Partial Differential Equations, 2003, 19, 53-93.	1.7	6
68	Towards a reversed Faber–Krahn inequality for the truncated Laplacian. Revista Matematica Iberoamericana, 2019, 36, 723-740.	0.9	6
69	Existence through convexity for the truncated Laplacians. Mathematische Annalen, 2021, 379, 909-950.	1.4	6
70	Relaxation in an Lˆž-optimization problem. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2003, 133, 599-615.	1.2	5
71	The vanishing discount problem for monotone systems of Hamilton–Jacobi equations: part 2—nonlinear coupling. Calculus of Variations and Partial Differential Equations, 2020, 59, 1.	1.7	5
72	On Îµ -optimal controls for state constraint problems. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2000, 17, 473-502.	1.4	4

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73	Motion of a Graph by R -Curvature. Archive for Rational Mechanics and Analysis, 2004, 171, 1-23.	2.4	4
74	Eigenvalue problem for fully nonlinear second-order elliptic PDE on balls, II. Bulletin of Mathematical Sciences, 2015, 5, 451-510.	0.7	4
75	Metastability for parabolic equations with drift: part 1. Indiana University Mathematics Journal, 2015, 64, 875-913.	0.9	4
76	The vanishing discount problem for monotone systems of Hamilton-Jacobi equations. Part 1: linear coupling. Mathematics in Engineering, 2021, 3, 1-21.	0.9	4
77	A two-dimensional random crystalline algorithm for Gauss curvature flow. Advances in Applied Probability, 2002, 34, 491-504.	0.7	4
78	An Approximation Scheme for Motion by Mean Curvature with Right-Angle Boundary Condition. SIAM Journal on Mathematical Analysis, 2001, 33, 369-389.	1.9	3
79	Relaxation of Hamilton-Jacobi Equations. Archive for Rational Mechanics and Analysis, 2003, 169, 265-304.	2.4	3
80	Asymptotic Analysis for a Class of Infinite Systems of First-Order PDE: Nonlinear Parabolic PDE in the Singular Limit. Communications in Partial Differential Equations, 2003, 28, 409-438.	2.2	3
81	Convexified Gauss Curvature flow of Sets: A Stochastic Approximation. SIAM Journal on Mathematical Analysis, 2004, 36, 552-579.	1.9	3
82	On Viscosity Solution of HJB Equations with State Constraints and Reflection Control. SIAM Journal on Control and Optimization, 2017, 55, 365-396.	2.1	3
83	A remark on a system of inequalities with bilateral obstacles. Nonlinear Analysis: Theory, Methods & Applications, 1989, 13, 1295-1301.	1.1	2
84	Positivity sets of supersolutions of degenerate elliptic equations and the strong maximum principle. Transactions of the American Mathematical Society, 2021, 374, 539-564.	0.9	2
85	Metastability for parabolic equations with drift: part II. The quasilinear case. Indiana University Mathematics Journal, 2017, 66, 315-360.	0.9	2
86	Some properties of ergodic attractors for controlled dynamical systems. Discrete and Continuous Dynamical Systems, 1998, 4, 43-54.	0.9	2
87	Non-Local Hamilton-Jacobi Equations Arising in Dislocation Dynamics. Zeitschrift Fur Analysis Und Ihre Anwendung, 2010, 29, 309-350.	0.6	1
88	Discrete approximation of the viscous HJ equation. Stochastics and Partial Differential Equations: Analysis and Computations, 0, , 1.	0.9	1
89	Existence and Uniqueness of Viscosity Solutions of an Integro-differential Equation Arising in Option Pricing. SIAM Journal on Financial Mathematics, 2021, 12, 604-640.	1.3	1
90	Hamiltonâ€"Jacobi equations with their Hamiltonians depending Lipschitz continuously on the unknown. Communications in Partial Differential Equations, 0, , 1-36.	2.2	1

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91	A PDE approach to stochastic invariance. Discrete and Continuous Dynamical Systems, 2000, 6, 651-664.	0.9	0
92	TWO REMARKS ON PERIODIC SOLUTIONS OF HAMILTON-JACOBI EQUATIONS. , 2009, , .		0
93	On the Langevin equation with variable friction. Calculus of Variations and Partial Differential Equations, 2017, 56, 1.	1.7	0
94	Averaging of Hamilton-Jacobi equations along divergence-free vector fields. Discrete and Continuous Dynamical Systems, 2021, 41, 1519-1542.	0.9	0
95	Some Uniqueness Theorems for First Order Hyperbolic Systems. Publications of the Research Institute for Mathematical Sciences, 1975, 11, 403-415.	0.8	0