Daniel Sevcovic

List of Publications by Year
in descending order

61	526	759233 12	677142 22
papers	citations	h-index	g-index

66	66	66	206
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evolution of Plane Curves Driven by a Nonlinear Function of Curvature and Anisotropy. SIAM Journal on Applied Mathematics, 2001, 61, 1473-1501.	1.8	82
2	On the risk-adjusted pricing-methodology-based valuation of vanilla options and explanation of the volatility smile. Journal of Applied Mathematics, 2005, 2005, 235-258.	0.9	49
3	A direct method for solving an anisotropic mean curvature flow of plane curves with an external force. Mathematical Methods in the Applied Sciences, 2004, 27, 1545-1565.	2.3	46
4	Computational and qualitative aspects of evolution of curves driven by curvature and external force. Computing and Visualization in Science, 2004, 6, 211-225.	1.2	45
5	Analysis of the free boundary for the pricing of an American call option. European Journal of Applied Mathematics, 2001, 12, 25-37.	2.9	30
6	Evolution of curves on a surface driven by the geodesic curvature and external force. Applicable Analysis, 2006, 85, 345-362.	1.3	30
7	Evolution of plane curves with a curvature adjusted tangential velocity. Japan Journal of Industrial and Applied Mathematics, 2011, 28, 413-442.	0.9	22
8	Analysis of the Nonlinear Option Pricing Model Under Variable Transaction Costs. Asia-Pacific Financial Markets, 2016, 23, 153-174.	2.4	22
9	Solution of nonlinearly curvature driven evolution of plane curves. Applied Numerical Mathematics, 1999, 31, 191-207.	2.1	19
10	Manifold Evolution with Tangential Redistribution of Points. SIAM Journal of Scientific Computing, 2014, 36, A1384-A1414.	2.8	18
11	COMPARISON OF NUMERICAL AND ANALYTICAL APPROXIMATIONS OF THE EARLY EXERCISE BOUNDARY OF AMERICAN PUT OPTIONS. ANZIAM Journal, 2010, 51, 430-448.	0.2	17
12	Total value adjustment for European options with two stochastic factors. Mathematical model, analysis and numerical simulation. Computers and Mathematics With Applications, 2018, 76, 725-740.	2.7	16
13	A TRANSFORMATION METHOD FOR SOLVING THE HAMILTONâ€“JACOBIâ€“BELLMAN EQUATION FOR A CONSTRAINED DYNAMIC STOCHASTIC OPTIMAL ALLOCATION PROBLEM. ANZIAM Journal, 2013, 55, 14-38.	0.2	11
14	A Simple, Fast and Stabilized Flowing Finite Volume Method for Solving General Curve Evolution Equations. Communications in Computational Physics, 2010, 7, 195-211.	1.7	11
15	Comparison study for Level set and Direct Lagrangian methods for computing Willmore flow of closed planar curves. Computing and Visualization in Science, 2009, 12, 307-317.	1.2	9
16	PDE models for American options with counterparty risk and two stochastic factors: Mathematical analysis and numerical solution. Computers and Mathematics With Applications, 2020, 79, 1525-1542.	2.7	8
17	Computational and qualitative aspects of motion of plane curves with a curvature adjusted tangential velocity. Mathematical Methods in the Applied Sciences, 2012, 35, 1784-1798.	2.3	7
18	Transformation Methods for Evaluating Approximations to the Optimal Exercise Boundary for Linear and Nonlinear Black-Scholes Equations. SSRN Electronic Journal, 2008, , .	0.4	6

#	Article	IF	Citations
19	Nonlinear stability of stationary solutions for curvature flow with triple junction. Hokkaido Mathematical Journal, 2009, 38, .	0.3	6
20	On Stabilisation of Parametric Active Contours. , 2007, , .		5
21	On traveling wave solutions to a Hamiltonâ€“Jacobiâ€“Bellman equation with inequality constraints. Japan Journal of Industrial and Applied Mathematics, 2013, 30, 51-67.	0.9	5
22	Computational analysis of the conserved curvature driven flow for open curves in the plane. Mathematics and Computers in Simulation, 2016, 126, 1-13.	4.4	5
23	Option Pricing in Illiquid Markets with Jumps. Applied Mathematical Finance, 2018, 25, 395-415.	1.2	4
24	Explanation of spurt for a non-Newtonian fluid by a diffusion term. Quarterly of Applied Mathematics, 1994, 52, 401-426.	0.7	4
25	Risks Due to Variability of K-Day Extreme Precipitation Totals and Other K-Day Extreme Events. Journal of Hydrology and Hydromechanics, 2009, 57, 250-263.	2.0	3
26	Application of the Level-Set Model with Constraints in Image Segmentation. Numerical Mathematics, 2016, 9, 147-168.	1.3	3
27	Nonlinear Parabolic Equations Arising in Mathematical Finance. Mathematics in Industry, 2017, , 3-15.	0.3	3
28	On a construction of integrally invertible graphs and their spectral properties. Linear Algebra and Its Applications, 2017, 532, 512-533.	0.9	3
29	Pricing American Options with a Non-Constant Penalty Parameter. Journal of Risk and Financial Management, 2020, 13, 124.	2.3	3
30	On solutions of a partial integro-differential equation in Bessel potential spaces with applications in option pricing models. Japan Journal of Industrial and Applied Mathematics, 2020, 37, 697-721.	0.9	3
31	Dynamic stochastic accumulation model with application to pension savings management. Yugoslav Journal of Operations Research, 2010, 20, 1-24.	0.8	3
32	Limiting behaviour of invariant manifolds for a system of singularly perturbed evolution equations. Mathematical Methods in the Applied Sciences, 1994, 17, 643-666.	2.3	2
33	Solution to the inverse Wulff problem by means of the enhanced semidefinite relaxation method. Journal of Inverse and Ill-Posed Problems, 2015, 23, .	1.0	2
34	Mathematical analysis of a nonlinear PDE model for European options with counterparty risk. Comptes Rendus Mathematique, 2019, 357, 252-257.	0.3	2
35	Dynamic intertemporal utility optimization by means of Riccati transformation of Hamiltonâ€“Jacobiâ€“Bellman equation. Japan Journal of Industrial and Applied Mathematics, 2019, 36, 497-519.	0.9	2
36	Mathematical Modelling of Varicella Spread in Slovakia. Central European Journal of Public Health, 2015, 23, 227-232.	1.1	2

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37	Comparison of Numerical and Analytical Approximations of the Early Exercise Boundary of the American Put Option. SSRN Electronic Journal, 0, , .	0.4	2
38	Area preserving geodesic curvature driven flow of closed curves on a surface. Discrete and Continuous Dynamical Systems - Series B, 2017, 22, 3671-3689.	0.9	2
39	On construction of upper and lower bounds for the HOMO-LUMO spectral gap. Numerical Algebra, Control and Optimization, 2019, 9, 53-69.	1.6	2
40	Projectivep-algebras. Algebra Universalis, 1991, 28, 280-300.	0.3	1
41	Smoothness of the singular limit of inertial manifolds of singularly perturbed evolution equations. Nonlinear Analysis: Theory, Methods & Applications, 1997, 28, 199-215.	1.1	1
42	Viscously controlled nonlinear magnetoconvection in a non-uniformly stratified horizontal fluid layer. Physics of the Earth and Planetary Interiors, 1999, 111, 83-92.	1.9	1
43	On the Ginzburgâ€“Landau system of complex modulation equations for a rotating annulus with radial magnetic field. Physica D: Nonlinear Phenomena, 2002, 161, 116-128.	2.8	1
44	Early Exercise Boundary for American Type of Floating Strike Asian Option and Its Numerical Approximation. Applied Mathematical Finance, 2011, 18, 367-394.	1.2	1
45	Comparison of the Analytical Approximation Formula and Newton's Method for Solving a Class of Nonlinear Blackâ€“Scholes Parabolic Equations. Computational Methods in Applied Mathematics, 2016, 16, 35-50.	0.8	1
46	Early Exercise Boundary for American Type of Floating Strike Asian Option and Its Numerical Approximation. SSRN Electronic Journal, 0, , .	0.4	1
47	Dynamic model of pension savings management with stochastic interest rates and stock returns. , 2012, , 295-303.		1
48	Qualitative and Numerical Aspects of a Motion of a Family of Interacting Curves in Space. SIAM Journal on Applied Mathematics, 2022, 82, 549-575.	1.8	1
49	Bounded endomorphisms of free P-algebras. Glasgow Mathematical Journal, 1992, 34, 209-214.	0.3	0
50	Dissipative Feedback Synthesis for a Singularly Perturbed Model of a Piston Driven Flow of a Non-Newtonian Fluid. Mathematical Methods in the Applied Sciences, 1997, 20, 79-94.	2.3	0
51	On tangential stabilization in curvature driven flows of planar curves. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1024805-1024806.	0.2	0
52	On a Numerical Approximation Scheme for Construction of the Early Exercise Boundary for a Class of Nonlinear Black-Scholes Equations. SSRN Electronic Journal, 0, , .	0.4	0
53	Pricing Perpetual Put Options by the Blackâ€“Scholes Equation with a Nonlinear Volatility Function. Asia-Pacific Financial Markets, 2017, 24, 291-308.	2.4	0
54	Curvature driven flow of a family of interacting curves withÂapplications. Mathematical Methods in the Applied Sciences, 2020, 43, 4177.	2.3	0

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55	Application of maximal monotone operator method for solving Hamiltonâ€“Jacobiâ€“Bellman equation arising from optimal portfolio selection problem. Japan Journal of Industrial and Applied Mathematics, 2021, 38, 693-713.	0.9	0
56	Multidimensional Linear and Nonlinear Partial Integro-Differential Equation in Bessel Potential Spaces with Applications in Option Pricing. Mathematics, 2021, 9, 1463.	2.2	0
57	Utility Indifference Option Pricing Model with a Non-Constant Risk-Aversion under Transaction Costs and Its Numerical Approximation. Journal of Risk and Financial Management, 2021, 14, 399.	2.3	0
58	Dynamic Model of Pension Savings Management with Stochastic Interest Rates and Stock Returns. SSRN Electronic Journal, 0, , .	0.4	0
59	On a Numerical Approximation Scheme for Construction of the Early Exercise Boundary for a Class of Nonlinear Blackâ€“Scholes Equations. Mathematics in Industry, 2012, , 207-213.	0.3	0
60	Analytical and Numerical Results for American Style of Perpetual Put Options Through Transformation into Nonlinear Stationary Black-Scholes Equations. Mathematics in Industry, 2017, , 129-142.	0.3	0
61	Expected utility maximization and conditional value-at-risk deviation-based Sharpe ratio in dynamic stochastic portfolio. Kybernetika, 0, , 1167-1183.	0.0	0