Song-Ping Zhu

List of Publications by Citations

143 papers	2,030 citations	25 h-index	38 g-index
161 ext. papers	2,386 ext. citations	2.1 avg, IF	5.57 L-index

#	Paper	IF	Citations
143	An exact and explicit solution for the valuation of American put options. *Quantitative Finance*, **2006**, 6, 229-242	1.6	172
142	Nonlinear 2D analysis of the efficiency of fixed Oscillating Water Column wave energy converters. *Renewable Energy*, **2014**, 64, 255-265	8.1	74
141	Modelling the Shear Behaviour of Rock Joints with Asperity Damage Under Constant Normal Stiffness. *Rock Mechanics and Rock Engineering*, **2015**, 48, 179-195	5.7	73
140	A closed-form analytical solution for the valuation of convertible bonds with constant dividend yield. *ANZIAM Journal*, **2006**, 47, 477-494	0.5	66
139	Solving linear diffusion equations with the dual reciprocity method in Laplace space. *Engineering Analysis With Boundary Elements*, **1994**, 13, 1-10	2.6	60
138	An analytical formula for VIX futures and its applications. *Journal of Futures Markets*, **2012**, 32, 166-190	2.1	53
137	Analytically pricing double barrier options based on a time-fractional Black-Scholes equation. *Computers and Mathematics With Applications*, **2015**, 69, 1407-1419	2.7	48
136	A finite-element study of the efficiency of arrays of oscillating water column wave energy converters. *Ocean Engineering*, **2012**, 43, 72-81	3.9	48
135	A predictor-corrector scheme based on the ADI method for pricing American puts with stochastic volatility. *Computers and Mathematics With Applications*, **2011**, 62, 1-26	2.7	48
134	New solutions for the propagation of long water waves over variable depth. *Journal of Fluid Mechanics*, **1994**, 278, 391-406	3.7	46
133	Diffraction of short-crested waves around a circular cylinder. *Ocean Engineering*, **1993**, 20, 389-407	3.9	44
132	On the choice of interpolation functions used in the dual-reciprocity boundary-element method. *Engineering Analysis With Boundary Elements*, **1994**, 13, 387-396	2.6	43
131	A NEW ANALYTICAL APPROXIMATION FORMULA FOR THE OPTIMAL EXERCISE BOUNDARY OF AMERICAN PUT OPTIONS. *International Journal of Theoretical and Applied Finance*, **2006**, 09, 1141-1177	0.5	42
130	Analytically pricing European-style options under the modified Black-Scholes equation with a spatial-fractional derivative. *Quarterly of Applied Mathematics*, **2014**, 72, 597-611	0.7	38
129	Pricing VIX options with stochastic volatility and random jumps. *Decisions in Economics and Finance*, **2013**, 36, 71-88	0.7	36
128	Scattering of long waves around a circular island mounted on a conical shoal. *Wave Motion*, **1996**, 23, 353-362	1.8	35
127	A new exact solution for pricing European options in a two-state regime-switching economy. *Computers and Mathematics With Applications*, **2012**, 64, 2744-2755	2.7	34

126	An explicit series approximation to the optimal exercise boundary of American put options. *Communications in Nonlinear Science and Numerical Simulation*, **2010**, 15, 1148-1158	3.7	34
125	Numerical calculation of forces induced by short-crested waves on a vertical cylinder of arbitrary cross-section. *Ocean Engineering*, **1994**, 21, 645-662	3.9	34
124	An efficient computational method for modelling transient heat conduction with nonlinear source terms. *Applied Mathematical Modelling*, **1996**, 20, 513-522	4.5	29
123	A new DRBEM model for wave refraction and diffraction. *Engineering Analysis With Boundary Elements*, **1993**, 12, 261-274	2.6	28
122	A predictorcorrector approach for pricing American options under the finite moment log-stable model. *Applied Numerical Mathematics*, **2015**, 97, 15-29	2.5	27
121	Application of CFD in ship engineering design practice and ship hydrodynamics. *Journal of Hydrodynamics*, **2006**, 18, 315-322	3.3	27
120	A DRBEM model for microwave heating problems. *Applied Mathematical Modelling*, **1995**, 19, 287-297	4.5	27
119	Diffraction of ocean waves around a hollow cylindrical shell structure. *Wave Motion*, **2009**, 46, 78-88	1.8	26
118	A closed-form pricing formula for European options under the Heston model with stochastic interest rate. *Journal of Computational and Applied Mathematics*, **2018**, 335, 323-333	2.4	25
117	An analytical approximation formula for European option pricing under a new stochastic volatility model with regime-switching. *Journal of Economic Dynamics and Control*, **2016**, 71, 77-85	1.3	24
116	Hydrodynamic and energetic properties of a finite array of fixed oscillating water column wave energy converters. *Ocean Engineering*, **2014**, 88, 131-148	3.9	23
115	A general DRBEM model for wave refraction and diffraction. *Engineering Analysis With Boundary Elements*, **2000**, 24, 377-390	2.6	23
114	How should a local regime-switching model be calibrated?. *Journal of Economic Dynamics and Control*, **2017**, 78, 149-163	1.3	22
113	A simplified analytical approach for pricing discretely-sampled variance swaps with stochastic volatility. *Applied Mathematics Letters*, **2012**, 25, 1644-1650	3.5	22
112	The dual reciprocity boundary element method for magnetohydrodynamic channel flows. *ANZIAM Journal*, **2002**, 44, 305-322	0.5	22
111	A Numerical Model for the Confinement of Oil Spill with Floating Booms. *Spill Science and Technology Bulletin*, **2002**, 7, 249-255		20
110	On the valuation of variance swaps with stochastic volatility. *Applied Mathematics and Computation*, **2012**, 219, 1654-1669	2.7	18
109	An analytical solution for long wave refraction over a circular hump. *Journal of Applied Mathematics and Computing*, **2009**, 30, 315-333	1.8	18

108	Dynamic portfolio choice with return predictability and transaction costs. *European Journal of Operational Research*, **2019**, 278, 976-988	5.6	17
107	CALCULATING THE EARLY EXERCISE BOUNDARY OF AMERICAN PUT OPTIONS WITH AN APPROXIMATION FORMULA. *International Journal of Theoretical and Applied Finance*, **2007**, 10, 1203-1227	0.5	17
106	Second-order wave diffraction forces on a vertical circular cylinder due to short-crested waves. *Ocean Engineering*, **1995**, 22, 135-189	3.9	16
105	Optimal investment and consumption under a continuous-time cointegration model with exponential utility. *Quantitative Finance*, **2019**, 19, 1135-1149	1.6	16
104	Mathematical Modeling and Experimental Verification of Fluid Flow through Deformable Rough Rock Joints. *International Journal of Geomechanics*, **2015**, 15, 04014065	3.1	15
103	Improvement on dual reciprocity boundary element method for equations with convective terms. *Communications in Numerical Methods in Engineering*, **1994**, 10, 361-371		15
102	Patterns of ship waves. II. Gravity-capillary waves. *Quarterly of Applied Mathematics*, **1989**, 47, 35-44	0.7	15
101	On full calibration of hybrid local volatility and regime-switching models. *Journal of Futures Markets*, **2018**, 38, 586-606	2.1	14
100	Semi-analytical valuation for discrete barrier options under time-dependent L�y processes. *Journal of Banking and Finance*, **2017**, 75, 167-183	2.6	14
99	A multiscale correction to the Black�choles formula. *Applied Stochastic Models in Business and Industry*, **2014**, 30, 753-765	1.1	14
98	Open channel flow past a bottom obstruction. *Journal of Engineering Mathematics*, **1996**, 30, 487-499	1.2	14
97	Pricing Parisian and Parasian options analytically. *Journal of Economic Dynamics and Control*, **2013**, 37, 875-896	1.3	13
96	An inverse finite element method for pricing American options. *Journal of Economic Dynamics and Control*, **2013**, 37, 231-250	1.3	13
95	A combination of LTDRM and ATPS in solving diffusion problems. *Engineering Analysis With Boundary Elements*, **1998**, 21, 285-289	2.6	13
94	Pricing variance swaps under the Hawkes jump-diffusion process. *Journal of Futures Markets*, **2019**, 39, 635-655	2.1	12
93	Stock loan valuation under a stochastic interest rate model. *Computers and Mathematics With Applications*, **2015**, 70, 1757-1771	2.7	12
92	A new predictor�orrector scheme for valuing American puts. *Applied Mathematics and Computation*, **2011**, 217, 4439-4452	2.7	12
91	A CLOSED-FORM EXACT SOLUTION FOR PRICING VARIANCE SWAPS WITH STOCHASTIC VOLATILITY. *Mathematical Finance*, **2010**, 21, no-no	2.3	12

90	An application of the LTDRM to transient diffusion problems with nonlinear material properties and nonlinear boundary conditions. *Applied Mathematics and Computation*, **1997**, 87, 127-160	2.7	12
89	Subcritical, transcritical and supercritical flows over a step. *Journal of Fluid Mechanics*, **1997**, 333, 257-271	3.7	11
88	Solving transient diffusion problems: time-dependent fundamental solution approaches versus LTDRM approaches. *Engineering Analysis With Boundary Elements*, **1998**, 21, 87-90	2.6	11
87	Pricing convertible bonds based on a multi-stage compound-option model. *Physica A: Statistical Mechanics and Its Applications*, **2006**, 366, 449-462	3.3	10
86	Solving nonlinear time-dependent diffusion equations with the dual reciprocity method in Laplace space. *Engineering Analysis With Boundary Elements*, **1996**, 18, 19-27	2.6	10
85	Analytically pricing volatility swaps under stochastic volatility. *Journal of Computational and Applied Mathematics*, **2015**, 288, 332-340	2.4	9
84	An explicit analytic formula for pricing barrier options with regime switching. *Mathematics and Financial Economics*, **2015**, 9, 29-37	1	9
83	Pricing European options with stochastic volatility under the minimal entropy martingale measure. *European Journal of Applied Mathematics*, **2016**, 27, 233-247	1	9
82	A new closed-form formula for pricing European options under a skew Brownian motion. *European Journal of Finance*, **2018**, 24, 1063-1074	1.5	8
81	A perturbation DRBEM model for weakly nonlinear wave run-ups around islands. *Engineering Analysis With Boundary Elements*, **2009**, 33, 63-76	2.6	8
80	On the application of multiquadric bases in conjunction with the LTDRM method to solve nonlinear diffusion equations. *Applied Mathematics and Computation*, **1998**, 96, 161-175	2.7	8
79	A numerical model for multiphase flow based on the GMPPS formulation. Part I: Kinematics. *Computers and Fluids*, **2007**, 36, 1199-1212	2.8	8
78	Optimal investment and consumption with return predictability and execution costs. *Economic Modelling*, **2020**, 88, 408-419	3.4	8
77	An analytical solution for the HJB equation arising from the Merton problem. *International Journal of Financial Engineering*, **2018**, 05, 1850008	0.4	8
76	An analytic formula for pricing American-style convertible bonds in a regime switching model. *IMA Journal of Management Mathematics*, **2015**, 26, 403-428	1.4	7
75	A SIMPLE CLOSED-FORM FORMULA FOR PRICING DISCRETELY-SAMPLED VARIANCE SWAPS UNDER THE HESTON MODEL. *ANZIAM Journal*, **2014**, 56, 1-27	0.5	7
74	Combined diffraction and radiation of ocean waves around an OWC device. *Journal of Applied Mathematics and Computing*, **2011**, 36, 401-416	1.8	7
73	On nonlinear transient free-surface flows over a bottom obstruction. *Physics of Fluids*, **1997**, 9, 2598-2604	4.4	7

72	Equal risk pricing under convex trading constraints. *Journal of Economic Dynamics and Control*, **2017**, 76, 136-151	1.3	6
71	Pricing puttable convertible bonds with integral equation approaches. *Computers and Mathematics With Applications*, **2018**, 75, 2757-2781	2.7	6
70	A new integral equation formulation for American put options. *Quantitative Finance*, **2018**, 18, 483-490	1.6	6
69	Pricing perpetual American options under a stochastic-volatility model with fast mean reversion. *Applied Mathematics Letters*, **2011**, 24, 1663-1669	3.5	6
68	SHOULD AN AMERICAN OPTION BE EXERCISED EARLIER OR LATER IF VOLATILITY IS NOT ASSUMED TO BE A CONSTANT?. *International Journal of Theoretical and Applied Finance*, **2011**, 14, 1279-1297	0.5	6
67	A new analytical approximation for European puts with stochastic volatility. *Applied Mathematics Letters*, **2010**, 23, 687-692	3.5	6
66	Resonant interaction between a uniform current and an oscillating object. *Applied Ocean Research*, **1995**, 17, 259-264	3.4	6
65	Numerical simulation of discharged waste heat and contaminants into the South Estuary of the Yangtze River. *Mathematical and Computer Modelling*, **1993**, 18, 107-123		6
64	Pricing forward-start variance swaps with stochastic volatility. *Applied Mathematics and Computation*, **2015**, 250, 920-933	2.7	5
63	Pricing Parisian down-and-in options. *Applied Mathematics Letters*, **2015**, 43, 19-24	3.5	5
62	How should a convertible bond be decomposed?. *Decisions in Economics and Finance*, **2012**, 35, 113-149	0.7	5
61	A spectral-collocation method for pricing perpetual American puts with stochastic volatility. *Applied Mathematics and Computation*, **2011**, 217, 9033-9040	2.7	5
60	ON VARIOUS QUANTITATIVE APPROACHES FOR PRICING AMERICAN OPTIONS. *New Mathematics and Natural Computation*, **2011**, 07, 313-332	0.6	5
59	Pricing perpetual American puts under multi-scale stochastic volatility. *Asymptotic Analysis*, **2012**, 80, 133-148	0.7	5
58	A flat ship theory on bow and stern flows. *ANZIAM Journal*, **2003**, 45, 1-15	0.5	5
57	A new numerical approach for solving high-order non-linear ordinary differential equations. *Communications in Numerical Methods in Engineering*, **2003**, 19, 601-614		5
56	Modelling the confinement of spilled oil with floating booms. *Applied Mathematical Modelling*, **2001**, 25, 713-729	4.5	5
55	An efficient numerical calculation of wave loads on an array of vertical cylinders. *Applied Mathematical Modelling*, **1996**, 20, 26-33	4.5	5

54	Solving general field equations in infinite domains with dual reciprocity boundary element method. *Engineering Analysis With Boundary Elements*, **1993**, 12, 241-250	2.6	5
53	A series-form solution for pricing variance and volatility swaps with stochastic volatility and stochastic interest rate. *Computers and Mathematics With Applications*, **2018**, 76, 2223-2234	2.7	5
52	Robust Portfolio Optimization with Multi-Factor Stochastic Volatility. *Journal of Optimization Theory and Applications*, **2020**, 186, 264-298	1.6	4
51	Pricing American-style Parisian up-and-out call options. *European Journal of Applied Mathematics*, **2018**, 29, 1-29	1	4
50	Pricing American call options under a hard-to-borrow stock model. *European Journal of Applied Mathematics*, **2018**, 29, 494-514	1	4
49	An integral equation approach for the valuation of American-style down-and-out calls with rebates. *Computers and Mathematics With Applications*, **2016**, 71, 544-564	2.7	4
48	A comparison study of nonlinear waves generated behind a semicircular trench. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **1996**, 452, 1563-1584	2.4	4
47	A three-dimensional numerical model of the response of the Australian North West Shelf to tropical cyclones **1994**, 36, 64-100		4
46	An alternative form used to calibrate the Heston option pricing model. *Computers and Mathematics With Applications*, **2016**, 71, 1831-1842	2.7	4
45	A Numerical Solution of Optimal Portfolio Selection Problem with General Utility Functions. *Computational Economics*, **2020**, 55, 957-981	1.4	4
44	On the Convexity Correction Approximation in Pricing Volatility Swaps and VIX Futures. *New Mathematics and Natural Computation*, **2018**, 14, 383-401	0.6	4
43	Pricing European call options under a hard-to-borrow stock model. *Applied Mathematics and Computation*, **2019**, 357, 243-257	2.7	3
42	Optimal execution with regime-switching market resilience. *Journal of Economic Dynamics and Control*, **2019**, 101, 17-40	1.3	3
41	Pricing weather derivatives with the market price of risk extracted from the utility indifference valuation. *Computers and Mathematics With Applications*, **2020**, 79, 3394-3409	2.7	3
40	A modified Black Scholes pricing formula for European options with bounded underlying prices. *Computers and Mathematics With Applications*, **2018**, 75, 1635-1647	2.7	3
39	Connection between trinomial trees and finite difference methods for option pricing with state-dependent switching rates. *International Journal of Computer Mathematics*, **2018**, 95, 341-360	1.2	3
38	A comparative study of the direct boundary element method and the dual reciprocity boundary element method in solving the Helmholtz equation. *ANZIAM Journal*, **2007**, 49, 131-150	0.5	3
37	Application of CFD in ship engineering design practice and ship hydrodynamics. *Journal of Hydrodynamics*, **2006**, 18, 308-315	3.3	3

36	Selective withdrawal from stratified streams **1996**, 38, 26-40		3
35	Stationary Binnie waves near resonance. *Quarterly of Applied Mathematics*, **1992**, 50, 585-597	0.7	3
34	An Analytic Approach for Pricing American Options with Regime Switching. *Journal of Risk and Financial Management*, **2021**, 14, 188	2.4	3
33	PRICING EUROPEAN OPTIONS ON REGIME-SWITCHING ASSETS: A COMPARATIVE STUDY OF MONTE CARLO AND FINITE-DIFFERENCE APPROACHES. *ANZIAM Journal*, **2017**, 59, 183-199	0.5	2
32	A new simple tree approach for the Heston's stochastic volatility model. *Computers and Mathematics With Applications*, **2019**, 78, 1993-2010	2.7	2
31	A revised option pricing formula with the underlying being banned from short selling. *Quantitative Finance*, **2020**, 20, 935-948	1.6	2
30	OPTIMAL EXERCISE PRICE OF AMERICAN OPTIONS NEAR EXPIRY. *ANZIAM Journal*, **2009**, 51, 145-161	0.5	2
29	Resonant transcritical flow over a wavy bed. *Wave Motion*, **1997**, 25, 295-302	1.8	2
28	Combined refraction and diffraction of short waves using the dual-reciprocity boundary-element method. *Applied Ocean Research*, **1995**, 17, 315-322	3.4	2
27	Computer-simulated current responses to cyclones on the North West Shelf of Australia. *Mathematical and Computer Modelling*, **1996**, 24, 93-115		2
26	Optimal portfolio execution problem with stochastic price impact. *Automatica*, **2020**, 112, 108739	5.7	2
25	Numerically pricing convertible bonds under stochastic volatility or stochastic interest rate with an ADI-based predictor–corrector scheme. *Computers and Mathematics With Applications*, **2020**, 79, 1393-1419	2.7	2
24	A note on the calculation of default probabilities in "structural" credit risk modeling with Hawkes jump–diffusion processes. *Journal of Computational and Applied Mathematics*, **2021**, 381, 113037	2.4	2
23	A new algorithm for calibrating local regime-switching models. *IMA Journal of Management Mathematics*, **2021**, 32, 237-255	1.4	2
22	A numerical study of the utility-indifference approach for pricing American options. *Computers and Mathematics With Applications*, **2020**, 80, 894-905	2.7	1
21	Pricing resettable convertible bonds using an integral equation approach. *IMA Journal of Management Mathematics*, **2020**, 31, 417-443	1.4	1
20	AN APPROPRIATE APPROACH TO PRICING EUROPEAN-STYLE OPTIONS WITH THE ADOMIAN DECOMPOSITION METHOD. *ANZIAM Journal*, **2018**, 59, 349-369	0.5	1
19	A simple approximation formula for calculating the optimal exercise boundary of American puts. *Journal of Applied Mathematics and Computing*, **2011**, 37, 611-623	1.8	1

18	On the Efficiency of Oscillating Water Column (OWC) Devices in Converting Ocean Wave Energy to Electricity Under Weakly Nonlinear Waves **2012**,		1
17	Refraction of interfacial waves over a circular hump. *Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics*, **2009**, 162, 199-213	0.3	1
16	A Numerical Model for Multiphase Flow Based On The GMPPS Formulation, Part II: Dynamics. *Engineering Applications of Computational Fluid Mechanics*, **2008**, 2, 284-298	4.5	1
15	Continuous time mean-variance-utility portfolio problem and its equilibrium strategy. *Optimization*,1-29	1.2	1
14	VARIANCE AND VOLATILITY SWAPS UNDER A TWO-FACTOR STOCHASTIC VOLATILITY MODEL WITH REGIME SWITCHING. *International Journal of Theoretical and Applied Finance*, **2019**, 22, 1950009	0.5	1
13	A hybrid computational approach for option pricing. *International Journal of Financial Engineering*, **2018**, 05, 1850021	0.4	1
12	Nonlinear PDE model for European options with transaction costs under Heston stochastic volatility. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 103, 105986	3.7	1
11	Portfolio choice with return predictability and small trading frictions. *Economic Modelling*, **2022**, 111, 105823	3.4	1
10	On the improvement of a numerical method for solving high-order non-linear ordinary differential equations. *Communications in Numerical Methods in Engineering*, **2006**, 24, 111-124		0
9	An exact and explicit formula for pricing lookback options with regime switching. *Journal of Industrial and Management Optimization*, **2021**,	2	0
8	Revisiting the Merton Problem: from HARA to CARA Utility. *Computational Economics*,1	1.4	0
7	An alternative form to calibrate the correlated Stein-Stein option pricing model. *Computational and Applied Mathematics*, **2019**, 38, 1	2.4	
6	An accurate approximation formula for pricing European options with discrete dividend payments. *IMA Journal of Management Mathematics*, **2016**, dpw020	1.4	
5	Optimal exercise of American puts with transaction costs under utility maximization. *Applied Mathematics and Computation*, **2022**, 415, 126684	2.7	
4	An Extension of the LTDRM to Some Highly Nonlinear Diffusion Equations **1995**, 2975-2980		
3	AN ANALYTICAL SOLUTION FOR PARISIAN UP-AND-IN CALLS. *ANZIAM Journal*, **2016**, 57, 269-279	0.5	
2	A closed-form pricing formula for catastrophe equity options. *Probability in the Engineering and Informational Sciences*,1-13	0.6	
1	On the Asymptotic Behavior of the Optimal Exercise Price Near Expiry of an American Put Option under Stochastic Volatility. *Journal of Risk and Financial Management*, **2022**, 15, 189	2.4	