Zacharias A Anastassi

List of Publications by Year
in descending order

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36 papers	1,432 citations	430754 18 h-index	395590 33 g-index
38 all docs	38 docs citations	38 times ranked	164 citing authors

#	Article	IF	Citations
1	An optimized Rungeâ€“Kutta method for the solution of orbital problems. Journal of Computational and Applied Mathematics, 2005, 175, 1-9.	1.1	177
2	Construction of an optimized explicit Rungeâ€“Kuttaâ€“NystrÃ¶m method for the numerical solution of oscillatory initial value problems. Computers and Mathematics With Applications, 2011, 61, 3381-3390.	1.4	145
3	A parametric symmetric linear four-step method for the efficient integration of the SchrÃ¶dinger equation and related oscillatory problems. Journal of Computational and Applied Mathematics, 2012, 236, 3880-3889.	1.1	141
4	A new family of symmetric linear four-step methods for the efficient integration of the SchrÃ¶dinger equation and related oscillatory problems. Applied Mathematics and Computation, 2012, 218, 5370-5382.	1.4	126
5	Trigonometrically fitted Runge?Kutta methods for the numerical solution of the Schrï¿½dinger equation. Journal of Mathematical Chemistry, 2005, 37, 281-293.	0.7	100
6	Two optimized symmetric eight-step implicit methods for initial-value problems with oscillating solutions. Journal of Mathematical Chemistry, 2009, 46, 604-620.	0.7	89
7	A Family of Exponentially-fitted Rungeâ€“Kutta Methods with Exponential Order Up to Three for the Numerical Solution of the SchrÃ¶dinger Equation. Journal of Mathematical Chemistry, 2007, 41, 79-100.	0.7	86
8	An optimized explicit Runge-Kutta method with increased phase-lag order for the numerical solution of the SchrÃ¶dinger equation and related problems. Journal of Mathematical Chemistry, 2010, 47, 315-330.	0.7	69
9	A family of two-stage two-step methods for the numerical integration of the SchrÃ¶dinger equation and related IVPs with oscillating solution. Journal of Mathematical Chemistry, 2009, 45, 1102-1129.	0.7	63
10	A symmetric eight-step predictor-corrector method for the numerical solution of the radial SchrÃ¶dinger equation and related IVPs with oscillating solutions. Computer Physics Communications, 2011, 182, 1626-1637.	3.0	49
11	A NEW SYMMETRIC EIGHT-STEP PREDICTOR-CORRECTOR METHOD FOR THE NUMERICAL SOLUTION OF THE RADIAL SCHRÃ–DINGER EQUATION AND RELATED ORBITAL PROBLEMS. International Journal of Modern Physics C, 2011, 22, 133-153.	0.8	49
12	A phase-fitted Rungeâ€“Kuttaâ€“NystrÃ¶m method for the numerical solution of initial value problems with oscillating solutions. Computer Physics Communications, 2009, 180, 1839-1846.	3.0	42
13	SPECIAL OPTIMIZED RUNGEâ€“KUTTA METHODS FOR IVPs WITH OSCILLATING SOLUTIONS. International Journal of Modern Physics C, 2004, 15, 1-15.	0.8	40
14	A NEW EIGHT-STEP SYMMETRIC EMBEDDED PREDICTOR-CORRECTOR METHOD (EPCM) FOR ORBITAL PROBLEMS AND RELATED IVPs WITH OSCILLATORY SOLUTIONS. Astronomical Journal, 2013, 145, 75.	1.9	39
15	An optimized explicit Rungeâ€“Kuttaâ€“NystrÃ¶m method for the numerical solution of orbital and related periodical initial value problems. Computer Physics Communications, 2012, 183, 470-479.	3.0	31
16	A dispersive-fitted and dissipative-fitted explicit Rungeâ€“Kutta method for the numerical solution of orbital problems. New Astronomy, 2004, 10, 31-37.	0.8	27
17	A modified phase-fitted and amplification-fitted Runge-Kutta-NystrÃ¶m method for the numerical solution of the radial SchrÃ¶dinger equation. Journal of Molecular Modeling, 2010, 16, 1339-1346.	0.8	24
18	Trigonometrically fitted fifth-order runge-kutta methods for the numerical solution of the schrÃ¶dinger equation. Mathematical and Computer Modelling, 2005, 42, 877-886.	2.0	23

#	Article	IF	Citations
19	A trigonometrically fitted Rungeâ€“Kutta method for the numerical solution of orbital problems. New Astronomy, 2005, 10, 301-309.	0.8	20
20	A 6(4) optimized embedded Rungeâ€“Kuttaâ€“NystrÃ¶m pair for the numerical solution of periodic problems. Journal of Computational and Applied Mathematics, 2015, 275, 311-320.	1.1	16
21	A family of Runge-Kutta methods with zero phase-lag and derivatives for the numerical solution of the SchrÃ¶dinger equation and related problems. Journal of Mathematical Chemistry, 2009, 46, 1158-1171.	0.7	10
22	Explicit almost P-stable Rungeâ€“Kuttaâ€“NystrÃ¶m methods for the numerical solution of the two-body problem. Computational and Applied Mathematics, 2015, 34, 647-659.	1.3	7
23	Spatiotemporal algebraically localized waveforms for a nonlinear SchrÃ¶dinger model with gain and loss. Physica D: Nonlinear Phenomena, 2017, 355, 24-33.	1.3	7
24	A new symmetric linear eight-step method with fifth trigonometric order for the efficient integration of the SchrÃ¶dinger equation. Applied Mathematics Letters, 2011, 24, 1468-1472.	1.5	6
25	A new methodology for the development of numerical methods for the numerical solution of the SchrÃ¶dinger equation. Journal of Mathematical Chemistry, 2009, 46, 621-651.	0.7	5
26	Dark soliton scattering in symmetric and asymmetric double potential barriers. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 2514-2520.	0.9	5
27	Identifying Parkinsonâ€™s Disease Through the Classification of Audio Recording Data. , 2020, , .		5
28	A NEW FAMILY OF MULTISTEP METHODS WITH IMPROVED PHASE-LAG CHARACTERISTICS FOR THE INTEGRATION OF ORBITAL PROBLEMS. Astronomical Journal, 2009, 138, 86-94.	1.9	4
29	Efficient Computation of the Nonlinear SchrÃ¶dinger Equation with Time-Dependent Coefficients. Mathematics, 2020, 8, 374.	1.1	4
30	High order multistep methods with improved phase-lag characteristics for the integration of the SchrÃ¶dinger equation. Journal of Mathematical Chemistry, 2009, 46, 692-725.	0.7	2
31	A new methodology for the construction of numerical methods for the approximate solution of the SchrÃ¶dinger equation. Journal of Mathematical Chemistry, 2009, 46, 652-691.	0.7	1
32	High order phase fitted multistep integrators for the SchrÃ¶dinger equation with improved frequency tolerance. Journal of Mathematical Chemistry, 2009, 46, 1009-1049.	0.7	1
33	Symposium on the Numerical Solution of Differential Equations and their Applications. , 2008, , .		0
34	Some Symmetric Linear Four-Step Methods for the Numerical Solution of Oscillatory Initial Value Problems. , 2011, , .		0
35	A Fitted Runge-Kutta-NystrÒ†m Method with Six Stages for the Integration of the Two-Body Problem. , 2011, , .		0
36	A Neural Network for Interpolating Light-Sources. , 2020, , .		0