Theodore E Simos

List of Publications by Year in Descending Order

433 papers	13,931 citations	68 h-index	89 g-index
512 ext. papers	15,366 ext. citations	2.4 avg, IF	7.61 L-index

#	Paper	IF	Citations
433	A two-step singularly P-stable method with high phase and large stability properties for problems in chemistry. *Journal of Mathematical Chemistry*, **2022**, 60, 475	2.1	0
432	Multi-input bio-inspired weights and structure determination neuronet with applications in European Central Bank publications. *Mathematics and Computers in Simulation*, **2022**, 193, 451-465	3.3	3
431	On high order RungeKuttaNyström pairs. *Journal of Computational and Applied Mathematics*, **2022**, 400, 113753	2.4	2
430	Runge-Kutta-Nyström Pairs of Orders 8(6) with Coefficients Trained to Perform Best on Classical Orbits. *Mathematics*, **2022**, 10, 654	2.3	1
429	A multistep conditionally P-stable method with phase properties of high order for problems in quantum chemistry. *Journal of Mathematical Chemistry*, **2022**, 60, 637-665	2.1	
428	A Neural Network Type Approach for Constructing RungeKutta Pairs of Orders Six and Five That Perform Best on Problems with Oscillatory Solutions. *Mathematics*, **2022**, 10, 827	2.3	1
427	On a New Family of RungeKuttaNyström Pairs of Orders 6(4). *Mathematics*, **2022**, 10, 875	2.3	3
426	Zeroing Neural Network for Pseudoinversion of an Arbitrary Time-Varying Matrix Based on Singular Value Decomposition. *Mathematics*, **2022**, 10, 1208	2.3	3
425	A higher-order zeroing neural network for pseudoinversion of an arbitrary time-varying matrix with applications to mobile object localization. *Information Sciences*, **2022**, 600, 226-238	7.7	2
424	Eighth Order Two-Step Methods Trained to Perform Better on Keplerian-Type Orbits. *Mathematics*, **2021**, 9, 3071	2.3	1
423	Sixth Order Numerov-Type Methods with Coefficients Trained to Perform Best on Problems with Oscillating Solutions. *Mathematics*, **2021**, 9, 2756	2.3	1
422	A new method with vanished phase-lag and its derivatives of the highest order for problems in quantum chemistry. *Journal of Mathematical Chemistry*, **2021**, 59, 1155-1200	2.1	
421	Efficiently inaccurate approximation of hyperbolic tangent used as transfer function in artificial neural networks. *Neural Computing and Applications*, **2021**, 33, 10227-10233	4.8	3
420	A new FinDiff numerical scheme with phase-lag and its derivatives equal to zero for periodic initial value problems. *Journal of Mathematical Chemistry*, **2021**, 59, 1201-1233	2.1	
419	A new economical method with eliminated phase-lag and its derivative for problems in chemistry. *Journal of Mathematical Chemistry*, **2021**, 59, 1395	2.1	1
418	A new method with improved phase-lag and stability properties for problems in quantum chemistry - an economical case. *Journal of Mathematical Chemistry*, **2021**, 59, 1571-1602	2.1	1
417	A new improved economical finite difference method for problems in quantum chemistry. *Journal of Mathematical Chemistry*, **2021**, 59, 1738-1766	2.1	1

416	An economical two-step method with improved phase and stability properties for problems in chemistry. *Journal of Mathematical Chemistry*, **2021**, 59, 1704-1737	2.1	
415	RungeKutta Pairs of Orders 6(5) with Coefficients Trained to Perform Best on Classical Orbits. *Mathematics*, **2021**, 9, 1342	2.3	4
414	Two-step method with vanished phase-lag and its derivatives for problems in quantum chemistry: an economical case. *Journal of Mathematical Chemistry*, **2021**, 59, 1880-1916	2.1	
413	Evolutionary derivation of RungeKutta pairs for addressing inhomogeneous linear problems. *Numerical Algorithms*, **2021**, 87, 511-525	2.1	10
412	Randomized time-varying knapsack problems via binary beetle antennae search algorithm: Emphasis on applications in portfolio insurance. *Mathematical Methods in the Applied Sciences*, **2021**, 44, 2002-2012	2.3	16
411	Direct estimation of SIR model parameters through second-order finite differences. *Mathematical Methods in the Applied Sciences*, **2021**, 44, 3819-3826	2.3	11
410	Exponential integrators for linear inhomogeneous problems. *Mathematical Methods in the Applied Sciences*, **2021**, 44, 937-944	2.3	14
409	Efficient FinDiff algorithm with optimal phase properties for problems in quantum chemistry. *Journal of Mathematical Chemistry*, **2021**, 59, 597-640	2.1	
408	New FD methods with phase-lag and its derivatives equal to zero for periodic initial value problems. *Journal of Mathematical Chemistry*, **2021**, 59, 641-675	2.1	
407	Sixth-order, P-stable, Numerov-type methods for use at moderate accuracies. *Mathematical Methods in the Applied Sciences*, **2021**, 44, 6923-6930	2.3	14
406	A new finite difference method with optimal phase and stability properties for problems in chemistry. *Journal of Mathematical Chemistry*, **2021**, 59, 951-984	2.1	
405	Real-Time Estimation of R0 for COVID-19 Spread. *Mathematics*, **2021**, 9, 664	2.3	8
404	An economical two-step method with optimal phase and stability properties for problems in chemistry. *Journal of Mathematical Chemistry*, **2021**, 59, 1938-1975	2.1	
403	A Neural Network Technique for the Derivation of RungeKutta Pairs Adjusted for Scalar Autonomous Problems. *Mathematics*, **2021**, 9, 1842	2.3	5
402	RungeKutta Pairs of Orders 5(4) Trained to Best Address Keplerian Type Orbits. *Mathematics*, **2021**, 9, 2400	2.3	3
401	Evolutionary Derivation of RungeKutta Pairs of Orders 5(4) Specially Tuned for Problems with Periodic Solutions. *Mathematics*, **2021**, 9, 2306	2.3	0
400	Time-varying BlackLitterman portfolio optimization using a bio-inspired approach and neuronets. *Applied Soft Computing Journal*, **2021**, 112, 107767	7.5	8
399	RungeKutta pairs suited for SIR-type epidemic models. *Mathematical Methods in the Applied Sciences*, **2021**, 44, 5210-5216	2.3	11

398	Phase fitted method for quantum chemistry problems. *Journal of Mathematical Chemistry*, **2020**, 58, 1313-1336	2.1	4
397	Phase fitted algorithm for problems in quantum chemistry. *Journal of Mathematical Chemistry*, **2020**, 58, 1499-1530	2.1	2
396	Complete in phase method for problems in chemistry. *Journal of Mathematical Chemistry*, **2020**, 58, 1785-1814	2.1	4
395	Explicit, ninth order, two step methods for solving inhomogeneous linear problems x?(t)=?(t)+f(t). *Applied Numerical Mathematics*, **2020**, 153, 344-351	2.5	18
394	Ninth-order, explicit, two-step methods for second-order inhomogeneous linear IVPs. *Mathematical Methods in the Applied Sciences*, **2020**, 43, 4918	2.3	9
393	A phase fitted FiniteDiffr process for DiffrntEqutns in chemistry. *Journal of Mathematical Chemistry* , **2020**, 58, 1059-1090	2.1	17
392	Explicit, Eighth-Order, Four-Step Methods for Solving (y^{prime prime }=f(x,y)). *Bulletin of the Malaysian Mathematical Sciences Society*, **2020**, 43, 3791-3807	1.2	8
391	A complete in phase FiniteDiffrnc algorithm for DiffrntEqutins in chemistry. *Journal of Mathematical Chemistry*, **2020**, 58, 1091-1132	2.1	8
390	Full in phase finite difference algorithm for differential equations in quantum chemistry. *Journal of Mathematical Chemistry*, **2020**, 58, 1197-1218	2.1	11
389	An integrated in phase FD procedure for DiffEqns in chemical problems. *Journal of Mathematical Chemistry*, **2020**, 58, 6-28	2.1	18
388	Variable step-size implementation of sixth-order Numerov-type methods. *Mathematical Methods in the Applied Sciences*, **2020**, 43, 1204-1215	2.3	15
387	A phase fitted FinDiff process for DifEquns in quantum chemistry. *Journal of Mathematical Chemistry*, **2020**, 58, 353-381	2.1	23
386	Neural Network Solution of Single-Delay Differential Equations. *Mediterranean Journal of Mathematics*, **2020**, 17, 1	0.9	28
385	Trigonometric fitted modification of RADAU5. *Mathematical Methods in the Applied Sciences*, **2020**, 43, 1582-1589	2.3	4
384	Two-derivative Runge-Kutta methods with optimal phase properties. *Mathematical Methods in the Applied Sciences*, **2020**, 43, 1267-1277	2.3	4
383	Neural network solution of pantograph type differential equations. *Mathematical Methods in the Applied Sciences*, **2020**, 43, 3369-3374	2.3	27
382	A complete in phase FinitDiff procedure for DiffEquns in chemistry. *Journal of Mathematical Chemistry*, **2020**, 58, 407-438	2.1	18
381	New FD scheme with vanished phase-lag and its derivatives up to order six for problems in chemistry. *Journal of Mathematical Chemistry*, **2020**, 58, 2324-2360	2.1	

380	A new algorithm with eliminated phase-lag and its derivatives up to order five for problems in quantum chemistry. *Journal of Mathematical Chemistry*, **2020**, 58, 2361-2398	2.1	
379	A finite difference method with phase-lag and its derivatives equal to zero for problems in chemistry. *Journal of Mathematical Chemistry*, **2020**, 58, 2024-2060	2.1	1
378	A finite difference method with zero phase-lag and its derivatives for quantum chemistry problems. *Journal of Mathematical Chemistry*, **2020**, 58, 1680-1710	2.1	1
377	Optimized two derivative Runge-Kutta methods for solving orbital and oscillatory problems **2019**,		1
376	New fifth-order two-derivative Runge-Kutta methods with constant and frequency-dependent coefficients. *Mathematical Methods in the Applied Sciences*, **2019**, 42, 1955-1966	2.3	14
375	A multistage two-step fraught in phase scheme for problems in mathematical chemistry. *Journal of Mathematical Chemistry*, **2019**, 57, 1710-1731	2.1	24
374	Hybrid Numerov-Type Methods with Coefficients Trained to Perform Better on Classical Orbits. *Bulletin of the Malaysian Mathematical Sciences Society*, **2019**, 42, 2119-2134	1.2	22
373	A four-stages multistep fraught in phase method for quantum chemistry problems. *Journal of Mathematical Chemistry*, **2019**, 57, 1627-1651	2.1	7
372	Evolutionary Derivation of Sixth-Order P-stable SDIRKN Methods for the Solution of PDEs with the Method of Lines. *Mediterranean Journal of Mathematics*, **2019**, 16, 1	0.9	19
371	A new multistage multistep full in phase algorithm with optimized characteristics for problems in chemistry. *Journal of Mathematical Chemistry*, **2019**, 57, 1112-1139	2.1	6
370	New multistage two-step complete in phase scheme with improved properties for quantum chemistry problems. *Journal of Mathematical Chemistry*, **2019**, 57, 1088-1111	2.1	6
369	A new four-stages two-step phase fitted scheme for problems in quantum chemistry. *Journal of Mathematical Chemistry*, **2019**, 57, 1201-1229	2.1	6
368	A three-stages multistep teeming in phase algorithm for computational problems in chemistry. *Journal of Mathematical Chemistry*, **2019**, 57, 1598-1617	2.1	31
367	Phase-fitted, six-step methods for solving x?? = f(t,x). *Mathematical Methods in the Applied Sciences* , **2019**, 42, 3942-3949	2.3	14
366	Hybrid, phase-fitted, four-step methods of seventh order for solving x?(t) = f(t,x). *Mathematical Methods in the Applied Sciences*, **2019**, 42, 2025-2032	2.3	19
365	A new multistep method with optimized characteristics for initial and/or boundary value problems. *Journal of Mathematical Chemistry*, **2019**, 57, 119-148	2.1	13
364	A multiple stage absolute in phase scheme for chemistry problems. *Journal of Mathematical Chemistry*, **2019**, 57, 2049-2074	2.1	17
363	Local interpolants for Numerov-type methods and their implementation in variable step schemes. *Mathematical Methods in the Applied Sciences*, **2019**, 42, 7047-7058	2.3	6

362	Explicit hybrid six-step, sixth order, fully symmetric methods for solving y ? = f (x,y). *Mathematical Methods in the Applied Sciences*, **2019**, 42, 3305-3314	2.3	15
361	A Runge-Kutta type crowded in phase algorithm for quantum chemistry problems. *Journal of Mathematical Chemistry*, **2019**, 57, 1983-2006	2.1	19
360	Low-order, P-stable, two-step methods for use with lax accuracies. *Mathematical Methods in the Applied Sciences*, **2019**, 42, 6301-6314	2.3	7
359	A perfect in phase FD algorithm for problems in quantum chemistry. *Journal of Mathematical Chemistry*, **2019**, 57, 2019-2048	2.1	15
358	Interpolants for sixth-order Numerov-type methods. *Mathematical Methods in the Applied Sciences*, **2019**, 42, 7349-7358	2.3	7
357	An accomplished phase FD process for DEs in chemistry. *Journal of Mathematical Chemistry*, **2019**, 57, 2208-2228	2.1	25
356	Eighth-order, phase-fitted, four-step methods for solving y??=f(x,y). *Mathematical Methods in the Applied Sciences*, **2019**, 43, 4016	2.3	2
355	New multiple stages multistep method with best possible phase properties for second order initial/boundary value problems. *Journal of Mathematical Chemistry*, **2019**, 57, 834-857	2.1	2
354	New four stages multistep in phase algorithm with best possible properties for second order problems. *Journal of Mathematical Chemistry*, **2019**, 57, 895-917	2.1	7
353	New multiple stages two-step complete in phase algorithm with improved characteristics for second order initial/boundary value problems. *Journal of Mathematical Chemistry*, **2019**, 57, 494-515	2.1	16
352	Trigonometric-fitted hybrid four-step methods of sixth order for solving. *Mathematical Methods in the Applied Sciences*, **2019**, 42, 710-716	2.3	30
351	New multiple stages scheme with improved properties for second order problems. *Journal of Mathematical Chemistry*, **2019**, 57, 232-262	2.1	6
350	New five-stages two-step method with improved characteristics. *Journal of Mathematical Chemistry* , **2018**, 56, 1567-1594	2.1	15
349	On Ninth Order, Explicit Numerov-Type Methods with Constant Coefficients. *Mediterranean Journal of Mathematics*, **2018**, 15, 1	0.9	41
348	A four stages numerical pair with optimal phase and stability properties. *Journal of Mathematical Chemistry*, **2018**, 56, 81-102	2.1	25
347	A five-stages symmetric method with improved phase properties. *Journal of Mathematical Chemistry*, **2018**, 56, 1313-1338	2.1	15
346	A finite difference pair with improved phase and stability properties. *Journal of Mathematical Chemistry*, **2018**, 56, 170-192	2.1	31
345	Trigonometrical fitting conditions for two derivative Runge-Kutta methods. *Numerical Algorithms*, **2018**, 79, 787-800	2.1	32

344	A new three-stages six-step finite difference pair with optimal phase properties for second order initial and/or boundary value problems with periodical and/or oscillating solutions. *Journal of Mathematical Chemistry*, **2018**, 56, 1280-1312	2.1	2
343	New three-stages symmetric two step method with improved properties for second order initial/boundary value problems. *Journal of Mathematical Chemistry*, **2018**, 56, 2591-2616	2.1	20
342	A new six-step algorithm with improved properties for the numerical solution of second order initial and/or boundary value problems. *Journal of Mathematical Chemistry*, **2018**, 56, 1206-1233	2.1	3
341	Fitted modifications of classical Runge-Kutta pairs of orders 5(4). *Mathematical Methods in the Applied Sciences*, **2018**, 41, 4549-4559	2.3	38
340	New three-stages symmetric six-step finite difference method with vanished phase-lag and its derivatives up to sixth derivative for second order initial and/or boundary value problems with periodical and/or oscillating solutions. *Journal of Mathematical Chemistry*, **2018**, 56, 2267-2301	2.1	1
339	New Runge-Kutta type symmetric two-step method with optimized characteristics. *Journal of Mathematical Chemistry*, **2018**, 56, 2454-2484	2.1	13
338	New five-stages finite difference pair with optimized phase properties. *Journal of Mathematical Chemistry*, **2018**, 56, 982-1010	2.1	17
337	A multistep method with optimal properties for second order differential equations. *Journal of Mathematical Chemistry*, **2018**, 56, 1-29	2.1	9
336	A new multistep finite difference pair for the Schrödinger equation and related problems. *Journal of Mathematical Chemistry*, **2018**, 56, 656-686	2.1	3
335	A hybrid finite difference pair with maximum phase and stability properties. *Journal of Mathematical Chemistry*, **2018**, 56, 423-448	2.1	17
334	New finite difference pair with optimized phase and stability properties. *Journal of Mathematical Chemistry*, **2018**, 56, 449-476	2.1	19
333	New four-stages symmetric six-step method with improved phase properties for second order problems with periodical and/or oscillating solutions. *Journal of Mathematical Chemistry*, **2018**, 56, 2898-2928	2.1	2
332	New 8-step symmetric embedded predictor-corrector (EPCM) method with vanished phase-lag and its first derivative for the numerical integration of the Schrödinger equation. *Journal of Mathematical Chemistry*, **2018**, 56, 2741-2767	2.1	2
331	New Runge-Kutta type symmetric two step finite difference pair with improved properties for second order initial and/or boundary value problems. *Journal of Mathematical Chemistry*, **2018**, 56, 3014-3044	2.1	13
330	New hybrid two-step method with optimized phase and stability characteristics. *Journal of Mathematical Chemistry*, **2018**, 56, 2302-2340	2.1	16
329	Fitted modifications of Runge-Kutta pairs of orders 6(5). *Mathematical Methods in the Applied Sciences*, **2018**, 41, 6184-6194	2.3	23
328	New hybrid symmetric two step scheme with optimized characteristics for second order problems. *Journal of Mathematical Chemistry*, **2018**, 56, 2816-2844	2.1	13
327	Trigonometric fitted, eighth-order explicit Numerov-type methods. *Mathematical Methods in the Applied Sciences*, **2018**, 41, 1845-1854	2.3	45

326	A new two-step finite difference pair with optimal properties. *Journal of Mathematical Chemistry*, **2018**, 56, 770-798	2.1	18
325	Explicit, two-stage, sixth-order, hybrid four-step methods for solving. *Mathematical Methods in the Applied Sciences*, **2018**, 41, 6997-7006	2.3	29
324	Trigonometric-Fitted Explicit Numerov-Type Method with Vanishing Phase-Lag and Its First and Second Derivatives. *Mediterranean Journal of Mathematics*, **2018**, 15, 1	0.9	41
323	An economical eighth-order method for the approximation of the solution of the Schr□inger equation. *Journal of Mathematical Chemistry*, **2017**, 55, 717-733	2.1	61
322	Three stages symmetric six-step method with eliminated phase-lag and its derivatives for the solution of the Schr□inger equation. *Journal of Mathematical Chemistry*, **2017**, 55, 1213-1235	2.1	11
321	An efficient six-step method for the solution of the Schr□inger equation. *Journal of Mathematical Chemistry*, **2017**, 55, 1521-1547	2.1	9
320	An efficient and computational effective method for second order problems. *Journal of Mathematical Chemistry*, **2017**, 55, 1649-1668	2.1	29
319	An efficient and economical high order method for the numerical approximation of the Schr□inger equation. *Journal of Mathematical Chemistry*, **2017**, 55, 1755-1778	2.1	19
318	Evolutionary generation of high-order, explicit, two-step methods for second-order linear IVPs. *Mathematical Methods in the Applied Sciences*, **2017**, 40, 6276-6284	2.3	66
317	Phase-fitted Runge□Kutta pairs of orders 8(7). *Journal of Computational and Applied Mathematics*, **2017**, 321, 226-231	2.4	65
316	Modified two-step hybrid methods for the numerical integration of oscillatory problems. *Mathematical Methods in the Applied Sciences*, **2017**, 40, 5286-5294	2.3	61
315	High order computationally economical six-step method with vanished phase-lag and its derivatives for the numerical solution of the Schr□inger equation. *Journal of Mathematical Chemistry*, **2017**, 55, 987-1013	2.1	10
314	Symmetric embedded predictor□predictor□corrector (EPPCM) methods with vanished phase□lag and its derivatives for second order problems **2017**,		1
313	Construction of two derivative Runge Kutta methods of order five **2017**,		2
312	A new family of 7 stages, eighth-order explicit Numerov-type methods. *Mathematical Methods in the Applied Sciences*, **2017**, 40, 7867-7878	2.3	53
311	Perspective of mathematical modeling and research of targeted formation of disperse phase clusters in working media for the next-generation power engineering technologies **2017**,		13
310	Order conditions for two derivative Runge Kutta methods up to order six **2017**,		1
309	A new fourteenth algebraic order finite difference method for the approximate solution of the Schr□inger equation. *Journal of Mathematical Chemistry*, **2017**, 55, 697-716	2.1	1

308	A new two stages tenth algebraic order symmetric six-step method with vanished phase-lag and its first and second derivatives for the solution of the radial Schrödinger equation and related problems. *Journal of Mathematical Chemistry*, **2017**, 55, 105-131	2.1	14
307	New two stages high order symmetric six-step method with vanished phase-lag and its first, second and third derivatives for the numerical solution of the Schrödinger equation. *Journal of Mathematical Chemistry*, **2017**, 55, 503-531	2.1	12
306	Two stages six-step method with eliminated phase-lag and its first, second, third and fourth derivatives for the approximation of the Schrödinger equation. *Journal of Mathematical Chemistry*, **2017**, 55, 961-986	2.1	12
305	A new high algebraic order efficient finite difference method for the solution of the Schrödinger equation. *Filomat*, **2017**, 31, 4999-5012	0.7	49
304	Construction of Exponentially Fitted Symplectic Runge–Kutta–Nyström Methods from Partitioned Runge–Kutta Methods. *Mediterranean Journal of Mathematics*, **2016**, 13, 2271-2285	0.9	81
303	A New Algorithm for the Approximation of the Schrödinger Equation. *Open Physics*, **2016**, 14, 628-642	1.3	26
302	A family of two stages tenth algebraic order symmetric six-step methods with vanished phase-lag and its first derivatives for the numerical solution of the radial Schrödinger equation and related problems. *Journal of Mathematical Chemistry*, **2016**, 54, 1835-1862	2.1	15
301	A new eight algebraic order embedded explicit six-step method with vanished phase-lag and its first, second, third and fourth derivatives for the numerical solution of the Schrödinger equation. *Journal of Mathematical Chemistry*, **2016**, 54, 1696-1727	2.1	14
300	An implicit symmetric linear six-step methods with vanished phase-lag and its first, second, third and fourth derivatives for the numerical solution of the radial Schrödinger equation and related problems. *Journal of Mathematical Chemistry*, **2016**, 54, 1010-1040	2.1	17
299	Family of symmetric linear six-step methods with vanished phase-lag and its derivatives and their application to the radial Schrödinger equation and related problems. *Journal of Mathematical Chemistry*, **2016**, 54, 466-502	2.1	17
298	A new two stage symmetric two-step method with vanished phase-lag and its first, second, third and fourth derivatives for the numerical solution of the radial Schrödinger equation. *Journal of Mathematical Chemistry*, **2016**, 54, 442-465	2.1	81
297	An optimized two-step hybrid block method for solving general second order initial-value problems. *Numerical Algorithms*, **2016**, 72, 1089-1102	2.1	112
296	Four-Stages High Algebraic Order Two-Step Method with Vanished Phase-Lag and Its First, Second and Third Derivatives for the Numerical Integration of the Schrödinger Equation. *Journal of Computational and Theoretical Nanoscience*, **2016**, 13, 7886-7902	0.3	
295	An Efficient Numerical Method for the Solution of the Schrödinger Equation. *Advances in Mathematical Physics*, **2016**, 2016, 1-20	1.1	31
294	Hybrid high algebraic order two-step method with vanished phase-lag and its first, second, third, fourth and fifth derivatives. *International Journal of Modern Physics C*, **2016**, 27, 1650049	1.1	1
293	Trigonometrical fitting conditions for two derivative Runge Kutta methods **2016**,		1
292	A family of embedded explicit six-step methods with vanished phase-lag and its derivatives for the numerical integration of the Schrödinger equation: development and theoretical analysis. *Journal of Mathematical Chemistry*, **2016**, 54, 1159-1186	2.1	16
291	A new four stages symmetric two-step method with vanished phase-lag and its first derivative for the numerical integration of the Schrödinger equation. *Journal of Mathematical Chemistry*, **2016**, 54, 1187-1211	2.1	48

290	A new approach on the construction of trigonometrically fitted two step hybrid methods. *Journal of Computational and Applied Mathematics*, **2016**, 303, 146-155	2.4	90
289	A new high algebraic order four stages symmetric two-step method with vanished phase-lag and its first and second derivatives for the numerical solution of the Schr□dinger equation and related problems. *Journal of Mathematical Chemistry*, **2016**, 54, 1417-1439	2.1	35
288	A High-Order Two-Step Phase-Fitted Method for the Numerical Solution of the Schr□dinger Equation. *Mediterranean Journal of Mathematics*, **2016**, 13, 5177-5194	0.9	73
287	A new explicit four-step method with vanished phase-lag and its first and second derivatives. *Journal of Mathematical Chemistry*, **2015**, 53, 402-429	2.1	25
286	A high algebraic order multistage explicit four-step method with vanished phase-lag and its first, second, third, fourth and fifth derivatives for the numerical solution of the Schr□dinger equation. *Journal of Mathematical Chemistry*, **2015**, 53, 1915-1942	2.1	47
285	High algebraic order Runge□Kutta type two-step method with vanished phase-lag and its first, second, third, fourth, fifth and sixth derivatives. *Computer Physics Communications*, **2015**, 196, 226-235	4.2	5
284	A predictor□corrector explicit four-step method with vanished phase-lag and its first, second and third derivatives for the numerical integration of the Schr□dinger equation. *Journal of Mathematical Chemistry*, **2015**, 53, 685-717	2.1	47
283	A Runge□Kutta type implicit high algebraic order two-step method with vanished phase-lag and its first, second, third and fourth derivatives for the numerical solution of coupled differential equations arising from the Schr□dinger equation. *Journal of Mathematical Chemistry*, **2015**, 53, 1239-1256	2.1	84
282	A low computational cost eight algebraic order hybrid method with vanished phase-lag and its first, second, third and fourth derivatives for the approximate solution of the Schr□dinger equation. *Journal of Mathematical Chemistry*, **2015**, 53, 1295-1312	2.1	65
281	A high algebraic order predictor□corrector explicit method with vanished phase-lag and its first, second, third and fourth derivatives for the numerical solution of the Schr□dinger equation and related problems. *Journal of Mathematical Chemistry*, **2015**, 53, 1495-1522	2.1	48
280	A new family of two stage symmetric two-step methods with vanished phase-lag and its derivatives for the numerical integration of the Schr□dinger equation. *Journal of Mathematical Chemistry*, **2015**, 53, 2191-2213	2.1	79
279	A trigonometrically fitted optimized two-step hybrid block method for solving initial-value problems of the form y? = f (x, y, y?) with oscillatory solutions **2015**,		3
278	Limb volume measurements for the assessment of lymphedema. Methodological issues **2015**,		1
277	An optimized two-step hybrid block method for solving general second order initial-value problems of the form y? = f (x, y, y?) **2015**,		3
276	An eight-step semi-embedded predictor□corrector method for orbital problems and related IVPs with oscillatory solutions for which the frequency is unknown. *Journal of Computational and Applied Mathematics*, **2015**, 290, 1-15	2.4	86
275	Efficient low computational cost hybrid explicit four-step method with vanished phase-lag and its first, second, third and fourth derivatives for the numerical integration of the Schr□dinger equation. *Journal of Mathematical Chemistry*, **2015**, 53, 1808-1834	2.1	53
274	A Runge□Kutta type four-step method with vanished phase-lag and its first and second derivatives for each level for the numerical integration of the Schr□dinger equation. *Journal of Mathematical Chemistry*, **2014**, 52, 917-947	2.1	59
273	An explicit four-step method with vanished phase-lag and its first and second derivatives. *Journal of Mathematical Chemistry*, **2014**, 52, 833-855	2.1	64

272	An explicit linear six-step method with vanished phase-lag and its first derivative. *Journal of Mathematical Chemistry*, **2014**, 52, 1895-1920	2.1	22
271	A family of explicit linear six-step methods with vanished phase-lag and its first derivative. *Journal of Mathematical Chemistry*, **2014**, 52, 2087-2118	2.1	55
270	RungeKutta type methods with special properties for the numerical integration of ordinary differential equations. *Physics Reports*, **2014**, 536, 75-146	27.7	13
269	A fourth order modified trigonometrically fitted symplectic RungeKuttaNystrm method. *Computer Physics Communications*, **2014**, 185, 3151-3155	4.2	25
268	A hybrid type four-step method with vanished phase-lag and its first, second and third derivatives for each level for the numerical integration of the Schrdinger equation. *Journal of Mathematical Chemistry*, **2014**, 52, 2334-2379	2.1	55
267	A sixth order symmetric and symplectic diagonally implicit Runge-Kutta method **2014**,		2
266	Construction of exponentially fitted symplectic Runge-Kutta-Nystrm methods from partitioned Runge-Kutta methods **2014**,		2
265	A new explicit hybrid four-step method with vanished phase-lag and its derivatives. *Journal of Mathematical Chemistry*, **2014**, 52, 1690-1716	2.1	52
264	A new phase-fitted eight-step symmetric embedded predictorcorrector method (EPCM) for orbital problems and related IVPs with oscillating solutions. *Computer Physics Communications*, **2014**, 185, 512-523	4.2	12
263	On the Explicit Four-Step Methods with Vanished Phase-Lag and its First Derivative. *Applied Mathematics and Information Sciences*, **2014**, 8, 447-458	2.4	99
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