Mustafa GÃ¼lsu

List of Publications by Year
in descending order

45 papers	854 citations	394421 19 h-index	501196 28 g-index
45 all docs	45 docs citations	45 times ranked	389 citing authors

#	Article	IF	Citations
1	A Taylor polynomial approach for solving differential-difference equations. Journal of Computational and Applied Mathematics, 2006, 186, 349-364.	2.0	54
2	Laguerre polynomial approach for solving linear delay difference equations. Applied Mathematics and Computation, 2011, 217, 6765-6776.	2.2	53
3	A new collocation method for solution of mixed linear integro-differential-difference equations. Applied Mathematics and Computation, 2010, 216, 2183-2198.	2.2	49
4	A Taylor polynomial approach for solving generalized pantograph equations with nonhomogenous term. International Journal of Computer Mathematics, 2008, 85, 1055-1063.	1.8	47
5	A finite difference approach for solution of Burgersâ€™ equation. Applied Mathematics and Computation, 2006, 175, 1245-1255.	2.2	44
6	A collocation approach for solving systems of linear Volterra integral equations with variable coefficients. Computers and Mathematics With Applications, 2011, 62, 755-769.	2.7	44
7	On the solution of the Riccati equation by the Taylor matrix method. Applied Mathematics and Computation, 2006, 176, 414-421.	2.2	42
8	The approximate solution of high-order linear difference equations with variable coefficients in terms of Taylor polynomials. Applied Mathematics and Computation, 2005, 168, 76-88.	2.2	40
9	A new polynomial approach for solving difference and Fredholm integro-difference equations with mixed argument. Applied Mathematics and Computation, 2005, 171, 332-344.	2.2	36
10	Taylor polynomial solutions of systems of linear differential equations with variable coefficients. International Journal of Computer Mathematics, 2005, 82, 755-764.	1.8	35
11	Taylor collocation method for solution of systems of high-order linear Fredholmâ€“Volterra integro-differential equations. International Journal of Computer Mathematics, 2006, 83, 429-448.	1.8	31
12	On the solution of the Abel equation of the second kind by the shifted Chebyshev polynomials. Applied Mathematics and Computation, 2011, 217, 4827-4833.	2.2	27
13	Numerical solution of Burgersâ€™ equation with restrictive Taylor approximation. Applied Mathematics and Computation, 2005, 171, 1192-1200.	2.2	26
14	Numerical solution the fractional Bagleyâ€“Torvik equation arising in fluid mechanics. International Journal of Computer Mathematics, 2017, 94, 173-184.	1.8	26
15	Polynomial solution of the most general linear Fredholm integrodifferentialâ€“difference equations by means of Taylor matrix method. Complex Variables and Elliptic Equations, 2005, 50, 367-382.	0.2	25
16	Approximations to the solution of linear Fredholm integrodifferentialâ€“difference equation of high order. Journal of the Franklin Institute, 2006, 343, 720-737.	3.4	24
17	Numerical approach for solving fractional relaxationâ€“oscillation equation. Applied Mathematical Modelling, 2013, 37, 5927-5937.	4.2	23
18	An operational matrix method for solving Lane-Emden equations arising in astrophysics. Mathematical Methods in the Applied Sciences, 2014, 37, 2227-2235.	2.3	23

#	Article	IF	Citations
19	A method for the approximate solution of the high-order linear difference equations in terms of Taylor polynomials. International Journal of Computer Mathematics, 2005, 82, 629-642.	1.8	22
20	An approximation algorithm for the solution of the Laneâ€"Emden type equations arising in astrophysics and engineering using Hermite polynomials. Computational and Applied Mathematics, 2014, 33, 131-145.	1.3	18
21	Polynomial solution of the most general linear Fredholmâ€"Volterra integrodifferential-difference equations by means of Taylor collocation method. Applied Mathematics and Computation, 2007, 185, 646-657.	2.2	15
22	Rational Chebyshev collocation method for solving higher-order linear ordinary differential equations. Numerical Methods for Partial Differential Equations, 2011, 27, 1130-1142.	3.6	15
23	Numerical approach for solving fractional Fredholm integro-differential equation. International Journal of Computer Mathematics, 2013, 90, 1413-1434.	1.8	13
24	A taylor collocation method for solving high-order linear pantograph equations with linear functional argument. Numerical Methods for Partial Differential Equations, 2011, 27, 1628-1638.	3.6	12
25	The Approximate Solution of High-Order Nonlinear Ordinary Differential Equations by Improved Collocation Method with Terms of Shifted Chebyshev Polynomials. International Journal of Applied and Computational Mathematics, 2016, 2, 519-531.	1.6	11
26	Numerical approach for solving linear Fredholm integro-differential equation with piecewise intervals by Bernoulli polynomials. International Journal of Computer Mathematics, 2018, 95, 2100-2111.	1.8	10
27	Approximate solution of complex differential equations for a rectangular domain with Taylor collocation method. Applied Mathematics and Computation, 2006, 177, 844-851.	2.2	9
28	Approximate solution to linear complex differential equation by a new approximate approach. Applied Mathematics and Computation, 2007, 185, 636-645.	2.2	9
29	A new Taylor collocation method for nonlinear Fredholmâ€Volterra integroâ€differential equations. Numerical Methods for Partial Differential Equations, 2010, 26, 1006-1020.	3.6	9
30	Approximate solution of general high-order linear nonhomogeneous difference equations by means of Taylor collocation method. Applied Mathematics and Computation, 2006, 173, 683-693.	2.2	8
31	A Taylor collocation method for the numerical solution of complex differential equations with mixed conditions in elliptic domains. Applied Mathematics and Computation, 2006, 182, 498-508.	2.2	8
32	Numerical solution of a class of complex differential equations by the Taylor collocation method in elliptic domains. Numerical Methods for Partial Differential Equations, 2010, 26, 1191-1205.	3.6	7
33	A new Chebyshev polynomial approximation for solving delay differential equations. Journal of Difference Equations and Applications, 2012, 18, 1043-1065.	1.1	7
34	A matrix method for solving high-order linear difference equations with mixed argument using hybrid legendre and taylor polynomials. Journal of the Franklin Institute, 2006, 343, 647-659.	3.4	6
35	Numerical solution of Abel equation using operational matrix method with Chebyshev polynomials. Asian-European Journal of Mathematics, 2017, 10, 1750053.	0.5	5
36	A collocation approach for the numerical solution of certain linear retarded and advanced integrodifferential equations with linear functional arguments. Numerical Methods for Partial Differential Equations, 2011, 27, 447-459.	3.6	4

#	Article	IF	Citations
37	Solving highâ€order linear differential equations by a Legendre matrix method based on hybrid Legendre and Taylor polynomials. Numerical Methods for Partial Differential Equations, 2010, 26, 647-661.	3.6	3
38	A Collocation Method for Solving Fractional Riccati Differential Equation. Journal of Applied Mathematics, 2013, 2013, 1-8.	0.9	3
39	An Operational Matrix Method for Solving a Class of Nonlinear Volterra Integro-Differential Equations by Operational Matrix Method. International Journal of Applied and Computational Mathematics, 2017, 3, 3279-3294.	1.6	3
40	An operational matrix method to solve linear Fredholmâ€"Volterra integro-differential equations with piecewise intervals. Mathematical Sciences, 2021, 15, 189-197.	1.7	3
41	A Collocation Method for Solving Fractional Riccati Differential Equation. Advances in Applied Mathematics and Mechanics, 2013, 5, 872-884.	1.2	3
42	A numerical approach for solving initial-boundary value problem describing the process of cooling of a semi-infinite body by radiation. Applied Mathematical Modelling, 2013, 37, 2709-2716.	4.2	1
43	New wave simulations to the (3+1)-dimensional modified Kdv-Zakharov-Kuznetsov equation. AIP Conference Proceedings, 2017, , .	0.4	1
44	Numerical solution of Riccati equation using operational matrix method with Chebyshev polynomials. Asian-European Journal of Mathematics, 2015, 08, 1550020.	0.5	0
45	New Numerical Approach for Solving Abelâ€™s Integral Equations. Foundations of Computing and Decision Sciences, 2021, 46, 255-271.	1.2	0