Siraj-ul-Islam

List of Publications by Year
in descending order

90	2,544	172386	233338
papers	citations	29 h-index	45 g-index

91	91	91	1027
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	New algorithms for approximation of Bessel transforms with high frequency parameter. Journal of Computational and Applied Mathematics, 2022, 399, 113705.	1.1	8
2	A local meshless method for the numerical solution of spaceâ€dependent inverse heat problems. Mathematical Methods in the Applied Sciences, 2021, 44, 3066-3079.	1.2	20
3	Numerical solution and characteristic study of time-fractional shocks collision. Physica Scripta, 2021, 96, 045214.	1.2	1
4	Approximation of Cauchy-type singular integrals with high frequency Fourier kernel. Engineering Analysis With Boundary Elements, 2021, 130, 209-219.	2.0	11
5	A parametrized level set based topology optimization method for analysing thermal problems. Computers and Mathematics With Applications, 2021, 99, 99-112.	1.4	8
6	An efficient approach for solving nonlinear multidimensional SchrÃ¶dinger equations. Engineering Analysis With Boundary Elements, 2021, 132, 263-270.	2.0	4
7	Approximation of highly oscillatory integrals containing special functions. Journal of Computational and Applied Mathematics, 2020, 365, 112372.	1.1	11
8	Local radial basis function collocation method for stokes equations with interface conditions. Engineering Analysis With Boundary Elements, 2020, 119, 246-256.	2.0	12
9	The localized radial basis functions for parameterized level set based structural optimization. Engineering Analysis With Boundary Elements, 2020, 113, 296-305.	2.0	13
10	Local meshless methods for second order elliptic interface problems with sharp corners. Journal of Computational Physics, 2020, 416, 109500.	1.9	15
11	Meshless approximation method of one-dimensional oscillatory Fredholm integral equations. Filomat, 2020, 34, 861-877.	0.2	3
12	Local meshless differential quadrature collocation method for time-fractional PDEs. Discrete and Continuous Dynamical Systems - Series S, 2020, 13, 2641-2654.	0.6	12
13	A Differential Quadrature Based Approach for Volterra Partial Integro-Differential Equation with a Weakly Singular Kernel. CMES - Computer Modeling in Engineering and Sciences, 2020, 124, 915-935.	0.8	2
14	Haar wavelets multi-resolution collocation analysis of unsteady inverse heat problems. Inverse Problems in Science and Engineering, 2019, 27, 1498-1520.	1.2	18
15	Local meshless method for convection dominated steady and unsteady partial differential equations. Engineering With Computers, 2019, 35, 803-812.	3.5	16
16	On numerical evaluation of integrals involving oscillatory Bessel and Hankel functions. Numerical Algorithms, 2019, 82, 1325-1343.	1.1	8
17	Numerical solution of 2D and 3D elliptic-type interface models with regular interfaces. Engineering With Computers, 2019, 35, 1081-1102.	3.5	9
18	Structural optimization based on meshless element free Galerkin and level set methods. Computer Methods in Applied Mechanics and Engineering, 2019, 344, 144-163.	3.4	34

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19	A multi-resolution collocation procedure for time-dependent inverse heat problems. International Journal of Thermal Sciences, 2018, 128, 160-174.	2.6	23
20	Meshless methods for one-dimensional oscillatory Fredholm integral equations. Applied Mathematics and Computation, 2018, 324, 156-173.	1.4	8
21	Numerical methods for multivariate highly oscillatory integrals. International Journal of Computer Mathematics, 2018, 95, 1024-1046.	1.0	5
22	Meshless and Multi-Resolution Collocation Techniques for Steady State Interface Models. International Journal of Computational Methods, 2018, 15, 1750073.	0.8	3
23	Meshless methods for two-dimensional oscillatory Fredholm integral equations. Journal of Computational and Applied Mathematics, 2018, 335, 33-50.	1.1	12
24	Meshless analysis of elliptic interface boundary value problems. Engineering Analysis With Boundary Elements, 2018, 92, 38-49.	2.0	19
25	Meshless and multi-resolution collocation techniques for parabolic interface models. Applied Mathematics and Computation, 2018, 335, 313-332.	1.4	4
26	Meshless analysis of parabolic interface problems. Engineering Analysis With Boundary Elements, 2018, 94, 134-152.	2.0	17
27	RBF Solution Method for 1D Oscillatory Fredholm Integral Equations Having Kernel Function Free-of-Stationary-Points. , 2018, , .		0
28	An Efficient Modified Haar Wavelet Collocation Method for Numerical Solution of Two-Dimensional Elliptic PDEs. Differential Equations and Dynamical Systems, 2017, 25, 347-360.	0.5	9
29	Estimation of Dispersion in an Open Channel from an Elevated Source Using an Upwind Local Meshless Method. International Journal of Computational Methods, 2017, 14, 1750009.	0.8	7
30	A Local Meshless Method for Steady State Convection Dominated Flows. International Journal of Computational Methods, 2017, 14, 1750067.	0.8	7
31	Local meshless method for PDEs arising from models of wound healing. Applied Mathematical Modelling, 2017, 48, 688-710.	2.2	26
32	A boundary element and level set based bi-directional evolutionary structural optimisation with a volume constraint. Engineering Analysis With Boundary Elements, 2017, 80, 152-161.	2.0	11
33	Analysis of meshless weak and strong formulations for boundary value problems. Engineering Analysis With Boundary Elements, 2017, 80, 1-17.	2.0	8
34	Meshless collocation procedures for time-dependent inverse heat problems. International Journal of Heat and Mass Transfer, 2017, 113, 1152-1167.	2.5	17
35	Local RBF method for multi-dimensional partial differential equations. Computers and Mathematics With Applications, 2017, 74, 292-324.	1.4	41
36	Haar wavelet collocation method for three-dimensional elliptic partial differential equations. Computers and Mathematics With Applications, 2017, 73, 2023-2034.	1.4	51

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37	Efficient numerical methods for Bessel type of oscillatory integrals. Journal of Computational and Applied Mathematics, 2017, 315, 161-174.	1.1	15
38	An efficient numerical algorithm based on Haar wavelet for solving a class of linear and nonlinear nonlocal boundary-value problems. Calcolo, 2016, 53, 621-633.	0.6	14
39	A computational modeling and simulation of spatial dynamics in biological systems. Applied Mathematical Modelling, 2016, 40, 4524-4542.	2.2	4
40	A comparative analysis of local meshless formulation for multi-asset option models. Engineering Analysis With Boundary Elements, 2016, 65, 159-176.	2.0	30
41	Meshless methods for multivariate highly oscillatory Fredholm integral equations. Engineering Analysis With Boundary Elements, 2015, 53, 100-112.	2.0	19
42	Numerical solution of two-dimensional elliptic PDEs with nonlocal boundary conditions. Computers and Mathematics With Applications, 2015, 69, 180-205.	1.4	46
43	A comparative study of meshless complex quadrature rules for highly oscillatory integrals. Engineering Analysis With Boundary Elements, 2015, 52, 71-80.	2.0	3
44	New quadrature rules for highly oscillatory integrals with stationary points. Journal of Computational and Applied Mathematics, 2015, 278, 75-89.	1.1	27
45	A new method based on Haar wavelet for the numerical solution of two-dimensional nonlinear integral equations. Journal of Computational and Applied Mathematics, 2014, 272, 70-80.	1.1	87
46	An improved method based on Haar wavelets for numerical solution of nonlinear integral and integro-differential equations of first and higher orders. Journal of Computational and Applied Mathematics, 2014, 260, 449-469.	1.1	73
47	Numerical solution of compartmental models by meshless and finite difference methods. Applied Mathematics and Computation, 2014, 238, 408-435.	1.4	4
48	Meshless and wavelets based complex quadrature of highly oscillatory integrals and the integrals with stationary points. Engineering Analysis With Boundary Elements, 2013, 37, 1136-1144.	2.0	16
49	A numerical assessment of parabolic partial differential equations using Haar and Legendre wavelets. Applied Mathematical Modelling, 2013, 37, 9455-9481.	2.2	50
50	A new approach for numerical solution of integro-differential equations via Haar wavelets. International Journal of Computer Mathematics, 2013, 90, 1971-1989.	1.0	49
51	Local radial basis function collocation method along with explicit time stepping for hyperbolic partial differential equations. Applied Numerical Mathematics, 2013, 67, 136-151.	1.2	60
52	Wavelets collocation methods for the numerical solution of elliptic BV problems. Applied Mathematical Modelling, 2013, 37, 676-694.	2.2	79
53	New algorithms for the numerical solution of nonlinear Fredholm and Volterra integral equations using Haar wavelets. Journal of Computational and Applied Mathematics, 2013, 239, 333-345.	1.1	110
54	Assessment of global and local meshless methods based on collocation with radial basis functions for parabolic partial differential equations in three dimensions. Engineering Analysis With Boundary Elements, 2012, 36, 1640-1648.	2.0	47

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55	Radial basis function collocation method for the numerical solution of the two-dimensional transient nonlinear coupled Burgersâ€™ equations. Applied Mathematical Modelling, 2012, 36, 1148-1160.	2.2	77
56	Numerical integration of multi-dimensional highly oscillatory, gentle oscillatory and non-oscillatory integrands based on wavelets and radial basis functions. Engineering Analysis With Boundary Elements, 2012, 36, 1284-1295.	2.0	19
57	Haar wavelet collocation method for the numerical solution of boundary layer fluid flow problems. International Journal of Thermal Sciences, 2011, 50, 686-697.	2.6	63
58	Quadrature rules for numerical integration based on Haar wavelets and hybrid functions. Computers and Mathematics With Applications, 2011, 61, 2770-2781.	1.4	49
59	Thermo-Mechanical Analysis of Hot Shape Rolling of Steel by a Meshless Method. Procedia Engineering, 2011, 10, 3173-3178.	1.2	17
60	Numerical Solution of Singularly Perturbed Two-point BVPs Using Nonuniform Haar Wavelets. International Journal for Computational Methods in Engineering Science and Mechanics, 2011, 12, 168-175.	1.4	13
61	A computational modeling of the behavior of the two-dimensional reactionâ€“diffusion Brusselator system. Applied Mathematical Modelling, 2010, 34, 3896-3909.	2.2	50
62	A numerical technique for solution of the MRLW equation using quartic B-splines. Applied Mathematical Modelling, 2010, 34, 4151-4160.	2.2	36
63	The numerical solution of second-order boundary-value problems by collocation method with the Haar wavelets. Mathematical and Computer Modelling, 2010, 52, 1577-1590.	2.0	136
64	The solution of multipoint boundary value problems by the Optimal Homotopy Asymptotic Method. Computers and Mathematics With Applications, 2010, 59, 2000-2006.	1.4	49
65	A comparative study of numerical integration based on Haar wavelets and hybrid functions. Computers and Mathematics With Applications, 2010, 59, 2026-2036.	1.4	73
66	Application of the Optimal Homotopy Asymptotic Method to squeezing flow. Computers and Mathematics With Applications, 2010, 59, 3858-3866.	1.4	42
67	Numerical solution of complex modified Kortewegâ€“de Vries equation by mesh-free collocation method. Computers and Mathematics With Applications, 2009, 58, 566-578.	1.4	26
68	Numerical solution of special 12th-order boundary value problems using differential transform method. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 1132-1138.	1.7	32
69	A meshfree interpolation method for the numerical solution of the coupled nonlinear partial differential equations. Engineering Analysis With Boundary Elements, 2009, 33, 399-409.	2.0	59
70	Application of meshfree collocation method to a class of nonlinear partial differential equations. Engineering Analysis With Boundary Elements, 2009, 33, 661-667.	2.0	40
71	A mesh-free numerical method for solution of the family of Kuramotoâ€“Sivashinsky equations. Applied Mathematics and Computation, 2009, 212, 458-469.	1.4	52
72	A mesh-free method for the numerical solution of the KdVâ€“Burgers equation. Applied Mathematical Modelling, 2009, 33, 3442-3449.	2.2	29

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73	A meshfree method for the numerical solution of the RLW equation. Journal of Computational and Applied Mathematics, 2009, 223, 997-1012.	1.1	112
74	A Computational Meshfree Technique for the Numerical Solution of the Two-Dimensional Coupled Burgers' Equations. International Journal for Computational Methods in Engineering Science and Mechanics, 2009, 10, 406-422.	1.4	43
75	Non-polynomial splines approach to the solution of sixth-order boundary-value problems. Applied Mathematics and Computation, 2008, 195, 270-284.	1.4	27
76	Non-polynomial spline solution of singularly perturbed boundary-value problems. Applied Mathematics and Computation, 2008, 196, 6-16.	1.4	19
77	A comparative study of numerical solutions of a class of KdV equation. Applied Mathematics and Computation, 2008, 199, 425-434.	1.4	14
78	Family of numerical methods based on non-polynomial splines for solution of contact problems. Communications in Nonlinear Science and Numerical Simulation, 2008, 13, 1448-1460.	1.7	14
79	A meshfree method for numerical solution of KdV equation. Engineering Analysis With Boundary Elements, 2008, 32, 849-855.	2.0	38
80	Quartic Non-Polynomial Splines Approach to the Solution of a System of Second-Order Boundary-Value Problems. International Journal of High Performance Computing Applications, 2007, 21, 42-49.	2.4	7
81	An Adaptive Perturbation Scheme in Finite Difference Gradient Approximation. , 2007, , .		0
82	Quartic non-polynomial spline approach to the solution of a system of third-order boundary-value problems. Journal of Mathematical Analysis and Applications, 2007, 335, 1095-1104.	0.5	15
83	A smooth approximation for the solution of special non-linear third-order boundary-value problems based on non-polynomial splines. International Journal of Computer Mathematics, 2006, 83, 397-407.	1.0	3
84	Nonpolynomial spline approach to the solution of a system of second-order boundary-value problems. Applied Mathematics and Computation, 2006, 173, 1208-1218.	1.4	29
85	A class of methods based on non-polynomial spline functions for the solution of a special fourth-order boundary-value problems with engineering applications. Applied Mathematics and Computation, 2006, 174, 1169-1180.	1.4	26
86	Quadratic non-polynomial spline approach to the solution of a system of second-order boundary-value problems. Applied Mathematics and Computation, 2006, 179, 153-160.	1.4	22
87	A numerical method based on polynomial sextic spline functions for the solution of special fifth-order boundary-value problems. Applied Mathematics and Computation, 2006, 181, 356-361.	1.4	14
88	A class of methods based on non-polynomial sextic spline functions for the solution of a special fifth-order boundary-value problems. Journal of Mathematical Analysis and Applications, 2006, 321, 651-660.	0.5	20
89	Non polynomial spline approach to the solution of a system of third-order boundary-value problems. Applied Mathematics and Computation, 2005, 168, 152-163.	1.4	51
90	A numerical method for third-order non-linear boundary-value problems in engineering. International Journal of Computer Mathematics, 2005, 82, 103-109.	1.0	22