List of papers published by "**Prof. Mehdi DEHGHAN**" in **ISI** journals (updated 30 June 2022. (= 9 Tir 1401). All papers are published free of any charge.

Mehdi **DEHGHAN**, Professor of Department of Applied Mathematics, Faculty of Mathematics and Computer Sciences, Amirkabir University of Technology(Tehran Polytechnic), No.424 Hafez Av. Tehran, IRAN(Islamic Republic of Iran) E-mail: mdehghan@aut.ac.ir; Second e-mail(Non–University Email Account): mdehghan.aut@gmail.com

1- **Mehdi DEHGHAN** and **Zeinab GHARIBI**, A unified analysis of fully mixed virtual element method for wormhole propagation over polygonal meshes arising in the petroleum engineering, **Computers and Mathematics with Applications**, Volume 121, (2022) Pages 30–51 .

2-**Ali EBRAHIMIJAHAN** and **Mehdi DEHGHAN** and **Mostafa ABBASZADEH**, Simulation of Maxwell equation based on an ADI approach and integrated radial basis function-generalized moving least squares (IRBF–GMLS) method with reduced order algorithm based on proper orthogonal decomposition, **Engineering Analysis with Boundary Elements**, Volume 143, (2022), Pages 397–417 .

3-**Niusha NARIMANI** and **Mehdi DEHGHAN**, A direct RBF-PU method for simulating the infiltration of cytotoxic T–lymphocytes into the tumor microenvironment, **Communications in Nonlinear Science and Numerical Simulation**, Volume 114 (2022) Article number 10661 (This article has 25 pages).

4-**Zeinab GHARIBI** and **Mehdi DEHGHAN** and **Mostafa ABBASZADEH**, Optimal error bound for immersed weak Galerkin finite element method for elliptic interface problems, **Journal of Computational and Applied Mathematics**, Volume 416, (2022) Article number 114567 .

5-**Vahid MOHAMMADI** and **Mehdi DEHGHAN**, A POD–RBF–FD scheme for simulating chemotaxis models on surfaces, **Engineering Analysis with Boundary Elements**, Volume 143, (2022) Pages 316–330 .

6-**Akbar SHIRILORD** and **Mehdi DEHGHAN**, Single step iterative method for linear system of equations with complex symmetric positive semi-definite coefficient matrices, **Applied Mathematics and Computation"**, Volume 426 (2022) Article number 127111. (This article has 17 pages).

7- **Mehdi DEHGHAN** and **Zeinab GHARIBI** and **Mohammad Reza ESLAHCHI**, Unconditionally energy stable C–virtual element scheme for solving generalized Swift–Hohenberg equation, **Applied Numerical Mathematics**, Volume 178 (2022) pages 304–328.

8–**Akbar SHIRILORD** and **Mehdi DEHGHAN**, Closed–form solution of non–symmetric algebraic Riccati matrix equation, **Applied Mathematics Letters**, Volume 131 (2022) Article number 108040. (This article has 10 pages).

9–**Hadi MOHAMMADI–FIROUZJAEI** and **Hojatollah ADIBI** and **Mehdi DEHGHAN**, A comparative study on interior penalty discontinuous Galerkin and enriched Galerkin methods for time-fractional Sobolev equation, **Engineering with Computers**, In Press(2022), (Accepted 10 February 2022).

10–**Mahboubeh NAJAFI** and **Mehdi DEHGHAN** and **Bozidar SARLER** and **Gregor KOSEC** and **Bostjan MAVRIC**, Divergence–free meshless local Petrov–Galerkin method for Stokes flow, **Engineering with Computers**, in Press (2022) Accepted 4 February 2022 .

11-**Reza MOHAMMADI–ARANI** and **Mehdi DEHGHAN** and **Mostafa ABBASZADEH**, Proper orthogonal decomposition-Lattice Boltzmann method: Simulating the air pollutant problem in street canyons areas, **SIAM Journal on Scientific Computing**, in Press (2022), (Accepted 4 February 2022, Appeared on-line 26 July 2022) .

12-**Rohollah ABEDIAN** and **Mehdi DEHGHAN**, A high–order weighted essentially nonoscillatory scheme based on exponential polynomials for nonlinear degenerate parabolic equations, **Numerical Methods for Partial Differential Equations**, Volume 38(Issue 4), (2022) Pages 970–996.

13-**Akbar SHIRILORD** and **Mehdi DEHGHAN**, Combined real and imaginary parts method for solving generalized Lyapunov matrix equation, **Applied Numerical Mathematics**, Volume 181 (2022) Pages 94–109.

14- **Majid HAGHI** and **Mohammad ILAT** and **Mehdi DEHGHAN**, A fourth-order compact difference method for the nonlinear time–fractional fourth–order reaction?diffusion equation, **Engineering with Computers**, in Press (20 October 2022),

15-**Mostafa ABBASZADEH** and **Mostafa BAYAT** and **Mehdi DEHGHAN**, Numerical investigation of the magnetic properties and behavior of electrically conducting fluids via the local weak form method, **Applied Mathematics and Computation**, Volume 433, (2022), Article number 127293.

16-**Rohollah ABEDIAN** and **Mehdi DEHGHAN**, The formulation of finite difference RBFWENO schemes for hyperbolic conservation laws: An alternative technique", **Advances in Applied Mathematics and Mechanics**, Accepted 12 February 2022, .

1-**Mehdi DEHGHAN** and **Baharak HOOSHYARFARZIN** and **Mostafa AB-BASZADEH**, Numerical simulation based on a combination of finite element method and proper orthogonal decomposition to prevent the groundwater contamination, **Engineering with Computers**, in Press(22 July 2021) $DOI = 10.1007/s00366 - 021 - 01439 - y$.

Mostafa ABBASZADEH and **Mehdi DEHGHAN**, Investigation of heat transport equation at the microscale via interpolating element free Galerkin method, **Engineering with Computers**, in Press (5 July 2021)
DOI=DOI:10.1007/s00366-021-01425-4 .

3- **Mehdi DEHGHAN** and **Zeinab GHARIBI**, Optimal convergence analysis of the energy–preserving immersed weak Galerkin method for second–order hyperbolic interface problems in inhomogeneous media, **Computers and Mathematics with Applications**, Volume 105, (2022) Pages 150–171 .

4-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Meshless local numerical procedure based on interpolating moving least squares approximation and exponential time differencing fourth–order Runge–Kutta (ETDRK4) for solving parabolic interface problems, **Engineering with Computers**, Volume 38, (2022) Pages 71–91 .

5-**Mehdi DEHGHAN** and **Akbar SHIRILORD**, A fast computational algorithm for computing outer pseudo-inverses with numerical experiments, **Journal of Computational and Applied Mathematics**, Volume 408, (2022) Article number 114128 .

6-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN** and **Amirreza KHO-DADADIAN** and **Thomas WICK**, Legendre spectral element(LSEM) to simulate two-dimensional system of nonlinear stochastic advection–reaction–diffusion models, **Applicable Analysis**, Volume 101 (Issue 6), (2022) Pages 2279–2294 .

7-**Mehdi DEHGHAN** and **Akbar SHIRILORD**, Two lopsided TSCSP (LTSCSP) iteration methods for solution of complex symmetric positive definite linear systems, **Engineering with Computers**, Volume 38, (2022) Pages 1867–1881 .

8-**Ali EBRAHIMIJAHAN** and **Mehdi DEHGHAN** and **Mostafa ABBASZADEH**, Simulation of plane elastostatic equations of anisotropic functionally graded materials by integrated radial basis function based on finite difference approach, **Engineering Analysis with Boundary Elements**, Volume 134, (2022) Pages 553–570 .

9-**Mehdi DEHGHAN** and **Akbar SHIRILORD**, Three-step iterative methods for numerical solution of systems of nonlinear equations, **Engineering with Computers**, Volume 38 (Issue 2), (2022) Pages 1015–1028

10-**Vahid MOHAMMADI** and **Mehdi DEHGHAN** and **Amirreza KHODADA-DIAN** and **Nima NOII** and **Thomas WICK**, An asymptotic analysis and numerical simulation of a prostate tumor growth model via the generalized moving least squares approximation combined with semi-implicit time integration, **Applied Mathematical**

Modelling, Volume 104, (2022) Pages 826–849 .

11-**Ali EBRAHIMIJAHAN** and **Mehdi DEHGHAN** and **Mostafa ABBASZADEH**, Integrated radial basis functions (IRBFs) to simulate nonlinear advection–diffusion equations with smooth and non–smooth initial data, **Engineering with Computers**, Volume 38, (2022) Pages 1071–1106 .

12-**Akbar SHIRILORD** and **Mehdi DEHGHAN**, Double parameter splitting (DPS) iteration for solving complex symmetric linear systems, **Applied Numerical Mathematics**, Volume 171 (2022) pages 176–192.
.

13-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, The fourth–order time–discrete scheme and split–step direct meshless finite volume method for solving cubic–quintic complex Ginzburg–Landau equations on complicated geometries, **Engineering with Computers**, Volume 38, (2022) Pages 1543–1557 .

14-**Behzad NEMATI SARAY** and **Mehrdad LAKESTANI** and **Mehdi DEHGHAN**, On the sparse multiscale representation of 2–D Burgers equations by an efficient algorithm based on multiwavelets, **Numer Methods for Partial Differential Equations**, In press (27 April 2021) $https://doi.org/10.1002/num.22795$.

15-**Mehdi DEHGHAN** and **Akbar SHIRILORD**, The use of homotopy analysis method for solving generalized Sylvester matrix equation with applications, **Engineering with Computers**, Volume 38 (2022) Pages 2699–2716 .

16-**Mostafa Abbaszadeh** and **Mehdi Dehghan** and **Amirreza Khodadadian** and **Clemens Heitzinger**, Application of direct meshless local Petrov–Galerkin method for numerical solution of stochastic elliptic interface problems, **Numerical Methods for Partial Differential Equations**, Volume 38 (2022) Pages 1271–1292 .

17-**Moh. Ivan AZIS** and **Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, An LT–BEM for an unsteady diffusion–convection problem of another class of anisotropic FGMs, **International Journal of Computer Mathematics**, Volume 99(Issue 3), (2022) Pages 575–590 .

18-**Samira ESLAMI** and **Mohammad ILAT** and **Mehdi DEHGHAN**, A local meshless method for solving multi-dimensional Galilei invariant fractional advection–diffusion equation, **Engineering Analysis with Boundary Elements**, Volume 143 (2022) Pages 283–292 .

19-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, A class of moving Kriging interpolation-based DQ methods to simulate multi-dimensional space Galilei invariant fractional advection-diffusion equation, **Numerical Algorithms**, Volume 90 (Issue 1), (2022) Pages 271–299 .

20-**Mehdi DEHGHAN** and **Zeinab GHARIBI**, An analysis of weak Galerkin finite element method for a steady state Boussinesq problem, **Journal of Computational and**

Applied Mathematics, Volume 406 (2022) Article number 114029.   (It has 29 pages) .

21-**Akbar SHIRILORD** and **Gholamreza KARAMALI** and **Mehdi DEHGHAN**, Solving Sylvester equation with complex symmetric semi-definite positive coefficient matrices, **FILOMAT**, Volume 36(5), (2022) Pages 1743–1754 .

22-**Ali EBRAHIMIJAHAN** and **Mehdi DEHGHAN** and **Mostafa ABBASZADE**, Simulation of the incompressible Navier–Stokes via integrated radial basis function based on finite difference scheme, **Engineering with Computers**, In press (3 January 2022) $https://doi.org/10.1007/s00366-021-01543-z$.

23-**Mehdi DEHGHAN** and **Akbar SHIRILORD**, Approximating optimal parameters for generalized preconditioned Hermitian and skew-Hermitian splitting (GPHSS) method", **Computational and Applied Mathematics**, Volume 41(Issue 2) (2022), Article number 72 .

24-**Ali EBRAHIMIJAHAN** and **Mehdi DEHGHAN** and **Mostafa ABBASZADEH**, Integrated radial basis functions to simulate modified anomalous sub–diffusion equation, **Numerical Methods for Partial Differential Equations**, Volume 38(Issue 4), (2022) Pages 1015–1054 .

1-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Meshless upwind local radial basis function–finite difference technique to simulate the time fractional distributed–order advection–diffusion equation, **Engineering with Computers**, Volume 37(Issue 2), (2021) pages 873–889 .

2-**Mohammad SHIRZADI** and **Mehdi DEHGHAN**, Generalized regularized least–squares approximation of noisy data with application to stochastic PDEs, **Applied Mathematics Letters**, Volume 111 (2021) Article Number : 106598 (Eight pages) .

3-**Mehdi DEHGHAN and Zeinab GHARIBI**, Numerical analysis of fully discrete energy stable weak Galerkin finite element scheme for a coupled Cahn–Hilliard–Navier–Stokes phase–field model, **Applied Mathematics and Computation**, Volume 410 (2021) Article Number 126487 .

4-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, The Crank–Nicolson/interpolating stabilized element–free Galerkin method to investigate the fractional Galilei invariant advection–diffusion equation, **Mathematical Methods in the Applied Sciences**, Volume 44(Issue 4), (2021) pages 2752–2768 .

5-**Mehdi DEHGHAN** and **Akbar SHIRILORD**, Solving complex Sylvester matrix equation by accelerated double-step scale splitting (ADSS) method, **Engineering with Computers**, Volume 37(Issue 1), (2021), pages 489–508 .

6-**Zeinab GHARIBI and Mehdi DEHGHAN**, Convergence analysis of weak Galerkin flux-based mixed finite element method for solving singularly perturbed convection-diffusion-reaction problem, **Applied Numerical Mathematics**, Volume 163, (May 2021) Pages 303–316 .

7-**Vahid MOHAMMADI** and **Mehdi DEHGHAN** and **Stefano De MARCHI**, Numerical simulation of a prostate tumor growth model by the RBF-FD scheme and a semi-implicit time discretization, **Journal of Computational and Applied Mathematics**, Volume 388 (2021) Article number 113314 .

8-**Rohollah ABEDIAN** and **Mehdi DEHGHAN**, RBF–ENO/WENO schemes with Lax–Wendroff type time discretizations for Hamilton–Jacobi equations, **Numerical Methods for Partial Differential Equations**, Volume 37 (Issue 1), (2021) pages 594-613.

9-**Pouria ASSARI** and **Fatemeh ASADI–MEHREGAN** and **Mehdi DEHGHAN**, A meshless local Galerkin integral equation method for solving a type of Darboux problems based on radial basis functions, **ANZIAM Journal**, Volume 63 (2021) Pages 469–492 .

10-**Mehdi DEHGHAN** and **Ali EBRAHIMIJAHAN**, The numerical solution of nonlinear generalized Benjamin–Bona–Mahony–Burgers and regularized long–wave equations via the meshless method of integrated radial basis functions, **Engineering with Computers**, Volume 37 (Issue 1), (2021) pages 93–122 .

11-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Numerical investigation of reproducing kernel particle Galerkin method for solving fractional modified distributed-order anomalous sub-diffusion equation with error estimation, **Applied Mathematics and Computation**, Volume 392, (2021) Article number 125718 .

12-**Zeinab GHARIBI** and **Mehdi DEHGHAN** and **Mostafa ABBASZADEH**, Numerical analysis of locally conservative weak Galerkin dual-mixed finite element method for the time-dependent Poisson–Nernst–Planck system, **Computers & Mathematics with Applications**, Volume 92, (2021), Pages 88-108 .

13-**Mehdi DEHGHAN** and **Akbar SHIRILORD**, On the Hermitian and Skew-Hermitian splitting-like iteration approach for solving complex continuous-time algebraic Riccati matrix equation, **Applied Numerical Mathematics**, Volume 170, (2021) Pages 109–127 .

14-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN** and **Mohammad Ivan AZIS**, The meshless local Petrov-Galerkin method based on moving Taylor polynomial approximation to investigate unsteady diffusion-convection problems of anisotropic functionally graded materials related to incompressible flow, **Engineering Analysis with Boundary Elements**, Volume 132,(2021), Pages 469–480 .

15-**Mehdi DEHGHAN** and **Akbar SHIRILORD**, HSS–like method for solving complex Yang–Baxter matrix equation, **Engineering with Computers**, volume 37 (Issue 3), (2021) pages 2345–2357 .

16-**Mehdi DEHGHAN** and **Vahid MOHAMMADI**, The boundary knot method for solving two–dimensional (advection) reaction–diffusion equation, **International Journal of Numerical Methods for Heat and Fluid Flow**, Volume 31(Issue 1), (2021) Pages 106–133.

17- **Mehdi DEHGHAN** and **Nasim SHAFIEEABYANEH** and **Mostafa ABBASZADEH**, Numerical and theoretical discussions for solving nonlinear generalized Benjamin–Bona–Mahony–Burgers equation based on the Legendre spectral element method, **Numer Methods for Partial Differential Equations** , Volume 37(Issue 1), (2021) Pages 360-382.

18-**Mohammad SHIRZADI** and **Mehdi DEHGHAN** and **Ali Foroush BASTANI**, A trustable shape parameter in the kernel-based collocation method with application to pricing financial options, **Engineering Analysis with Boundary Elements**, Volume 126 (2021), Pages 108–117 .

19-**Vahid MOHAMMADI and Mehdi DEHGHAN and Amirreza KHODADADIAN and Thomas WICK**, Numerical investigation on the transport equation in spherical coordinates via generalized moving least squares and moving kriging least squares approximations, **Engineering with Computers**, Volume 37(Issue 2), (2021) Pages 1231–1249 .

20-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, The proper orthogonal decomposition modal spectral element method for two-dimensional viscoelastic equation, **Thin–Walled Structures**, Volume 161 (2021), Article Number 107429.

21-**Mohammad SHIRZADI** and **Mehdi DEHGHAN** and **Ali Foroush BAS-TANI**, Optimal uniform error estimates for moving least–squares collocation with application to option pricing under jump–diffusion processes, **Numerical Methods for Partial Differential Equations**, Volume 37(Issue 1), (2021), pages 98-117.

22–**Mostafa ABBASZADEH** and **Mostafa BAYAT** and **Mehdi DEHGHAN** and **Mohammad Ivan AZIS**, Investigation of generalized Couette hydromagnetic flow of two-step exothermic chemical reaction in a channel via the direct meshless local Petrov–Galerkin method, **Engineering Analysis with Boundary Elements**, Volume 125(2021), Pages 178–189 .

23-**Mehdi DEHGHAN** and **Nasim SHAFIEEABYANEH**, Local radial basis function–finite-difference method to simulate some models in the nonlinear wave phenomena: regularized long–wave and extended Fisher–Kolmogorov equations, **Engineering with Computers**, Volume 37(Issue 2), (2021) Pages 1159-1179.

24-**Hadi MOHAMMADI-FIROUZJAEI** and **Hojatollah ADIBI** and **Mehdi DEHGHAN**, Local discontinuous Galerkin method for distributed-order time-fractional diffusion-wave equation: Application of Laplace transform, **Mathematical Methods in the Applied Sciences**, Volume 44, (2021) 4923-4937.

25-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Numerical and analytical investigations for solving the inverse tempered fractional diffusion equation via interpolating element-free Galerkin (IEFG) method, **Journal of Thermal Analysis and Calorimetry**, Volume 143(Issue 3), (2021) pages 1917-1933.

26-**Mostafa Abbaszadeh** and **Mostafa Bayat** and **Mehdi Dehghan**, The local meshless collocation method for numerical simulation of shallow water waves based on generalized equal width (GEW) equation, **Wave Motion**, Volume 107,(2021) Article Number 102805

27-**Vahid MOHAMMADI** and **Mehdi DEHGHAN**, A divergence–free generalized moving least squares approximation with its application, **Applied Numerical Mathematics**, Volume 162, (April 2021), Pages 374–404 .

28-**Mostafa ABBASZADEH** and **Mobina GOLMOHAMMADI** and **Mehdi DEHGHAN**, Simulation of activator–inhibitor dynamics based on cross–diffusion Brusselator reaction–diffusion system via a differential quadrature-radial point interpolation method (DQ–RPIM) technique, **The European Physical Journal Plus**, volume 136, (2021) Article number 59 .

29-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, A finite difference procedure to solve weakly singular integro–partial differential equation with space–time frac-

tional derivatives, **Engineering with Computers**, volume 37, (2021) Pages 2173–2182 .

30-**Mohammad Ivan AZIS** and **Mostafa ABBASZADEH** and **Mehdi DE-HGHAN** and **Imam SOLEKHUDIN**, A boundary–only integral equation method for parabolic problems of another class of anisotropic functionally graded materials, **Materials Today Communications**, Volume 26, (2021), Article 101956 .

31-**Ali EBRAHIMIJAHAN** and **Mehdi DEHGHAN** and **Mostafa ABBASZADEH**, Numerical simulation of shallow water waves based on generalized equal width (GEW) equation by compact local integrated radial basis function method combined with adaptive residual subsampling technique, **Nonlinear Dynamics**, Volume 105,(2021) pages 3359–3391 .

32- **Mehdi DEHGHAN** and **Nasim SHAFIEEABYANEH** and **Mostafa AB-BASZADEH**, A local meshless procedure to determine the unknown control parameter in the multi-dimensional inverse problems, **Inverse Problems in Science and Engineering**, Volume 29(Issue 10), (2021) Pages 1369–1400 .

33-**Mehdi DEHGHAN** and **Zeinab GHARIBI**, Virtual element method for solving an inhomogeneous Brusselator model with and without cross-diffusion in pattern formation, **Journal of Scientific Computing**, Volume 89, (2021) Article 16.   (This article has 33 pages) .

34-**Gholamreza KARAMALI** and **Akbar SHIRILRD** and **Mehdi DEHGHAN**, On the CRI method for solving Sylvester equation with complex symmetric semi-definite positive coefficient matrices, **FILOMAT**, Volume 35(Issue 9), (2021), Pages 3071–3090 .

35-**Pouria ASSARI** and **Fatemeh ASADI–MEHREGAN** and **Mehdi DEHGHAN**, Local Gaussian–collocation scheme to approximate the solution of nonlinear fractional differential equations using Volterra integral equations, **Journal of Computational Mathematics**, Volume 39(Issue 2), (2021) Pages 261–282 .

36-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Meshless upwind local radial basis function–finite difference technique to simulate the time fractional distributed–order advection–diffusion equation, **Engineering with Computers**, volume 37, (2021) Pages 873–889 .

37-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Fourth–order alternating direction implicit (ADI) difference scheme to simulate the space–time Riesz tempered fractional diffusion equation, **International Journal of Computer Mathematics**, Volume 98(Issue 11) (2021) Pages 2137–2155 .

1-**Mehdi DEHGHAN and Niusha NARIMANI**, The element-free Galerkin method based on moving least squares and moving Kriging approximations for solving two–dimensional tumor–induced angiogenesis model, **Engineering with Computers**, Volume 36(Issue 4), (2020) Pages 1517–1537 .

2-**Hossein HOSSEINZADEH** and **Mehdi DEHGHAN** and
Zeynab SEDAGHATJOO, The stability study of numerical solution of Fredholm integral equations of the first kind with emphasis on its application in boundary elements method, **Applied Numerical Mathematics**, Volume 158 (2020) Pages 134–151 .

3-**Mehdi DEHGHAN** and **Niusha NARIMANI**, Radial basis function-generated finite difference scheme for simulating the brain cancer growth model under radiotherapy in two various types of computational domain, **Computer Methods and Programs in Biomedicine**, volume 195 (2020) 105641 .

4-**Mehdi DEHGHAN** and **Akbar SHIRILORD**, Matrix multisplitting Picard–iterative method for solving generalized absolute value matrix equation, **Applied Numerical Mathematics**, volume 158 (2020), pages 425–438 .

5-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Simulation flows with multiple phases and components via the radial basis functions-finite difference (RBF–FD) procedure: Shan–Chen model, **Engineering Analysis with Boundary Elements**, volume 119 (2020) pages 151–161 .

6- **Vahid MOHAMMADI** and **Mehdi DEHGHAN**, Generalized moving least squares approximation for the solution of local and non–local models of cancer cell invasion of tissue under the effect of adhesion in one–and two–dimensional spaces, **Computers in Biology and Medicine**, Volume 124 (2020), Article 103803(It is 20 pages) .

7-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN** and **Amirreza KHO-DADADIAN** and **Celmenz HEITZINGER**, Error analysis of interpolating element free Galerkin method to solve non–linear extended Fisher–Kolmogorov equation, **Computers and Mathematics with Applications**, volume 80 (2020) pages 247–262 .

8-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Interior penalty discontinuous Galerkin technique for solving generalized Sobolev equation, **Applied Numerical Mathematics**, Volume 154, (2020) Pages 172–186 .

9- **Vahid MOHAMMADI** and **Mehdi DEHGHAN**, A meshless technique based on generalized moving least squares combined with the second–order semi–implicit backward differential formula for numerically solving time–dependent phase field models on the spheres, **Applied Numerical Mathematics**, volume 153 (2020) pages 248–275 .

10-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN** and **Yong ZHOU**, Crank–Nicolson/Galerkin spectral method for solving two–dimensional time–space distributed–order weakly singular integro–partial differential equation, **Journal of Computational and Applied Mathematics**, Volume 374 (2020) Article number is 112739 (16 pages) .

11-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN** A POD–based reduced–order Crank–Nicolson/fourth–order alternating direction implicit (ADI) finite difference scheme for solving the two–dimensional distributed–order Riesz space–fractional diffusion equation, **Applied Numerical Mathematics**, Volume 158, (2020) Pages 271–291 .

12-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Direct meshless local Petrov–Galerkin method to investigate anisotropic potential and plane elastostatic equations of anisotropic functionally graded materials problems, **Engineering Analysis with Boundary Elements**, volume 118 (2020) 188–201 .

13-**Pouria ASSARI** and **Mehdi DEHGHAN**, The Numerical Solution of Nonlinear Weakly Singular Fredholm Integral Equations Based on the Dual–Chebyshev Wavelets, **Applied and Computational Mathematics**, in Press (2020) DOI: .

14- **Mehdi DEHGHAN** and **Nasim SHAFIEEABYANEH** and **Mostafa AB-BASZADEH**, Application of spectral element method for solving Sobolev equations with error estimation, **Applied Numerical Mathematics**, Volume 158 (2020) pages 439–462 .

15-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, An upwind local radial basis functions-differential quadrature (RBFs–DQ) technique to simulate some models arising in water sciences, **Ocean Engineering**, Volume 197, (2020) Article Number 106844 (26 pages) .

16-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN** and **Amirreza KHO-DADADIAN** and **Celmenz HEITZINGER**, Analysis and application of the interpolating element free Galerkin (IEFG) method to simulate the prevention of groundwater contamination with application in fluid flow, **Journal of Computational and Applied Mathematics**, Volume 368 (2020) Article number 112453 (17 pages) .

17-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Investigation of the Oldroyd model as a generalized incompressible Navier–Stokes equation via the interpolating stabilized element free Galerkin technique, **Applied Numerical Mathematics**, Volume 150 (2020) pages 274–294 .

18-**Maryam KMRANIAN** and **Mehdi TATARI** and **Mehdi DEHGHAN**, Analysis of the stabilized element free Galerkin approximations to the Stokes equations, **Applied Numerical Mathematics**, Volume 150 (2020) pages 325–340 .

19-**Mohammad SHIRZADI** and **Mehdi DEHGHAN** and **Ali Foroush BAS-TANI**, On the pricing of multi–asset options under jump–diffusion processes using mesh-free moving least–squares approximation, **Communications in Nonlinear Science and Numerical Simulation**, Volume 84, (2020) Article Number: 105160,(18 pages) .

20-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Reduced order modeling of time–dependent incompressible Navier–Stokes equation with variable density based on

a local radial basis functions–finite difference (LRBF–FD) technique and the POD/DEIM method, **Computer Methods in Applied Mechanics and Engineering**, volume 364 (2020) Article number: 112914, (28 pages) .

21-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Direct meshless Local Petrov–Galerkin (DMLPG) method for time–fractional fourth–order reaction–diffusion problem on complex domains, **Computers and Mathematics with Applications**, Volume 79(Issue 3), (2020), pages 876–888 .

22-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Fourth–order alternating direction implicit (ADI) difference scheme to simulate the space–time Riesz tempered fractional diffusion equation, **International Journal of Computer Mathematics**, Volume 98(Issue 11) (2021) Pages 2137–2155 .

23-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN** and **Ionel Michael NAVON**, A proper orthogonal decomposition variational multiscale meshless interpolating element free Galerkin method for incompressible magnetohydrodynamics flow, **International Journal for Numerical Methods in Fluids**, Volume 92(Issue 10), (2020) Pages 1415–1436 .

1-**Mehdi Dehghan** and **Mostafa Abbaszadeh**, The solution of nonlinear Green–Naghdi equation arising in water sciences via a meshless method which combines moving kriging interpolation shape functions with the weighted essentially non–oscillatory method, **Communications in Nonlinear Science and Numerical Simulation**, Volume 68 (2019) Pages 220–239.

2-**Vahid Mohammadi** and **Mehdi Dehghan**, Simulation of the phase field Cahn–Hilliard and tumor growth models via a numerical scheme: element–free Galerkin method, **Computer Methods in Applied Mechanics and Engineering**, Volume 345, (2019), Pages 919–950 .

3-**Mohammad Ilati** and **Mehdi Dehghan**, DMLPG method for numerical simulation of soliton collisions in multi–dimensional coupled damped nonlinear Schrodinger system which arises from Bose–Einstein condensates, **Applied Mathematics and Computation**, volume 346 (2019) Pages 244–253.

4-**Mehdi Dehghan** and **Mostafa Abbaszadeh**, Error estimate of finite element/finite difference technique for solution of two-dimensional weakly singular integro-partial differential equation with space and time fractional derivatives, **Journal of Computational and Applied Mathematics**, Volume 356, (2019) Pages 314–328 .

5-**Pouria Assari** and **Mehdi Dehghan**, Application of thin plate splines for solving a class of boundary integral equations arisen from Laplace's equations with nonlinear boundary conditions, **International Journal of Computer Mathematics**, Volume 96 (1), (2019), pages 170–198.

6-**Vahid MOHAMMADI and Davoud MIRZAEI and Mehdi DEHGHAN**, Numerical simulation and error estimation of the time–dependent Allen–Cahn equation on surfaces with radial basis functions, **Journal of Scientific Computing**, Volume 79 (2019) pages 493–516 .

7-**Mehdi Dehghan** and **Mostafa Abbaszadeh**, Error analysis and numerical simulation of magnetohydrodynamics(MHD) equation based on the interpolating element free Galerkin (IEFG) method, **Applied Numerical Mathematics**, Volume 137, (2019), Pages 252–273 .

8-**Mostafa Abbaszadeh** and **Amirreza Khodadadian** and **Maryam Parvizi** and **Mehdi Dehghan** and **Clemens Heitzinger**, A direct meshless local collocation method for solving stochastic Cahn–Hilliard—Cook and stochastic Swift—Hohenberg equations, **Engineering Analysis with Boundary Elements**, volume 98, (2019) pages 253–264.

9-**Mehdi Dehghan** and **Akbar Shirilord**, A generalized modified Hermitian and skew–Hermitian splitting (GMHSS) method for solving complex Sylvester matrix equation, **Applied Mathematics and Computation**, Volume 348, (2019) Pages 632–651.

10-**Mehdi Dehghan** and **Mostafa Abbaszadeh**, The simulation of some chemotactic bacteria patterns in liquid medium which arises in tumor growth with blow–up

phenomena via a generalized smoothed particle hydrodynamics (GSPH) method, **Engineering with Computers**, Volume 35, (2019) Pages 875–892.

11-**Saeed Kazem** and **Mehdi Dehghan**, Semi–analytical solution for time–fractional diffusion equation based on finite difference method of lines (MOL), **Engineering with Computers**, Volume 35, (2019) Pages 229–241 .

12-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, The interpolating element–free Galerkin method for solving Korteweg–de Vries–Rosenau–regularized long–wave equation with error analysis, **Nonlinear Dynamics**, Volume 96, (2019) Pages 1345–1365 .

13-**Gh. Karamali** and **Mehdi Dehghan** and **Mostafa Abbaszadeh**, Numerical solution of a time fractional PDE in the electroanalytical chemistry by a local meshless method, **Engineering with Computers**, Volume 35, (2019) Pages 87–100 .

14-**Pouria Assari** and **Mehdi Dehghan**, Application of dual–Chebyshev wavelets for the numerical solution of boundary integral equations with logarithmic singular kernels, **Engineering with Computers**, Volume 35, (2019) Pages 175–190 .

15-**Pouria Assari** and **Fateme Asadi–Mehregan** and **Mehdi Dehghan**, On the numerical solution of Fredholm integral equations utilizing the local radial basis function method, **International Journal of Computer Mathematics**, Volume 96(Issue 7), (2019) pages 1416–1443 .

16-**Pouria Assari** and **Fatemeh Asadi–Mehregan** and **Mehdi Dehghan**, The implication of local thin plate splines for solving nonlinear mixed integro–differential equations based on the Galerkin scheme, **Numerical Mathematics: Theory, Methods and Applications**, Volume 12, (No. 4), (2019) Pages 1066–1092 .

17-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Analysis of mixed finite element method (MFEM) for solving the generalized fractional reaction–diffusion equation on nonrectangular domains, **Computers and Mathematics with Applications**, Volume 78(Issue 5), (2019) Pages 1531–1547 .

18-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN** and **Yong ZHOU**, Alternating direction implicit–spectral element method (ADI–SEM) for solving multi–dimensional generalized modified anomalous sub–diffusion equation, **Computers and Mathematics with Applications**, Volume 78(Issue 5), (2019) Pages 1772–1792 .

19-**Mehdi DEHGHAN** and **Vahid MOHAMMADI**, Two–dimensional simulation of the damped Kuramoto–Sivashinsky equation via radial basis function–generated finite difference scheme combined with an exponential time discretization, **Engineering Analysis with Boundary Elements**, Volume 107, (2019) Pages 168–184 .

20-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, Numerical and analytical investigations for neutral delay fractional damped diffusion-wave equation based on the stabilized interpolating element free Galerkin (IEFG) method, **Applied Numerical**

Mathematics, 145, (2019) Pages 488–506 .

21-**Pouria ASSARI** and **Mehdi DEHGHAN**, On the numerical solution of nonlinear integral equations on non–rectangular domains utilizing thin plate spline collocation method, **Proceedings–Mathematical Sciences**, (PMSC), Proc. Indian Acad. Sci. (Math. Sci.), volume 129 (2019), 83–115 .

22-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, The reproducing kernel particle Petrov–Galerkin method for solving two–dimensional nonstationary incompressible Boussinesq equations, **Engineering Analysis with Boundary Elements**, Volume 106, (2019) pages 300–308 .

23-**Mehdi DEHGHAN** and **Akbar SHIRILORD**, Accelerated double-step scale splitting iteration method for solving a class of complex symmetric linear systems, **Numerical Algorithms**, volume 83 (2019) 281–304 .

24-**Mehdi DEHGHAN** and **Akbar SHIRILORD**, The double–step scale splitting method for solving complex Sylvester matrix equation, **”Computational and Applied Mathematics”**, Volume 38 (Issue 3), (2019), Article Number 146 .

25-**Pouria ASSARI** and **Mehdi DEHGHAN**, A meshless local Galerkin method for solving Volterra integral equations deduced from nonlinear fractional differential equations using the moving least squares technique, **Applied Numerical Mathematics**, Volume 143, (2019), Pages 276–299 .

26-**Amirreza Khodadadian** and **Maryam Parvizi** and **Mostafa Abbaszadeh** and **Mehdi Dehghan** and **Clemens Heitzinger**, A multilevel Monte Carlo finite element method for the stochastic Cahn–Hilliard–Cook equation, **Computational Mechanics**, Volume 64(Issue 4), (2019) Pages 937–949 .

27-**Pouria ASSARI** and **Mehdi DEHGHAN**, On the numerical solution of a class of logarithmic boundary integral equations deduced from Laplace's equations utilizing the meshless local discrete collocation method, **Advances in Applied Mathematics and Mechanics**, Volume 11(Issue 4),(2019) Pages 807–837 .

28-**Mehdi DEHGHAN** and **Mostafa ABBASZADEH** and **Amirreza KHODADADIAN** and **Clemens HEITZINGER**, Galerkin proper orthogonal decomposition-reduced order method (POD–ROM) for solving generalized Swift–Hohenberg equation, **International Journal of Numerical Methods for Heat and Fluid Flow**, Volume 29 (Issue 8), (2019) Pages 2642–2665 .

29-**Pouria ASSARI** and **Mehdi DEHGHAN**, A meshless local discrete Galerkin (MLDG) scheme for numerically solving two–dimensional nonlinear Volterra integral equations, **Applied Mathematics and Computation**, Volume 350, (2019) pages 249–265 .

30-**Mostafa ABBASZADEH** and **Mehdi DEHGHAN**, A reduced order finite difference method for solving space–fractional reaction–diffusion systems: Gray–Scott model,

1-**F. Fakhar–Izadi, M. Dehghan**, Fully spectral collocation method for nonlinear parabolic partial integro–differential equations, **Applied Numerical Mathematics**, Volume 123 (2018) Pages 99–120 .

2- **Pouria Assari, Mehdi Dehghan**, Solving a class of nonlinear boundary integral equations based on the meshless local discrete Galerkin (MLDG) method, **Applied Numerical Mathematics**, Volume 23 (2018) Pages 137–158 .

3-**Mohammad Ilati, Mehdi Dehghan**, Error analysis of a meshless weak form method based on radial point interpolation technique for Sivashinsky equation arising in the alloy solidification problem, **Journal of Computational and Applied Mathematics**, Volume 327 (2018) Pages 314–324 .

4-**S.M.M. Kazemi, M. Dehghan, A. F. Bastani** On a new family of radial basis functions: Mathematical analysis and applications to option pricing, **Journal of Computational and Applied Mathematics**, Volume 328, (2018), Pages 75–100 .

5- **M. Dehghan, M. Abbaszadeh**, Interpolating stabilized moving least squares (MLS) approximation for 2D elliptic interface problems, **Computer Methods in Applied Mechanics and Engineering**, Volume 238 (2018) pages 775–803 .

6-**Z.Sedaghatjoo, M. Dehghan, H. Hosseinzadeh**, A stable boundary elements method for magnetohydrodynamic channel flows at high Hartmann numbers, **Numerical Methods for Partial Differential Equations**, Volume 34 (2), (2018) pages 575–601 .

7-**M. Dehghan, M. Abbaszadeh**, An upwind local radial basis functions–differential quadrature (RBF–DQ) method with proper orthogonal decomposition (POD) approach for solving compressible Euler equation, **Engineering Analysis With Boundary Elements**, Volume 92 (2018), pages 244–256 .

8-**M. Dehghan, M. Abbaszadeh**, Solution of multi-dimensional Klein–Gordon–Zakharov and Schrodinger/Gross–Pitaevskii equations via local Radial Basis Functions–Differential Quadrature (RBF–DQ) technique on non–rectangular computational domains, **Engineering Analysis With Boundary Elements**, Volume 92 (2018), pages 156–170 .

9-**M. Dehghan, M. Safarpoor**, Application of the dual reciprocity boundary integral equation approach to solve fourth–order time fractional partial differential equations, **International Journal of Computer Mathematics**, Volume 95(Issue 10), (2018) pages 2066–2081 .

10-**S. Kazem, M. Dehghan**, Application of finite difference method of lines (MOL) on the heat equation, **Numerical Methods for Partial Differential Equations**, Volume 34(Issue 2), (2018) 626–660 .

11-**M. Khaksar–Oshagh, M. Shamsi, M. Dehghan**, A wavelet-based adaptive mesh refinement method for the obstacle problem, **Engineering with Computers**, Volume 34(Issue 3), (2018), pages 577–589 .

12-**M. Dehghan, M. Abbaszadeh**, A reduced proper orthogonal decomposition (POD) element free Galerkin (POD-EFG) method to simulate two–dimensional solute transport problems and error estimate, **Applied Numerical Mathematics**, Volume 126, (2018), Pages 92–112 .

13-**H. Khosravan–Arab, M. Dehghan, M. R. Eslahchi**, A new approach to improve the order of approximation of the Bernstein operators: Theory and applications, **Numerical Algorithms**, Volume 77 (2018) pages 111–150 .

14-**M. Abbaszadeh, M. Dehghan**, The two–grid interpolating element free Galerkin (TG–IEFG) method for solving Rosenau–regularized long wave (RRLW) equation with error analysis, **Applicable Analysis**, Volume 97 (Issue 7), (2018), pages 1129–1153 .

15-**P. Assari, M. Dehghan**, A meshless local discrete collocation (MLDC) scheme for solving two–dimensional singular integral equations with logarithmic kernels, **International Journal of Numerical Modelling: Electronic Networks, Devices and Fields**, Volume 31(Issue 3), (2018), pages 1–23 .

16-**M. Dehghan, M. Abbaszadeh**, The space-splitting idea combined with local radial basis function meshless approach to simulate conservation laws equations, **Alexandria Engineering Journal**, Volume 57 (2018) pages 1137–1156.

17-**Pouria ASSARI** and **Mehdi DEHGHAN**, A meshless Galerkin scheme for the approximate solution of nonlinear logarithmic boundary integral equations utilizing radial basis functions, **Journal of Computational and Applied Mathematics**, Volume 333, (2018), Pages 362-381 .

18-**M. Dehghan, M. Abbaszadeh**, A combination of proper orthogonal decomposition-screte empirical interpolation method (POD-IM) and meshless local RBF–DQ approach for prevention of groundwater contamination, **Computers and Mathematics with Applications**, Volume 75(Issue 4), (2018) Pages 1390–1412 .

19-**M. Dehghan, M. Abbaszadeh**, A finite difference/finite element technique with error estimate for space fractional tempered diffusion–wave equation, **Computers and Mathematics with Applications**, Volume 75(Issue 8), (2018), pages 2903–2914 .

20-**F. Fakhar–Izadi, M. Dehghan**, Modal spectral element method in curvilinear domains, **Applied Numerical Mathematics**, Volume 128, (2018), Pages 157–182. .

21-**P. Assari, M. Dehghan**, A meshless discrete Galerkin method based on the free shape parameter radial basis functions for solving Hammerstein integral equations", **Numerical Mathematics: Theory, Methods and Applications**, Volume 11 (3), (2018) 540–568.

22-**M. Dehghan, M. Abbaszadeh**, Variational multiscale element–free Galerkin method combined with the moving Kriging interpolation for solving some partial differ-

ential equations with discontinuous solutions, **Computational and Applied Mathematics**, Volume 37 (Issue 3), (2018) Pages 3869–3905 .

23-**M. Dehghan, N. Narimani**, An element–free Galerkin meshless method for simulating the behavior of cancer cell invasion of surrounding tissue, **Applied Mathematical Modelling**, Volume 59, (2018) pages 500–513 .

24-**M. Dehghan, M. Abbaszadeh**, A Legendre spectral element method (SEM) based on the modified bases for solving neutral delay distributed–order fractional damped diffusion–wave equation, **Mathematical Methods in the Applied Sciences**, Volume 41 (Issue 9), (2018) pages 3476–3494 .

25-**M. Abbaszadeh, M. Dehghan**, An efficient technique based on finite difference /finite element method for solution of two-dimensional space/multi–time fractional Bloch–Torrey equations on non-rectangular domains, **Applied Numerical Mathematics**, Volume 131, (2018) pages 190–206 .

26-**Pouria Assari, Mehdi Dehghan**, A local Galerkin integral equation method for solving integro–differential equations arising in oscillating magnetic fields, **Mediterranean Journal of Mathematics**, Volume 15,(2018) Article Number 90.   (This paper has 21 pages) .

27-**Pouri Assari, Mehdi Dehghan**, The approximate solution of nonlinear Volterra integral equations of the second kind using radial basis functions, **Applied Numerical Mathematics**, Volume 131, (2018), Pages 140–157 .

28-**Mohammad Ilati and Mehdi Dehghan**, Direct local boundary integral equation method for numerical solution of extended Fisher–Kolmogorov equation, **Engineering with Computers**, Volume 34 (1), (2018) pages 203–213 .

29-**Mania Sabouri and Mehdi Dehghan**, A hk mortar spectral element method for the p–Laplacian equation, **Computers and Mathematics with Application**, Volume 76(7), (2018) pages 1803–1826.

30-**Zeynab Sedaghatjoo, Mehdi Dehghan, Hossein Hosseinzadeh**, Numerical Solution of 2D Navier–Stokes Equation Discretized via Boundary Elements Method and Finite Difference Approximation, **Engineering Analysis with Boundary Elements**, volume 96 (2018) pages 64–77.

31-**Mehdi Dehghan, Niusha Narimani**, Approximation of continuous surface differential operators with the generalized moving least squares method (GMLS) for solving reaction–diffusion equation, **Computational and Applied Mathematics**, Volume 37(Issue 5), (2018) Pages 6955–6971 .

1- **M. Dehghan, M. Abbaszadeh**, Spectral element technique for nonlinear fractional evolution equation, stability and convergence analysis, **Applied Numerical Mathematics**, Volume 119, (2017), Pages 51–66 .

2- **Z. Sedaghatjoo, M. Dehghan, H. Hosseinzadeh**, On uniqueness of numerical solution of boundary integral equations with 3–times monotone radial kernels, **Journal of Computational and Applied Mathematics**, Volume 311, (2017), Pages 664–681 .

3-**H. Khosravian–Arab, M. Dehghan, M. R. Eslahchi**, Fractional spectral and pseudo–spectral methods in unbounded domains: Theory and applications, **Journal of Computational Physics**, Volume 338, (2017) pages 527–566 .

4-**M. Dehghan, V. Mohammadi**, Comparison between two meshless methods based on collocation technique for the numerical solution of four–species tumor growth model, **Communications in Nonlinear Science and Numerical Simulation**, Volume 44 (2017) Pages 204–219 .

5- **S. M. M. Kazemi, M. Dehghan, A. F. Bastani**, Asymptotic expansion of solutions to the Black–Scholes equation arising from American option pricing near the expiry, **Journal of Computational and Applied Mathematics**, Volume 311 (2017) Pages 11–37 .

6-**M. Dehghan, M. Abbaszadeh**, A finite element method for the numerical solution of Rayleigh–Stokes problem for a heated generalized second grade fluid with fractional derivatives, **Engineering with Computers**, Volume 33 (2017) pages 587–605 .

7-**M. Dehghan, M. Abbaszadeh**, The use of proper orthogonal decomposition (POD) meshless RBF–FD technique to simulate the shallow water equations, **Journal of Computational Physics**, Volume 351 (2017), Pages 478–510 .

8- **M. Dehghan, M. Abbaszadeh**, The meshless local collocation method for solving multi–dimensional Cahn—Hilliard, Swift–Hohenberg and phase field crystal equations, **Engineering Analysis with Boundary Elements**, Volume 78, (2017) pages 49–64 .

9-**M. Dehghan, M. Abbaszadeh**, A local meshless method for solving multi–dimensional Vlasov–Poisson and Vlasov–Poisson–Fokker–Planck systems arising in plasma physics, **Engineering with Computers**, Volume 33 (2017) Pages 961–981 .

10-**M. Dehghan, V. Mohammadi**, A numerical scheme based on radial basis function finite difference (RBF–FD) technique for solving the high–dimensional nonlinear Schrodinger equations using an explicit time discretization: Runge–Kutta method, **Computer Physics Communications**, Volume 217 (2017) Pages 23–34 .

11-**M. Dehghan, M. Abbaszadeh**, Two meshless procedures: Moving kriging interpolation and element–free Galerkin for fractional PDEs, **Applicable Analysis**, Volume 96 (issue 6), (2017) pages 936–969 .

12-**P. Assari, M. Dehghan**, The numerical solution of two–dimensional logarithmic integral equations on normal domains using radial basis functions with polynomial precision, **Engineering with Computers**, Volume 33 (2017), Pages 853–870 .

13-**M. Dehghan, V. Mohammadi**, Error analysis of method of lines (MOL) via generalized interpolating moving least squares (GIMLS) approximation, **Journal of Computational and Applied Mathematics**, Volume 321, (2017) pages 540–554 .

14-**M. Kamranian, M. Dehghan, M. Tatari**, An adaptive meshless local Petrov–Galerkin method based on a posteriori error estimation for the boundary layer problems, **Applied Numerical Mathematics**, Volume 111 (2017), Pages 181–196 .

15-**M. Dehghan, M. Haghjoo-Saniji**, The local radial point interpolation meshless method for solving Maxwell equations, **Engineering with Computers**, Volume 33 (2017) Pages 897–918 .

16-**M. Dehghan, M. Dehghani-Madiseh, M. Hajarian**, A two-step iterative method based on diagonal and off–diagonal splitting for solving linear systems, **Filomat**, Volume 31 (Issue 5), (2017) pages 1441–1452 .

17-**M. Dehghan, M. Abbaszadeh**, Numerical investigation based on direct meshless local Petrov–Galerkin (Direct MLPG) method for solving generalized Zakharov system in one and two dimensions and generalized Gross–Pitaevskii equation, **Engineering with Computers**, Volume 33, (2017) Pages 983–996 .

18-**M. Ilati, M. Dehghan**, Application of direct meshless local Petrov–Galerkin (DMLPG) method for some Turing type models, **Engineering With Computers** Volume 33 (2017) Pages 107–124 .

19-**H. Moghaderi, M. Dehghan, M. Donatelli, M. Mazza,** Spectral analysis and multigrid preconditioners for two–dimensional space–fractional diffusion equations, **Journal of Computational physics**, Volume 350, (2017) Pages 992–1011 .

20-**P. Assari and M. Dehghan**, A meshless discrete collocation method for the numerical solution of singular–logarithmic boundary integral equations utilizing radial basis functions, **Applied Mathematics and Computation**, Volume 315,(2017) 424–444 .

21-**M. Moghaderi, M. Dehghan**, Mixed two–grid finite difference methods for solving one–dimensional and two–dimensional Fitzhugh–Nagumo equations, **Mathematical Methods in the Applied Sciences**, Volume 40 (2017) 1170–1200 .

22-**P. Assari, M. Dehghan**, A meshless method for the numerical solution of nonlinear weakly singular integral equations using radial basis functions, **Eur. Phys. J. Plus**, Volume 132, (2017) Pages 199–221 .

23-**M. Dehghan, R. Mohammadi–Arani**, Generalized product–type methods based on Bi–conjugate gradient(GPBiCG) for solving shifted linear systems, **Computational**

and **Applied Mathematics**(Springer journal), Volume 36 (Issue 4), (2017) 1591–1606 .

24-**M. Abbaszadeh, M. Dehghan**, An improved meshless method for solving two-dimensional distributed order time–fractional diffusion–wave equation with error estimate, **Numerical Algorithms**, Volume 75 (2017) pages 173–211 .

25-**P. Assari, M. Dehghan**, A meshless discrete Galerkin method based on the free shape parameter radial basis functions for solving Hammerstein integral equations, **U.P.B. Sci. Bull., Series A**, Volume 79(Issue 4), (2017) pages 83–92 .

26-**H. Minbashian, H. Adibi, M. Dehghan**, An adaptive wavelet space–time SUPG method for hyperbolic conservation laws, **Numerical methods for Partial Differential Equations**, Volume 33(Issue 6), (2017), Pages: 2062–2089 .

27-**H. Khosravian–Arab, M. Dehghan, M. R. Eslahchi**, Generalized Bessel functions: Theory and their applications, **Mathematical Methods in the Applied sciences**, volume 40(Issue 18), (2017) pages 6389–6410 .

28-**M. Kamranian, M. Dehghan, M. Tatari**, Study of the two–dimensional sine–Gordon equation arising in Josephson junctions using meshless finite point method, **International Journal of Numerical Modelling: Electronic Networks, Devices and Fields**, Volume 30(2017) Article number 2210.   (This article has 16 pages) .

29- **M. Dehghan, M. Abbaszadeh**, Element free Galerkin approach based on the reproducing kernel particle method for solving 2D fractional Tricomi–type equation with Robin boundary condition, **Computers and Mathematics with Applications**, Volume 73(Issue 6), (2017), Pages 1270–1285 .

30-**M. Dehghan, M. Abbaszadeh, W. Deng**, Fourth–order numerical method for the space–time tempered fractional diffusion–wave equation, **Applied Mathematics Letters**, Volume 73, (2017) pages 120–127 .

1-**M. Dehghan, M. Abbaszadeh**, Variational multiscale element free Galerkin (VMEFG) and local discontinuous Galerkin (LDG) methods for solving two–dimensional Brusselator reaction–diffusion system with and without cross–diffusion, **Computer Methods in Applied Mechanics and Engineering**, Volume 300, (2016) Pages 770–797 .

2-**M. Dehghan, M. Abbaszadeh**, Analysis of the element free Galerkin (EFG) method for solving fractional cable equation with Dirichlet boundary condition, **Applied Numerical Mathematics**, Volume 109 (2016), Pages 208–234 .

3-**M. Dehghan, M. Abbaszadeh, A. Mohebbi**, Analysis of two methods based on Galerkin weak form for fractional diffusion–wave: Meshless interpolating element free Galerkin (IEFG) and finite element methods, **Engineering Analysis with Boundary Elements**, Volume 64, (2016) Pages 205–221 .

4-**M. Dehghan, V. Mohammadi**, The numerical simulation of the phase field crystal (PFC) and modified phase field crystal (MPFC) models via global and local meshless methods, **Computer Methods in Applied Mechanics and Engineering**, Volume 298, (2016), Pages 453–484 .

5-**M. Dehghan, M. Abbaszadeh, A. Mohebbi**, The use of element free Galerkin method based on moving Kriging and radial point interpolation techniques for solving some types of Turing models, **Engineering Analysis with Boundary Elements**, Volume 62, (2016), Pages 93–111 .

6-**M. Dehghan, V. Mohammadi**, Two numerical meshless techniques based on radial basis functions (RBFs) and the method of generalized moving least squares (GMLS) for simulation of coupled Klein–Gordon–Schrodinger (KGS) equations, **Computers and Mathematics with Applications**, Volume 71 (2016) Pages 892–921 .

7- **M. Dehghan. M. Abbaszadeh, A. Mohebbi**, Analysis of a meshless method for the time fractional diffusion–wave equation, **Numerical Algorithms**, Volume 73 (2016) Pages 445–476 .

8-**M. Dehghan, M. Safarpoor**, The dual reciprocity boundary elements method for the linear and nonlinear two-dimensional time–fractional partial differential equations, **Mathematical Methods in the Applied Sciences**, Volume 39, (Issue 14), (2016) 3979–3995 .

9-**M. Dehghan, M. Shirzadi**, A meshless method based on the dual reciprocity method for one–dimensional stochastic partial differential equations, **Numerical Methods for Partial Differential Equations**, Volume 32 (2016) Pages 292–306 .

10-**M. Dehghani–Madiseh, M. Dehghan**, Parametric AE–solution sets to the parametric linear systems with multiple right–hand sides and parametric matrix equation $A(p)X = B(p)$, **Numerical Algorithms**, Volume 73(1), (2016) Pages 245–279 .

11-**M. Dehghan, M. Abbaszadeh, A. Mohebbi**, Legendre spectral element method

for solving time fractional modified anomalous sub–diffusion equation, **Applied Mathematical Modelling**, Volume 40(Issues 5,6) (2016) Pages 3635–3654 .

12-**H. Moghaderi, M. Dehghan, M. Hajarian**, A fast and efficient two–grid method for solving d–dimensional Poisson equations, **Numerical Algorithms**, Volume 72 (2016) Pages 483–537 .

13-**M. Dehghan, M. Safarpoor**, The dual reciprocity boundary integral equation technique to solve a class of the linear and nonlinear fractional partial differential equations, **Mathematical Methods in the Applied Sciences**, Volume 39 (Issue 10), (2016) Pages 2461–2476 .

14-**S. Kazem, E. Chadwick, A. Hatam, M. Dehghan**, Using generating functions to convert an implicit (3,3) finite difference method to an explicit form on diffusion equation with different boundary conditions, **Numerical Algorithms**, Volume 71 (4), (2016) Pages 827–854 .

15-**M. Dehghan, E.A. Hamedi, H. Khosravian–Arab**, A numerical scheme for the solution of a class of fractional variational and optimal control problems using the modified Jacobi polynomials, **Journal of Vibration and Control**, Volume 22 (6), (2016) Pages 1547–1559 .

16-**Z. Sabeh, M. Shamsi, M. Dehghan**, Distributed optimal control of the viscous Burgers equation via a Legendre pseudo–spectral approach, **Mathematical Methods in the Applied Sciences**, Volume 39, (2016) Pages 3350–3360 .

17-**M. Dehghan. M. Abbaszadeh**, Numerical study of three–dimensional Turing patterns using a meshless method based on moving Kriging element free Galerkin (EFG) approach, **Computers and Mathematics with Applications**, Volume 72(Issue 3), (2016) Pages 427–454 .

18-**M. Dehghan, M. Najafi**, Numerical solution of a non–classical two–phase Stefan problem via RBF collocation methods, **Engineering Analysis With Boundary Elements**, Volume 72 (2016) Pages 111–127 .

19-**M. Dehghan, M. Abbaszadeh**, Proper orthogonal decomposition variational multiscale element free Galerkin (POD-VMEFG) meshless method for solving incompressible Navier–Stokes equation, **Computer Methods in Applied Mechanics and Engineering**, Volume 311 (2016) Pages 856–888 .

20- **M. Ilati and M. Dehghan**, Remediation of contaminated groundwater by meshless local weak form, **Computers and Mathematics with Applications**, Volume 72 (2016) Pages 2408–2416 .

1-**M. Sabouri, M. Dehghan**, An efficient implicit spectral element method for time–dependent nonlinear diffusion equations by evaluating integrals at one quadrature point, **Computers and Mathematics with Applications**, Volume 70(Issue 10), (2015) Pages 2513–2541 .

2-**M. Dehghan, V. Mohammadi**, The method of variably scaled radial kernels for solving two-dimensional magnetohydrodynamic (MHD) equations using two discretizations: The Crank-Nicolson scheme and the method of lines (MOL)”, **Computers and Mathematics with Applications**, Volume 70(Issue 10), (2015) Pages 2292–2315 .

3-**M. Abbaszadeh, M. Dehghan**, A meshless numerical procedure for solving fractional reaction subdiffusion model via a new combination of alternating direction implicit (ADI) approach and interpolating element free Galerkin (EFG) method, **Computers and Mathematics with Applications**, Volume 70(Issue 10),(2015) Pages 2493–2512 .

4-**M. Dehghan, M. Safarpoor, M. Abbaszadeh**, Two high–order numerical algorithms for solving the multi–term time fractional diffusion–wave equations, **Journal of Computational and Applied Mathematics**, Volume 290, (2015) Pages 174–195.

5-**H. Khosravian–Arab, M. Dehghan, M.R. Eslahchi**, Fractional Sturmiouville boundary value problems in unbounded domains: Theory and applications, **Journal of Computational Physics**, Volume 299 (2015) Pages 526–560 .

6-**M. Dehghan, M. Shirzadi**, The modified dual reciprocity boundary elements method and its application for solving stochastic partial differential equations, **Engineering Analysis with Boundary Elements**, Volume 58, (2015), Pages 99–111 .

7-**M. Dehghan, M. Abbaszadeh, A. Mohebbi**, Error estimate for the numerical solution of fractional reaction–subdiffusion process based on a meshless method, **Journal of Computational and Applied Mathematics**, Volume 280, (2015) Pages 14–36 .

8-**M. Dehghan, M. Shirzad**, Numerical solution of stochastic elliptic partial differential equations using the meshless method of radial basis functions, **Engineering Analysis with Boundary Elements**, Volume 50, (2015) Pages 291–303 .

9-**M. Dehghan, V. Mohammadi**, The numerical solution of Cahn–Hilliard (CH) equation in one, two and three–dimensions via globally radial basis functions (GRBFs) and RBFs–differential quadrature (RBFs–DQ) methods, **Engineering Analysis with Boundary Elements**, Volume 51, (2015) Pages 74–100 .

10- **M. Dehghan, M. Abbaszadeh, A. Mohebbi**, An implicit RBF meshless approach for solving the time fractional nonlinear sine–Gordon and Klein–Gordon equations, **Engineering Analysis with Boundary Elements**, Volume 50, (2015) Pages 412–434 .

11-**M. Dehghan, M. Abbaszadeh, A. Mohebbi**, The numerical solution of the two–dimensional sinh–Gordon equation via three meshless methods, **Engineering Analysis with Boundary Elements**, Volume 51, (2015), Pages 220–235 .

12-**A. Taleei, M. Dehghan**, An efficient meshfree point collocation moving least squares method to solve the interface problems with nonhomogeneous jump conditions, **Numerical Methods for Partial Differential Equations**, Volume 31 (2015) pages 1031–1053 .

13-**K. Rashedi, H. Adibi, M. Dehghan**, Efficient numerical methods for boundary data and right–hand side reconstructions in elliptic partial differential equations, **Numerical Methods for Partial Differential Equations** , Volume 31 (2015), Pages 1995–2026 .

14-**H. Moghaderi, M. Dehghan**, A multigrid compact finite difference method for solving the one-dimensional nonlinear sine–Gordon equation, **Mathematical Methods in the Applied Sciences**, Volume 38, (2015) Pages 3901–3922 .

15-**R. Abedian, H. Adibi, M. Dehghan**, Symmetrical weighted essentially non–oscillatory (ENO)–flux limiter schemes for Hamilton–Jacobi equations, **Mathematical Methods in the Applied Sciences**, Volume 38 (2015), Pages 4710–4728 .

16-**M. Dehghan, M. Shirzadi**, Meshless simulation of stochastic advection–diffusion equations based on radial basis functions, **Engineering Analysis with Boundary Elements**, Volume 53 (2015) Pages 18–26 .

17-**M. Ilati, M. Dehghan**, The use of radial basis functions (RBFs) collocation and RBF–QR methods for solving the coupled nonlinear sine–Gordon equations, **Engineering Analysis with Boundary Elements**, Volume 52 (2015) Pages 99–109 .

18-**F. Fakhar–Izadi, M. Dehghan**, A spectral element method using the modal basis and its application in solving second–order nonlinear partial differential equations, **Mathematical Methods in the Applied Sciences**, Volume 38 ,(2015) Pages 478–504 .

19-**M. R. Eslahchi, M. Dehghan, S. Amani**, Chebyshev polynomials and best approximation of some classes of functions, **Journal of Numerical Mathematics**, Volume 23 (2015) Pages 41–50 .

20-**M. Parvizi, M. R. Eslahchi, M. Dehghan**, Numerical solution of fractional advection–diffusion equation with a nonlinear source term, **Numerical Algorithms**, Volume 68, (2015) Pages 601–629 .

21-**M. Dehghan, M. Shahini**, Rational pseudospectral approximation to the solution of a nonlinear integro–differential equation arising in modeling of the population growth, **Applied Mathematical Modelling**, Volume 39 (2015) Pages 5521–5530 .

22-**S. Abdi–Mazraeh, M. Lakestani, M. Dehghan**, The construction of operational matrices of integral and fractional integral using the flatlet oblique multiwavelets, **Journal of Vibration and Control**, Volume 21 (4), (2015) Pages 818–832 .

23-**M. Dehghan, M. Abbaszadeh, A. Mohebbi**, A meshless technique based on the local radial basis functions collocation method for solving parabolic–parabolic Patlak–Keller–Segel chemotaxis model, **Engineering Analysis with Boundary Elements**, Volume 56, (2015) Pages 129–144 .

24-**M. Dehghan, M. Abbaszadeh, A. Mohebbi**, The use of interpolating element free Galerkin technique for solving 2D generalized Benjamin–Bona–Mahony–Burgers and regularized long–wave equations on non–rectangular domains with error estimate, **Journal of Computational and Applied Mathematics**, Volume 286, (2015) Pages 211–231 .

25-**M. Ilati, M. Dehghan**, Meshless local weak form method based on a combined 3 basis function for numerical investigations of Brusselator model and spike dynamics in the Gierer–Meinhardt system, **Computer Modelling in Engineering and Sciences, CMES**, Volume 109–110(Issue 4) (2015) Pages 325–360 .

26-**M. Dehghan, M. Abbaszadeh, A. Mohebbi**, Meshless local Petrov–Galerkin and RBFs collocation methods for solving 2D fractional Klein–Kramers dynamics equation on irregular domains, **Computer Modelling in Engineering and Sciences, CMES**, Volume 107(Issue 4), (2015), Pages 481–516 .

1-**M. Dehghan, R. Salehi**, A meshless local Petrov–Galerkin method for the time–dependent Maxwell equations, **Journal of Computational and Applied Mathematics**, Volume 268 (2014) Pages 93–110 .

2-**P. Assari, H. Adibi, M. Dehghan**, The numerical solution of weakly singular integral equations based on the meshless product integration(MPI) method with error analysis, **Applied Numerical Mathematics**, Volume 81 (2014) Pages 76–93 .

3-**F. Fakhar–Izadi, M. Dehghan**, Space–time spectral method for a weakly singular parabolic partial integro–differential equation on irregular domains, **Computers and Mathematics with Applications**, Volume 67(10), (2014) Pages 1884–1904 .

4-**M. Kamranian, M. Dehghan, M. Tatari**, An image denoising approach based on a meshfree method and the domain decomposition technique, **Engineering Analysis with Boundary Elements**, Volume 39 (2014) Pages 101–110 .

5-**R. Abedian, H. Adibi, M. Dehghan**, A high–order symmetrical weighted hybrid ENO–flux limiter scheme for hyperbolic conservation laws, **Computer Physics Communications**, Volume 185(1), (2014) Pages 106–127 .

6-**M.R. Eslahchi, M. Dehghan, M. Parvizi**, Application of the collocation method for solving nonlinear fractional integro–differential equations, **Journal of Computational and Applied Mathematics**, Volume 257, (2014), Pages 105–128 .

7-**A. Mohebbi, M. Abbaszadeh, M. Dehghan**, Solution of two–dimensional modified anomalous fractional sub–diffusion equation via radial basis functions (RBF) meshless method, **Engineering Analysis with Boundary Elements**, Volume 38 (2014) Pages 72–82 .

8-**S. Sedaghat, Y. Ordokhani, M. Dehghan**, On spectral method for Volterra functional integro–differential equations of neutral type, **Numerical Functional Analysis and Optimization**, Volume 35(2), (2014) Pages 223–239 .

9- **P. Assari, H. Adibi, M. Dehghan**, A meshless method based on the moving least squares (MLS) approximation for the numerical solution of two–dimensional nonlinear integral equations of the second kind on non-rectangular domains, **Numerical Algorithms**, Volume 67 (2014) Pages 433–455 .

10-**H. Hosseinzadeh, M. Dehghan**, A new scheme based on boundary elements method to solve linear Helmholtz and semi–linear Poisson's equations, **Engineering Analysis with Boundary Elements**, Volume 43 (2014), Pages 124–135 .

11-**S. Irandoust–Pakchin, M. Dehghan, S. Abdi–Mazraeh, M. Lakestani** , Numerical solution for a class of fractional convection–diffusion equation using the flatlet oblique multiwavelets, **Journal of Vibration and Control**, Volume 20(6), (2014) Pages 913–924 .

12-**A. Kayedi–Bardeh, M. R. Eslahchi, M. Dehghan**, A method for obtaining the operational matrix of the fractional Jacobi functions and applications, **Journal of Vibration and Control**, Volume 20(Issue 5), (2014) Pages 736–748 .

13-**M. Dehghan, B. Nemati–Saray, M. Lakestani**, Mixed finite difference and Galerkin methods for solving Burgers equations using interpolating scaling functions, **Mathematical Methods in the Applied Sciences**, Volume 37(6), (2014) Pages 894–912 .

14-**M. Dehghan, M. Hajarian**, Solving the system of generalized Sylvester matrix equations over generalized centro–symmetric matrices, **Journal of Vibration and Control**, Volume 20(Issue 6), (2014) Pages 838–846 .

15-**R. Mohammadzadeh, M. Lakestani, M. Dehghan**, Collocation method for the numerical solutions of Lane–Emden type equations using cubic Hermite spline functions, **Mathematical Methods in the Applied Sciences**, Volume 37(9), (2014) Pages 1303–1317 .

16-**A. Taleei, M. Dehghan**, A pseudo-spectral method that uses an overlapping multidomain technique for the numerical solution of sine–Gordon equation in one and two spatial dimensions, **Mathematical Methods in Applied Sciences**, Volume (2014) Pages 1909–1923 .

17-**P. Assari, H. Adibi, M. Dehghan**, A meshless discrete Galerkin (MDG) method for the numerical solution of integral equations with logarithmic kernels, **Journal of Computational and Applied Mathematics**, Volume 267 (2014) Pages 160–181 .

18-**M. Dehghan, M. Hajarian**, Modified AOR iterative methods to solve linear systems **Journal of Vibration and Control**, Volume 20(5), (2014) Pages 661–669 .

18-**S. Abdi–Mazraeh, M. Lakestani, M. Dehghan**, The construction of operational matrices of integral and fractional integral using the flatlet oblique multiwavelets, **Journal of Vibration and Control**, Volume 20 (2014) Pages 913–924 .

19-**A. Mohebbi, M. Abbaszadeh, M. Dehghan**, The meshless method of radial basis functions for the numerical solution of time fractional telegraph equation, **International Journal of Numerical Methods for Heat and Fluid Flow**, Volume 24 (2014) Pages 1636–1659 .

20-**M. Dehghan, M. Hajarian**, Finite iterative methods for solving systems of linear matrix equations over reflexive and antireflexive matrices, **Bulletin of the Iranian Mathematical Society**, Volume 40(4), (2014) 295–323 .

21-**A. Mohebbi, M. Abbaszadeh, M. Dehghan**, High–order difference scheme for the solution of linear time fractional Klein–Gordon equations, **Numerical Methods for Partial Differential Equations**, Volume 30(4), (2014) Pages 1234–1253 .

22-**A. Taleei, M. Dehghan**, Direct meshless local Petrov–Galerkin method for elliptic interface problems with applications in electrostatic and elastostatic, **Computer Methods in Applied Mechanics and Engineering**, Volume 278 (2014) Pages 479–498 .

23-**M. Dehghan, V. Mohammadi**, The numerical solution of Fokker–Planck equation with radial basis functions (RBFs) based on the meshless technique of Kansa's approach and Galerkin method, **Engineering Analysis with Boundary Elements**, Volume 47 (2014) Pages 38–63 .

24-**H. Hosseinzadeh, M. Dehghan**, A simple and accurate scheme based on complex space $\mathcal{C}$ to calculate boundary integrals of 2D boundary elements method, **Computers and Mathematics with Applications**, Volume 68(4), (2014) Pages 531–542 .

25-**M. Dehghan, M. Abbaszadeh, A. Mohebbi**, The numerical solution of nonlinear high dimensional generalized Benjamin–Bona–Mahony–Burgers equation via the meshless method of radial basis functions, **Computers and Mathematics with Applications**, Volume 68(3), (2014) Pages 212–237.

26-**K. Rashedi, H. Adibi, M. Dehghan**, Determination of spaceime-dependent heat source in a parabolic inverse problem via the Ritz–Galerkin technique, **Inverse Problems in Science and Engineering**, Volume 22(7), (2014) Pages 1077–1108 .

27-**M. Dehghan, M. Abbaszadeh, A. Mohebbi**, Numerical solution of system of N-coupled nonlinear Schrodinger equations via two variants of the meshless local Petrov–Galerkin (MLPG) method, **Computer Modeling in Engineering and Sciences, CMES**, Volume 100(5), (2014) Pages 399–444 .

28-**A. Taleei, M. Dehghan**, Time–splitting pseudo–spectral domain decomposition method for the soliton solutions of the one– and multi–dimensional nonlinear Schrodinger equations, **Computer Physics Communications**, Volume 185 (6) (2014), Pages 1515–1528 .

29-**M. Dehghani–Madiseh, M. Dehghan**, Generalized solution sets of the interval generalized Sylvester matrix equation $\sum_{i=1}^{p} \mathbf{A}_i X_i + \sum_{j=1}^{q} Y_j \mathbf{B}_j = \mathbf{C}$ and some approaches for inner and outer estimations, **Computers and Mathematics with Applications**, Volume 68(12), (2014) Pages 1758–1774 .

1-**F. Shakeri, M. Dehghan**, A high order finite volume element method for solving elliptic partial integro–differential equations, **Applied Numerical Mathematics**, Volume 65 (2013) Pages 105–118 .

2-**H. Hosseinzadeh, M. Dehghan, D. Mirzaei**, The boundary elements method for magneto–hydrodynamic (MHD) channel flows at high Hartmann numbers, **Applied Mathematical Modeling**, Volume 37(4), (2013) Pages 2337–2351 .

3–**M. Dehghan, M. Sabouri**, A Legendre spectral element method on a large spatial domain to solve the predator-prey system modeling interacting populations, **Applied Mathematical Modelling**, Volume 37(3), (2013) Pages 1028–1038 .

4-**K. Parand, M. Dehghan, A. Pirkhedri**, The Sinc–collocation method for solving the Thomas–Fermi equation, **Journal of Computational and Applied Mathematics**, Volume 237 (2013) Pages 244–252 .

5-**F. Fakhar–Izadi, M. Dehghan**, An efficient pseudo–spectral Legendre–Galerkin method for solving a nonlinear partial integro–differential equation arising in population dynamics, **Mathematical Methods in the Applied Sciences**, Volume 36 (12), (2013) Pages 1485–1511 .

6-**P. Assari, H. Adibi, M. Dehghan**, A meshless method for solving nonlinear two-dimensional integral equations of the second kind on non-rectangular domains using radial basis functions with error analysis, **Journal of Computational and Applied Mathematics**, Volume 239 (2013) Pages 72–92 .

7-**K. Parand, M. Dehghan, F. Baharifard**, Solving a laminar boundary layer equation with the rational Gegenbauer functions, **Applied Mathematical Modelling**, Volume 37(3), (2013) Pages 851–863 .

8-**M. Dehghan, S. Aryanmehr, M. R. Eslahchi**, A technique for the numerical solution of initial-value problems based on a class of Birkhoff–type interpolation method, **Journal of Computational and Applied Mathematics**, Volume 244 (2013) Pages 125–139 .

9-**A. Mohebbi, M. Abbaszadeh, M. Dehghan**, A high–order and unconditionally stable scheme for the modified anomalous fractional sub–diffusion equation with a nonlinear source term, **Journal of Computational Physics**, Volume 240 (2013) Pages 36–48 .

10-**M. Lakestani, M. Dehghan**, Four techniques based on the B–spline expansion and the collocation approach for the numerical solution of the Lane–Emden equation, **Mathematical Methods in the Applied Sciences**, Volume 36(16), (2013) Pages 2243–2253 .

11-**P. Assari, H. Adibi, M. Dehghan**, A numerical method for solving linear integral equations of the second kind on the non–rectangular domains based on the meshless method, **Applied Mathematical Modelling**, Volume 37(22), (2013) Pages 9269–9294 .

12-**M. Dehghan, A. Nikpour**, Numerical solution of the system of second–order boundary value problems using the local radial basis functions based differential quadrature collocation method, **Applied Mathematical Modelling**, Volume 37 (18), (2013) Pages 8578–8599 .

13-**R. Abedian, H. Adibi, M. Dehghan**, A high–order weighted essentially non–oscillatory (WENO) finite difference scheme for nonlinear degenerate parabolic equations, **Computer Physics Communications**, Volume 184(8), (2013) Pages 1874–1888 .

14-**R. Salehi, M. Dehghan**, A moving least square reproducing polynomial meshless method, **Applied Numerical Mathematics**, Volume 69 (2013) Pages 34–58 .

15-**A. Mohebbi, M. Abbaszadeh, M. Dehghan**, Compact finite difference scheme and RBF meshless approach for solving 2D Rayleigh–Stokes problem for a heated generalized second grade fluid with fractional derivatives, **Computer Methods in Applied Mechanics and Engineering**, Volume 264 (2013) Pages 163–177 .

16-**M. Dehghan, A. Nikpour**, The solitary wave solution of coupled Klein–Gordon–Zakharov equations via two different numerical methods, **Computer Physics Communications**, Volume 184(9), (2013) Pages 2145–2158 .

17-**R. Salehi, M. Dehghan**, A generalized moving least square reproducing kernel method, **Journal of Computational and Applied Mathematics**, Volume 249 (2013) Pages 120–132 .

18-**K. Rashedi, H. Adibi, M. Dehghan**, Application of the Ritz–Galerkin method for recovering the spacewise–coefficients in the wave equation, **Computers and Mathematics with Applications**, Volume 65(12), (2013) Pages 1990–2008 .

19-**M. Dehghan, F. Emami–Naeini**, The Sinc–collocation and Sinc–Galerkin methods for solving the two–dimensional Schrodinger equation with nonhomogeneous boundary conditions, **Applied Mathematical Modelling**, Volume 37(22), (2013) Pages 9379–9397 .

20-**A. Lotfi, S. A. Yousefi, M. Dehghan**, Numerical solution of a class of fractional optimal control problems via the Legendre orthonormal basis combined with the operational matrix and the Gauss quadrature rule, **Journal of Computational and Applied Mathematics** Volume 250 (2013) Pages 143–160 .

21-**A. Mohebbi, M. Abbaszadeh, M. Dehghan**, The use of a meshless technique based on collocation and radial basis functions for solving the time fractional nonlinear Schrodinger equation arising in quantum mechanics, **Engineering Analysis with Boundary Elements**, Volume 37(22), (2013) Pages 475–485.

22–**S. Aryanmehr, M. Dehghan, M. R. Eslahchi**, The weighted $(0, 1, ..., m − 2, m)$–interpolation technique based on the roots of the classical orthogonal polynomials

and application in deriving new quadrature rules, **Acta Math. Hungar.**, Volume 140 (4), (2013) Pages 341–362 .

23-**S. Yeganeh, A. Saadatmandi, F. Soltanian, M. Dehghan**, The numerical solution of differential–algebraic equations by sinc-collocation method, **Computational and Applied Mathematics**, Volume 32(2), (2013) Pages 343–354 .

24-**Z. Sedaghatjoo, M. Dehghan, H. Hosseinzadeh**, The use of continuous boundary elements in the boundary elements method for domains with non–smooth boundaries via finite difference approach, **Computers and Mathematics with Applications**, Volume 65(7), (2013) Pages 983–995 .

25-**F. Soltanian, M. Dehghan, S.M. Karbassi**, A semi–analytical technique for the solution of differential–algebraic equations and applications in flow of an incompressible viscous fluid, **International Journal for Numerical Methods in Heat and Fluid Flow**, Volume. 23(5), (2013) Pages 818–843 .

26-**M. Dehghan, R. Salehi**, A meshfree weak-strong (MWS) form method for the unsteady magnetohydrodynamic (MHD) flow in pipe with arbitrary wall conductivity, **Computational Mechanics**, Volume 52(6), (2013) Pages 1445–1462 .

27- **D. Baleanu, A. Saadatmandi, A. Kadem, M. Dehghan**, The fractional linear systems of equations within an operational approach, **Journal of Computational and Nonlinear Dynamics**, Volume 8(2), (2013), 021011–1 .

28-**M. Dehghan, S. A. Yousefi, K. Rashedi** , Ritz–Galerkin method for solving an inverse heat conduction problem with a nonlinear source term via Bernstein multi–scaling functions and cubic B–spline function, **Inverse Problems in Science and Engineering**, Volume 21(3), (2013) Pages 500–523 .

29-**M. Hajarian, M. Dehghan**, The reflexive and Hermitian reflexive solutions of the generalized Sylvester–conjugate matrix equation, **The Bulletin of the Belgian Mathematical Society**, Volume 20(4), (2013), Pages 639–653 .

30-**M. Dehghan, M. Hajarian**, Construction of an iterative method for solving generalized coupled Sylvester matrix equations, **Transactions of the Institute of Measurement and Control**, Volume 35(8), (2013), Pages 961–970 .

31-**Sh. Esmaeili, M. Shamsi, M. Dehghan**, Numerical solution of fractional differential equations via a Volterra integral equation approach, **Central European Journal of Physics**, Volume 11(10), (2013) Pages 1470–1481.

32-**M. Dehghan, M. Dehghani–Madiseh, M. Hajarian**, A generalized preconditioned MHSS method for a class of complex symmetric linear systems, **Mathematical Modelling and Analysis**, Volume 18 (4), (2013) Pages 561–576 .

1-**M. Dehghan, H. Hosseinzadeh**, Calculation of 2D singular and near singular integrals of boundary elements method based on the complex space C, **Applied Mathematical Modeling**, Volume 36(2), (2012) Pages 545–560 .

2-**M. Lakestani, M. Dehghan, S. Irandoust–Pakchin**, The construction of operational matrix of fractional derivatives using B–spline functions, **Communications in Nonlinear Science and Numerical Simulation**, Volume 17(3), (2012) Pages 1149–1162 .

3-**M. Navabi, N. Nasiri, M. Dehghan**, Modeling and numerical simulation of linear and nonlinear of spacecraft attitude dynamics and gravity gradient moments: A comparative study, **Communications in Nonlinear Science and Numerical Simulation**, Volume 17(2), (2012) Pages 1065–1084 .

4- **M. Lakestani, M. Dehghan**, Numerical solutions of the generalized Kuramoto–Sivashinsky equation using B–spline functions, **Applied Mathematical Modelling**, Volume 36(2), (2012) Pages 605–617 .

5-**A. Saadatmandi, M. Dehghan**, The use of sinc–collocation method for solving multi-point boundary value problems, **Communications in Nonlinear Science and Numerical Simulation**, Volume 17(2), (2012) Pages 593–601 .

6-**M. Shamsi, M. Dehghan**, Determination of a control function in three–dimensional parabolic equations by Legendre pseudospectral method, **Numerical Methods for Partial Differential Equations**, Volume 28(1), (2012) Pages 74–93 .

7-**S. A. Yousefi, M. Behroozifar, M. Dehghan**, Numerical solution of the nonlinear age–structured population models by using the operational matrices of Bernstein polynomials, **Applied Mathematical Modelling**, Volume 36(3), (2012) Pages 945–963 .

8-**M. Dehghan, R. Salehi**, A meshless based numerical technique for traveling solitary wave solution of Boussinesq equation, **Applied Mathematical Modelling**, Volume 36(5), (2012), Pages 1939–1956 .

9-**M. Dehghan, A. Taleei**, Numerical solution of the Yukawa–coupled Klein–Gordon–Schrodinger equations via a Chebyshev pseudospectral multidomain method, **Applied Mathematical Modelling**, Volume 36(6), (2012) 2340–2349 .

10-**M. R. Eslahchi, M. Dehghan, S. Ahmadi–Asl**, The general Jacobi matrix method for solving some nonlinear ordinary differential equations, **Applied Mathematical Modelling**, Volume 36(8), (2012) Pages 3387–3398 .

11-**M. Dehghan, B. Nemati–Saray, M. Lakestani**, Three methods based on the interpolation scaling functions and the mixed collocation finite difference schemes for the numerical solution of the nonlinear generalized Burgers–Huxley equation, **Mathematical and Computer Modelling**, Volume 55(3), (2012) Pages 1129–1142 .

12-**B. Hashemi, M. Dehghan**, The interval Lyapunov matrix equation: Analytical results and an efficient numerical technique for outer estimation of the united solution set, **Mathematical and Computer Modelling**, Volume 55(3), (2012) Pages 622–633 .

13-**D. Mirzaei, R. Schaback, M. Dehghan**, On generalized moving least squares and diffuse derivatives, **IMA Journal of Numerical Analysis**, Volume 32, (2012) Pages 983–1000 .

14-**M. R. Eslahchi, M. Dehghan, S. Amani**, The third and fourth kinds Chebyshev polynomials and best uniform approximation, **Mathematical and Computer Modelling**, Volume 55(5), (2012) Pages 1746–1762 .

15-**M. Dehghan, H. Hosseinzadeh**, Obtaining the upper bound of discretization error and critical boundary integrals of circular arc boundary element method, **Mathematical and Computer Modelling**, Volume 55(3), (2012) pages 517–529 .

16-**M. Dehghan, R. Salehi**, The numerical solution of the non–linear integro–differential equations based on the meshless method, **Journal of Computational and Applied Mathematics**, Volume 236(9), (2012) pages 2367–2377 .

17-**D. Mirzaei, M. Dehghan**, New implementation of MLBIE method for heat conduction analysis in functionally graded materials, **Engineering Analysis with Boundary Elements**, Volume 36(4), (2012) pages 511–519 .

18-**R. Salehi, M. Dehghan**, The use of a Legendre pseudospectral viscosity technique to solve a class of nonlinear dynamic Hamilton–Jacobi equations, **Computers and Mathematics with Applications**, Volume 63(3), (2012) pages 629–644 .

19-**S. A. Yousefi, Z. Barikbin, M. Dehghan**, Ritz–Galerkin method with Bernstein polynomial basis for finding the product solution form of heat equation with non–classic boundary conditions, **International Journal for Numerical Methods in Heat and Fluid Flow**, Volume 22(1), (2012) pages 39–48 .

20-**M. Dehghan, J. Manafian**, Study of the wave–breaking's qualitative behavior of the Fornberg—Whitham equation via quasi–numeric approaches, **International Journal for Numerical Methods in Heat and Fluid Flow**, Volume 22(5), (2012) Pages 537–553 .

21-**M. Dehghan, J. Manafian, A. Saadatmandi**, Application of semi–analytical methods for solving the Rosenau–Hyman equation arising in the pattern formation in liquid drops, **International Journal for Numerical Methods in Heat and Fluid Flow**, Volume 23(6), (2012) Pages 777–790 .

22-**M. Dehghan, M. Hajarian**, Convergence of the descent Dai–Yuan conjugate gradient method for unconstrained optimization, **Journal of Vibration and Control**, Volume 18(9), (2012) Pages 1249–1253 .

23-**M. Dehghan, M. Hajarian**, Iterative algorithms for the generalized centro–symmetric and central anti–symmetric solutions of general coupled matrix equation, **Engineering Computations**, Volume 29(5), (2012) pages 528–560 .

24-**R. Mazrooei–Sebdani, M. Dehghan**, A generalized semiconjugacy in difference equations, **Acta Matematica Scientia**, Volume 32(3), (2012) Pages 978–988.

25- **K. Parand, M. Dehghan, A. Pirkhedri**, The use of sinc–collocation method for solving Falkner–Skan boundary-layer equation, **International Journal for Numerical Methods in Fluids**, Volume 68(1), (2012) Pages 36–47.

26-**A. Saadatmandi, M. Dehghan**, A method based on the tau approach for identification of a time–dependent coefficient in the heat equation subject to an extra measurement, **Journal of Vibration and Control**, Volume 18(8), (2012), Pages 1125–1132 .

27-**M. Tatari, M. Dehghan**, An efficient method for solving multi–point boundary value problems and applications in physics, **Journal of Vibration and Control**, 18(8), (2012), Pages 1116–1124 .

28-**M. Dehghan, M. Hajarian**, Fourth–order variants of Newton's method without second derivatives for solving non–linear equations, **Engineering Computations**, Volume 29(4), (2012) Pages 356–365 .

29-**M. Dehghan, M. Sabouri**, A spectral element method for solving the Pennes bioheat transfer equation by using triangular and quadrilateral elements, **Applied Mathematical Modelling**, Volume 36(12), (2012) Pages 6031–6049 .

30-**A. Saadatmandi, M. Dehghan, M. R. Azizi**, The Sinc-Legendre collocation method for a class of fractional convection-diffusion equation with variable coefficients, **Communications in Nonlinear Science and Numerical Simulation**, Volume 17(11), (2012) Pages 4125–4136 .

31-**M. Dehghan, M. Hajarian**, Solving coupled matrix equations over generalized bisymmetric matrices, **International Journal of Control, Automation and Systems**, Volume 10 (5), (2012) Pages 905–912 .

32-**M. Dehghan, M. Hajarian**, The generalized Sylvester matrix equations over the generalized bisymmetric and skew–symmetric matrices, **International Journal of Systems Science**, Volume 43(8), (2012) Pages 1580–1590 .

33-**S. Sedaghat, Y. Ordokhani, M. Dehghan**, Numerical solution of the delay differential equations of pantograph type via Chebyshev polynomials, **Communications in Nonlinear Science and Numerical Simulation** , Volume 17 (2012) Pages 4815–4830 .

34-**A. Shokri, M. Dehghan**, Meshless method using radial basis functions for the numerical solution of two—dimensional complex Ginzburg–Landau equation, **Computer Modeling in Engineering and Science, CMES**, Volume 84(4), (2012) Pages 333–358 .

35-**M. Dehghan, M. Hajarian**, On the generalized reflexive and anti–reflexive solutions to a system of matrix equations, **Linear Algebra and Applications**, Volume 437(11), (2012) Pages 2793–2812 .

36-**M. Dehghan, M. Hajarian**, Two iterative algorithms for solving coupled matrix equations over reflexive and anti-reflexive matrices, **Computational and Applied Mathematics**, Volume 31(2), (2012) Pages 353–371 .

37-**A. Mohebbi, Z. Asgari, M. Dehghan**, Numerical solution of nonlinear Jaulentiodek and Whithamroeraup equations, **Communications in Nonlinear Science and Numerical Simulation**, Volume 17, (2012) Pages 4602–4610 .

38-**M. Dehghan, R. Salehi**, A method based on meshless approach for the numerical solution of the two–space dimensional hyperbolic telegraph equation , **Mathematical Methods in the Applied Sciences**, Volume 35(10), (2012) Pages 1120–1233 .

1-**F. Shakeri, M. Dehghan**, A finite volume spectral element method for solving magnetohydrodynamic (MHD) equations, **Applied Numerical Mathematics**, Volume 61(1), (2011) Pages 1–23.

2- **M. Dehghan, H. Hosseinzadeh**, Development of circular arc boundary elements method, **Engineering Analysis with Boundary Elements**, Volume 35 (3), (2011) Pages 543–549.

3-**M. Dehghan, M. Hajarian**, Two algorithms for finding the Hermitian reflexive and skew–Hermitian solutions of Sylvester matrix equations, **Applied Mathematics Letters**, Volume 24(4), (2011) Pages 444–449.

4-**M. Dehghan, F. Fakhar–Izadi**, The spectral collocation method with three different bases for solving a nonlinear partial differential equation arising in modeling of nonlinear waves, **Mathematical and Computer Modelling**, Volume 53(9), (2011), Pages 1865–1877 .

5-**B. Hashemi, M. Dehghan**, Results concerning interval linear systems with multiple right–hand sides and the interval matrix equation $AX = B$, **Journal of Computational and Applied Mathematics**, Volume 235, (2011) Pages 2969–2978 .

6-**F. Shakeri, M. Dehghan**, A hybrid Legendre tau method for the solution of a class of nonlinear wave equations with nonlinear dissipative terms, **Numerical Methods for Partial Differential Equations**, Volume 27(5), (2011) Pages 1055–1071 .

7-**M. Dehghan, R. Salehi**, A boundary–only meshless method for numerical solution of the Eikonal equation, **Computational Mechanics**, Volume 47(3), (2011) Pages 283–294 .

8-**M. Dehghan, R. Salehi**, The use of variational iteration method and Adomian decomposition method to solve the Eikonal equation and its application in the reconstruction problem, **International Journal for Numerical Methods in Biomedical Engineering**, Volume 27(4), (2011) Pages 524–540 .

9-**M. Dehghan, S. A. Yousefi, A. Lotfi**, The use of He's variational iteration method for solving the telegraph and fractional telegraph equations, **International Journal for Numerical Methods in Biomedical Engineering**, Volume 27(4), (2011) Pages 219–231.

10-**M. Dehghan, F. Fakhar–Izadi**, Pseudospectral methods for Nagumo equation, **International Journal for Numerical Methods in Biomedical Engineering**, Volume 27, (2011) Pages 553–561.

11-**M. Dehghan, M. Hajarian**, On some cubic convergence iterative formulae without derivatives for solving nonlinear equations, **International Journal for Numerical Methods in Biomedical Engineering** , Volume 27 (2011), Pages 722–731, .

12-**M. Dehghan, M. Hajarian**, Improving preconditioned SOR–type iterative methods for L–matrices, **International Journal for Numerical Methods in Biomedical Engineering**, Volume 27 (2011) Pages 774–784.

13-**M. Dehghan, R. Jazlanian**, On the total variation of a third–order semi–discrete central scheme for 1D conservation laws, **Journal of Vibration and Control**, Volume 17(9), (2011) Pages 1348–1358.

14-**M. Dehghan, R. Salehi**, The use of homotopy analysis method to solve the time–dependent nonlinear Eikonal partial differential equation, **Z. Naturforsch., A**, Volume 66a(5), (2011) Pages 259–271.

15-**M. Tatari, M. Haghighi, M. Dehghan**, Adomian decomposition and variational iteration methods for solving a problem arising in modeling of biological species living together, **Z. Naturforsch., A**, Volume 66a(1), (2011) Pages 93–105.

16-**M. Dehghan, S. Pourghanbar**, Solution of the Black–Scholes equation for pricing of barrier option, **Z. Naturforsch., A**, Volume 66a(5), (2011) Pages 289—296 .

17-**M. Lakestani, M. Jokar, M. Dehghan**, Numerical solution of nth–order integro–differential equations using trigonometric wavelets, **Mathematical Methods in the Applied Sciences**, Volume 34(11), (2011), Pages 1317–1329 .

18-**M. Dehghan, M. Hajarian**, Convergence of an iterative method for solving Sylvester matrix equations over reflexive matrices, **Journal of Vibration and Control**, Volume 17(9), (2011) Pages 1295–1298.

19-**A. Saadatmandi, M. Dehghan** , A Legendre collocation method for fractional integro–differential equations, **Journal of Vibration and Control**, Volume 17(13), (2011) Pages 2050–2058.

20-**S. A. Yousefi, A. Lotfi, M. Dehghan**, The use of Legendre multiwavelet collocation method for solving the fractional optimal control problems, **Journal of Vibration and Control**, Volume 17(13), (2011) Pages 2059–2065.

21-**A. Alipanah, M. Dehghan**, A pseudospectral method for the solution of second–order integro–differential equations, **Journal of Vibration and Control**, Volume 17(14), (2011), Pages 2158–2163.

22-**M. Dehghan, M. Tatari, A. Azizi**, The solution of the Falkner–Skan equation arising in the modelling of boundary–layer problems via variational iteration method, **International Journal for Numerical Methods in Heat and Fluid Flow**, Volume 21(2), (2011) Pages 136–149 .

23-**M. Dehghan, F. Shakeri** A semi–numerical technique for solving the multi–point boundary value problems and engineering applications, **International Journal for Numerical Methods in Heat and Fluid Flow**, Volume 21 (7), (2011) Pages 794–809 .

24- **M. Dehghan, M. Hajarian**, On the generalized bisymmetric and skew–symmetric solutions of the system of generalized Sylvester matrix equations, **Linear and Multilinear Algebra**, Volume 59 (11), (2011) Pages 1281–1309.

25-**M. Dehghan, M. Hajarian**, The (R,S)–symmetric and (R,S)–skew symmetric solutions of the pair of matrix equations $A_1XB_1 = C_1$ and $A_2XB_2 = C_2$, **Bulletin of the Iranian Mathematical Society**, Volume 37(3), (2011), Pages 273–283 .

26- **M. Dehghan, M. Hajarian**, Solving the generalized Sylvester matrix equation $\sum_{i=1}^{p} = A_iXB_i + \sum_{j=1}^{q} C_jYD_j = E$ over reflexive and anti–reflexive matrices, **International Journal of Control, Automation and Systems**, Volume 9(1), (2011), Pages 118–124 .

27-**M. Hajarian, M. Dehghan**, The generalized centro–symmetric and least squares generalized centro–symmetric solutions of the matrix equation $AYB + CY^TD = E$, **Mathematical Methods in the Applied Sciences**, Volume 34(13), (2011) Pages 1562–1579 .

28-**M. Dehghan, M. Hajarian**, On derivative free cubic convergence iterative methods for solving nonlinear equations, **Computational Mathematics and Mathematical Physics**, Volume 51(4), (2011) Pages 513–519 .

29-**M. Dehghan, M. Hajarian**, Analysis of an iterative algorithm to solve the generalized coupled Sylvester matrix equations, **Applied Mathematical Modelling**, Volume 35(7), (2011) Pages 3285–3300 .

30-**F. Fakhar–Izadi, M. Dehghan**, The spectral methods for parabolic Volterra integro-differential equations, **Journal of Computational and Applied Mathematics**, Volume 235(14), (2011), Pages 4032–4046 .

31-**M. Lakestani, B. Nemati–Saray, M. Dehghan**, Numerical solution for the weakly singular Fredholm integro–differential equations using Legendre multiwavelets, **Journal of Computational and Applied Mathematics**, Volume 235(11), (2011), Pages 3291–3303 .

32-**M. Dehghan, R. Jazlanian**, A high–order non–oscillatory central scheme with non–staggered grids for hyperbolic conservation laws, **Computer Physics Communications**, Volume 182(6), (2011) Pages 1284–1294 .

33-**A. Lotfi, M. Dehghan, S.A. Yousefi**, A numerical technique for solving fractional optimal control problems, **Computers and Mathematics with Applications**, Volume 62(3), (2011) Pages 1055–1067 .

34-**M.R. Eslahchi, M. Dehghan**, Application of Taylor series in obtaining the orthogonal operational matrix, **Computers and Mathematics with Applications**, Volume 61(9), (2011) Pages 2596–2604 .

35-**L. Yang, M. Dehghan, J.-N. Yu, G.-W. Luo**, Inverse problem of time–dependent heat sources numerical reconstruction, **Mathematics and Computers in Simulation**, Volume 81(8), (2011) Pages 1656–1672 .

36-**M. Dehghan, M. Hajarian**, Two class of synchronous matrix multisplitting schemes for solving linear complementarity problems, **Journal of Computational and Applied Mathematics**, Volume 235(15), (2011) Pages 4325–4336 .

37-**S. A. Yousefi, M. Dehghan, A. Lotfi**, Generalized Euler–Lagrange equations for fractional variational problems with free boundary conditions, **Computers and Mathematics with Applications**, Volume 62(3), (2011) Pages 987–995 .

38-**M. Dehghan, J. Manafian, A. Saadatmandi**, Analytical treatment of some partial differential equations arising in mathematical physics by using the Exp–function method, **International Journal of Modern Physics, B**, 25(22), (2011) Pages 2965–2981.

39-**A. Saadatmandi, M. Dehghan**, A tau approach for solution of the space fractional diffusion equation, **Computers and Mathematics with Applications**, Volume 62(3), (2011) Pages 1135–1142 .

40-**D. Mirzaei, M. Dehghan**, MLPG method for transient heat conduction problem with MLS as trial approximation in both time and space domains, **Computer Modeling in Engineering and Sciences, CMES**, Volume 72(3), (2011) Pages 185–210 .

41-**S. A. Yousefi, M. Behroozifar, M. Dehghan**, The operational matrices of Bernstein polynomials for solving the parabolic equation subject to specification of mass, **Journal of Computational and Applied Mathematics**, Volume 235(17), (2011), Pages 5272–5283 .

42-**M. Tatari, M. Kamranian, M. Dehghan**, The finite point method for the p–Laplace equation, **Computational Mechanics**, Volume 48(6), (2011) Pages 689–697 .

43-**M. Dehghan, N. Rastegar**, Stability and periodic character of a third order difference equation, **Mathematical and Computer Modelling**, Volume 54(11), (2011) Pages 2560-2564 .

44-**M. Dehghan, R. Salehi**, The solitary wave solution of the two–dimensional regularized long–wave equation in fluids and plasmas, **Computer Physics Communications** Volume 182(12), (2011) Pages 2540–2549 .

45-**M. Dehghan, A. Taleei**, A Chebyshev pseudospectral multidomain method for the soliton solution of coupled nonlinear Schrodinger equations, **Computer Physics Communications**, Volume 182(12), (2011) Pages 2519–2529 .

46-**M. Dehghan, R. Mazrooei–Sebdani, H. Sedaghat**, Global behaviour of the Riccati difference equation of order two, **Journal of Difference Equations and Ap-**

plications, Volume 17(4), (2011) Pages 467–477 .

47-**F. Shakeri, M. Dehghan**, The finite volume spectral element method to solve Turing models in the biological pattern formation, **Computers and Mathematics with Applications**, Volume 62(12), (2011), Pages 4322–4336 .

48-**M. Dehghan, H. Hosseinzadeh**, Improvement of the accuracy in boundary element method based on high–order discretization, **Computers and Mathematics with Applications**, Volume 62(12), (2011) Pages 4461–4471 .

49-**M. Dehghan, M. Hajarian**, SSHI methods for solving general linear matrix equations, **Engineering Computations**, Volume 28(8), (2011) Pages 1028–1043 .

50-**M. Dehghan, J. Manafian, A. Saadatmandi**, Application of the Exp–function method for solving a partial differential equation arising in biology and population genetics, **International Journal for Numerical Methods in Heat and Fluid Flow**, Volume 21(6), (2011) Pages 736–753.

51-**M. Tatari, M. Kamranian, M. Dehghan**, The finite point method for reactioniffusion systems in developmental biology, **Computer Modeling in Engineering and Science**, **CMES**, Volume 82(1), (2011) Pages 1–27 .

1-**A. Saadatmandi, M. Dehghan**, Numerical solution of hyperbolic telegraph equation using the Chebyshev tau method, **Numerical Methods for Partial Differential Equations**, Volume 26(1), (2010) Pages 239–252.

2-**A. Shokri, M. Dehghan**, A Not–a–Knot meshless method using radial basis functions and predictor–corrector scheme to the numerical solution of improved Boussinesq equation, **Computer Physics Communications**, Volume 181(12), (2010) Pages 1990–2000.

3-**M. Dehghan, J. Manafian, A. Saadatmandi**, Solving nonlinear fractional partial differential equations using the homotopy analysis method, **Numerical Methods for Partial Differential Equations**, Volume 26(2), (2010), Pages 448–479.

4-**A. Shokri, M. Dehghan**, A meshless method the using radial basis functions for numerical solution of the regularized long wave equation, **Numerical Methods for Partial Differential Equations**, Volume 26(2), (2010) Pages 807–825.

5-**M. Dehghan, A. Taleei**, Numerical solution of nonlinear Schrodinger equation by using time–space pseudo–spectral method, **Numerical Methods for Partial Differential Equations**, Vol. 26(4), (2010) Pages 979–992.

6-**F. Soltanian, M. Dehghan, S. M. Karbassi**, Solution of the differential-algebraic equations via homotopy perturbation method and their engineering applications, **International Journal of Computer Mathematics**, Volume 87(9), (2010) Pages 1950–1974.

7-**M. Tatari, M. Dehghan**, A method for solving partial differential equations via radial basis functions: Application to the heat equation, **Engineering Analysis with Boundary Elements**, Volume 34(3), (2010) Pages 206–212.

8-**M. Dehghan, M. Hajarian**, New iterative method for solving non–linear equations with fourth-order convergence, **International Journal of Computer Mathematics**, Volume 87(4), (2010) Pages 834–839.

9-**S. A. Yousefi, Z. Barikbin, M. Dehghan**, Bernstein Ritz–Galerkin method for solving an initial–boundary value problem that combines Neumann and integral condition for the wave equation, **Numerical Methods for Partial Differential Equations**, Volume 26(5), (2010) Pages 1236–1246.

10-**S. A. Yousefi, M. Dehghan, A. Lotfi**, Finding the optimal control of linear systems via He's variational iteration method, **International Journal of Computer Mathematics**, Volume 87(4), (2010) Pages 1042–1050.

11- -**M. Dehghan, M. R. Eslahchi**, Best uniform polynomial approximation of some rational functions, **Computers and Mathematics with Applications**, Volume 59(1), (2010) Pages 382–390.

12-**K. Parand, M. Shahini, M. Dehghan**, Solution of a laminar boundary layer

flow via a numerical method, **Communications in Nonlinear Science and Numerical Simulation**, Volume 15(2), (2010) Pages 360–367.

13-**M. Dehghan, A. Ghesmati**, Numerical simulation of two–dimensional sine–Gordon solitons via a local weak meshless technique based on the radial point interpolation method (RPIM), **Computer Physics Communications**, Volume 181(4), (2010) Page 772–786.

14-**M. Dehghan, A. Ghesmati**, Application of the dual reciprocity boundary integral equation technique to solve the nonlinear Klein–Gordon equation, **Computer Physics Communications**, Volume 181(8), (2010) Pages 1410–1418.

15-**M. Lakestani, M. Dehghan**, Numerical solution of Riccati equation using the cubic B–spline scaling functions and Chebyshev cardinal functions, **Computer Physics Communications**, Volume 181(5), (2010) Pages 957–966.

16-**M. Lakestani, M. Dehghan**, Collocation and finite difference–collocation methods for the solution of nonlinear Klein–Gordon equation, **Computer Physics Communications**, Volume 181(8),(2010) Pages 1392–1401.

17-**M. Dehghan, R. Salehi**, Solution of a nonlinear time-delay model in biology via semi–analytical approaches, **Computer Physics Communications**, Volume 181(7), (2010) Pages 1255–1265.

18-**K. Parand, M. Dehghan, A. R. Rezaei, S. M. Ghaderi**, An approximation algorithm for the solution of the nonlinear Lane–Emden type equations arising in astrophysics using Hermite functions collocation method, **Computer Physics Communications**, Volume 181(6), (2010) Pages 1096–1108.

19-**M. Dehghan, A. Taleei**, A compact split–step finite difference method for solving the nonlinear Schrodinger equations with constant and variable coefficients, **Computer Physics Communications**, Volume 181(1), (2010) Pages 43–51.

20-**D. Mirzaei, M. Dehghan**, MLPG approximation to the p-Laplace problem, **Computational Mechanics**, Volume 46(6), (2010) Pages 805–812.

21-**A. Mohebbi, M. Dehghan**, High-order compact solution of the one-dimensional heat and advection–diffusion equations, **Applied Mathematical Modelling**, Volume 34(10), (2010) Pages 3071–3084.

22-**D. Mirzaei, M. Dehghan**, A meshless based method for solution of integral equations, **Applied Numerical Mathematics**, Volume 60(3), (2010) Pages 245–262.

23-**M. Lakestani, M. Dehghan**, The use of Chebyshev cardinal functions for the solution of a partial differential equation with an unknown time–dependent coefficient subject to an extra measurement, **Journal of Computational and Applied Mathematics**, Volume 235(3), (2010) Pages 669–678.

24-**M. Dehghan, M. Hajarian**, Some derivative free quadratic and cubic convergence iterative formulas for solving nonlinear equations, **Computational and Applied Mathematics**, Volume 29(1),(2010) Pages 19–30.

25-**M. Dehghan, M. Hajarian**, Matrix equations over (R, S)–symmetric and (R, S)–skew symmetric matrices, **Computers and Mathematics with Applications**, Volume 59 (11), (2010) Pages 3583–3594.

26-**A. Saadatmandi, M. Dehghan**, A new operational matrix for solving fractional–order differential equations, **Computers and Mathematics with Applications**, Volume 59(3), (2010) Pages 1326–1336.

27-**A. Saadatmandi, M. Dehghan** Numerical solution of the higher–order linear Fredholm integro–differential–difference equation with variable coefficients, **Computers and Mathematics with Applications**, Volume 59(8), (2010) Pages 2996–3004.

28-**M. Dehghan, F. Shakeri**, Solution of parabolic integro–differential equations arising in heat conduction in materials with memory via He's variational iteration technique, **International Journal for Numerical Methods in Biomedical Engineering**, Volume 26(6), (2010) Pages 705–715.

29-**M. Dehghan, R. Jazlanian**, A fourth–order central Runge–Kutta scheme for hyperbolic conservation laws, **Numerical Methods for Partial Differential Equations**, Volume 26 (2010) Pages 1675–1692.

30-**M. Dehghan, M. Hajarian**, The reflexive and anti–reflexive solutions of a linear matrix equation and systems of matrix equations, **Rocky Mountain Journal of Mathematics** , Volume 40(3), (2010), Pages 825–848.

31-**F. Shakeri, M. Dehghan**, Application of the decomposition method of Adomian for solving the pantograph equation of order m, **Z. Naturforsch., A**, Volume 65a(5), (2010) Pages 453–460.

32-**M. Tatari, M. Dehghan**, On the reconstruction of the first term in the variational iteration method for solving differential equations, **Z. Naturforsch.,A**, Volume 65a(3), (2010) Pages 203–208.

33-**M. Dehghan, M. Hajarian**, Asynchronous multisplitting GAOR method and asynchronous multisplitting SSOR method for systems of weakly nonlinear equations, **Mediterranean Journal of Mathematics**, Volume 7(2), (2010) Pages 209–223.

34-**M. Dehghan, A. Ghesmati**, Combination of meshless local weak and strong (MLWS) forms to solve the two dimensional hyperbolic telegraph equation, **Engineering Analysis with Boundary Elements**, Volume 34 (4), (2010) Pages 324–336.

35-**M. Dehghan, A. Ghesmati**, Solution of the second–order one–dimensional hy-

perbolic telegraph equation by using the dual reciprocity boundary integral equation (DRBIE) method, **Engineering Analysis with Boundary Elements**, Volume 34(1), (2010) Pages 51–59.

36-**B. Hashemi, M. Dehghan**, Efficient computation of enclosures for the exact solvents of a quadratic matrix equation, **Electronic Journal of Linear Algebra**, Volume 20 (2010) Pages 519–536.

37-**K. Parand, M. Dehghan, A. Taghavi**, Modified generalized Laguerre function Tau method for solving laminar viscous flow the Blasius equation, **International Journal of Numerical Methods for Heat and Fluid Flow**, Volume 20 (7), (2010) Pages 728–743.

38-**M. Dehghan, R. Salehi**, The Chebyshev spectral viscosity method for the time dependent Eikonal equation, **Mathematical and Computer Modelling**, Volume 52(1), (2010) Pages 70–86.

39-**A. Mohebbi, M. Dehghan**, High–order solution of one–dimensional sine–Gordon equation using compact finite difference and DIRKN methods, **Mathematical and Computer Modelling**, Volume 51(5), (2010) Pages 537–549.

40-**M. Dehghan, M. Hajarian**, Computing matrix functions using mixed interpolation methods, **Mathematical and Computer Modelling**, Volume 52 (5), (2010) Pages 826–836.

41-**M. Dehghan, M. Hajarian**, On the reflexive and anti–reflexive solutions of the generalized coupled Sylvester matrix equations, **International Journal of Systems Science**, Volume 41(6), (2010) Pages 607–625.

42-**M. Dehghan, M. Tatari**, Finding approximate solutions for a class of third–order non–linear boundary value problems via the decomposition method of Adomian, **International Journal of Computer Mathematics**, Volume 87(6), (2010) Pages 1256–1263.

43-**M. Lakestani, M. Dehghan**, Numerical solution of fourth–order integro–differential equations using Chebyshev cardinal functions, **International Journal of Computer Mathematics**, Volume 87(6), (2010) Pages 1389–1394.

44-**A. Saadatmandi, M. Dehghan**, Computation of two time–dependent coefficients in a parabolic partial differential equation subject to additional specifications, **International Journal of Computer Mathematics**, Volume 87(5), (2010) Pages 997–1008.

45-**R. Mazrooei–Sebdani, M. Dehghan**, Chaotic behavior and dynamics of maps in a method of scrambling signals, **International Journal of Bifurcation and Chaos**, Volume 20(12), (2010) Pages 4097–4101 .

46-**D. Mirzaei, M. Dehghan**, Meshless local Petrov–Galerkin (MLPG) approximation to the two dimensional sine–Gordon equation, **Journal of Computational and**

Applied Mathematics, Volume 233(10), (2010) Pages 2737–2754.

47-**A. Mohebbi, M. Dehghan**, High-order scheme for determination of a control parameter in an inverse problem from the over–specified data, **Computer Physics Communications**, Vol. 181(12), (2010), Pages 1947–1954.

48-**M. Dehghan, M. Hajarian**, An iterative method for solving the generalized coupled Sylvester matrix equations over generalized bisymmetric matrices, **Applied Mathematical Modelling**, Volume 34(3), (2010), Pages 639–654, .

49-**M. Dehghan, R. Salehi**, A seminumeric approach for solution of the eikonal partial differential equation and its applications, **Numerical Methods for Partial Differential Equations**, Volume 26(3), (2010) Pages 702–722.

50-**M. Dehghan, J. Manafian Herris, A. Saadatmandi**, Application of semi–analytic methods for the Fitzhugh–Nagumo equation which models the transmission of nerve impulses, **Mathematical Methods in the Applied Science**, Volume 33 (1), (2010) Pages 1384–1398.

51-**S. A. Yousefi, M. Dehghan**, The use of He's variational iteration method for solving variational problems, **International Journal of Computer Mathematics**, Volume 87(6), (2010) Pages 1299–1314.

52–**M. Dehghan, J. Manafian–Herris, A. Saadatmandi**, The solution of the linear fractional partial differential equations using the homotopy analysis method, **Z. Naturforsch., A**, Volume 65a(11), (2010) Pages 935–549.

53–**M. Dehghan, M. Hajarian**, An efficient algorithm for solving general coupled matrix equations and its application, **Mathematical and Computer Modelling**, Volume 51(9), (2010) Pages 1118–1134.

54-**M. Dehghan, M. Hajarian**, The general coupled matrix equations over generalized bisymmetric matrices, **Linear Algebra and its Applications**, Volume 432(6), (2010) Pages 1531–1552.

1-**K. Parand. M. Shahini, M. Dehghan**, Rational Legendre pseudospectral approach for solving nonlinear differential equations of Lane–Emden type, **Journal of Computational Physics**, Volume 228 (23), (2009) Pages 8830–8840.

2-**M. Dehghan, M. Hajarian**, A lower bound for the product of eigenvalues of solutions to matrix equations, **Applied Mathematics Letters**, Volume 22 (12), (2009) Pages 1786–1788.

3-**M. R. Eslahchi, M. Dehghan**, Quadrature rules using arbitrary fixed order of derivatives, **Computers and Mathematics with Applications**, Volume 57 (7), (2009) pages 1212–1225.

4-**M. Dehghan, A. Shokri**, Numerical solution of the nonlinear Klein–Gordon equation using radial basis functions, **Journal of Computational and Applied Mathematics**, Volume 230 (2), (2009) pages 400–410.

5- **M. Dehghan, M. Jaberi Douraki**, Global attractivity and convergence of a difference equation, **Dynamics of Continuous, Discrete and Impulsive Systems, Series A: Mathematical Analysis**, Volume 16 (2009) Pages 347–361.

6-**S. A. Yousefi, M. Dehghan**, Legendre multiscaling functions for solving the one–dimensional parabolic inverse problem, **Numerical Methods for Partial Differential Equations**, Volume 25(6), (2009) 1502–1510.

7-**M. Dehghan, A. Shokri**, A meshless method for numerical solution of a linear hyperbolic equation with variable coefficients in two space dimensions, **Numerical Methods for Partial Differential Equations** Volume 25(Issue 2), (2009) Pages 494–506.

8-**M. Dehghan, A. Mohebbi**, High order implicit collocation method for the solution of two–dimensional linear hyperbolic equation, **Numerical Methods for Partial Differential Equations**, Volume 25(1), (2009) Pages 232–243.

9-**M. Dehghan, M. Lakestani**, The use of Chebyshev cardinal functions for solution of the second–order one–dimensional telegraph equation, **Numerical Methods for Partial Differential Equations**, Volume 25 (4), (2009) pages 931–938.

10-**M. Lakestani, M. Dehghan**, Numerical solution of Fokker–Planck equation using the cubic B–spline scaling functions, **Numerical Methods for Partial Differential Equations**, Volume 25(2), (2009) Pages 418–429.

11-**M. Dehghan, F. Shakeri**, Method of lines solutions of the parabolic inverse problem with an overspecification at a point, **Numerical Algorithms**, Volume 50(4), (2009) pages 417–437.

12-**M. Dehghan, M. Hajarian**, On the reflexive solutions of the matrix equation $AXB + CYD = E$, **Bull. Korean Math. Soc.** Volume 46(Issue 3), (2009) Pages 511–519.

13-**M. Dehghan, M. Hajarian**, Convergence of SSOR methods for linear complementarity problems, **Operations Research Letters**, Volume 37 (3), (2009) Pages 219–223.

14-**M. Dehghan, M. Hajarian**, Determination of a matrix function using the divided difference method of Newton and the interpolation technique of Hermite, **Journal of Computational and Applied Mathematics**, Volume 231(1), (2009) Pages 67–81.

15-**A. Saadatmandi, M. Dehghan, A. Eftekhari**, Application of He's homotopy perturbation method for non-linear system of second–order boundary value problems, **Nonlinear Analysis: Real World Applications**, Volume 10(3), (2009) Pages 1912–1922.

16-**M. Dehghan, M. Hajarian**, Finite iterative algorithms for the reflexive and anti–reflexive solutions of the matrix equation $A_1X_1B_1 + A_2X_2B_2 = C$, **Mathematical and Computer Modelling**, Volume 49 (9), (2009) Pages 1937-1959.

17-**M. Dehghan, N. Rastegar**, On the global behavior of a high–order rational difference equation, **Computer Physics Communications**, Volume 180 (6), (2009) pages 873–878.

18-**M. Dehghan, M. Nourian, M. B. Menhaj**, Numerical solution of Helmholtz equation by the modified Hopfield finite difference techniques, **Numerical Methods for Partial Differential Equations**, Volume 25(3), (2009) Pages 637–656.

19-**D. Mirzaei, M. Dehghan,** Boundary element solution of the two-dimensional sine–Gordon equation using continuous linear elements, **Engineering Analysis with Boundary Elements**, Volume 33 (1), (2009) Pages 12–24.

20-**M. R. Eslahchi, M. Dehghan**, The best uniform polynomial approximation to class of the form $\frac{1}{(a^2 + or - x^2)}$, **Nonlinear Analysis: Theory, Methods and Applications**, Volume 71 (3), (2009) Pages 740–750.

21-**M. Dehghan, M. Ghatee, B. Hashemi**, Inverse of a fuzzy matrix of fuzzy numbers, **International Journal of Computer Mathematics**, Volume 86 (8), (2009) Pages 1433–1452.

22-**A. Mohebbi, M. Dehghan**, The use of compact boundary value method for the solution of two–dimensional Schrodinger equation, **Journal of Computational and Applied Mathematics**, Volume 225 (1), (2009) Pages 124–134.

23-**M. Dehghan, D. Mirzaei**, Meshless local Petrov–Galerkin (MLPG) method for the unsteady magnetohydrodynamic (MHD) flow through pipe with arbitrary wall conductivity, **Applied Numerical Mathematics**, Volume 59 (5), (2009) Pages 1043–1058.

24-**M. Dehghan, D. Mirzaei**, A numerical method based on the boundary integral

equation and dual reciprocity methods for one-dimensional Cahn–Hilliard equation, **Engineering Analysis with Boundary Elements**, Volume 33 (4), (2009) Pages 522–528.

25-**M. Tatari, M. Dehghan**, On the solution of the non-local parabolic partial differential equations via radial basis functions, **Applied Mathematical Modelling**, Volume 33 (3), (2009) Pages 1729–1738.

26-**M. Dehghan, M. Shakourifar, A. Hamidi**, The solution of linear and nonlinear systems of Volterra functional equations using Adomian–Pade technique, **Chaos, Solitons and Fractals**, Volume 39 (5), (2009) Pages 2509–2521.

27-**M. Dehghan, F. Shakeri**, The numerical solution of the second Painleve equation, **Numerical Methods for Partial Differential Equations**, Volume 25 (5), (2009) Pages 1238–1259 .

28- **M. Dehghan, M. Manafian**, The solution of the variable coefficients fourth-order parabolic partial differential equations by homotopy perturbation method, **Zeitschrift fur Naturforschung A**, Volume 64A(7), (2009) Pages 420–430.

29-**M. Dehghan, A. Saadatmandi**, Variational iteration method for solving the wave equation subject to an integral conservation condition, **Chaos, Solitons and Fractals**, Volume 41 (3), (2009) Pages 1448–1453.

30-**A. Saadatmandi, M. Dehghan**, Variational iteration method for solving a generalized pantograph equation, **Computers and Mathematics with Applications**, Volume 58 (11), (2009) Pages 2190–2196.

31-**S. A. Yousefi, A. Lotfi, M. Dehghan**, He's variational iteration method for the nonlinear mixed Volterra–Fredholm integral equations, **Computers and Mathematics with Applications**, Volume 58 (11), (2009) Pages 2172–2176.

32-**M. Tatari, M. Dehghan**, Improvement of the He's variational iteration method for solving system of differential equations, **Computers and Mathematics with Applications**, Volume 58 (11), (2009) Pages 2160–2166.

33-**M. Dehghan, M. Hajarian**, Efficient iterative method for solving the second–order Sylvester matrix equation $EVF^2 - AVF - CV = BW$, **IET Control Theory Appl.**, Volume 3(10), (2009) Pages 1401–1408 .

34-**M. Dehghan, A. Mohebbi, Z. Asgari**, Fourth–order compact solution of the nonlinear Klein-Gordon equation, **Numerical Algorithms**, Volume 52 (4), (2009) Pages 523–540.

35-**D. Mirzaei, M. Dehghan**, Implementation of meshless LBIE method to the 2D non–linear SG problem, **International Journal for Numerical Methods in Engineering**, Volume 79 (13), (2009) Pages 1662–1682 .

36-**A. Saadatmandi, M. Dehghan**, The He's variational iteration method for solving a partial differential equation arising in modeling of the water waves, **Zeitschrift fur Naturforschung A** , Volume 64a(12), (2009) Pages 783–787.

37-**W. Liao, M. Dehghan, A. Mohebbi**, Direct numerical method for an inverse problem of a parabolic partial differential equation, **Journal of Computational and Applied Mathematics**, Volume 232 (2), (2009) Pages 351–360.

38-**M. Dehghan, D. Mirzaei**, Meshless local boundary integral equation (LBIE) method for the unsteady magnetohydrodynamic (MHD) flow in rectangular and circular pipes, **Computer Physics Communications**, Volume 180 (9), (2009) Pages 1458–1466.

39-**K. Parand, M. Dehghan, A. Pirkhedri**, Sinc–collocation method for solving the Blasius equation, **Physics Letters A**, Volume 373(44), (2009) Pages 4060–4065.

40-**R. Saadati, M. Dehghan, S.M. Vaezpour, M. Saravi**, The convergence of He's variational iteration method for solving integral equations, **Computers and Mathematics with Applications**, Volume 58 (11), (2009) Pages 2167–2171 .

41-**M. Dehghan, A. Shokri**, A meshless method for numerical solution of the one–dimensional wave equation with an integral condition using radial basis functions, **Numerical Algorithms**, Volume 52(3), (2009), Pages 461–477 .

1-**F. Shakeri, M. Dehghan**, Solution of delay differential equations via a homotopy perturbation method, **Mathematical and Computer Modelling**, Volume 48 (3), (2008), Pages 486–498.

2-**M. Lakestani, M. Dehghan**, A new technique for solution of a parabolic inverse problem, **Kybernetes**, Volume 37(2), (2008) Pages 352–364.

3-**M. Masjed-Jamei, M. Dehghan, H.M. Srivastava**, A functional expansion for analytic functions and its subclasses, **Integral Transforms and Special Functions**, Volume 19 (12), (2008) Pages 913–922.

4-**M. Dehghan, F. Shakeri**, The use of the decomposition procedure of Adomian for solving a delay differential equation arising in electrodynamics, **Physica Scripta**, Volume 78 (6), (2008) Article No. 065004 Totally 11 Pages.

5-**M. Dehghan, C. Kent, R. Mazrooei-Sebdani, N. L. Ortiz, H. Sedaghat**, Monotone and oscillatory solutions of a rational difference equation containing quadratic terms, **Journal of Difference Equations and Applications** Volume 14(10), (2008) Pages 1045–1058.

6-**A. Saadatmandi, M. Dehghan**, A collocation method for solving Abel's integral equations of first and second kinds, **Z. Naturforsch.**, Volume 63a (10), (2008) Pages 752–756.

7-**M. Dehghan, F. Shakeri**, Solution of an integro–differential equation arising in oscillating magnetic fields using He's homotopy perturbation method, **Progress In Electromagnetics Research, PIER**, Volume 78, (2008) Pages 361–376.

8-**M. Dehghan, F. Shakeri**, Use of He's homotopy perturbation method for solving a partial differential equation arising in modeling of flow in porous media, **Journal of Porous Media**, Volume 11 (8), (2008) Pages 765–778.

9-**A. Mohebbi, M. Dehghan**, High order compact solution of the one–space–dimensional linear hyperbolic equation, **Numerical Methods for Partial Differential Equations**, Volume 24 (5), (2008), Pages 1222–1235.

10-**M. Dehghan, A. Mohebbi**, The combination of collocation, finite difference, and multigrid methods for solution of the two–dimensional wave equation, **Numerical Methods for Partial Differential Equations**, Volume 24 (3), (2008), Pages 897–910.

11-**F. Shakeri, M. Dehghan**, Numerical solution of the Klein–Gordon equation via He's variational iteration method, **Nonlinear Dynamics**, Volume 51 (1) (2008), Pages 89–97 .

9-**M. Shakourifar, M. Dehghan**, On the numerical solution of nonlinear systems of Volterra integro–differential equations with delay arguments, **Computing**, Volume 82(4), (2008) Pages 241–260 .

10-**M. Dehghan, M. Ghatee, B. Hashemi**, Some computations of fuzzy matrices: An application in fuzzy analytical hierarchy process, **International Journal of Uncertainty, Fuzziness and Knowledge–Based Systems**, Volume 16, (2008) Pages 715–733.

11-**M. Dehghan, M. Lakestani**, Numerical solution of nonlinear system of second–order boundary value problems using cubic B–spline scaling functions, **International Journal of Computer Mathematics**, Volume 85(9), (2008) Pages 1455–1461.

12-**M. Dehghan, D. Mirzaei**, The boundary integral equation approach for numerical solution of the one–dimensional Sine–Gordon equation, **Numerical Methods for Partial Differential Equations**, Volume 24 (6), (2008), Pages 1405–1415.

13-**M. Dehghan, A. Mohebbi**, Solution of the two dimensional second biharmonic equation with high–order accuracy, **Kybernetes**, Volume 37(8), (2008) Pages 1165–1179.

14-**M. Dehghan, D. Mirzaei**, Numerical solution to the unsteady two–dimensional Schrodinger equation using meshless local boundary integral equation method, **International Journal for Numerical Methods in Engineering**, Volume 76(Issue 4), (2008) Pages 501–520.

15- **M. Dehghan, A. Shokri**, A numerical method for solution of the two–dimensional sine–Gordon equation using the radial basis functions, **Mathematics and Computers in Simulation**, Volume 79 (3), (2008), Pages 700–715.

16-**R. Mazrooei–Sebdani, M. Dehghan**, A non–trivial relation between some many–dimensional chaotic discrete dynamical systems and some one–dimensional chaotic discrete dynamical systems, **Computer Physics Communications**, Volume 179 (9), (2008) Pages 628–633.

17-**F. Shakeri, M. Dehghan**, The method of lines for solution of the one–dimensional wave equation subject to an integral conservation condition, **Computers and Mathematics with Applications**, Volume 56 (9), (2008) Pages 2175–2188.

18-**M. Dehghan, M. Hajarian**, An iterative algorithm for the reflexive solutions of the generalized coupled Sylvester matrix equations and its optimal approximation, **Applied Mathematics and Computation**, Volume 202(Issue 2), (2008) Pages 571–588.

19- **M. Jaberi–Douraki, M. Dehghan J. Mashreghi**, Dynamics of the difference equation $x_{n+1} = \frac{x_n + p x_{n-k}}{x_{n+q}}$, **Computers and Mathematics with Applications**, Volume 56 (1), (2008) Pages 186–198.

20-**M. Dehghan, A. Shokri**, A numerical method for solving the hyperbolic telegraph equation, **Numerical Methods for Partial Differential Equations**, Volume 24 (4), (2008), Pages 1080–1093.

21-**M. Dehghan, R. Mazrooei-Sebdani**, Some characteristics of solutions of a class of rational difference equations, **Kybernetes**, Volume 37(Issue 6), (2008) Pages 786–796.

22-**M. Dehghan, A. Shokri**, A numerical method for one–dimensional nonlinear Sine–Gordon equation using collocation and radial basis functions, **Numerical Methods for Partial Differential Equations**, Volume 24(Issue 2), (2008), Pages 687–698.

23-**M. Ghatee, S. M. Hashemi, B. Hashemi, M. Dehghan**, The solution and duality of imprecise network problems, **Computers and Mathematics with Applications**, Volume 55(12), (2008) Pages 2767–2790.

24-**A. Saadatmandi, M. Dehghan**, The numerical solution of problems in calculus of variation using Chebyshev finite difference method, **Physics Letters A**, Volume 372(22), (2008) Pages 4037–4040.

25-**M. Aghigh, M. Masjed–Jamei, M. Dehghan**, A survey on third and fourth kind of Chebyshev polynomials and their applications, **Applied Mathematics and Computation**, Volume 199(1), (2008), Pages 2–12.

26-**M. Dehghan, F. Shakeri**, Application of He's variational iteration method for solving the Cauchy reaction–diffusion problem, **Journal of Computational and Applied Mathematics**, Volume 214 (2), (2008) Pages 435–446.

27-**M. Masjed–Jamei, M. Dehghan**, A generalization of Fourier trigonometric series, **Computers and Mathematics with Applications**, Volume 56 (11), (2008), Pages 2941–2947.

28-**M. Dehghan, M. Hajarian**, An iterative algorithm for solving a pair of matrix equations $AYB = E, CYD = F$ over generalized centro–symmetric matrices, **Computers and Mathematics with Applications**, Volume 56 (12), (2008), Pages 3246–3260.

29-**M. Dehghan, A. Mohebbi**, High–order compact boundary value method for the solution of unsteady convection–diffusion problems, **Mathematics and Computers in Simulation**, Volume 79(3), (2008) Pages 683–699.

30- **M. Ramezani, M. Dehghan, M. Razzaghi** , Combined finite difference and spectral methods for the numerical solution of hyperbolic equation with an integral condition, **Numerical Methods for Partial Differential Equations**, Volume 24 (1), (2008) Pages 1–8.

31-**M. Dehghan, A. Saadatmandi**, Chebyshev finite difference method for Fredholm integro–differential equation, **International Journal of Computer Mathematics**, Volume 85 (1), (2008) Pages 123–130.

32-**M. Dehghan, C. M. Kent, R. Mazrooei-Sebdani, N. L. Ortiz, H. Sedaghat**, Dynamics of rational difference equations containing quadratic terms, **Journal of Difference Equations and Applications**, Volume 14(2), (2008), Pages 191–208.

33-**M. Dehghan, M. Tatari**, Identifying an unknown function in a parabolic equation with overspecified data via He's variational iteration method, **Chaos, Solitons and Fractals**, Volume 36 (1), (2008) Pages 157–166.

34-**M. Dehghan, M. Jaberi Douraki, M. Razzaghi**, Global behavior of the difference equation $x_{n+1} = \frac{x_{n-l+1}}{1+a_0 x_n + a_1 x_{n-1} + ... + a_1 x_{n-l} + x_{n-l+1}}$, **Chaos, Solitons and Fractals**, Volume 35(3), (2008) Pages 543–549.

35- **M. Dehghan, D. Mirzaei**, The dual reciprocity boundary element method (DRBEM) for two–dimensional sine–Gordon equation, **Computer Methods in Applied Mechanics and Engineering**, Volume 197(6), (2008), Pages 476–486.

36- **M. Dehghan, F. Shakeri**, Approximate solution of a differential equation arising in astrophysics using the variational iteration method, **New Astronomy**, Volume 13(1), (2008) Pages 53–59.

37-**T. Tajvidi, M. Razzaghi, M. Dehghan**, Modified rational Legendre approach to laminar viscous flow over a semi–infinite flat plate, **Chaos, Solitons and Fractals**, Volume 35(1), (2008), Pages 59–66.

38-**M. Dehghan, D. Mirzaei**, The meshless local Petrov–Galerkin (MLPG) method for the generalized two–dimensional non–linear Schrodinger equation, **Engineering Analysis with Boundary Elements**, Volume 32(9), (2008) Pages 747–756.

39-**F. Shakeri, M. Dehghan**, Solution of a model describing biological species living together using the variational iteration method, **Mathematical and Computer Modelling**, Volume 48(5), (2008) Pages 685–699.

40-**, M. R. Navabi, M. Shamsi, M. Dehghan**, Numerical solution of the controlled Rayleigh nonlinear oscillator by the direct spectral method, **Journal of Vibration and Control**, Volume 14(Issue 6), (2008) Pages 795–806.

41-**M. Dehghan, M. Ramezani**, Composite spectral method for solution of the diffusion equation with specification of energy, **Numerical Methods for Partial Differential Equations**, Volume 24(3), (2008), Pages 950–959.

42-**A. Alipanah, M. Dehghan**, Solution of population balance equations via rationalized Haar functions, **Kybernetes**, Volume 37(8), (2008) Pages 1189–1196.

43-**H. Jafari, M. Dehghan, K. Sayevand**, Solving a fourth-order fractional diffusion–wave equation in a bounded domain by decomposition method, **Numerical Methods for Partial Differential Equations**, Volume 24(4), (2008), pages 1115–1126.

44-**M. Dehghan, M. Tatari**, Use of radial basis functions for solving the second–order parabolic equation with nonlocal boundary conditions, **Numerical Methods for Partial Differential Equations** , Volume 24(Issue 3), (2008) Pages 924–938 .

45-**M. Tatari, M. Dehghan, M. Razzaghi**, Numerical solution of the one–dimensional heat equation on the bounded intervals using fundamental solutions, **Numerical Methods for Partial Differential Equations**, Volume 24(Issue 3), (2008) Pages 911–923 .

46-**A. Saadatmandi, M. Dehghan**, Numerical solution of a mathematical model for capillary formation in tumor angiogenesis via the tau method, **Communications in Numerical Methods in Engineering**, Volume 24(Issue 11), (2008) Pages 1467–1474 .

1-**M. Dehghan, A. Shokri**, A numerical method for KdV equation using collocation and radial basis functions, **Nonlinear Dynamics**, Volume 50(1), (2007) Pages 111–120.

2-**M. Dehghan, R. Mazrooei-Sebdani**, On a recursive sequence, **Kybernetes**, Volume 36 (1), (2007) Pages 98–115.

3- **M. Dehghan, M. Tatari**, The radial basis functions method for identifying an unknown parameter in a parabolic equation with overspecified data, **Numerical Methods for Partial Differential Equations**, Volume 23 (5), (2007) Pages 984–997.

4- **M. Dehghan, A. Saadatmandi**, The numerical solution of a nonlinear system of second–order boundary value problems using the sinc–collocation method, **Mathematical and Computer Modelling**, Volume 46 (11), (2007) Pages 1434–1441.

5- **M. Dehghan, M. Lakestani**, The use of cubic B–spline scaling functions for solving the one–dimensional hyperbolic equation with a nonlocal conservation condition, **Numerical Methods for Partial Differential Equations**, Volume 23 (6), (2007), Pages 1277–1289.

6-**M. Dehghan, M. Nasri, M. R. Razvan**, Global stability of a deterministic model for HIV infection in vivo **Chaos, Solitons and Fractals**, Volume 34 (4), (2007) Pages 1225–1238.

7-**M. Dehghan, B. Hashemi, M. Ghatee**, Solution of the fully fuzzy linear systems using iterative techniques, **Chaos, Solitons and Fractals**, Volume 34 (2), (2007), Pages 316–336.

8-**F. Shakeri, M. Dehghan**, Numerical solution of a biological population model using He's variational iteration method, **Computers and Mathematics with Applications**, Volume 54 (7), (2007), Pages 1197–1209.

9- **M. Dehghan, M. Tatari**, Solution of a semilinear parabolic equation with an unknown control function using the decomposition procedure of Adomian, **Numerical Methods for Partial Differential Equations**, Volume 23 (3), (2007), Pages 499–510.

10- **A. Saadatmandi, M. Dehghan**, Numerical solution of the one-dimensional wave equation with an integral condition, **Numerical Methods for Partial Differential Equations**, Volume 23 (2), (2007) Pages 282–292.

11-**M. Shamsi, M. Dehghan**, Recovering a time–dependent coefficient in a parabolic equation from overspecified boundary data using the pseudospectral Legendre method, **Numerical Methods for Partial Differential Equations**, Volume 23 (1), (2007) Pages 196-210.

12-**M. Tatari, M. Dehghan**, On the convergence of He's variational iteration method, **Journal of Computational and Applied Mathematics**, Volume 207 (1), (2007) Pages 121–128.

13-**M. Dehghan, B. Hashemi**, Determination of the degrees of P–property and nonnegative invertibility for a fuzzy matrix, **International Journal of Approximate Reasoning**, Volume 46 (1), (2007) Pages 98–108.

14-**A. H. A.E. Tabatabaei, E. Shakour, M. Dehghan**, Some implicit methods for the numerical solution of Burgers' equation, **Applied Mathematics and Computation**, Volume 191 (2), (2007) Pages 560–570.

15-**M. Dehghan, F. Shakeri**, Solution of a partial differential equation subject to temperature overspecification by He's homotopy perturbation method, **Physica Scripta**, Volume 75 (6), (2007), Pages 778–787.

16-**A. Alipanah, M. Dehghan**, Numerical solution of the nonlinear Fredholm integral equations by positive definite functions, **Applied Mathematics and Computation**, Volume 190 (2), (2007) Pages 1754–1761.

17- **M. Tatari, M. Dehghan**, He's variational iteration method for computing a control parameter in a semi-linear inverse parabolic equation, **Chaos, Solitons and Fractals**, Volume 33 (2), (2007), Pages 671–677.

18- **M. Dehghan, A. Shokri**, A numerical method for two-dimensional Schrodinger equation using collocation and radial basis functions, **Computers and Mathematics with Applications**, Volume 54 (1), (2007) Pages 136–146.

19-**M. Dehghan, A. Hamidi, M. Shakourifar**, The solution of coupled Burgers' equations using Adomian–Pade technique, **Applied Mathematics and Computation**, Volume 189 (2), (2007) Pages 1034–1047.

20- **M. Movahhedi, A. Abdipour, A. Nentchev, M. Dehghan, S. Selberherr**, Alternating–direction implicit formulation of the finite–element time–domain method, **IEEE Transactions on Microwave Theory and Techniques** Volume 55 (6), (2007) Pages 1322–1331.

21-**A. Alipanah, M. Razzaghi, M. Dehghan**, Nonclassical pseudospectral method for the solution of brachistochrone problem, **Chaos, Solitons and Fractals**, Volume 34 (5), (2007) Pages 1622–1628.

22-**M. Tatari, M. Dehghan**, Identifying a control function in parabolic partial differential equations from overspecified boundary data, **Computers and Mathematics with Applications**, Volume 53 (12), (2007), Pages 1933–1942.

23-**S. M. Molavi–Arabshahi, M. Dehghan**, Preconditioned techniques for solving large sparse linear systems arising from the discretization of the elliptic partial differential equations, **Applied Mathematics and Computation**, Volume 188 (2), (2007) Pages 1371–1388.

24-**M. Dehghan, R. Mazrooei–Sebdani**, Some results about the global attractivity of bounded solutions of difference equations with applications to periodic solutions, **Chaos, Solitons and Fractals**, Volume 32 (4), (2007) Pages 1398–1412.

25-**M. Masjed–Jamei, M. Dehghan**, A probabilistic model for quadrature rules, **Applied Mathematics and Computation**, Volume 187 (2), (2007) Pages 1520–1526.

26-**M. Dehghan**, The one–dimensional heat equation subject to a boundary integral specification, **Chaos, Solitons and Fractals**, Volume 32 (2), (2007) Pages 661–675.

27-**M. Tatari, M. Dehghan**, Solution of problems in calculus of variations via He's variational iteration method, **Physics Letters A**, Volume 362 (5), (2007) Pages 401–406.

28-**M. Tatari, M. Dehghan, M. Razzaghi**, Application of the Adomian decomposition method for the Fokker–Planck equation, **Mathematical and Computer Modelling**, Volume 45 (5), (2007) Pages 639–650.

29-**M. Dehghan, R. Mazrooei–Sebdani**, Dynamics of $x_{n+1} = \frac{x_{n-2k+1}}{x_{n-2k+1}+\alpha x_{n-2l}}$, **Applied Mathematics and Computation**, Volume 185 (1), (2007) Pages 464–472.

30- **M. Ramezani, M. Razzaghi, M. Dehghan**, Composite spectral functions for solving Volterra's population model, **Chaos, Solitons and Fractals**, Volume 34 (2), (2007) Pages 588–593.

31-**M. Dehghan, S. M. Molavi–Arabshahi** Comparison of preconditioning techniques for solving linear systems arising from the fourth order approximation of the three–dimensional elliptic equation, **Applied Mathematics and Computation**, Volume 184 (2), (2007) Pages 156–172.

32-**M. Dehghan, S. M. Molavi–Arabshahi**, A simple form for the fourth–order difference method for 3-D elliptic equations, **Applied Mathematics and Computation**, Volume 184 (2), (2007) Pages 589–598.

33-**M. Dehghan**, Time–splitting procedures for the solution of the two–dimensional transport equation, **Kybernetes**, Volume 36 (5), (2007), Pages 791–805.

34-**F. Shakeri, M. Dehghan**, Inverse problem of diffusion equation by He's homotopy perturbation method, **Physica Scripta** Volume 75 (4), (2007), Pages 551–556.

1-**M. Jaberi Douraki, M. Dehghan, M. Razzaghi**, Oscillation and asymptotic behavior of a class of higher order nonlinear recursive sequences, **Applied Mathematics and Computation**, Volume 179 (1), (2006) Pages 175–189.

2-**M. Dehghan, M. Tatari**, Determination of a control parameter in a one-dimensional parabolic equation using the method of radial basis functions, **Mathematical and Computer Modelling**, Volume 44 (11), (2006) Pages 1160–1168.

3-**M. Dehghan, M. Shamsi**, Numerical solution of two-dimensional parabolic equation subject to nonstandard boundary specifications using the pseudospectral Legendre method, **Numerical Methods for Partial Differential Equations**, Volume 22 (6), (2006) Pages 1255–1266.

4- **A. Saadatmandi, M. Dehghan, A. Campo**, The Legendre–tau technique for the determination of a source parameter in a semilinear parabolic equation, **Mathematical Problems in Engineering** Volume 2006 (2006), Pages 1–11.

5-**M. Dehghan, B. Hashemi**, Solution of the fully fuzzy linear systems using the decomposition procedure, **Applied Mathematics and Computation**, Volume 182 (2), (2006) Pages 1568–1580.

6-**M. Dehghan**, A computational study of the one–dimensional parabolic equation subject to nonclassical boundary specifications, **Numerical Methods for Partial Differential Equations**, Volume 22 (1), (2006) Pages 220–257 .

7-**M. Dehghan, R. Mazrooei–Sebdani**, The characteristics of a higher–order rational difference equation, **Applied Mathematics and Computation**, Volume 182 (1), (2006) Pages 521–528.

8-**R. Mazrooei–Sebdani, M. Dehghan**, Global stability of $y_{n+1} = \frac{q+qy_n+ry_{n-k}}{1+y_n}$, **Applied Mathematics and Computation**, Volume 182 (1), (2006) Pages 621–630.

9-**M. Dehghan, A. Mohebbi**, Multigrid solution of high order discretisation for three–dimensional biharmonic equation with Dirichlet boundary conditions of second kind, **Applied Mathematics and Computation**, Volume 180 (2), (2006) Pages 575–593.

10- **M. Tatari, M. Dehghan, M. Razzaghi**, Determination of a time-dependent parameter in a one–dimensional quasi–linear parabolic equation with temperature over-specification, **International Journal of Computer Mathematics**, Volume 83 (12), (2006) Pages 905-3.

11-**M. Dehghan** Solution of a partial integro–differential equation arising from viscoelasticity, **International Journal of Computer Mathematics**, Volume 83 (1), (2006) Pages 123–129.

12-**M. Lakestani, M. Dehghan**, The solution of a second-order nonlinear differential equation with Neumann boundary conditions using semi–orthogonal B–spline wavelets,

International Journal of Computer Mathematics, Volume 83 (8), (2006) Pages 685–694.

13- **D. M. Chan, E. R. Chang, M. Dehghan, C. M. Kent, R. Mazrooei–Sebdani, H. Sedaghat**, Asymptotic stability for difference equations with decreasing arguments, **Journal of Difference Equations and Applications**, Volume 12 (2), (2006) Pages 109–123.

14- **R. Mazrooei–Sebdani, M. Dehghan**, The study of a class of rational difference equations, **Applied Mathematics and Computation**, Volume 179 (1), (2006) Pages 98–107.

15- **M. Lakestani, M. Razzaghi, M. Dehghan**, Numerical solution of the controlled Duffing oscillator by semi–orthogonal spline wavelets, **Physica Scripta**, Volume 74 (3), (2006) Pages 362–366.

16- **M. Dehghan, M. Jaberi Douraki, M. Razzaghi** , Global stability of a higher order rational recursive sequence, **Applied Mathematics and Computation**, Volume 179 (1), (2006) Pages 161–174.

17- **M. Dehghan, M. Tatari**, The use of He's variational iteration method for solving a Fokker-Planck equation, **Physica Scripta**, Volume 74 (3), (2006) Pages 310–316.

18- **M. Dehghan, B. Hashemi, M. Ghatee**, Computational methods for solving fully fuzzy linear systems, **Applied Mathematics and Computation**, Volume 179 (1), (2006) Pages 328–343.

19- **R. Mazrooei-Sebdani, M. Dehghan**, Dynamics of a non–linear difference equation, **Applied Mathematics and Computation**, Volume 178 (2), (2006) Pages 250–261.

20- **M. Dehghan, R. Mazrooei–Sebdani**, On the recursive sequence $x_{n+1} = \frac{\alpha + \beta x_{n-k+1}}{A + B x_{n-k+1} + C x_{n-2k+1}}$, **Applied Mathematics and Computation**, Volume 178 (2), (2006) Pages 273–286.

21- **M. Dehghan, R. Mazrooei–Sebdani**, Dynamics of a higher–order rational difference equation, **Applied Mathematics and Computation**, Volume 178 (2), (2006) Pages 345–354.

22- **M. Lakestani, M. Razzaghi, M. Dehghan**, Semiorthogonal spline wavelets approximation for Fredholm integro–differential equations, **Mathematical Problems in Engineering** Volume 2006 (2006), pages 1–12.

23- **M. Dehghan, M. Jaberi Douraki**, The oscillatory character of the recursive sequence $x_{n+1} = \frac{\alpha + \beta x_{n-k+1}}{A + B x_{n-2k+1}}$, **Applied Mathematics and Computation**, Volume 175 (1), (2006) Pages 38–48.

24- **M. Dehghan, A. Saadatmandi**, A tau method for the one–dimensional parabolic inverse problem subject to temperature overspecification, **Computers and Mathemat-**

ics with Applications, Volume 52 (6), (2006) Pages 933–940.

25- **M. Dehghan, B. Hashemi**, Iterative solution of fuzzy linear systems, **Applied Mathematics and Computation**, Volume 175 (1), (2006) Pages 645–674.

26- **M. Movahhedi, A. Abdipour, M. Dehghan**, Accelerating the transient simulation of semiconductor devices using filter–bank transforms, **International Journal of Numerical Modelling: Electronic Networks, Devices and Fields**, Volume 19, (2006), Pages 47–67.

27- **M. Dehghan, M. Tatari**, The use of the Adomian decomposition method for solving a parabolic equation with temperature overspecification, **Physica Scripta**, Volume 73 (3), (2006), Pages 240–245.

28- **M. Dehghan**, Finite difference procedures for solving a problem arising in modeling and design of certain optoelectronic devices, **Mathematics and Computers in Simulation**, Volume 71 (1), (2006) Pages 16–30.

29- **M. Jaberi Douraki, M. Dehghan, M. Razzaghi**, On the higher order rational recursive sequence $x_n = \frac{A}{x_{n-k}} + \frac{B}{x_{n-3k}}$, **Applied Mathematics and Computation**, Volume 173 (2), (2006) Pages 710–723.

30- **M. Tatari, M. Dehghan**, The use of the Adomian decomposition method for solving multipoint boundary value problems, **Physica Scripta** , Volume 73 (6), (2006), Pages 672–676.

31- **M. Dehghan, M. Tatari**, The use of Adomian decomposition method for solving problems in calculus of variations, **Mathematical Problems in Engineering**, Volume 2006 (2006), Pages 1–12.

32- **M. Masjed–Jamei, M. Dehghan**, Application of zero eigenvalue for solving the potential, heat, and wave equations using a sequence of special functions, **Mathematical Problems in Engineering** Volume 2006 (2006), Pages 1–9.

33-**M. Masjed–Jamei, S. M. Hashemiparast, M. R. Eslahchi, M. Dehghan**, The second kind Chebyshev quadrature rules of semi-open type and its numerical improvement, **Applied Mathematics and Computation**, Volume 172 (1), (2006), Pages 210–221.

34-**K. Aghigh, M. Masjed–Jamei, M. Dehghan**, On numerical integration methods with the generalized Stieltjes weight function, **Applied Mathematics and Computation**, Volume 182 (2), (2006), Pages 1184–1190.

35-**S. M. Hashemiparast, M. Masjed–Jamei, M. Dehghan**, On selection of the best coefficients in interpolatory quadrature rules, **Applied Mathematics and Computation**, Volume 182 (2), (2006), Pages 1240–1246.

36- **K. Aghigh, M. Masjed–Jamei, M. Dehghan**, A symmetric sequence of orthogonal polynomials associated with the Stieltjes weight polynomials, **Applied Mathematics and Computation**, Volume 182(1), (2006), 194–199.

37-**S. M. Hashemiparast, M. Masjed–Jamei, M. R. Eslahchi, M. Dehghan**, The second kind Chebyshev–Newton–Cotes quadrature rule (open type) and its numerical improvement, **Applied Mathematics and Computation**, Volume 180 (2), (2006), Pages 605–613.

38-**M. Dehghan, M. Masjed–Jamei, M. R. Eslahchi**, Weighted quadrature rules with weight function on $[0, 8)$, **Applied Mathematics and Computation**, Volume 180 (1), (2006), Pages 1–6.

39-**S. M. Hashemiparast, M. R. Eslahchi, M. Dehghan**, A note on equal coefficient quadrature rules, **Applied Mathematics and Computation**, Volume 180 (1), (2006), Pages 153–159.

40- **M. Masjed–Jamei, M. R. Eslahchi, M. Dehghan**, A statistical approach for economization of the polynomial functions, **International Journal of Computer Mathematics**, Volume 83 (5), (2006), Pages 551–523.

41-**S. M. Hashemiparast, M. R. Eslahchi, M. Dehghan**, Numerical integration using the derivatives, **Applied Mathematics and Computation**, Volume 180 (1), (2006), 194–199.

42- **E. Babolian, M. Dehghan, M. R. Eslahchi**, Application of Gauss quadrature rule in finding bounds for solution of linear systems of equations, **Applied Mathematics and Computation**, Volume 179 (2), (2006), Pages 707–713.

43-**M. Masjed–Jamei, M. Dehghan**, On some statistical integral equations, **Applied Mathematics and Computation**, Volume 179 (1), (2006), Pages 87–91.

44-**S. M. Hashemiparast, M. R. Eslahchi, M. Dehghan**, Minimizing the error function of Gauss–Jacobi quadrature rule with respect to parameters α and β, **Applied Mathematics and Computation**, Volume 176 (1), (2006), Pages 58–64.

45- **S. M. Hashemiparast, M. R. Eslahchi, M. Dehghan**, Determination of nodes in numerical integration rules using difference equation, **Applied Mathematics and Computation**, Volume 176 (1), (2006), Pages 177–122.

46-**M. Dehghan, M. Masjed–Jamei, M.R. Eslahchi**, On numerical improvement of open Newton–Cotes quadrature rules, **Applied Mathematics and Computation**, Volume 175 (1), (2006), Pages 618–627.

47- **S. M. Hashemiparast, M. R. Eslahchi, M. Dehghan, M. Masjed–Jamei**, The first kind Chebyshev–Newton–Cotes quadrature rules (semi–open type) and its numerical improvement, **Applied Mathematics and Computation**, Volume 174 (2),

(2006), Pages 1020–1032.

48-**E. Babolian, M. Masjed–Jamei, M. R. Eslahchi, M. Dehghan**, On numerical integration methods with T-distribution weight function, **Applied Mathematics and Computation**, Volume 174, (2006), Pages 1314–1320.

49-**M. Dehghan**, Implicit collocation technique for heat equation with non–classic initial condition, **International Journal of Nonlinear Sciences and Numerical Simulation**, Volume 7(4), (2006) Pages 447–450 .

1-**M. Dehghan**, On the solution of an initial-boundary value problem that combines Neumann and integral condition for the wave equation, **Numerical Methods for Partial Differential Equations**, Volume 21 (1), (2005) Pages 24–40.

2-**M. Dehghan**, Identification of a time–dependent coefficient in a partial differential equation subject to an extra measurement, **Numerical Methods for Partial Differential Equations**, Volume 21(Issue 3), (2005) Pages 611–622 .

3-**A. Saadatmandi, M. Razzaghi, M. Dehghan**, Hartley series approximations for the parabolic equations, **International Journal of Computer Mathematics**, Volume 82 (9), (2005) 1149–1156 .

4- **M. Nasri, M. Dehghan and M. Jaberi Douraki**, Study of a system of non–linear difference equations arising in a deterministic model for HIV infection, **Applied Mathematics and Computation**, Volume 171 (2), (2005) Pages 1306–1330 .

5-**M. Tatari, M. Dehghan**, Numerical solution of Laplace equation in a disk using the Adomian decomposition method, **Physica Scripta** Volume 72 (5), (2005), Pages 345–348.

6-**M. Dehghan and M. Jaberi Douraki**, On the recursive sequence $x_{n+1} = \frac{\alpha+\beta x_{n-k+1}+\gamma x_{n-2k+1}}{\beta x_{n-k+1}+C x_{n-2k+1}}$, **Applied Mathematics and Computation**, Volume 170 (2), (2005) Pages 1045–1066.

7-**A. Saadatmandi, M. Razzaghi and M. Dehghan**, Sinc–Galerkin solution for nonlinear two-point boundary value problems with applications to chemical reactor theory, **Mathematical and Computer Modelling**, Volume 42 (11), (2005) Pages 1237–1244.

8-**M. Jaberi Douraki, M. Dehghan and A. Razavi**, On the global behavior of higher order recursive sequences, **Applied Mathematics and Computation**, Volume 169 (2), (2005) Pages 819–831.

9- **M. Dehghan and M. Tatari**, Solution of a parabolic equation with a time-dependent coefficient and an extra measurement using the decomposition procedure of Adomian, **Physica Scripta**, Volume 72 (6), (2005) Pages 425–431.

10- **M. Jaberi Douraki, M. Dehghan and M. Razzaghi**, The qualitative behavior of solutions of a nonlinear difference equation, **Applied Mathematics and Computation**, Volume 170 (1) Pages 485-502.

11- **M. Dehghan, M. Jaberi Douraki and M. Jaberi Douraki**, Dynamics of a rational difference equation using both theoretical and computational approaches, **Applied Mathematics and Computation**, Volume 168 (2), (2005) Pages 756–775.

12- **A. Saadatmandi, M. Razzaghi, M. Dehghan**, Sinc–collocation methods for the solution of Hallen's integral equation, **Journal of Electromagnetic Waves and Applications**, Volume 19 (2), (2005) Pages 245–256.

13- **M. Dehghan**, Numerical approximations for solving a time-dependent partial differential equation with non-classical specification on four boundaries, **Applied Mathematics and Computation**, Volume 167 (1), (2005) Pages 28–45.

14-**M. Dehghan**, Quasi-implicit and two-level explicit finite-difference procedures for solving the one-dimensional advection equation, **Applied Mathematics and Computation**, Volume 167 (1), (2005) Pages 46–67.

15-**M. Dehghan**, Efficient techniques for the second-order parabolic equation subject to nonlocal specifications, **Applied Numerical Mathematics**, Volume 52(Issue 1), (2005) Pages 39–62 .

16- **M. Dehghan**, On the numerical solution of the one-dimensional convection–diffusion equation, **Mathematical Problems in Engineering**, Volume 2005 (1), (2005) Pages 61–74.

17- **M. Lakestani, M. Razzaghi, M. Dehghan**, Solution of nonlinear Fredholm–Hammerstein integral equations by using semiorthogonal spline wavelets, **Mathematical Problems in Engineering**, Volume 2005(1), (2005) Pages 113–121.

18-**M. Dehghan**, Parameter determination in a partial differential equation from the overspecified data, **Mathematical and Computer Modelling**, Volume 41 (2), (2005) 196–213.

19-**M. Masjed–Jamei and M. Dehghan**, On rational classical orthogonal polynomials and their application for explicit computation of inverse Laplace transforms, **Mathematical Problems in Engineering** Volume 2005 (2), (2005) Pages 215–230.

20- **M. Dehghan, M. Masjed–Jamei and M. R. Eslahchi**, On numerical improvement of closed Newton–Cotes quadrature rules, **Applied Mathematics and Computation**, Volume 165 (2), (2005) Pages 251–260.

21- **M.R. Eslahchi, M. Dehghan and M. Masjed–Jamei**, On numerical improvement of the first kind Gauss–Chebyshev quadrature rules, **Applied Mathematics and Computation**, Volume 165 (1), (2005) Pages 5–21.

22- **M. Masjed–Jamei, S. M. Hashemiparast, M. R. Eslahchi and M. Dehghan**, The first kind Chebyshev–Lobatto quadrature rule and its numerical improvement, **Applied Mathematics and Computation**, Volume 171(2),(2005)Pages 1104–1118.

23- **M. Dehghan, M. Masjed–Jamei and M. R. Eslahchi**, The semi-open Newton–Cotes quadrature rule and its numerical improvement, **Applied Mathematics and Computation**, Volume 171 (2), (2005) Pages 1129–1140.

24-**M. R. Eslahchi, M. Dehghan and M. Masjed–Jamei**, The equal coefficients quadrature rules and their numerical improvement, **Applied Mathematics and Computation**, Volume 171 (2), (2005) Pages 1331–1351.

25-**M. Masjed–Jamei, M.R. Eslahchi and M. Dehghan**, On numerical improvement of Gauss–Radau quadrature rules, **Applied Mathematics and Computation**, Volume 168 (1), (2005) Pages 51–64.

26-**M. Dehghan, M. Masjed–Jamei and M. R. Eslahchi**, On numerical improvement of the second kind of Gauss–Chebyshev quadrature rules, **Applied Mathematics and Computation**, Volume 168(1), (2005) Pages 431–446.

27- **M. R. Eslahchi, M. Dehghan and M. Masjed–Jamei**, The first kind Chebyshev–Newton–Cotes quadrature rules (closed type) and its numerical improvement, **Applied Mathematics and Computation**, Volume 168 (1), (2005) Pages 479–495.

28-**M. Masjed–Jamei, M. R. Eslahchi and M. Dehghan**, On numerical improvement of Gauss–Radau quadrature rules, **Applied Mathematics and Computation**, Volume 168 (1), (2005) Pages 51–64.

1- **M. Dehghan**, Application of the Adomian decomposition method for two-dimensional parabolic equation subject to nonstandard boundary specifications, **Applied Mathematics and Computation**, Volume 157 (2), (2004) Pages 549–560.

2-**M. Dehghan**, Three–level techniques for one–dimensional parabolic equation with nonlinear initial condition, **Applied Mathematics and Computation**, Volume 151 (2), (2004), Pages 567–579.

3- **M. Dehghan**, The solution of a nonclassic problem for one–dimensional hyperbolic equation using the decomposition procedure, **International Journal of Computer Mathematics**, Volume 81 (8), (2004), Pages 979–989.

4-**M. Dehghan**, Numerical solution of the three–dimensional advection-ffusion equation, **Applied Mathematics and Computation**, Volume 150(1), (2004) Pages 5–19.

5-**M. Dehghan and A. Saadatmandi**, Bounds for solutions of a six–point partial–difference scheme, **Computers and Mathematics with Applications**, Volume 47 (Issue 1), (2004) Pages 83–89.

6- **M. Dehghan**, Numerical solution of a parabolic equation subject to specification of energy, **Applied Mathematics and Computation**, Volume 149 (1), (2004) Pages 31–45.

7- **M. Dehghan**, The use of Adomian decomposition method for solving the one-dimensional parabolic equation with non–local boundary specifications, **International Journal of Computer Mathematics**, Volume 81 (1), (2004) Pages 25–34.

8-**M. Dehghan**, Weighted finite difference techniques for the one–dimensional advection–diffusion equation, **Applied Mathematics and Computation**, Volume 147 (2), (2004) Pages 307–319.

9- **M. Dehghan**, Numerical schemes for one-dimensional parabolic equations with nonstandard initial condition, **Applied Mathematics and Computation**, Volume 147 (2), (2004) Pages 321–331.

10- **M. Dehghan**, Numerical computation of a control function in a partial differential equation, **Applied Mathematics and Computation**, Volume 147 (2), (2004) Pages 397–408.

11- **M. Dehghan**, Numerical procedures for a boundary value problem with a non-linear boundary condition, **Applied Mathematics and Computation**, Volume 147 (1), (2004) Pages 291–306.

12- **M. Dehghan**, Numerical solution of a parabolic equation with non–local boundary specifications, **Applied Mathematics and Computation**, Volume 145 (1), (2003) Pages 185–194.

13-**M. Dehghan**, Identifying a control function in two–dimensional parabolic inverse problems, **Applied Mathematics and Computation**, Volume 143 (2), (2003) Pages 375–391.

14- **M. Dehghan**, Fractional step methods for parabolic equations with a non–standard condition, **Applied Mathematics and Computation**, Volume 142 (1), (2003) Pages 177–187.

15-**M. Dehghan**, Locally explicit schemes for three–dimensional diffusion with a non-local boundary specification, **Applied Mathematics and Computation**, Volume 138 (2), (2003) Pages 489–501.

16- **M. Dehghan**, Saulyev's techniques for solving a parabolic equation with a non linear boundary specification, **International Journal of Computer Mathematics**, Volume 80 (2), (2003) Pages 257–265.

17-**M. Dehghan**, Parallel techniques for a boundary value problem with non–classic boundary conditions, **Applied Mathematics and Computation**, Volume 137 (2), (2003) Pages 399–412.

18- **M. Dehghan**, On the numerical solution of the diffusion equation with a nonlocal boundary condition, **Mathematical Problems in Engineering**, Volume 9 (1), (2003) Pages 81–92.

19-**M. Dehghan**, Numerical solution of one–dimensional parabolic inverse problem, **Applied Mathematics and Computation**, Volume 136 (2), (2003) Pages 333–344.

20- **M. Dehghan**, Numerical solution of a non–local boundary value problem with Neumann's boundary conditions, **Communications in Numerical Methods in Engineering**, Volume 19 (1), (2003) Pages 1–12.

21-**M. Dehghan**, Finding a control parameter in one–dimensional parabolic equations, **Applied Mathematics and Computation**, Volume 135 (2), (2003) Pages 491–503.

22-**M. Dehghan**, Determination of a control function in three–dimensional parabolic equations, **Mathematics and Computers in Simulation**, Volume 61 (2), (2003) Pages 89–100.

23- **W. T. Ang, K. C. Ang, M. Dehghan**, The determination of a control parameter in a two–dimensional diffusion equation using a dual–reciprocity boundary element method, **International Journal of Computer Mathematics** Volume 80(1), (2003) Pages 65–74.

24- **M. Dehghan**, Determination of an unknown parameter in a semi–linear parabolic equation, **Mathematical Problems in Engineering**, Volume 8(Issue 2), (2002) Pages 111–122.

25-**M. Dehghan**, Numerical techniques for a parabolic equation subject to an over-specified boundary condition, **Applied Mathematics and Computation**, Volume 132 (2), (2002) Pages 299–313.

26- **M. Dehghan**, A new ADI technique for two–dimensional parabolic equation with an integral condition, **Computers and Mathematics with Applications**, Volume 43 (12), (2002) Pages 1477–1488.

27- **M. Dehghan**, Numerical solution of the three–dimensional parabolic equation with an integral condition, **Numerical Methods for Partial Differential Equations**, Volume 18(2), (2002) Pages 193–202.

28-**M. Dehghan**, Fourth–order techniques for identifying a control parameter in the parabolic equations, **International Journal of Engineering Science**, Volume 40 (4), (2002) Pages 433–447.

29-**M. Dehghan**, Fully explicit finite–difference methods for two–dimensional diffusion with an integral condition, **Nonlinear Analysis, Theory, Methods and Applications**, Volume 48 (5), (2002) Pages 637–650.

30-**M. Dehghan**, Second-order schemes for a boundary value problem with Neumann's boundary conditions, **Journal of Computational and Applied Mathematics**, Volume 138(1), (2002) Pages 173–184.

31-**M. Dehghan**, Crank–Nicolson finite difference method for two–dimensional diffusion with an integral condition, **Applied Mathematics and Computation**, Volume Volume 124(Issue 1), (2001) Pages 17–27 .

32-**M. Dehghan**, An inverse problem of finding a source parameter in a semilinear parabolic equation, **Applied Mathematical Modelling**, Volume 25 (9), (2001) Pages 743–754.

33- **M. Dehghan**, Determination of a control parameter in the two–dimensional diffusion equation, **Applied Numerical Mathematics**, Volume 37 (4), (2001) Pages 489–502.

34- **M. Dehghan**, Implicit solution of a two–dimensional parabolic inverse problem with temperature overspecification, **Journal of Computational Analysis and Applications**, Volume 3 (4), (2001) Pages 383–398.

35- **M. Dehghan**, New schemes for a two–dimensional inverse problem with temperature overspecification, **Mathematical Problems in Engineering**, Volume 7 (3), (2001), Pages 283–297.

36- **M. Dehghan**, Numerical methods for two–dimensional parabolic inverse problem with energy overspecification, **International Journal of Computer Mathematics**, Volume 77 (3), (2001) Pages 441–455.

37- **M. Dehghan**, A finite difference method for a non–local boundary value problem for two–dimensional heat equation, **Applied Mathematics and Computation**, Volume 112 (1), (2000) Pages 133–142.

38- **M. Dehghan**, Finite difference schemes for two–dimensional parabolic inverse problem with temperature overspecification, **International Journal of Computer Mathematics**, Volume 75 (3), (2000) Pages 339–349.

39- **W. T. Ang, D. L. Clements, M. Dehghan**, CVBEM for a class of linear crack problems, **Mathematics and Mechanics of Solids**, Volume 5 (3), (2000), Pages 369–391.

40- **B. J. Noye, M. Dehghan**, New explicit finite difference schemes for two–dimensional diffusion subject to specification of mass, **Numerical Methods for Partial Differential Equations**, Volume 15 (4), (1999) Pages 521–534.

41- **M. Dehghan**, Implicit locally one–dimensional methods for two–dimensional diffusion with a non–local boundary condition, **Mathematics and Computers in Simulation**, Volume 49 (4), (1999) Pages 331–349.

42-**M. Dehghan**, Fully implicit finite differences methods for two–dimensional diffusion with a non-local boundary condition, **Journal of Computational and Applied Mathematics**, Volume 106 (2), (1999) Pages 255–269.

43- **M. Dehghan** Alternating direction implicit methods for two–dimensional diffusion with a non–local boundary condition, **International Journal of Computer Mathematics**, Volume 72(Issue 3), (1999) Pages 349–366 .

44-**B. J. Noye, M. Dehghan**, A time–splitting finite difference method for two–dimensional diffusion with an integral condition, **Communications in Numerical Methods in Engineering**, Volume 10 (8), (1994) Pages 649–660.

45-**B. J. Noye, M. Dehghan**, Explicit solution of two–dimensional diffusion subject to specification of mass, **Mathematics and Computers in Simulation**, Volume 37 (1), (1994) Pages 37–45.

46-**B. J. Noye, M. Dehghan, J. van der Hoek**, Explicit finite difference methods for two–dimensional diffusion with a non–local boundary condition, **International Journal of Engineering Science**, Volume 32 (11), (1994), Pages 1829–1834.

47- **W. T. Ang, D. L. Clements , M. Dehghan**, Scattering and diffraction of SH waves by multiple planar cracks in an anisotropic half-space: A hypersingular integral formulation, **International Journal of Solids and Structures**, Volume 30 (10), (1993) Pages 1301–1312.