CURRICULUM VITAE[1]

Surname:	Tzirtzilakis.
Name:	Efstratios.
Date of birth:	08–04–1974.
Nationality:	Greek.
Marital status:	Married one child.
Military service:	Accomplished (From 7-9-2004 until 7-9-2005).
E-mails:	etzirtzilakis@uop.gr, tzirtzi@iconography.gr
Web page:	https://etzirtzilakis.uop.gr
Current Academic:	Professor (full)
Position:	Department of Civil Engineering Government Gazette: Γ 764–05/03/2025 "Applied Mathematics in Fluid Mechanics".
Web page:	https://people.uop.gr/ etzirtzilakis/
Administrative	University Council Member, University of the Peloponnese.
Positions:	Former Vice Rector for Finance and Electronic Governance (02 February 2023–31 August 2026).
Past	Professor (full)
Positions:	Department of Mechanical Engineering Government Gazette: Γ1491–06/07/2021 "Applied Mathematics in Fluid Mechanics". ————————————————- Associate Professor Department of Mechanical Engineering, TEI of Western Greece, Greece Government Gazette: Γ90/10.02.16 "Applied Mathematics in Fluid Mechanics". ———————————————— Assistant Professor Department of Mechanical & Water Resources Engineering Technological Educational Institute (TEI) of Western Greece (formerly Technological Educational Institute of Messolonghi). Government Gazette: C38/26.01.10) "Applied Mathematics". Permanent Assistant Professor at the same institution Government Gazette: Γ233/27.02.14) "Applied Mathematics".
Research Interests	Numerical Methods for Solution of Differential Equations, Computational Fluid Mechanics (CFD), Aerodynamics, Biomagnetic Fluid Dynamics (BFD), Ferro–Hydrodynamics (FHD), Magneto–Hydrodynamics (MHD)

[1]Last update: 02/09/2026

1 Degrees

1. **Bsc. degree** from the Department of Mathematics of the University of Patras, Greece. (Grade: 7.15/10). Years of study: 1993-1997.

2. **Msc. degree** in Applied Mathematics, from the Department of Mathematics of the University of Patras, Greece. (Grade 9.45/10). Years of study: 1997-1999.

3. **PhD degree** from the Department of Mathematics of the University of Patras, Greece. Received on 07–07–2003. Supervisor: Professor N. Kafoussias.

2 Certificates – Foreign Languages – Programming Languages – Computer Knowledge

- English. (First Certificate in English from the University of Cambridge).
- Internal auditor of ISO 9001:2008 (Quality Management Systems) certified by Hellenic Organization of Standardization (ELOT).
- External auditor of ISO 27001:2013 (Information Security Management Systems) certified by TÜV Nord, IRCA No. 17242.
- Experience in Windows operating system.
- Good knowledge of Microsoft Office, Latex2e, Mathematica, Origin, PowerPoint, Dreamweaver, Tecplot, Surfer.
- Good knowledge of the programming languages FORTRAN (Intel Visual Fortran), C, C++ and Python.

3 International Editorial activities

- Editor in Chief of the international, open access, scientific journal **New Horizons in Mechanical Engineering** of ISAAC Scientific Publishing from 04/2017–04/2019.

  Webpage: `http://www.isaacpub.org/Journal/NHME`.

- Member of the Editorial Board of the international scientific journal **Mathematical Problems in Engineering** of Hindawi Publishing Corporation since 2014. Impact Factor for the journal is 1.082 according to 2013 Journal Citation Reports released by Thomson Reuters in 2014.

  Webpage: `http://www.hindawi.com/journals/mpe/`.

- Member of the Editorial Board of the international scientific journal **Mathemtics** of MDPI Publishing Corporation since 2021. Impact Factor for the journal is 1.747 according to 2019 Journal Citation Reports released by Thomson Reuters in 2019.

  Webpage: `https://www.mdpi.com/journal/mathematics/editors`.

- Member of the Editorial Board of the international scientific journal **Scientific Reports** of Springer Nature since 2026.

  Webpage: `https://www.nature.com/srep/`.

- Guest Editor in Chief of the special issue "Fluid Mechanics Physical Problems and Symmetry" of the international journal **Symmetry.**

4 Administrative Positions

1. University Council Member of the University of the Peloponnese, Greece (01.09.2026–present).
2. Vice Rector for Finance and Electronic Governance of the University of the Peloponnese, Greece (02.02.2023–31.08.2026).
3. Member of the Strategic Planning Committee of the University of the Peloponnese (28.09.23 – 31.08.26).
4. Member of the Internal Evaluation Group (OMEA) of the Department of Civil Engineering, University of the Peloponnese (02.04.2025–). department Decision No. 10/02.04.2025.
5. Member of the committee responsible for drafting the Strategic Plan of the Department of Mechanical Engineering (Department Assembly No. 18/06.09.2023).
6. Head of the Mechanical Engineering Department (Academic years[2] 2019–2021).
7. Mechanical Engineering Department Representative at the Research Funds Special Account (Research Committee) T.E.I. of Western Greece (Academic years 2017–2019).
8. Mechanical Engineering Department Deputy Representative at the Research Funds Special Account University of the Peloponnese (Academic years 2019–2023).
9. Member of the Internal Evaluation Group (OMEA) of the Mechanical Engineering Department (Academic Years 2016–2021).

[2]Academic year is defined as the period from 01 September to 31 August

10. Member Member of the Undergraduate Program Committee of the Mechanical Engineering department.

11. Head of the Fluid Mechanics & Turbomachinery Laboratory (Academic Years 2015–2020).

    *Technological Educational Institute of Messolonghi is merged to Technological Educational Institute of Western Greece after A94/05.06.2013 government gazette.

12. Deputy Head of the Department of Mechanical & Water Resources Engineering, Technological Educational Institute of Western Greece, Greece (Academic years 2013–2015).

13. Director of the Division of Mechanics and Agricultural Engineering, Department of Mechanical & Water Resources Engineering, Technological Educational Institute of Messolonghi, Greece (Academic years 2012–2013).

14. Deputy Director of the Division of Mechanics and Agricultural Engineering, Department of Mechanical & Water Resources Engineering, Technological Educational Institute of Messolonghi, Greece (Academic year 2011–2012).

15. Coordinator of the Internal Evaluation Committee of the Department of Mechanical & Water Resources Engineering, Technological Educational Institute of Messolonghi, Greece (2010–2011).

16. Head of the Division of Quality Assurance of Laboratory of Educational Material and Methodology (e-Comet lab), Hellenic Open University, Greece (8/05/2008–30/06/2009 and 20/05/2011–31/12/2014).

17. Certified internal auditor of ISO 9001:2008 systems of the Hellenic Organization of Standardization. Internal auditor of ISO 9001:2008 systems of the Hellenic Open University at the Quality and Efficiency Office, which is an administrative unit subject directly to the General Secretary (Head of all administrative divisions) of the University (2012–2014).

18. Certified external auditor of ISO 27001:2013 (Information Security Management Systems) of the TÜV, IRCA No. 17242. Internal auditor of ISO 27001:2013 of the Hellenic Open University (Quality and Efficiency Office, 2014).

19. Member in various committees and work groups of the Department as well as of the Institution level. Among them was the committee for the allocation of heat and cooling for the School of Engineering. After this I was appointed head for the evaluation committee for the supply of air condition units throughout the School.

20. Member of at least 15 electoral bodies for selecting faculty members for tenure track positions. Head of the advisory committee for at least 3 electoral bodies for selecting faculty members for tenure track positions.

5 Participation in the organization of international scientific conferences

Participation in the organization of the:

1. "Fifth International Symposium on Orthogonal Polynomials, Special Functions and their Applications", Patras, Greece, 20–24 September, 1999.

2. "International Conference on Differential, Difference Equations and their Applications", Patras, Greece, 1–5 July, 2002.

3. "International Conference on Differential Equations, Difference Equations and Special Functions. In memory of Professor Panayiotis D. Siafarikas",Patras, Greece 3–7 September, 2012.

Refer to: Eugenia N. Petropoulou, Associate Professor, Department of Civil Engineering, University of Patras, Greece (jenpetr@upatras.gr)

6 Publications

A. Msc Thesis.

E. E. Tzirtzilakis, "Control of boundary layer with injection of a cold air layer through a wall jet", 1999, Department of Mathematics, University of Patras, Greece (in greek). Supervisor: Professor N. Kafoussias.

B. PhD Thesis.

E. E. Tzirtzilakis, "Study of the flow of biomagnetic fluids under the influence of an applied magnetic field", 2003, Department of Mathematics, University of Patras, Greece (in greek). Supervisor: Professor N. Kafoussias.

C. Papers in international journals following a refereeing process.

1. E. Tzirtzilakis, M. Xenos, V. Marinakis, T.C. Bountis, "Interactions and stability of solitary waves in shallow water", **Chaos, Solitons and Fractals**, Vol. 14, pp.87-95, 2002.
2. E. Tzirtzilakis, V. Marinakis, C. Apokis and T.C. Bountis, "Soliton like solutions of higher order wave equations of the KdV type", **Journal of Mathematical Physics**, Vol. 43, No 12, pp. 6151-6165, 2002.
3. E. Tzirtzilakis and N. Kafoussias, "Biomagnetic fluid flow over a stretching sheet with non linear temperature dependent magnetization", **ZAMP**, Vol. 54, pp. 551-565, 2003.

4. E. Tzirtzilakis and G. Tanoudis, "Numerical study of biomagnetic fluid over a stretching sheet with heat transfer", **International Journal for Numerical Methods in Heat and Fluid Flow**, Vol. 13, No 7, pp. 830-848, 2003.
5. V. Loukopoulos and E. Tzirtzilakis, "Biomagnetic channel flow in spatially varying magnetic field", **International Journal of Engineering Science**, Vol. 42, pp. 571-590, 2004.
6. E.E. Tzirtzilakis, V.D. Sakalis, N.G. Kafoussias, P.M. Hatzikonstantinou, "Biomagnetic fluid flow in a 3d rectangular duct", **International Journal for Numerical Methods in Fluids**, Vol. 44, pp. 1279-1298, 2004.
7. P.K. Papadopoulos and E.E. Tzirtzilakis, "Biomagnetic flow in a curved square duct under the influence of an applied magnetic field", **Physics of Fluids**, Vol. 16, No 8, pp. 2952-2962, 2004.

   [Republication in the July issue, 2004 of **Virtual Journal of Biological Physics Research** considered as pioneer work in the field.]
8. E.E. Tzirtzilakis and V.C. Loukopoulos, "Biofluid flow in a channel under the action of a uniform localized magnetic field", **Computational Mechanics**, Vol. 36, No 5, pp. 360-374, 2005.
9. E.E. Tzirtzilakis, "A mathematical model for blood flow in magnetic field", **Physics of Fluids**, Vol. 17, 077103, 2005.

   [Republication in the July issue, 2005 of **Virtual Journal of Biological Physics Research** considered as pioneer work in the field.]
10. E.E. Tzirtzilakis, M. Xenos, V.C. Loukopoulos and N.G. Kafoussias, "Turbulent biomagnetic fluid flow in a rectangular channel under the action of a localized magnetic field", **International Journal of Engineering Science**, Vol. 44, pp. 1205-1224, 2006.
11. E.N. Petropoulou, P.D. Siafarikas and E.E. Tzirtzilakis, "A "discretization" technique for the solution of ODEs", **Journal of Mathematical Analysis and Applications**, Vol. 331, No 1, pp. 279-296, 2007.
12. E.E. Tzirtzilakis, "Biomagnetic fluid flow in a channel with stenosis", **Physica D**, Vol. 237, 66-81, 2008.
13. N.G. Kafoussias, E.E. Tzirtzilakis, and A. Raptis, "Free - forced convective boundary layer flow of a biomagnetic fluid under the action of a localized magnetic field", **Canadian Journal of Physics**, Vol. 86, 447-457, 2008.
14. E.E. Tzirtzilakis, "A simple numerical methodology for BFD problems using stream function vorticity formulation", **Communications in Numerical Methods in Engineering**, Vol. 24, 683–700, 2008.
15. M. Ferdows, E. Tzirtzilakis, Koji Kaino and Chien-Hsin Chen, "Soret and Dufour effects on natural convection heat and mass transfer flow in a porous medium considering internal heat generation", **International Journal of Applied Mathematics & Statistics**, Vol. 13, No D08, 36–48. , 2008.

16. M. Xenos, E. Tzirtzilakis and N. Kafoussias, "Methods of optimizing separation of compressible turbulent boundary-layer over a wedge with heat and mass transfer", **Int. J. Heat and Mass Transfer**, Vol. 52, No 1–2, 488–496, 2009.
17. E. N. Petropoulou, P. D. Siafarikas and E. E. Tzirtzilakis, "A "discretization" technique for the solution of ODEs II", **Numerical Functional Analysis and Optimization**, Vol. 30, No 5–6, pp 613–631, 2009.
18. E. Tzirtzilakis and N. Kafoussias, "Three-dimensional magnetic fluid boundary layer flow over a linearly stretching sheet", **ASME J. Heat Transfer**, Vol. 132, No 1, 011702–1, 2010.
19. E.E. Tzirtzilakis, N.G. Kafoussias, A. Raptis, "Numerical study of forced and free convective boundary layer flow of a magnetic fluid over a flat plate under the action of a localized magnetic field", **ZAMP**, Vol. 61, No 5, 929–947, 2010.
20. E.E. Tzirtzilakis and M.A. Xenos, "Biomagnetic fluid flow in a driven cavity", **MECCANICA**, Vol. 48, No 1, 187–200, 2013.
21. E.N. Petropoulou and E.E. Tzirtzilakis, "On the logistic equation in the complex plane", **Numerical Functional Analysis and Optimization**, Vol. 34, No 7, 770–790, 2013.
22. M.A. Xenos and E.E. Tzirtzilakis, "MHD Effects on Blood Flow in a Stenosis", **Advances in Dynamical Systems and Applications**, Vol. 8, No 2, pp. 427–437, 2013.
23. A. Raptis, M. Xenos, E.E. Tzirtzilakis, and M. Matsagkas, "Finite element analysis of magnetohydrodynamic effects on blood flow in an aneurysmal geometry", **Physics Of Fluids,** Vol. 26, 101901, 2014, doi: 10.1063/1.4895893.
24. E.E. Tzirtzilakis, "Biomagnetic Fluid Flow in an Aneurism Using FerroHydroDynamics Principles", **Physics Of Fluids,** 27, 061902, 2015, doi: 10.1063 /1.4922757.
25. Md. Shakhaoath Khan, Md. Mahmud Alam, M Ferdows, E.E. Tzirtzilakis, Ifsana Karim and Shuyu Sun, "Rotating Fluid Flow on MHD Radiative Nanofluid past a Stretching Sheet", **International Journal of Advanced Thermofluid Research**, Vol. 2, No. 1, 15–30, 2016.
26. Md. Shakhaoath Khan, Md. Mahmud Alam, E.E. Tzirtzilakis, M Ferdows, and Ifsana Karim, "Finite Difference Solution of MHD Radiative Boundary Layer Flow of a Nanofluid past a Stretching Sheet with Stability Analysis", **International Journal of Advanced Thermofluid Research,** Vol. 2, No. 1,31–46, 2016.
27. G. Panagopoulos, D. Angelopoulou, E. Tzirtzilakis, P. Giannoulopoulos, "The contribution of Cluster and Discriminant Analysis to the classification of

complex aquifer systems", **Environ. Monit. Assess.**, 188:591 (13 pages), 2016.

28. I. karim, M.S. Khan, M.M. Alam, M.A. Rouf, M. Ferdows, E.E. Tzirtzilakis, "Transient Heat And Mass Transfer Flow Through Salt Water In An Ocean By Inclined Angle", **Technological Engineering**, Vol. XIII, No. 2, pp. 21–27, 2016.
29. M. Ferdows, T.S. Khalequ, E.E. Tzirtzilakis, and Sh. Sun, "Effects of Radiation and Thermal Conductivity on MHD Boundary Layer Flow with Heat Transfer along a Vertical Stretching Sheet in a Porous Medium", **Journal of Engineering Thermophysics**, DOI: 10.1134/S1810232817010015, Vol. 26, No. 1, pp. 1–11, 2017.
30. M. Ferdows, A.A. Afify, E.E. Tzirtzilakis, "Hall Current and Viscous Dissipation Effects on Boundary Layer Flow of Heat Transfer Past a Stretching Sheet", **Int. J. Appl. Comput. Math**, DOI 10.1007/s40819-017-0309-5, (17 pages), 2017.
31. M.G. Murtaza, E.E. Tzirtzilakis, & M. Ferdows, "Effect of electrical conductivity and magnetization on the biomagnetic fluid flow over a stretching sheet", **Z. Angew. Math. Phys.**, Vol. 68(4): art. no 93, DOI 10.1007/s00033-017-0839-z, (15 pages), 2017.
32. M.G. Murtaza, E.E. Tzirtzilakis, M. Ferdows, "A Note on MHD Flow and Heat Transfer over a Curved Stretching Sheet by Considering Variable Thermal Conductivity", **International Journal of Mathematical and Computational Sciences**, Vol. 12(2), pp. 23–27, 2018.
33. M.G. Murtaza, E.E. Tzirtzilakis, M. Ferdows, "Similarity Solutions of Nonlinear Stretched Biomagnetic Flow and Heat Transfer with Signum Function and Temperature Power Law Geometries", **International Journal of Mathematical and Computational Sciences**, Vol. 12(2), pp. 9–14, 2018.
34. M.G. Murtaza, E.E. Tzirtzilakis, M. Ferdows, "Numerical solution of three dimensional unsteady biomagnetic flow and heat transfer through stretching / shrinking sheet using temperature dependent magnetization.", **Archives of Mechanics**, Vol. 70(2), pp. 161–185, 2018.
35. T. Ahmed, M. Alam, M. Ferdows, E.E. Tzirtzilakis, "Chemically Reacting Ionized Radiative Fluid Flow Through An Impulsively Started Vertical Plate With Induced Magnetic Field", **International Journal of Applied Mechanics and Engineering**, Vol. 24 (1), pp.5–36,2019.
36. M.G. Murtaza, M. Ferdows, J.C. Misra, E.E. Tzirtzilakis, "Three–dimensional biomagnetic Maxwell fluid flow over a stretching surface in presence of heat source/sink", **International Journal of Biomathematics**, Vol. 12 (3), 1950036 (20 pages), 2019.

37. KE. Aslani, L. Benos, E. Tzirtzilakis and I.E. Sarris, "Micromagnetorotation of MHD Micropolar Flows", **Symmetry**, 12, 148; doi:10.3390/sym12010148, 2020.

38. Md. G. Murtaza, E.E. Tzirtzilakis and M. Ferdows, "Stability and Convergence Analysis of a Biomagnetic Fluid Flow Over a Stretching Sheet in the Presence of a Magnetic Field", **Symmetry**, 12, 253; doi:10.3390/sym12020253, 2020.

39. K.E. Hoque, M. Ferdows, S. Sawall and E.E. Tzirtzilakis, "The effect of hemodynamic parameters in patient-based coronary artery models with serial stenoses: normal and hypertension cases", **Computer Methods in Biomechanics and Biomedical Engineering**,DOI: 10.1080/10255842.2020. 1737028, 2020.

40. M. Ferdows, M.G. Murtaza, E.E. Tzirtzilakis, F. Alzahrani, "Numerical study of blood flow and heat transfer through stretching cylinder in the presence of a magnetic dipole", **Z Angew Math Mech.**, DOI: 10.1002/zamm.201900278, 2020;100:e201900278, 2020.

41. M. Ferdows, G. Murtaza, J.C. Misra, E.E. Tzirtzilakis and A. Alsenafi, "Dual solutions in biomagnetic fluid flow and heat transfer over a nonlinear stretching/shrinking sheet: Application of lie group transformation method", **Mathematical Biosciences and Engineering**, Vol. 17, Is. 5, 4852–4874, 2020.

42. N. Zaman, M. Ferdows, M.A. Xenos, K.E. Hoque and E.E. Tzirtzilakis, "Effect of Angle Bifurcation and Stenosis in Coronary Arteries: An Idealized Model Study", **BioMed Research Journal**, 4(2): 220–234, 2020.

43. M. Ferdows, M.G. Murtaza, J.C. Misra, E.E. Tzirtzilakis, F. Alzahrani, "Dual solutions for boundary layer flow and heat transfer of biomagnetic fluid over a stretching/shrinking sheet in presence of a magnetic dipole and a prescribed heat flux", **International Journal of Applied Electromagnetics and Mechanics**, vol.65, pp. 235–251, http://dx.doi.org/10.3233/JAE-190101 2021.

44. K.E. Hoque, M. Ferdows, S. Sawall, E.E. Tzirtzilakis and M.A. Xenos, "The impact of hemodynamic factors in a coronary main artery to detect the atherosclerotic severity: Single and multiple sequential stenosis cases". **Phys. Fluids** 33, 031903 (2021). https://doi.org/10.1063/5.0041335

    [This paper was selected as "Editor's pick"]

45. Alam, J. Murtaza, G. Tzirtzilakis, E. Ferdows, M. "Biomagnetic Fluid Flow and Heat Transfer Study of blood with Gold Nanoparticles over a Stretching Sheet in the Presence of Magnetic Dipole." **Fluids** 2021, 6, 113.

    https://doi.org/10.3390/fluids6030113

46. Alam, J. Murtaza, G. Tzirtzilakis, E. Ferdows, M. "Effect of Thermal Radiation on Biomagnetic Fluid Flow and Heat Transfer over an Unsteady Stretching Sheet." **Computer Assisted Methods in Engineering and Science 2021. http://dx.doi.org/10.24423/cames.327**

47. M.G. Murtaza, E.E. Tzirtzilakis, M. Ferdows, "A Duality of Biomagnetic fluid flow and heat transfer over a quadratic stretched sheet" **Journal of Power Technologies** Vol. 101 Is. 3 pp.154–162, 2021.

48. A. Gomes, J. Alam, G. Murtaza, T. Sultana, E.E. Tzirtzilakis, M. Ferdows, "Aligned Magnetic Field and Radiation Effects on Biomagnetic Fluid over an Unsteady Stretching Sheet with Various Slip Conditions." **Applied Math**, Vol. 1, pp. 37–62, 2021. https://doi.org/10.3390/appliedmath1010004

49. K.E. Hoque, M. Ferdows, S. Sawall, E.E. Tzirtzilakis and M.A. Xenos, "Hemodynamic characteristics expose the atherosclerotic severity in coronary main arteries: One-dimensional and three-dimensional approaches". **Phys. Fluids** 33, 121907 (2021). https://doi.org/10.1063/5.0069106

    [This paper was selected as "Featured paper" and "Scilight"]

50. A. Gul, E.E. Tzirtzilakis & S.S. Makhanov, "A two–phase, two–way coupled model of targeted magnetic drug delivery for small Reynolds numbers", **Engineering Applications of Computational Fluid Mechanics**, 16:1, 374-396, https://doi.org/10.1080/19942060.2021.2016493, 2022.

51. A. Gul, E.E. Tzirtzilakis & S.S. Makhanov, "Simulation of Targeted Magnetic Drug Delivery: Two–way Coupled Biomagnetic Fluid Dynamics Approach", **Phys. Fluids** 34, 021911; https://doi.org/10.1063/5.0080216, 2022.

    [This paper was selected as "Featured paper" and "Scilight"]

52. M. Ferdows, J. Alam, G. Murtaza, E.E. Tzirtzilakis, S. Sun, "Biomagnetic Flow with CoFe2O4 Magnetic Particles through an Unsteady Stretching / Shrinking Cylinder". **Magnetochemistry**, 8, 27. https:// www.mdpi.com /2312–7481/ 8/ 3/ 27, 2022.

    [This paper was selected as "Editor's Choice"]

53. J. Alam, M.G. Murtaza, E.E. Tzirtzilakis, M.G. Ferdows, "Magnetohydrodynamic and Ferrohydrodynamic Interactions on the Biomagnetic Flow and Heat Transfer Containing Magnetic Particles Along a Stretched Cylinder", **European Journal of Computational Mechanics**, Vol. 31, Is. 1 https:// doi.org/ 10.13052/ ejcm2642–2085 .3111, 2022.

54. M. Mahabub, M. Ferdows, M. Gluam Murtaza, G. Lorenzini, E.E. Tzirtzilakis, "Numerical study of unsteady boundary layer flow of a biomagnetic fluid over a horizontal stretching sheet with magnetic dipole". **Mathematical Modelling of Engineering Problems**, Vol. 9, No. 1, pp. 215–223. https:// doi.org/ 10.18280/ mmep.090127, 2022.

55. J. Alam, M.G. Murtaza, E.E. Tzirtzilakis, M.G. Ferdows, "Application of Biomagnetic Fluid Dynamics modeling for simulation of flow with magnetic particles and variable fluid properties over a stretching cylinder", **Mathematics and Computers in Simulation**, Vol. 199, pp. 438–462, https:// doi.org/ 10.1016/ j.matcom. 2022. 04. 008, 2022.

56. Alam J, Murtaza MG, Tzirtzilakis EE, Ferdows M. Group method analysis for blood-Mn-ZnFe2O4 flow and heat transfer under ferrohydrodynamics through a stretched cylinder. **Math Meth Appl Sci.** 2022; 11807–11827. doi:10.1002/mma.8482.

57. Alam, J.; Murtaza, M.G., Petropoulou, E.N. Tzirtzilakis, E.E. Ferdows, M. Applications of a Group Theoretical Method on Biomagnetic Fluid Flow and Heat Transfer for Different Shapes of Fe3O4 Magnetic Particles under the Influence of Thermal Radiation and a Magnetic Dipole Over a Cylinder. **Mathematics** 2022, 10, 3520. https://doi.org/10.3390/math10193520.

58. S.A. Jumana, M. Ferdows, E.E. Tzirtzilakis, Bio-Magnetic Flow Of Heat Transfer Over Moving Horizontal Plate By The Presence Of Variable Viscosity And Temperature, **Journal of Mechanics in Medicine and Biology** Vol. 22, No. 10, 2250063 (2022). Journal page

59. MD Hassan Faruk , Mohammad Ferdows , and E. E. Tzirtzilakis , "Hyperthermia Temperature Reduction in Bio Magnetic Flow:Thermal Transfer in Fe3O4-Blood Particle Suspension with Uniform andNon-Uniform Effects", **Physics of Fluids** 35, 011902 (2023); https://doi.org/10.1063/5.0128247

60. M. G. Murtaza, Tamanna Akter, E. E. Tzirtzilakis and M. Ferdows, "Numerical study of biomagnetic fluid flow over an unsteady curved stretching sheet in the presence of magnetic field", **Advances and Applications in Fluid Mechanics** 30(1) (2023), 35-62. http://dx.doi.org/10.17654/0973468623003.

61. J. Alam, M.G. Murtaza, E.E. Tzirtzilakis, M. Ferdows, "Parametric Simulation of Biomagnetic Fluid with Magnetic Particles Over a Swirling Stretchable Cylinder Under Magnetic Field Effect" **BioNanoScience** (2023), https: //doi.org/10.1007/s12668-023-01117-x.

62. Murtaza MG, Alam J, Tzirtzilakis EE, Ferdows M. Numerical Simulation of Slip Flow and Heat Transfer of Biomagnetic Fluid over a Stretching Sheet in the Presence of a Magnetic Dipole with Temperature Dependent Viscosity. **Contemp. Math.** [Internet]. 2023 Jun. 5 [cited 2023 Jun. 11];4(2):347-61. https://doi.org/10.37256/cm.4220232685

63. Alam, J., Murtaza, M.G., Tzirtzilakis, E.E. Ferdows M. A Parametric Simulation of MHD Flow and Heat Transfer of Blood-Fe3O4 Over an Exponentially Stretching Cylinder. **BioNanoSci.** (2023). https://doi.org/10.1007/s12668-023-01141-x

64. Murtaza MG, Begum J, Tzirtzilakis E, Ferdows M. MHD Flow and Heat Transfer of Water-Based Nanofluid Passing a Permeable Exponentially Shrinking

Sheet with Thermal Radiation. **Contemp. Math.** 4(2):358–7. Available from: https://ojs.wiserpub.com/index.php/CM/article/view/2684

65. Sultana Jahan, Mohammad Ferdows & Efstratios Tzirtzilakis (2023) Convective flow of hybrid nano particles in combination of TiO2+CuO/engine oil MoS2+ZnO/engine oil and Al2O3+Cu/engine oil with viscous dissipation over vertically moving surface: Numerical and Galerkin approach, **Numerical Heat Transfer, Part A: Applications**, DOI: 10.1080/10407782.2023.2261145.
66. Chrimatopoulos, G. Tzirtzilakis, E.E. Xenos, M.A. Magnetohydrodynamic and Ferrohydrodynamic Fluid Flow Using the Finite Volume Method. **Fluids** 2024, 9, 5. https://doi.org/10.3390/fluids9010005.
67. Ferdows M, Jahan S, Tzirtzilakis E, Sun S. Magnetohydrodynamic hybrid nanofluid flow through moving thin needle considering variable viscosity and thermal conductivity. **Advances in Mechanical Engineering**. 2023 15 (11) doi:10.1177/16878132231208272.
68. Murtaza, G. Bonik, L. Tzirtzilakis, E.E. Ferdows, M. Finite Difference Simulation on Biomagnetic Fluid Flow and Heat Transfer with Gold Nanoparticles towards a Shrinking Sheet in the Presence of a Magnetic Dipole. **Comput. Sci. Math. Forum** 2023, 7, 18. https://doi.org/10.3390/IOCMA2023-14398
69. Murtaza, G. Gomes, A. Alam, J. Tzirtzilakis, E.E. Ferdows, M. Numerical Solution of The Effects of Variable Fluid Properties on Biomagnetic Fluid over an Unsteady Stretching Sheet. **Comput. Sci. Math. Forum** 2023, 7, 15. https://doi.org/10.3390/IOCMA2023-14399.
70. M. G. Murtaza, Jahangir Alam, E.E. Tzirtzilakis, Md. Shamshuddin and M. Ferdows, Effects of Variable Fluid Properties and Mixed Convection on Biomagnetic Fluid Flow and Heat Transfer over a Stretching Sheet in the presence of Magnetic Dipole, **Journal of Power Technologies** 103 (4) 193-208, 2023. ISSN 2083-4195. Available at: Journal page
71. E.N. Petropoulou, M. Ferdows, E.E. Tzirtzilakis. Exact solutions of Burgers equation with moving boundary.**J. Math. Phys**. 1 March 2024; 65 (3): 031507. Journal page.
72. J. Alam, G. Murtaza, E.E. Tzirtzilakis, S. Sun, M. Ferdows, Flow and Heat Transfer of $CoFe_2O_4$–Blood Due to a Rotating Stretchable Cylinder under the Influence of a Magnetic Field. **Bioengineering** 2024, 11, 317. Journal page.
73. M.G. Murtaza, J.C. Misra, E.E. Tzirtzilakis, M. Ferdows. Biomagnetic fluid flow on a nonlinearly stretching sheet with variable thickness in a magnetic environment. **J. Adv. App. Comput. Math.** 2023, 10, 163–177. Journal page.
74. M. Ferdows, J. Alam, M.G. Murtaza, and E.E. Tzirtzilakis, Effects Of Magnetic Particles Diameter And Particle Spacing On Biomagnetic Flow And

Heat Transfer Over A Linear/Nonlinear Stretched Cylinder In The Presence Of Magnetic Dipole, **Journal of Mechanics in Medicine and Biology** Vol. 23, No. 05, 2350036 (2023). Journal page

75. M.G. Murtaza, J. C. Misra, E.E. Tzirtzilakis, and M. Ferdows, Numerical Study Of Biomagnetic Maxwell Fluid Past A Nonlinearly Stretching Sheet With Considering Magnetization And Electrical Conductivity, **Journal of Mechanics in Medicine and Biology** Vol. 23, No. 05. Journal page
76. S.A. Jumana, M.G. Murtaza, E.E. Tzirtzilakis, M. Ferdows, Dual solution of convective biomagnetic fluid through permeable moving flat plate considering wall transpiration and magnetization, **Journal of Mechanics in Medicine and Biology** Vol. 23, No. 01, 2350009 (2023) Journal page
77. Jahangir Alam, M. G. Murtaza, E. E. Tzirtzilakis and M. Ferdows, Partial slip effect of Cu, Au, TiO2-nanoparticles in steady biomagnetic fluid flow and heat transfer over a stretching sheet in the presence of magnetic dipole, **International Journal of Materials Engineering and Technology** 23(1) (2024), 37–56. Journal page
78. R. Prodhan, M. Ferdows, J.C. Misra, E. Tzirtzilakis and M.G. Murtaza, Non–Similar Analysis of Mixed Convection Biomagnetic Boundary Layer Flow Over a Vertical Plate with Magnetization and Localized Heating/Cooling, **European Journal of Computational Mechanics**, Vol. 33 2, 1–30. Journal page
79. Sadia Anjum Jumana, M.G. Murtaza, E.E. Tzirtzilakis, M. Ferdows, Biomagnetic Flow with Magnetic Particles over a continuously moving sheet affected by a magnetic dipole, **Communications in Nonlinear Science and Numerical Simulation** (2024), CNSNS 108132
80. Kyriaki-Evangelia Aslani, Efstratios Tzirtzilakis, Ioannis E. Sarris; On the mechanics of conducting micropolar fluids with magnetic particles: Vorticity–microrotation difference. **Physics of Fluids**, 1 October 2024; 36 (10): 102006. doi: 10.1063/5.0231232.
81. Theofanis Aravanis, Grigorios Chrimatopoulos, Michalis Xenos, Efstratios E. Tzirtzilakis; Forecasting two–dimensional channel flow using machine learning. **Physics of Fluids** 1 October 2024; 36 (10): 103617. doi:10.1063/5.0231005
82. Anjum Jumana, S., Ferdows, M., Tzirtzilakis, E.E., Murtaza, M.G.: Flow of a biomagnetic fluid embedded by magnetic dipole over a continuously moving sheet. **Z Angew Math Mech**. e202100203 (2024). doi:10.1002/zamm.202100203
83. Kalaryti, T.P.; Fourniotis, N.T.; Tzirtzilakis, E.E. Numerical Study of Turbulent Open-Channel Flow Through Submerged Rigid Vegetation. **Water**, 2025, 17, 2156. doi: 10.3390/w17142156.

84. Katsoudas, S.C.; Chrimatopoulos, G.; Xenos, M.; Tzirtzilakis, E.E. A Finite Volume and Levenberg–Marquardt Optimization Framework for Benchmarking MHD Flows over Backward-Facing Steps. **Mathematics**, 2025, 13, 2953. doi: 10.3390/math13182953.

85. J. Alam, M.G. Murtaza, E.E. Tzirtzilakis and M. Ferdows, Duality and stability analysis of biomagnetic fluid flow and heat transfer with magnetic particles along a shrinking cylinder in the presence of a magnetic dipole, **Applied Mathematics-A Journal of Chinese Universities**, 2025, 40(3), 581–601.

86. K.C. Kyriakoudi, G.T. Chrimatopoulos, E.E. Tzirtzilakis and M.A. Xenos, Aneurysmal haemodynamics: a three–dimensional fluid–structure interaction approach. **Royal Society Open Science**, 2026, 13, 251928. doi: 10.1098/rsos.251928.

87. K.-E. Aslani, I.E. Sarris and E.E. Tzirtzilakis, Micromagnetorotation effects in micropolar magnetohydrodynamic blood flow through stenosis. **Physics of Fluids**, February 2026, 38(2), 021906. doi: 10.1063/5.0309533.

88. S.C. Katsoudas, P.D. Linardopoulos, A.A. Raptis et al., Hemodynamic Shear Stress Patterns in Abdominal Aortic Aneurysms and Healthy Aortas: A CFD Study. **Cardiovascular Engineering and Technology** (2026). doi: 10.1007/s13239-026-00823-3.

89. S.C. Katsoudas, K.C. Kyriakoudi, G.T. Chrimatopoulos, P.D. Linardopoulos, C.T. Chrimatopoulos, A.A. Raptis, K.G. Moulakakis, J.D. Kakisis, C.G. Manopoulos, M.A. Xenos and E.E. Tzirtzilakis, "Linking aneurysmal geometry and hemodynamics using computational fluid dynamics", **Physics of Fluids**, 38, 031910 (2026). doi: 10.1063/5.0315857.

90. K.-E. Aslani, I.E. Sarris and E.E. Tzirtzilakis, "On the development of OpenFOAM solvers for simulating MHD micropolar fluid flows with or without the effect of micromagnetorotation", **Computer Physics Communications**, 324, 110144 (2026). doi: 10.1016/j.cpc.2026.110144.

91. T. Aravanis, G. Chrimatopoulos, M. Ferdows, M. Xenos and E.E. Tzirtzilakis, "ASP-assisted symbolic regression for interpretable modelling of 3D laminar channel flow", **Scientific Reports**, 16, 20105 (2026). doi: 10.1038/s41598-026-49762-y.

92. G. Murtaza, J. Alam, E.E. Tzirtzilakis and M. Ferdows, "One–parameter group analysis of biomagnetic fluids with magnetic nanoparticles", **Journal of Asian Scientific Research**, Vol. 16, No. 3, pp. 37–55, 2026. Journal page.

93. S.C. Katsoudas, T.I. Aravanis, K.D. Blekas, E.E. Tzirtzilakis and M.A. Xenos, "Artificial neural networks for predicting pulsatile hemodynamics in stenotic arteries", **Meccanica**, Vol. 61, No. 4, Article 93, 2026. doi: 10.1007/s11012-026-02155-x.

D. Papers in special volumes and proceedings.

1. E. Tzirtzilakis and N. Kafoussias, "Comparative numerical study of the flow of a biomagnetic fluid over a flat stretched sheet under the influence of an applied magnetic fluid" (in Greek), In: Proceedings of the 8^{th} National Conference of Mathematical Analysis Xanthi, Greece, 29-30 September 2000, Xanthi (2002), 95-103.
2. E. Tzirtzilakis and M. Xenos, "Numerical study of solitons in a thin water layer" (in greek), In: Order and Chaos in Non-Linear Dynamic Systems, G. A. Pneumatikos Editions, Athens 2000, 391-398.
3. E. Tzirtzilakis and N. Kafoussias "Mathematical models for biomagnetic fluid flow and applications", In: Proceedings of the 6th National Congress on Mechanics, Thessaloniki, Greece, 19-21 July, 2001, 2, 227-232, 2001.
4. E. Tzirtzilakis, N. Kafoussias and P. M. Hatzikonstantinou, "Biomagnetic fluid flow in a rectangular duct", In: Proceedings of the 4th GRACM Congress on Computational Mechanics, Patras, Greeece, 27-29 June 2002, 503-510.
5. C.L. Goudas, G.A. Katsiaris, N. Kafoussias, C. Massalas, G. Pnevmatikos, M. Xenos and E. Tzirtzilakis, "Longshore current modification near the boundary by seabed groin arrangements: A numerical approach", In: SOFT SHORE PROTECTION An Environmental Innovation of Coastal Engineering, eds. C. Goudas, G. Katsiaris, V. May and T. Karambas, Kluwer Academic Publicers, 2003, 311-336.
6. N. G. Kafoussias and E. E. Tzirtzilakis, "A mathematical model of biomagnetic fluid flow", In: Recent Advances in Mechanics and related fields, eds. G. Katsiaris, V. Markellos, J. Hadjidemetriou. Patras, Greece, 2003, 115-130.
7. E. E. Tzirtzilakis, Ch. Skokos & T. C. Bountis, "A numerical study of soliton solutions of the Boussinesq equation using spectral methods", In: ICNAAM 2004, International Conference on Numerical Analysis and Applied Mathematics 2004, eds. Simos T. E. & Tsitouras Ch., Wiley-VCH, 2004, pp. 415-418 (extended abstract).
8. E. E. Tzirtzilakis, Ch. Skokos & T. C. Bountis, "Numerical solution of the Boussinesq equation using spectral methods and stability of solitary wave propagation", In: Proceedings of the 1st International Conference From Scientific Computing to Computational Engineering, (1st IC-SCCE), Athens, Greece, 8–10 September, 2004.
9. M. Xenos, E.E. Tzirtzilakis, V.C. Loukopoulos, N.G. Kafoussias, "Blood flow in a rectangular channel under the action of a magnetic field", In: Proceedings of the 1st International Conference From Scientific Computing to Computational Engineering, (1st IC-SCCE), Athens, Greece, 8–10 September, 2004.

10. E.E. Tzirtzilakis, "Mathematical Modelling And Simulations Of Blood Flow In Magnetic Field", (Invited Paper), In: Proceedings of the 2nd International Conference From Scientific Computing to Computational Engineering, (2nd IC-SCCE), Athens, Greece, 7–10 July, 2006.
11. M. Xenos, E. Tzirtzilakis and N. Kafoussias, "Compressible turbulent boundary layer flow control over a wedge", In: Proceedings of the 2nd International Conference From Scientific Computing to Computational Engineering, (2nd IC-SCCE), Athens, Greece, 7–10 July, 2006.
12. E.E. Tzirtzilakis and M.A. Xenos, "Biomagnetic fluid flow in a driven cavity", In: Proceedings of the 7th GRACM International Congress on Computational Mechanics, Athens, Greece, June 30th - July 2nd, 2011.
13. A.A. Raptis, M.A. Xenos, E.E. Tzirtzilakis and M.I. Matsagkas, "Magnetohydrodynamic Effects On Blood Flow In An Aneurysmal Geometry", In: Proceedings of the 6th International Conference from Scientific Computing to Computational Engineering, paper 37, Athens, 9–12, 2014.
14. M.G. Murtaza, M. Ferdows, E.E. Tzirtzilakis, "Effect of variable viscosity and variable thermal conductivity of biomagnetic fluid flow and heat transfer over a stretching sheet in the presence of magnetic dipole", **Proceedings of the 1st International Conference on Industrial and Mechanical Engineering and Operations Management** (IMEOM), Dhaka, Bangladesh, 2017.
15. M.G. Murtaza,E.E. Tzirtzilakis, M. Ferdows, "Three-Dimensional Biomagnetic Flow and Heat Transfer over a Stretching Surface with Variable Fluid Properties". In: Singh V., Gao D., Fischer A. (eds) Advances in Mathematical Methods and High Performance Computing. **Advances in Mechanics and Mathematics**, vol 41, 2019. Springer, Cham, DOI: https://doi.org/10.1007/978-3-030-02487-1_25.
16. M.G. Murtaza, E.E. Tzirtzilakis, and M. Ferdows, "Biomagnetic fluid flow past a stretching / shrinking sheet with slip conditions using lie group analysis", **AIP Conference Proceedings 2121, 050005 (2019)** https://doi.org/10.1063/1.5115892.
17. A. Jahangir, M.G. Murtaza, E.E. Tzirtzilakis, and M. Ferdows, "Mixed convection flow and heat transfer of Biomagnetic fluid with magnetic/non - magnetic particles due to a stretched cylinder in the presence of a magnetic dipole", **Proceedings of International Exchange and Innovation Conference on Engineering & Sciences (IEICES)**. 8, pp.76–83, 2022–10–20. https://doi.org/10.5109/5909065.
18. Murtaza, M.G. Bonik, L. Tzirtzilakis, E.E. Ferdows, M. Finite Difference Simulation on Biomagnetic Fluid Flow and Heat Transfer with Gold Nanoparticles towards a Shrinking Sheet in the Presence of a Magnetic Dipole. **Comput. Sci. Math. Forum** 2023, 6, x. https://doi.org/10.3390/xxxxx

19. Murtaza, M.G. Gomes, A. Alam, J. Tzirtzilakis, E.E. Ferdows, M. Numerical Solution of The Effects of Variable Fluid Properties on Biomagnetic Fluid over an Unsteady Stretching Sheet. **Comput. Sci. Math. Forum** 2023, 7(1) 15. https://doi.org/10.3390/IOCMA2023-14399

20. J. Alam, M.G. Murtaza, E.E. Tzirtzilakis, M. Ferdows, Study of Biomagnetic fluid flow and heat transfer containing magnetic particles over a cylinder subject to prescribed heat flux, **8th Thermal and Fluids Engineering Conference (TFEC)** pp. 1087–1096, 2023. DOI: 10.1615/TFEC2023.bio.045594

21. J. Alam, M.G. Murtaza, E.E. Tzirtzilakis, M. Ferdows, Stability And Convergence Analysis Of Time Dependent Fe_3O_4 / Blood Flow And Heat Transfer Over A Stretching Cylinder, **9th Thermal and Fluids Engineering Conference (TFEC)** April 21–24, 2024.

22. T. Aravanis, G. Chrimatopoulos, M. Xenos, E.E. Tzirtzilakis, "Machine-Learning Modelling Of A Fluid Flow In A Two dimensional Channel", In: Proceedings of the **11th International Conference From Scientific Computing to Computational Engineering**, (11th IC-SCCE), Loutraki, 3–6 July, 2024.

23. Kalaryti, T.P.; Fourniotis, N.T.; Tzirtzilakis, E.E. Effect of submerged vegetation on spatial structure of open-channel flow, in Proceedings of the 8th International Electronic Conference on Water Sciences, 14–16 October 2024, MDPI: Basel, Switzerland

24. T. Aravanis, G. Chrimatopoulos, M. Xenos, E.E. Tzirtzilakis, "Machine Learning–Based Geometric Interpolation for Fluid–Flow Modelling", in PCI '24: Proceedings of the **28th Pan–Hellenic Conference on Progress in Computing and Informatics**, Pages 407–412 On–line

25. K.C. Kyriakoudi, G.T. Chrimatopoulos, A.C. Felias, P.D. Linardopoulos, M.T. Rassias, E.E. Tzirtzilakis and M.A. Xenos, "Fluid–Structure Interaction in Arterial Hemodynamics: A Mathematical Approach", Chapter 11 in **Mathematical Analysis, Optimization and Data Sciences**, Series on Computers and Operations Research, Vol. 14, World Scientific Publishing Company, eds. P.M. Pardalos and T.M. Rassias. doi: 10.1142/9789819820498_0011.

26. F. Mohammad, M. Mahbub and E.E. Tzirtzilakis, "Steady Biomagnetic Flow Along a Nonlinearly Stretching Surface with Magnetic Dipole", In: **2018 Sustainable Industrial Processing Summit**, Vol. 8, pp. 175–182, 2018. Proceedings page.

27. S.A. Jumana, M. Ferdows and E.E. Tzirtzilakis, "Finite Difference Solution of Bio–Magnetic Flow of Heat Transfer over Moving Horizontal Plate by the Presence of Variable Viscosity and Temperature", In: Proceedings of the **CHT–21 ICHMT International Symposium on Advances in Computational Heat Transfer**, 2021. doi: 10.1615/ICHMT.2021.CHT-21.350.

28. K.-E. Aslani, I.E. Sarris and E.E. Tzirtzilakis, "Effect of Micromagnetorotation on an MHD Blood Flow through an Idealised Stenosis", In: Proceedings of the **11th World Congress on Mechanical, Chemical, and Material Engineering (MCM'25)**, Paris, France, August 2025, Paper HTFF 127. doi: 10.11159/htff25.127.
29. V.C. Gerogiannis, T.I. Aravanis, E.E. Tzirtzilakis and A. Kanavos, "An Efficient Deep Learning Framework for Real–Time Gender Classification from Facial Images", In: Proceedings of the **9th International Conference on Algorithms, Computing and Systems (ICACS '25)**, pp. 73–78, published 2026. doi: 10.1145/3789418.3789427.

Preprint.

1. M. Ferdows, J. Alam, M.G. Murtaza and E.E. Tzirtzilakis, "Biomagnetic flow and radiative heat transfer along an inclined stretched cylinder with magnetic particles and heat source/sink under the influence of magnetic dipole", **Research Square**, 2023. Preprint page.

E. Books–Lecture Notes.

1. E.E. Tzirtzilakis and M.A. Xenos, **''Fluid Mechanics with Applications''**, **ISBN: 978–960–9427–75–3**, 2nd edition, 2024, Gotsis Publications (in Greek). Eudoxus book code: 133039809.
2. E.E. Tzirtzilakis, **''Elements of optimization theory & operational resources management''**, (in Greek) Nafpaktos, Greece 2008, (132 pages). Lecture Notes for the students of the Department of Telecommunications Systems and Networks, Technological Educational Institute of Messolonghi.
3. E.E. Tzirtzilakis, **''Elements of optimization theory''**, (in greek), Nafpaktos, Greece 2008, (208 pages), **ISBN:978–960–930431–3**.
4. E.E. Tzirtzilakis, N.G. Kafoussias, **''Numerical schemes and Difference Equations''**, In E-Book: "Methods for studying partial difference equations. With a connection to numerical schemes and applications", Bentham Science Publishers, eISBN: 978–1–60805–152–6, pp. 111–140, 2010. Chapter in e–Book).

7 Scholarships

1. Scholarship from the Greek State Scholarships Foundation for the second year (1998–1999) of master studies as the student with the highest grades.
2. Scholarship for **postdoc research** from the Greek State Scholarships Foundation, for the "Study of Problems of Fluid Mechanics and Biomechanics". Duration: From 01–11–2005 until 01–06–2007.

8 References – Distinctions

Inclusion in the database "Updated science–wide author databases of standardized citation indicators", which includes the top 2% of researchers worldwide with respect to citation impact in a specific area of research. The corresponding entries are:

- Baas, Jeroen; Boyack, Kevin; Ioannidis, John P.A. (2020), "Data for "Updated science–wide author databases of standardized citation indicators", Mendeley Data, V2, doi: 10.17632/btchxktzyw.2

  Scientific area: Mechanical Engineering & Transports, Applied Mathematics, Mathematics & Statistics rating 1986 and 1789 out of 92645. The references included up to the year 2019.

- Baas, Jeroen; Boyack, Kevin; Ioannidis, John P.A. (2021), "August 2021 data-update for "Updated science–wide author databases of standardized citation indicators" ", Mendeley Data, V3, doi: 10.17632/btchxktzyw.3

  Scientific area: Mechanical Engineering & Transports, Applied Mathematics, Mathematics & Statistics rating 2177 and 1975 out of 109724. The references included up to the year 2020.

- Ioannidis, John P.A. (2022), "September 2022 data–update for "Updated science–wide author databases of standardized citation indicators" ", Mendeley Data, V4, doi: 10.17632/btchxktzyw.4

  Scientific area Mechanical Engineering & Transports, Engineering, Fluids & Plasmas rating 2616 and 2402 out of 121447. The references included up to the year 2021.

- Ioannidis, John P.A. (2023), "October 2023 data–update for "Updated science–wide author databases of standardized citation indicators" ", Elsevier Data Repository, V6, doi: 10.17632/btchxktzyw.6.

  Scientific area Mechanical Engineering & Transports, Applied Mathematics, Mathematics & Statistics rating 2142 and 2113 out of 133525. The references included up to the year 2022. Rating 1209 and 3182 out of 133525 for the year 2022 alone.

- Ioannidis, John P.A. (2024), "August 2024 data–update for "Updated science–wide author databases of standardized citation indicators" ", Elsevier Data Repository, V7, doi: 10.17632/btchxktzyw.7.

  Scientific area Mechanical Engineering & Transports, Applied Mathematics, Mathematics & Statistics rating 2033 and 2122 out of 143311 for career-long impact through 2023. Rating 1519 and 2201 out of 143311 for the single-year 2023 list.

- Source: Google Scholar **Total References: 2262**, last update: 12/04/2025.

  h-index: 24

  List of references are available at Google Scholar

- Source: Scopus

  Total references: 1507, excluding self–citations: 1230, last update: 25/01/2025.

  h-index: 20

9 Participation in research and development programmes – Professional experience

1. Participation in the cultural program **INTERREG II** (Greece-Italy), granted by Ministry of National Economy to the University of Patras, Greece.

   Duration: 2-6/2000 and 9/2000. (Included a one month stay at the University of Bologna, Italy).

   Position: Trainee.

2. Participation in the research program **PENED 99**, granted by Greek General Secretariat of Research and Technology to the Department of Mathematics, University of Patras, Greece, with title: "Applications of non linear dynamics and chaos in biomedical and biochemical systems".

   Duration: 11-12/1999, 1, 7, 8, 10 / 2000.

   Position: Researcher.

3. Participation in the research program **K. Karatheodoris** granted by the Research Committee University of Patras to the Department of Mathematics, University of Patras, Greece, with title "Study of biomagnetic fluid flow under the influence of an applied magnetic field".

   Duration: 11/2000 - 11/2003.

   Position: Researcher.

4. Participation in the research program **Pythagoras II**, granted by the Ministry of National Education and Religious Affairs to the Department of Mathematics, University of Patras, Greece, with title: "Differential Equations, Difference Equations and their Applications in Fluid Mechanics".

   Duration: 01/09/2005 - 31/12/2006.

   Position: Researcher.

5. Participation in the development program **EPEAEK II** cogranted by the European Union to the Hellenic Open University, Greece, with title "Development of educational material by using new technologies for the undergraduate and postgraduate programmes", which was included in the program entitled "Development and improvement of the quality of services of the Hellenic Open University".

   Duration: 03/09/2007-30/09/2009.

Position: Scientific personnel of the Laboratory of Educational Material and Methodology (e–Comet Lab). Especially from 08/05/2008-30/06/2009: Head of the Division of Quality Assurance of e–Comet Lab.

6. Participation in the operational program **Education and life learning** cogranted by the European Union to the Technological Educational Institute of Messolonghi.

   Duration: 3–6/2011.

   Position: Scientific Staff of MODIP of the Technological Educational Institute of Messolonghi.

7. Participation in the development program **ESPA 2007–2013** cogranted by the European Union to the Hellenic Open University, Greece, with title "Development actions of the Laboratory of Educational Material and Methodology for the support of the educational work of the Hellenic Open University".

   Duration: 14/02/2011–31/12/2014.

   Position: Scientific personnel of the Laboratory of Educational Material and Methodology (e–Comet Lab). Especially from 08/05/2011–31/12/2014: Head of the Division of Quality Assurance of e–Comet lab.

8. Participation in the research program entitled "Hydrogeological – Hydraulic study for the irrigation of Zacharo Municipality" granted by the Zacharo Municipality, Greece.

   Duration: 02/02/2023 – 02/08/2023.

   Position: Researcher.

9. Participation in the research program entitled "Investigation of the hydraulic behavior and suggestions for the regulation of the hydrodynamic system of Trichonida - Lysimachia lakes, in Western Greece" granted by the Region of Western Greece, Greece.

   Duration: 01/07/2022 – 30/04/2023.

   Position: Researcher.

10. Regional head of the research program granted by "Greece 2.0 – National Recovery and Resilience Fund, European Union, Next Generation EU" action: "Flagship actions in interdisciplinary scientific fields with a special focus on the productive fabric" title: "SAFE AORTA: Artificial Intelligence clinic decision support system for abdominal aortic aneurisms" code: TAEDR0535983.

    Duration: 02/08/2023 – 31/12/2025.

    Position: Project Leader for the University of the Peloponnese.

11. Organisation and implementation of the MSc Programme **"CLEAN TECHNOLOGIES MANAGEMENT"**, under the project "Internationalisation of the Educational Services of Higher Education Institutions" (Subproject 3), within SUB2: "Universities of Excellence", Project Code MIS TA 5180665, funded by the Recovery and Resilience Facility through the National Recovery and Resilience Plan "Greece 2.0" (Account Code 80905). Period: 18.09.2025–30.06.2026. Total budget: €1,163,531.20 (€1,037,031.20 allocated to the Greek partner and €126,500.00 to the University of Montpellier). Role: Principal Investigator and Scientific Coordinator.

10 Participation in conferences

A. Participation in conferences with presentation of scientific results.

1. E. Tzirtzilakis and M. Xenos, "Numerical study of solitons in a thin water layer", **12th Summer School/ National conference in Non–linear Dynamics, Chaos and Complexity**, Patras, Greece, 14-24 July, 1999.
2. E. Tzirtzilakis and N. Kafoussias, "Comparative numerical study of the flow of a biomagnetic fluid over a flat stretched sheet under the influence of an applied magnetic fluid" (in greek), **8th National Conference of Mathematical Analysis**, Xanthi, Greece, 29-30 September 2000.
3. E. Tzirtzilakis and G. Tanoudis, "Numerical Study of Biomagnetic Fluid Over a Streching Sheet With Heat Transfer", **Sixth International Symposium On Orthogonal Polynomials, Special Functions and Applications (OPSFA)**, Rome, Italy, 18-22 June, 2001.
4. E. Tzirtzilakis and N. Kafoussias, "Mathematical Models For Biomagnetic Fluid Flow and Applications", **6th National Congress on Mechanics**, Thessaloniki, 19-21 July, 2001.
5. E. Tzirtzilakis, E. Marinakis, M. Xenos and A. Apokis, "Solitary wave transmission in a thin water layer" **1412th Summer School/ National conference in Non–linear Dynamics, Chaos and Complexity**, Patras, Greece, July, 2001.
6. E. Tzirtzilakis, N. Kafoussias and P. M. Hatzikonstantinou, "Biomagnetic Fluid Flow In A Rectangular Duct", **4th GRACM Congress on Computational Mechanics**, Patras, Greece, 27-29 June, 2002.
7. E.E. Tzirtzilakis, V.D. Sakalis, N.G. Kafoussias, P.M. Hatzikonstantinou, "Biomagnetic Fluid Flow In A 3d Duct", **International Conference on Differential, Difference Equations and their Applications**, Patras, Greece, 1-5 July, 2002.
8. E. Tzirtzilakis, E. Marinakis, C. Apokis, A. Bountis, "Numerical study of soliton solutions of higher order evolution equations of KdV type", **9th National**

Conference of Mathematical Analysis, Chania, Greece, 5-7 September, 2002.

9. E.E. Tzirtzilakis, V.D. Sakalis, N.G. Kafoussias, P.M. Hatzikonstantinou, "Numerical, Existence and Uniqueness Results of Biomagnetic Fluid Flow", **Conference on Applied and Industrial Mathematics**, Pitesti, Romania, October, 11-13, 2002.
10. E.E. Tzirtzilakis, V.D. Sakalis, N.G. Kafoussias, P.M. Hatzikonstantinou, "Biomagnetic (Blood) Fluid Flow in a 3d Duct", **Second M.I.T. Conference on Computational Fluid and Solid Mechanics**, **M**assachusetts **I**nstitute of **T**echnology, Massachusetts, USA, June 17-20, 2003.
11. E. E. Tzirtzilakis, "Numerical solution of BFD equations", **11th National Conference of Mathematical Analysis**, Thessaloniki, Greece, May, 23-25, 2006.
12. E.E. Tzirtzilakis, "Mathematical Modelling And Simulations of Blood Flow In Magnetic Field", (INVITED PAPER), **2nd International Conference From Scientific Computing to Computational Engineering, (2nd IC-SCCE)**, Athens, Greece, 5-8 July, 2006.
13. E.E. Tzirtzilakis, "A Mathematical Model for Blood Flow in Magnetic Field", **International Symposium on Trends in Applications of Mathematics to Mechanics (STAMM 2006)**, Vienna, Austria, July 10-14, 2006.
14. E.N. Petropoulou, P.D. Siafarikas and E.E. Tzirtzilakis, "On the analytic structure of the complex Blasius problem", **International Conference on Difference Equations and Applications (ICDEA 2007)**, Lisbon, Portugal, July 23-27, 2007.
15. E.E. Tzirtzilakis, "Biomagnetic fluid flow in a channel with stenosis", **12th National Conference of Mathematical Analysis**, Athens, Greece, May, 15-17, 2008.
16. E.E. Tzirtzilakis, E.N. Petropoulou, "Some results on the Logistic Equation in the complex plane", **Progress on Difference Equations –PODE 2010**, Xanthi, Greece, May 21-25, 2010.
17. E.E. Tzirtzilakis and M.A. Xenos, "Biomagnetic Fluid Flow in a Driven Cavity", **7th GRACM International Congress on Computational Mechanics**, Athens, Greece, 30 June–2 July, 2011.
18. E.E. Tzirtzilakis and M.A. Xenos, "Biomagnetic Fluid Flow in a Driven Cavity", **14th National Conference of Mathematical Analysis**, University of Patras, Patras, Greece, May 18–19, 2012.
19. E.E. Tzirtzilakis, E.N. Petropoulou, "On the Logistic equation in the complex plane", **International conference on differential equations, difference equations and special functions–ICDDESF 2012**, Patras, Greece, September 03–07, 2012.

20. E.E. Tzirtzilakis, "Biomagnetic Fluid Flow in an Aneurism", **10th AIMS Conference on Dynamical Systems Differential Equations and Applications**, Madrid, Spain July 7–11, 2014.
21. E.E. Tzirtzilakis, "Mathematical formulation and solution technique of Biomagnetic Fluid Dynamic problems", 15th Panhellenic Conference of Mathematical Analysis, Heraklion, Crete, Greece, May 27-29, 2016.
22. E.E. Tzirtzilakis, "Mathematical formulation and solution technique of Biomagnetic Fluid flow in an aneurism", (INVITED SPEAKER, 35 MINUTES TALK), **Differential Equations and Applications**, Brno, Czech Republic, September 4–7, 2017.
23. G. Murtaza, E. Tzirtzilakis and M. Ferdows, "Effect Of Electrical Conductivity And Magnetization On The Biomagnetic Fluid Flow Over A Stretching Sheet", **9th GRACM International Congress on Computational Mechanics, Chania, Greece,** 2–4 June, 2018.
24. E. Tzirtzilakis, "Biomagnetic Fluid Flows in pathological geometries (Aneurism or Stenosis)", **11th Panhellenic Conference** "Fluid Flow Phenomena", Kozani, 23–24 November, 2018 (in Greek).
25. E.E. Tzirtzilakis (co-authors T. Aravanis, G. Chrimatopoulos and M. Xenos), "2D Channel Flow Machine Learning Modelling", **18th Panhellenic Conference of Mathematical Analysis**, Department of Electrical and Computer Engineering, Democritus University of Thrace, Xanthi, Greece, 19–21 September 2024.

B. Attendance of conferences.

1. 11th Summer School/ National conference in Non–Linear Dynamics, Chaos and Complexity, Livadia, Greece, 13-25 July, 1998.
2. 5th International Symposium on Orthogonal Polynomials, Special Functions and their Applications, Patras, Greece, 20-24 Semptember, 1999.
3. First International Conference On Soft Shore Protection Against Coastal Erosion, Patras, Greece, 18-21 October, 2000.
4. 1st International Seminar on "Mathematics of Computers and Decision Making", Patras, Greece, 25-26 May, 2001.
5. E.E. Tzirtzilakis and M.A. Xenos, "MHD effects on blood flow in a stenosis", **International conference on differential equations, difference equations and special functions–ICDDESF 2012**, Patras, Greece, September 03–07, 2012.
6. A.A. Raptis, M.A. Xenos, E.E. Tzirtzilakis and M.I. Matsagkas, "Magnetohydrodynamic Effects On Blood Flow In An Aneurysmal Geometry", **6th International Conference from Scientific Computing to Computational Engineering**, paper 37, Athens, 9–12 July, 2014.

7. M.G. Murtaza, E.E. Tzirtzilakis, and M. Ferdows, "Biomagnetic fluid flow past a stretching / shrinking sheet with slip conditions using lie group analysis", **8TH BSME International Conference On Thermal Engineering, 19–21 December 2018, Dhaka, Bangladesh**

11 Teaching experience

Postgraduate Courses

Teaching of the following **postgraduate** courses:

- **''Numerical solution of ordinary differential equations''** (Spring semesters 2009–2018, except 2013–2014 and 2015–2016). Obligatory course of a) the joint Postgraduate program leading to MSc in"Mathematics for computers and decision making" of the Departments of Mathematics and Computer Engineering & Informatics, of the University of Patras, Greece, b) the Postgraduate program leading to MSc in "Computational mathematics, Informatics in education" of the Department of Mathematics, of the University of Patras, Greece. (The course was taught by E. E. Tzirtzilakis and Professor M. Vrahatis.)
- **''Applications of computational mathematics''** (Academic years 2007–2015, except from 2008-2009). Free choice course of a) the joint Postgraduate program leading to MSc in "Mathematics for computers and decision making" of the Departments of Mathematics and Computer Engineering & Informatics, of the University of Patras, Greece. (The course was taught by E. E. Tzirtzilakis and Assistant Professor O. Raggos.)
- **''Principles of environmental physics''** (Academic year 2006–2007). Annual obligatory course part of the joint Postgraduate program leading in MSc in "Environmental sciences" of the Departments of Mathematics, Physics, Chemistry, Biology and Geology, of the University of Patras, Greece. (The course was taught by E. E. Tzirtzilakis and Professors P. Yianoulis and A. Argiriou.)

Undergraduate Courses[3]

- Teaching of the following undergraduate course at the Hellenic Open University, Greece:
  - ◇ **''FYE10-General Mathematics I''** (Academic years 2008–2012). Obligatory course of the program "Studies in Natural Sciences" leading to BSc.
  - ◇ **''PLI10-Mathematics for Computer Science I''** (Academic years 2017–2022). Obligatory course of the program "Computer Science" leading to BSc.

[3]When not mentioned otherwise, the course is theoretical with no laboratories.

- Teaching of the following undergraduate courses at the Technological Educational Institute (TEI) of Western Greece, Department of Mechanical Engineering (academic years 2015–2019), and at the University of the Peloponnese, Department of Mechanical Engineering (academic years 2019–winter semester 2023–2024). Teaching duties were subsequently suspended because of the Vice Rector appointment:

  1. **Fluid Mechanics I** (Theory and laboratories) (Academic years 2015–winter semester 2023–2024)
  2. **CFD** (Theory and laboratories) (Academic years 2019–winter semester 2023–2024)
  3. **Programming I** (Theory and laboratories) (Academic years 2016–2019)
  4. **CFD and Energy systems** (laboratories) (Academic years 2016–2019)
  5. **Fluid Mechanics II** (laboratories) (Academic years 2015–winter semester 2023–2024)
  6. **Programming II** (laboratories) (Academic years 2015–2019)
  7. **Operational Research** (Theory) (Academic years 2019–winter semester 2023–2024)
  8. **Numerical Analysis** (Theory and Laboratories) (Academic years 2018–2019)

- Teaching of the following undergraduate courses at the former Technological Educational Institute of Messolonghi, later Technological Educational Institute of Western Greece (academic years 2003–2004, 2005–2010):

  ◇ at the Department of Mechanical & Water Resources Engineering:

  1. **‘‘Mathematics I’’** (Academic years 2005–2014)
  2. **‘‘Mathematics II’’** (Academic years 2006–2009)
  3. **‘‘Applied Mathematics’’** (Academic years 2009–2015)
  4. **‘‘Special Topics in Physics’’** (Academic years 2009–2014)
  5. **‘‘Fluid Mechanics’’** (Academic years 2010–2015)
  6. **‘‘Programming I’’** (Theory and laboratories) (Academic years 2011–2014)
  7. **‘‘Programming II’’** (Theory and laboratories) (Academic years 2011–2015)
  8. **‘‘Finite Elements’’** (Academic years 2013–2015)
  9. **‘‘Energy and Environment’’** (Academic years 2013–2015)
  10. **‘‘Quality Control’’** (Academic years 2013–2015)
  11. **‘‘Data Bases Systems’’** (Academic years 2013–2015)
  12. **‘‘Professional Legislation and Ethics’’** (Academic years 2013–2015)
  13. **‘‘Thermodynamics and Heat Transfer’’** (Academic years 2013–2015)

14. **''Working Safety Rules and Environmental Protection''** (Academic years 2013–2015)
15. **''Hydraulics''** (Academic year 2014–2015)

◇ at the Department of Administration of Cooperative Organizations:

1. **''Programming II''** (Theory and laboratories) (Academic year 2005-2006)
2. **''Programming III''** (Only laboratories) (Academic years 2005-2007)

◇ at the Department of Applied Informatics in Management & Finance:

1. **''Office automation''** (Theory and laboratories) (Academic year 2003-2004)
2. **''Algorithms''** (Only laboratories) (Academic year 2003-2004)
3. **''Programming I''** (Only laboratories) (Academic year 2003-2004)

◇ at the Department of Telecommunications Systems and Networks:

1. **''Optimization theory & operational resources management''** (Academic years 2007-2009)

Thesis

- Co–supervisor of the PhD thesis of Md. Jahangir Alam, University of Dhaka, Bangladesh, jointly with Professor Mohammad Ferdows, Department of Applied Mathematics, University of Dhaka. Thesis title: "Effect of Magnetic Particles on Biomagnetic Fluid Flow through Stretched Cylindrical Surface". In publications the author is cited as J. Alam.

- Co–supervisor of PhD thesis of Md. Ghulam Murtaza Talukder University of Dhaka Bangladesh. Joint supervision with professor Mohammad Ferdows, Department of Applied Mathematics, University of Dhaka Bangladesh. PhD Thesis title: "Biomagnetic fluid flows over a stretching sheet". At the papers the PhD author is mentioned as M.G. Murtaza.

- Member of the three-member Advisory Committee for the PhD thesis of K.-E. Aslani, "Biological flows under the influence of high magnetic fields based on micropolar theory", Department of Mechanical Engineering, University of West Attica (19.02.2020–30.07.2024).

- Supervisor of the Master in Science Thesis of M. Iliopoulou: "Biomagnetic Fluid Flow in an aneurism", joint Postgraduate program leading to MSc in "Mathematics for computers and decision making" of the Departments of Mathematics and Computer Engineering & Informatics, of the University of Patras, Greece, 2015.

- Supervisor of more than fifteen graduate level Thesis at TEI of Western Greece and University of the Peloponnese, Department of Mechanical Engineering

Assistance Teaching

Assistance at teaching undergraduate courses, while being a PhD student

- At the Department of Mathematics of the University of Patras, Greece:

  1. **"Computational fluid dynamics I"** (Academic years 1999-2002)
  2. **"Computational fluid dynamics I"** (Academic years 1999-2002)
  3. **"Fluid mechanics I"** (Academic years 2001-2002)
  4. **"Fluid mechanics II"** (Academic years 2000-2002)

- At the Department of Chemistry of the University of Patras, Greece:

  { **"Mathematics II"** (Academic years 2000-2001)

12 Scientific Lectures

1. "Biomagnetic fluid dynamics", Dipartimento di Fisica, Bologna, Italy, 20 Setember, 2000. (During the participation in the program Interreg II (Greece-Italy).)

2. "A Mathematical model for blood flow in magnetic field", Department of Applied Mathematics and Theoretical Physics, Centre for Mathematical Sciences, University of Cambridge, U.K., 13 May, 2004 (as invited speaker during a scientific visit).

3. "Some physical problems of Biomagnetic Fluid Dynamics (BFD)", Department of Applied Mathematics, University of Zaragoza, Spain, 16 February, 2012 (as invited speaker during a scientific visit).

4. "Some physical problems of Biomagnetic Fluid Dynamics (BFD)", Department Mechanical Engineering, Technological Educational Institute of Western Macedonia, Kozani, Greece 22 February 2012 (as invited speaker during a scientific visit).

5. "Some physical problems of Biomagnetic Fluid Dynamics", Department of Mathematics, University of Ioannina, Ioannina, Greece, 13 February 2013 (talk at the weekly series of seminars of the department).

6. "Biomagentic fluids", Department of Mathematics, University of Patras, Greece, 27 September 2014 (invited speaker at the 2nd Meeting "Applications of Differential Equations" organized by the School of D.E and Applications "P. Siafarikas").

7. "Mathematical formulation and solution technique of Biomagnetic Fluid flow in an aneurism", Talks as a visiting professor in the framework of "Erasmus plus" program, Faculty of Mechanical Engineering, Institute of Mathematics, Brno, Czech Republic, September 4–7, 2017.

8. Scientific visit in the framework of "Erasmus plus" program, Talks as a visiting professor in the framework of "Erasmus plus" program, Faculty of Mechanical Engineering, Faculty of Mechanical Engineering, Institute of Mathematics, Brno, Czech Republic, April 10–13, 2018.

13 Scientific Referee –Reviews – Assessments

- Evaluator "Support of postdoctoral researchers" – B – cycle 2019, Greek State Foundation of Scholarships .
- Evaluator of research projects "support of research with emphasis to new researchers" EDBM34, ESPA 2014–2020.
- Evaluator of research projects (FONDECYT Regular Competition 2022) for the National Research and Development Agency of Chile.
- Assessment for the promotion to full professor of Dr. Fenuga, Olugbenga John, Department of Mathematics, University of Lagos, Akoka, Lagos State, Nigeria.
- Examiner of the PhD Thesis of Md. Jashim Uddin "A Study of Pulsatile Flow Phenomena with Computational Fluid Dynamics Approach", Department of Applied Mathematics, University of Dhaka, Bangladesh.
- Evaluator of research projects Research Ireland Investigators Programme 2025–Stage 2–Full Proposal Virtual Panel, Research Ireland, 2025.
- Reviewer for the Mathematical Reviews of the American Mathematical Society. Reviewer number: 45722.
- Referee for the following scientific international journals::

  1. Acta Mechanica
  2. Advances in Difference Equations
  3. AIP Advances
  4. American Journal of Computational and Applied Mathematics
  5. Applied Mathematical Modelling
  6. Biomechanics and Modeling in Mechanobiology
  7. Canadian Journal of Physics (2 articles)
  8. Cardiovascular Engineering and Technology
  9. Cell Reports Physical Science
  10. Chemical Engineering Communications
  11. Chinese Journal of Physics (2 articles)

12. Communications in Numerical Methods in Engineering
13. Computers & Fluids
14. Computer Methods and Programs in Biomedicine (2 articles)
15. Dynamics of Continuous, Discrete & Impulsive Systems, Series B
16. Energies
17. Entropy
18. European Journal of Mechanics / B Fluids
19. Heat and Mass Transfer of the Latin American Applied Research (LAAR) (2 articles)
20. Heliyon (3 articles)
21. Indian Journal of Pure and Applied Mathematics
22. International Journal for Computational Methods in Engineering Science & Mechanics
23. International Journal for Multiscale Computational Engineering
24. International Journal for Numerical Methods in Biomedical Engineering (2 articles)
25. International Journal for Numerical Methods in Heat and Fluid Flow
26. International Journal of Applied Mechanics (2 articles)
27. International Journal of Applied and Computational Mathematics (IACM)
28. International Journal of Computational Fluid Dynamics (3 articles)
29. International Journal of Heat and Fluid Flow (2 articles)
30. International Journal of Heat and Mass Transfer
31. International Journal of Mathematics and Mathematical Sciences
32. International Journal of Mechanical Sciences
33. International Journal of Modern Physics B
34. International Journal of Molecular Sciences
35. International Journal of Thermal Sciences (2 articles)
36. Iranian Journal of Science and Technology Transactions of Mechanical Engineering
37. Journal of Advanced Research in Fluid Mechanics and Thermal Sciences
38. Journal of Applied and Computational Mechanics
39. Journal of Computational and Applied Mathematics (3 articles)
40. Journal of Fluid Mechanics (3 articles)
41. Journal of Heat Transfer (ASME) (4 articles)

42. Journal of Marine Science and Engineering
43. Journal of Mathematical Analysis and Applications
44. Journal of Magnetism and Magnetic Materials (6 articles)
45. Journal of Non–Newtonian Fluid Mechanics
46. Journal of Theoretical and Applied Mechanics
47. Korea Australia Rheology Journal
48. Mathematics (mdpi journal) (3 articles)
49. MECCANICA
50. Nanotechnology Reviews
51. Nature (Scientific Reports)
52. Next Materials
53. Nonlinear Analysis Series A: Theory, methods & Applications
54. Nonlinear Analysis: Modelling and Control (LANA)
55. Optimization and Engineering
56. Partial Differential Equations in Applied Mathematics
57. Polish Journal of Chemical Technology
58. Physica A (2 articles)
59. Physics of Fluids (8 articles)
60. Physics Letters A
61. Symmetry
62. Teknomekanik
63. The European Physical Journal
64. Zeitschrift für Angewandte Mathematik und Mechanik (ZAMM) (2 articles)