

Complete list of publications of Zafar Hayat Khan

2017

1. Akbar NS, Khan LA, **Khan ZH**, Mir NA. Natural Propulsion with Lorentz Force and Nanoparticles in a Bioinspired Lopsided Ciliated Channel. *Journal of Bionic Engineering*. 2017 Jan 31;14(1):172-81.

2016

2. Akbar NS, Tripathi D, Bég OA, **Khan ZH**. MHD dissipative flow and heat transfer of Casson fluids due to metachronal wave propulsion of beating cilia with thermal and velocity slip effects under an oblique magnetic field. *Acta Astronautica*. 2016 Dec 31;128:1-2.
3. Akbar, Noreen Sher, and **Zafar Hayat Khan**. "Effect of variable thermal conductivity and thermal radiation with CNTS suspended nanofluid over a stretching sheet with convective slip boundary conditions: Numerical study." *Journal of Molecular Liquids* 222 (2016): 279-286.
4. Haq, Rizwan UI, **Khan ZH**, Hussain ST, Hammouch Z. Flow and heat transfer analysis of water and ethylene glycol based Cu nanoparticles between two parallel disks with suction/injection effects. *Journal of Molecular Liquids*. 2016 Sep 30;221:298-304.
5. Akbar NS, Tripathi D, **Khan ZH**, Bég OA. A numerical study of magnetohydrodynamic transport of nanofluids over a vertical stretching sheet with exponential temperature-dependent viscosity and buoyancy effects. *Chemical Physics Letters*. 2016 Sep 16;661:20-30.
6. Akbar N, Beg OA, **Khan ZH**, Tripathi D. Magneto-nanofluid flow with heat transfer past a stretching surface for the new heat flux model using numerical approach. *International Journal of Numerical Methods in Heat and Fluid Flow*. 2016 Sep 14.
7. Akbar, Noreen Sher, and **Zafar Hayat Khan**. "Magnetic field analysis in a suspension of gyrotactic microorganisms and nanoparticles over a stretching surface." *Journal of Magnetism and Magnetic Materials* 410 (2016): 72-80.
8. Rehman, S.U., Haq, R.U., **Khan, Z.H.** and Lee, C., 2016. Entropy generation analysis for non-Newtonian nanofluid with zero normal flux of nanoparticles at the stretching surface. *Journal of the Taiwan Institute of Chemical Engineers*, 63, pp.226-235.

9. Haq, Rizwan Ul, N. F. M. Noor, and **Z. H. Khan**. "Numerical simulation of water based magnetite nanoparticles between two parallel disks." *Advanced Powder Technology* (2016).
10. Tripathi D, Akbar NS, **Khan ZH**, Beg A. Peristaltic transport of bi-viscosity fluids through a curved tube: a mathematical model for intestinal flow. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*. 2016 Apr 10.
11. Akbar, N. Sher, and **Z. H. Khan**. "Entropy Generation Analysis for the Peristaltic Flow of Cu-water Nanofluid with Magnetic Field in a Lopsided Channel." *Journal of Applied Fluid Mechanics* 9.2 (2016).
12. Ul Haq R, **Khan ZH**, Khan WA, Shah IA. Viscous dissipation effects in water driven carbon nanotubes along a stream wise and cross flow direction. *International Journal of Chemical Reactor Engineering*. 2016.
13. Akbar, Noreen Sher, Liaqat Ali Khan, and **Zafar Hayat Khan**. "Natural Convective Flow Analysis For Nanofluids With Reynold's Model of Viscosity." *International Journal of Chemical Reactor Engineering* 14.5 (2016): 1101-1111.
14. Makinde, O. D., W. A. Khan, and **Z. H. Khan**. "Stagnation point flow of MHD chemically reacting nanofluid over a stretching convective surface with slip and radiative heat." *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering* (2016): 0954408916629506.
15. Akbar, N., **Z.H. Khan** and S. Nadeem "Influence of magnetic field and slip on Jeffrey fluid in a ciliated symmetric channel with metachronal wave pattern." *Journal of Applied Fluid Mechanics*, 9 (2016): 565 - 572.
16. W.A. Khan, O.D. Makinde and **Z.H. Khan**. " Non-aligned MHD stagnation point flow of variable viscosity nanofluids past a stretching sheet with radiative heat." *International Journal of Heat and Mass Transfer*, 96 (2016): 525 - 534.
17. Hussain, S. T., **Z. H. Khan**, and S. Nadeem. "Water driven flow of carbon nanotubes in a rotating channel." *Journal of Molecular Liquids* 214 (2016): 136-144.
18. Qasim, M., **Khan, Z. H.**, Lopez, R. J., & Khan, W. A. (2016). Heat and mass transfer in nanofluid thin film over an unsteady stretching sheet using Buongiorno's model. *The European Physical Journal Plus*, 131(1), 1-11.
19. Akbar, N., **Khan, Z.**, Nadeem, S., & Khan, W. (2016). Double-diffusive natural convective boundary-layer flow of a nanofluid over a stretching sheet with magnetic

field. *International Journal of Numerical Methods for Heat & Fluid Flow*, 26(1), 108-121.

2015

20. Haq, R. U., Nadeem, S., **Khan, Z. H.**, & Noor, N. F. M. (2015): MHD squeezed flow of water functionalized metallic nanoparticles over a sensor surface. *Physica E: Low-dimensional Systems and Nanostructures*, 73, 45-53.
21. Noreen, S., Qasim, M., & **Khan, Z. H.** (2015): MHD pressure driven flow of nanofluid in curved channel. *Journal of Magnetism and Magnetic Materials*, 393, 490-497.
22. **Khan, Z. H.**, & Pritchard, D. (2015): Anomaly of spontaneous transition to instability of liquid–vapour front in a porous medium. *International Journal of Heat and Mass Transfer*, 84, 448-455.
23. Akbar, N. S., Ebaid, A., & **Khan, Z. H.** (2015): Numerical analysis of magnetic field effects on Eyring-Powell fluid flow towards a stretching sheet. *Journal of Magnetism and Magnetic Materials*, 382, 355-358.
24. Akbar, N. S., & **Khan, Z. H.** (2015): Influence of magnetic field for metachronal beating of cilia for nanofluid with Newtonian heating. *Journal of Magnetism and Magnetic Materials*, 381, 235-242.
25. **Khan, Z. H.**, Culham, J. R., Khan, W. A., & Pop, I. (2015): Triple convective-diffusion boundary layer along a vertical flat plate in a porous medium saturated by a water-based nanofluid. *International Journal of Thermal Sciences*, 90, 53-61.
26. Akbar, N. S., & **Khan, Z. H.** (2015): Metachronal beating of cilia under the influence of Casson fluid and magnetic field. *Journal of Magnetism and Magnetic Materials*, 378, 320-326.
27. Haq, R. U., Nadeem, S., **Khan, Z. H.**, & Akbar, N. S. (2015): Thermal radiation and slip effects on MHD stagnation point flow of nanofluid over a stretching sheet. *Physica E: Low-dimensional Systems and Nanostructures*, 65, 17-23.
28. Haq, R. U., Nadeem, S., **Khan, Z. H.**, & Noor, N. F. M. (2015): Convective heat transfer in MHD slip flow over a stretching surface in the presence of carbon nanotubes. *Physica B: condensed matter*, 457, 40-47.

29. Khan, W. A., **Khan, Z. H.**, & Haq, R. U. (2015): Flow and heat transfer of ferrofluids over a flat plate with uniform heat flux. *The European Physical Journal Plus*, 130(4), 1-10.
30. Sher Akbar, N., & **Khan, Z. H.** (2015): Heat transfer analysis of bi-viscous ciliary motion fluid. *International Journal of Biomathematics*, 8(02), 1550026.

2014

31. Akbar, N. S., & **Khan, Z. H.** (2014): Heat transfer study of an individual multiwalled carbon nanotube due to metachronal beating of cilia. *International Communications in Heat and Mass Transfer*, 59, 114-119.
32. Khan, W. A., Culham, J. R., **Khan, Z. H.**, & Pop, I. (2014): Triple diffusion along a horizontal plate in a porous medium with convective boundary condition. *International Journal of Thermal Sciences*, 86, 60-67.
33. Haq, R. U., Nadeem, S., **Khan, Z. H.**, & Okedayo, T. G. (2014): Convective heat transfer and MHD effects on Casson nanofluid flow over a shrinking sheet. *Central European Journal of Physics*, 12(12), 862-871.
34. Akbar, N. S., & **Khan, Z. H.** (2014): Heat transfer analysis of the peristaltic instinct of biviscosity fluid with the impact of thermal and velocity slips. *International Communications in Heat and Mass Transfer*, 58, 193-199.
35. Haq, R. U., **Khan, Z. H.**, & Khan, W. A. (2014): Thermophysical effects of carbon nanotubes on MHD flow over a stretching surface. *Physica E: Low-dimensional Systems and Nanostructures*, 63, 215-222.
36. Akbar, N. S., **Khan, Z. H.**, & Nadeem, S. (2014): The combined effects of slip and convective boundary conditions on stagnation-point flow of CNT suspended nanofluid over a stretching sheet. *Journal of Molecular Liquids*, 196, 21-25.
37. Akbar, N. S., **Khan, Z. H.**, & Nadeem, S. (2014): Metachronal beating of cilia under influence of Hartmann layer and heat transfer. *The European Physical Journal Plus*, 129(8), 1-9.
38. Khan, W. A., Makinde, O. D., & **Khan, Z. H.** (2014): MHD boundary layer flow of a nanofluid containing gyrotactic microorganisms past a vertical plate with Navier slip. *International Journal of Heat and Mass Transfer*, 74, 285-291.

39. Akbar, N. S., **Khan, Z. H.**, & Nadeem, S. (2014): Peristaltic impulsion of MHD biviscosity fluid in a lopsided channel: Closed-form solution. *The European Physical Journal Plus*, 129(6), 1-7.
40. Khan, W. A., **Khan, Z. H.**, & Rahi, M. (2014): Fluid flow and heat transfer of carbon nanotubes along a flat plate with Navier slip boundary. *Applied Nanoscience*, 4(5), 633-641.
41. **Khan, Z. H.** (2014): Transition to instability of liquid–vapour front in a porous medium cooled from above. *International Journal of Heat and Mass Transfer*, 70, 610-620.
42. Nadeem, S., Haq, R. U., & **Khan, Z. H.** (2014): Heat transfer analysis of water-based nanofluid over an exponentially stretching sheet. *Alexandria Engineering Journal*, 53(1), 219-224.
43. Akbar, N. S., Nadeem, S., & **Khan, Z. H.** (2014): Numerical simulation of peristaltic flow of a Carreau nanofluid in an asymmetric channel. *Alexandria Engineering Journal*, 53(1), 191-197.
44. Nadeem, S., Haq, R. U., & **Khan, Z. H.** (2014): Numerical study of MHD boundary layer flow of a Maxwell fluid past a stretching sheet in the presence of nanoparticles. *Journal of the Taiwan Institute of chemical Engineers*, 45(1), 121-126.
45. Haq, R. U., Nadeem, S., Akbar, N. S., & **Khan, Z. H.** (2015): Buoyancy and Radiation Effect on Stagnation Point Flow of Micropolar Nanofluid Along a Vertically Convective Stretching Surface. *Nanotechnology, IEEE Transactions on*, 14(1), 42-50.
46. Akbar, N. S., **Khan, Z. H.**, Haq, R. U., & Nadeem, S. (2014): Dual solutions in MHD stagnation-point flow of Prandtl fluid impinging on shrinking sheet. *Applied Mathematics and Mechanics*, 35(7), 813-820.
47. Qasim, M., **Khan, Z. H.**, Khan, W. A., & Shah, I. A. (2014): MHD boundary layer slip flow and heat transfer of ferrofluid along a stretching cylinder with prescribed heat flux. *PloS one*, 9(1).
48. **Khan, Z. H.**, Khan, W. A., Qasim, M., & Shah, I. A. (2014): MHD stagnation point ferrofluid flow and heat transfer toward a stretching sheet. *Nanotechnology, IEEE Transactions on*, 13(1), 35-40.
49. Akbar, N. S., Nadeem, S., Haq, R. U., & **Khan, Z. H.** (2014): Nanoparticles fraction on the peristaltic flow of third order fluid. *Journal of Computational and Theoretical Nanoscience*, 11(1), 47-52.

2013

50. Akbar, N. S., Nadeem, S., Haq, R. U., & **Khan, Z. H.** (2013): Radiation effects on MHD stagnation point flow of nano fluid towards a stretching surface with convective boundary condition. *Chinese Journal of Aeronautics*, 26(6), 1389-1397.
51. Akbar, N. S., Nadeem, S., Lee, C., **Khan, Z. H.**, & Haq, R. U. (2013): Numerical study of Williamson nano fluid flow in an asymmetric channel. *Results in Physics*, 3, 161-166.
52. Nadeem, S., Haq, R. U., Akbar, N. S., & **Khan, Z. H.** (2013): MHD three-dimensional Casson fluid flow past a porous linearly stretching sheet. *Alexandria Engineering Journal*, 52(4), 577-582.
53. **Khan, Z. H.**, Khan, W. A., & Pop, I. (2013): Triple diffusive free convection along a horizontal plate in porous media saturated by a nanofluid with convective boundary condition. *International Journal of Heat and Mass Transfer*, 66, 603-612.
54. Akbar, N. S., Nadeem, S., Haq, R. U., & **Khan, Z. H.** (2013): Numerical solutions of Magnetohydrodynamic boundary layer flow of tangent hyperbolic fluid towards a stretching sheet. *Indian Journal of Physics*, 87(11), 1121-1124.
55. Nadeem, S., Haq, R. U., Akbar, N. S., Lee, C., & **Khan, Z. H.** (2013): Numerical study of boundary layer flow and heat transfer of Oldroyd-B nanofluid towards a stretching sheet. *PloS one*, 8(8).
56. Makinde, O. D., Khan, W. A., & **Khan, Z. H.** (2013): Buoyancy effects on MHD stagnation point flow and heat transfer of a nanofluid past a convectively heated stretching/shrinking sheet. *International Journal of Heat and Mass Transfer*, 62, 526-533.
57. **Khan, Z. H.**, & Pritchard, D. (2013): Liquid–vapour fronts in porous media: Multiplicity and stability of front positions. *International Journal of Heat and Mass Transfer*, 61, 1-17.
58. Sher Akbar, N., Nadeem, S., Lee, C., & **Hayat Khan, Z.** (2013): Numerical Simulation of Nanoparticle Fraction for the Peristaltic Flow of a Six Constant Jeffrey's Fluid Model. *Current Nanoscience*, 9(6), 798-803.
59. Akbar, N. S., Nadeem, S., & **Khan, Z. H.** (2013): Thermal and velocity slip effects on the MHD peristaltic flow with carbon nanotubes in an asymmetric channel: application of radiation therapy. *Applied Nanoscience*, 4(7), 849-857.

60. Nadeem, S., Haq, R. U., & **Khan, Z. H.** (2013): Numerical solution of non-Newtonian nanofluid flow over a stretching sheet. *Applied Nanoscience*, 4(5), 625-631.