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### **List of Publications (Last 5 years)**

- 1. Analysis of a fractional epidemic model by fractional generalised homotopy analysis method using modified Riemann - Liouville derivative.** S. R. Saratha., G. Sai Sundara Krishnan., M. Bagyalakshmi. Applied Mathematical Modelling, **Volume 92, Year 2021, Pages 525-545.**  
[DOI:10.1016/j.apm.2020.11.019](https://doi.org/10.1016/j.apm.2020.11.019) (SCIE)
- 2. Fractional generalised homotopy analysis method for solving nonlinear fractional differential equations.** S. R. Saratha ., M. Bagyalakshmi ., G. Sai Sundara Krishnan. Computational and Applied Mathematics, **Volume 39, Year 2020.**  
[DOI:10.1007/s40314-020-1133-9](https://doi.org/10.1007/s40314-020-1133-9) (SCIE)
- 3. Solving Black–Scholes equations using fractional generalized homotopy analysis methods.** R. Saratha ., G. Sai Sundara Krishnan ., M. Bagyalakshmi ., Chee Peng Lim ., Computational and Applied Mathematics, **Volume 39, Year 2020.**  
[DOI:10.1007/s40314-020-01306-4](https://doi.org/10.1007/s40314-020-01306-4) (SCIE)
- 4. A NOVEL INVESTIGATION of HEAT TRANSFER CHARACTERISTICS in HYBRID MICRO-CHANNEL HEAT SINK STRUCTURE: OPPOSITION-BASED ANTLION OPTIMIZATION.** Deena, R.;Sai Sundara Krishnan, G. Surface Review and Letters, **Volume 27, Year 2020.**  
[DOI:10.1142/S0218625X19501439](https://doi.org/10.1142/S0218625X19501439)
- 5. Mappings on abstract cellular complex and their applications in image analysis.** R.Syama, Sai Sundara Krishnan G, Yashwanth Ramamurthi. International Journal of Computer Mathematics, **Year 2020.**  
[DOI:10.1080/00207160.2020.1825695](https://doi.org/10.1080/00207160.2020.1825695) (Indexed)
- 6. Heat Transfer of Gas Flow through Microchannels using Extended Navier–Stokes Equations.** Deena, R.;Sai Sundara Krishnan, G. IETE Journal of Research, Year 2019. [DOI:10.1080/03772063.2019.1615009](https://doi.org/10.1080/03772063.2019.1615009) (SCI)

7.     **On  $\gamma$ -operations in soft topological spaces.** Kalaivani, N.;Anitha, K.;Saravanakumar, D.;Sai Sundara Krishnan, G. Far East Journal of Mathematical Sciences, Volume 101, Year 2017, Pages 2067-2077. [DOI:10.17654/MS101092067](https://doi.org/10.17654/MS101092067)
8.     **Operation-compact spaces, regular spaces and normal spaces with  $\alpha$ - $\gamma$ -open sets in topological spaces.** Kalaivani, N.;El-Maghrabi, A. I.;Saravanakumar, D.;Sai Sundara Krishnan, G. Journal of Interdisciplinary Mathematics, Volume 20, Year 2017, Pages 427-441  
[DOI:10.1080/09720502.2015.1104945](https://doi.org/10.1080/09720502.2015.1104945) (Scopus)
9.     **A similarity measure of intuitionistic fuzzy soft sets and its application in medical diagnosis.** Muthukumar, P.;Sai Sundara Krishnan, G. Applied Soft Computing Journal, Volume 41, Year 2016, Pages 148-156  
[DOI:10.1016/j.asoc.2015.12.002](https://doi.org/10.1016/j.asoc.2015.12.002) (SCIE)
10.    **Soft  $g^*$  closed and soft  $g^*$ open sets in soft topological spaces.** Kalavathi, A.;Sai Sundara Krishnan, G. Journal of Interdisciplinary Mathematics, Volume 19, Year 2016, Pages 65-82 [DOI:10.1080/09720502.2015.1103110](https://doi.org/10.1080/09720502.2015.1103110) (Scous)
11.    **Boundary detection algorithm based on semi-subcomplexes.** Sai Sundara Krishnan G, Vijaya N. International Journal of Pure and Applied Mathematics, Volume 107, Year 2016, Pages 709721  
[DOI:10.12732/ijpam.v107i3.19](https://doi.org/10.12732/ijpam.v107i3.19) (Scopus)
12.    **On new spatial filters using abstract cellular complex.** Sai Sundara Krishnan, G.;Vijaya, N. ARPN Journal of Engineering and Applied Sciences, Volume 10, Year 2015, Pages 10310-10316.