

Dr.Panwala Fenil Chetankumar

Journal papers, Chapter, Patent and Conferences

✓ Journal Papers:

- **Panwala Fenil Chetankumar, R.Kumar, P. Mohamed Shakeel “An analysis of bacteria separation and filtration from blood sample using passive methods”** Measurement, Elsevier, ISSN 0263-2241, Volume 140, pp 29-46, 2019. (*SCI*) (**Impact Factor: 3.364**)
- **Panwala Fenil Chetankumar, R.Kumar “Asymmetric sifter-shaped microchannel network in biological MEMS for size- and mass-based mammalian cell sorting and separation using hydrodynamic technique”** The journal of supercomputing, Springer US, Online ISSN 1573-0484 & print ISSN 0920-8542, vol 76, pp 3814-3846, 2018. [DOI 10.1007/s11227-018-2715-9]. (*SCI*) (**Impact Factor:2.469**)
- **Panwala Fenil Chetankumar, R.Kumar “Modelling and analysis of asymmetric Sieve shaped Skewed type microchannel network in BioMEMS for mass and size based mammalian cell separation and sorting using filtration method”** Revista de la Facultad de Agronomia De La Universidad Del Zulia, ISSN 0378-7818, Volume 34, Issue 4, pp 566-591, 2017. (*SCIE*) (**Impact Factor: 0.30**)
- **Panwala Fenil Chetankumar, R. Kumar, Trigunesh Narzary, A Vimala Juliet “An Enhanced and Sieve type microchannel network simulation model to detect the separation of size and mass dependent bacteria in microfluidic device”,** Journal of Advanced Research in Dynamical and Control Systems, Elsevier, ISSN 1943-023X, Volume 9, Issue 18, pp 1109-1124, 2017. (*SCOPUS*) (**Impact Factor: 0.40**)
- **Rituraj Bhattacharjee, R. Kumar, Panwala Fenil Chetankumar and P. Mohamed Shakeel, "Design and Analysis of an Optimized Microfluidic Channel for Isolation of Circulating Tumor Cells Using Deterministic Lateral Displacement Technique.",** Complex & Intelligent Systems, Springer, ISSN 2198-6053, Vol 6, Issue 3, pp. 711 - 720, 2020. (*SCI*) (**Impact Factor: 3.791**)
- **Siddhanta Borah, R.Kumar, Subhradip Mukherjee, Panwala Fenil Chetankumar, A Prassanna Lakshmi "An Experimental Analysis of Quad Wheel Autonomous Robot Location and Path Planning Using Borahsid Algorithm (BsA) with GPS and Zigbee"** (Submission code: IJVICS-253614), International Journal of Vehicle Information and Communication Systems (IJVICS), Inderscience Publisher, Vol 7, Issue No. 3, pp 290-305, 2022. (*SCOPUS*) (**Impact Factor:0.30**)
- **Writtick Pakhira, R. Kumar, Panwala Fenil Chetankumar, Khalid mohd. Ibrahimi “Microfluidic design for continuous separation of Blood particles and Plasma using Dielectrophoretic Force principle”,** Computer Assisted Methods in Engineering and Science. (**ACCEPTED to be Published**). (*SCOPUS*) (**Impact Factor:0.50**)(2022)
- **Khalid mohd. Ibrahimi, R. Kumar, Writtick Pakhira, Panwala Fenil Chetankumar " Enhance the design and analysis of Micro-Cantilever based Bio-Sensor to detect Carcinoembryonic Antigen Tumor biomarkers"** Computer Assisted Methods in Engineering and Science. (**ACCEPTED to be Published**). (*SCOPUS*) (**Impact Factor:0.50**) (2022).

✓ Chapter:

- R. Kumar and **Panwala Fenil Chetankumar**, “**Micropatterning in BioMEMS for separation of cells/bioparticles**” Book Title: MEMS Sensors- Design and Applications, InTechOpen Publication, Rijeka Croatia-European Union, ISBN:978-1-78923-395-7 and Print ISBN: 978-1-78923-394-0, pp 71-90, 2018. (WEB OF SCIENCE) (BOOK CITATION INDEX).

✓ Patents:

- Dr. R. Kumar, **Fenil Chetankumar Panwala**, “**Sieve/Sifter type 3d microchannel network in biological MEMS for separation and sorting of bioparticles using passive method**”, Official Journal of the Patent Office, INDIA, Issue no: 42(2018).
 - Application No: 201831036289 A
 - Filed Date: 19/10/2018
 - Status: **GRANTED** on 20-02-2023
- Dr. R. Kumar, Siddhanta Borah, Subhradip Mukherjee, S.K Sathya Lakshmi Preeth, **Panwala Fenil Chetankumar** “**Pocket Soil Moisture Sensor (P-SMS)**” Official Journal of the Patent Office, INDIA.
 - Application No: 202131029151 A
 - Filed Date: **29/06/2021**
 - Status: Filed→RQ Filed→**Published(13-08-2021)**→ Examination Review replied and in amended examination in Dec 2022
- Dr. R. Kumar, Rituraj Bhattacharjee, **Panwala Fenil Chetankumar** “**Microfluidic Channel Housing with Rounded Micro Masts for Entrapping of Circulating Tumor Cells Employing Deterministic Lateral Displacement Principle**” Official Journal of the Patent Office, INDIA.
 - Application No: 202131018244 A
 - Filed Date: **20/04/2021**.
 - Status: Filed→RQ Filed→**Published(28-05-2021)**

✓ Conferences:

- Hithashree H, **Panwala Fenil Chetankumar**, “Simulation and Comparative Analysis Between MOSFET and FinFET Based Digital Circuits”, IEEE Xplore, IEEE 3rd Global Conference for Advancement in Technology-2022, Bangalore, Karnataka, pp 1-7, [DOI: 10.1109/GCAT55367.2022.9971976], 2022.
- Trigunesh Narzary, R Kumar, **Panwala Fenil Chetankumar** “MEMS-Based Diaphragm Pressure Sensor using S-shaped Piezoresistors for Enhancing Sensitivity” IEEE Xplore, 2018 International conference on recent trends in Electrical, control and Communication(RTECC), Electronics ISBN: 978-1-5386-4310-5 & PoD ISBN: 978-1-5386-4311-2, pp 10-14, January 2018.
- **Panwala Fenil Chetankumar**, C Likith Kumar, A Vimala Juliet “**Simulating the Lattice- Shaped microchannel for separation of bacteria beads using HDF**” IEEE Xplore, Electronics ISBN: 978-1-5090-3355-3 & PoD ISBN: 978-1-5090-3356-0, pp 54-58, 2017. (Conference of IEEE Sponsored 4th International Conference on Electronics and Communication Systems-ICECS’17” at Karpagam College of engineering, Coimbatore, Feb-2017)

Google Scholar link: <https://scholar.google.co.in/citations?user=Nms5DmIAAAAJ>

Scopus ID: <https://www.scopus.com/authid/detail.uri?authorId=57198812803>