

Dr.D.ASHOKKUMAR, *B.E, M.Tech., Ph.D.*,
Associate Professor
Department of Biomedical Engineering,
SRMIST, Kattankulathur Campus, Chennai, India-603203
Mail: ashokd@srmist.edu.in
Mobile: +91-9442139050

Publications

Refereed Journal Articles (Published)

1. *Ashokkumar Devaraj, S Devapriya and V Karthik Raj*, “Development of customized knee brace for osteoarthritis”, *Journal of International Pharmaceutical Research*. 46 (4), 55-59, 2019 (*Scopus*) (*SNIP:0.035*)
2. *Ashokkumar Devaraj, S Batra, B Veerendranath, P Hadvani and R Agarwala*, “Eye blink based wireless wheelchair movement”, *Journal of International Pharmaceutical Research*. 46 (4), 50-54, 2019 (*Scopus*) (*SNIP:0.035*)
3. *Ashokkumar Devaraj, Varshini Karthik, Chenjerai Zizhou*, “Biomechanics Of Human Lumbar Spine (L3 To L5) With Degenerative Disc Disease Using Finite Element Model”, *International Journal of Engineering and Advanced Technology*. 8 (6), 4609-4614, 2019 (*Scopus*)
4. *Varshini Karthik, Ashokkumar Devaraj*, Arun Kuriakose*, “Effects of intervertebral disc degeneration on segmental rotation and intradisc pressure of C4-C6 cervical spine using finite element analysis”, *Biomedical Research*. 30 (3), 380-385, 2019 (*Scopus/SCI*) (*IF/SNIP:1.43/0.524*)
5. *Raja Chandrasekaran, R. Agilesh Saravanan, D. AshokKumar and N. Gangatharan*, “A novel particle swarm optimisation with search space tuning parameter to avoid premature convergence”, *International Journal of Mathematical Modelling and Numerical Optimisation*. 9 (4), 382-398, 2019 (*Scopus*) (*SNIP:0.251*)
6. *D.Ashokkumar*, M Anburajan and U Sneekhalatha*, “Evaluation of low bone mass and prediction of fracture risk using metacarpal radiogrammetry method: A comparative study with DXA and X-ray Phantom”, *Submitted Article in International journal of rheumatic diseases*. 21 (7), 1350-1371, 2018 (*Scopus/SCI*) (*IF/SNIP:2.423/0.857*)

7. R. Swetha Arulmozhi, Mahima Vaidya, M. G. Poojalakshmi, D. Ashokkumar* and K. Anuraag, "3D design and printing of custom-fit finger splint", *Biomedical Engineering: Applications, Basis and Communications*. 30 (5), 1-8, 2018 (Scopus) (SNIP:0.363)
8. K. S. Arjun Subramaniyan, S. Tarunkumar, Y. Vinish, K. Sanchana, Oinam Robita Chanu, S. Gnanavel, P. Muthu, D. Ashokkumar and V. Karthik Raj, "Low-cost automated nurse call System for improving patient care Using labview", *Biomedical Engineering: Applications, Basis and Communications*. 30 (4), 1-10, 2018 (Scopus) (SNIP:0.363)
9. U.Snehalatha, D.Ashokkumar and Padmaja vasan "Semi-automated approach in the evaluation of low bone mass using clavicle radiogrammetry technique", *International journal of Engineering and Technology (UAE)*, 7(2.8);169-174, 2018 (Scopus) (SNIP:0.086)
10. D.Ashokkumar*, Muhammed Javad, U.Snehalatha (2017) "Assessment of low bone mass using Peripheral Dual X-Ray Absorptiometry(Pdxa) in different ethnic groups". *Asian Journal of Pharmaceutical and Clinical Research* 10 (9); 74-77, 2017 (Scopus) (SNIP:0.624)
11. D. Ashokkumar*, M. Anburajan, 'Low Bone Mass Estimation: The Exhibition of Semi-automated Approach over the Manual Method in a Comparative Perspective With DXA', *International Journal of Osteoporosis and Metabolic Disorders*; 9 (1), 13-18, 2016.(Scopus) (SNIP:0.118)

International conference

1. Shreya Anilkumar, D Ashokkumar, D Raja, Varshini Karthik, "Finite element analysis of patellofemoral joint prosthetics", *IOP Conference Series: Materials Science and Engineering (ICAME 2020)*, DOI: 10.1088/1757-899X/912/2/022028. 2020. (Scopus)
2. Rajesh P, P Pranav Anand, Rupesh Babu C, Varshini Karthik, D Ashokkumar, "Affordable human motion analysis system", *IOP Conference Series: Materials Science and Engineering (ICAME 2020)*, DOI: 10.1088/1757-899X/912/6/062025. 2020. (Scopus)
3. Zindahi S, Rashmi K S, Varshini Karthik, D Ashokkumar, "Posture alert system for prolonged neck flexion while using smart phones", *IOP Conference Series: Materials Science and Engineering (ICAME 2020)*, DOI: 10.1088/1757-899X/912/6/062024. 2020. (Scopus)

4. *K Srivishnuprasath, Varshini Karthik, D Ashokkumar, "Point of care device for diagnosing and treatment of diabetes related peripheral arterial disease", IOP Conference Series: Materials Science and Engineering (ICAME 2020), DOI: 10.1088/1757-899X/912/6/062018. 2020. (Scopus)*
5. *Saahithyaa Vijayaraghavan, Rishab Kumar, Sibi DP, D Ashokkumar, Varshini Karthik, "FSR Sensor based Embedded system to detect imbalance in Autistic children", Proceedings of the IEEE 3rd International Conference on Smart Systems and Inventive Technology (ICSSIT 2020), ISBN: 978-1-7281-5820-4, pp. 876-881, 2020. (Scopus)*
6. *Shruthi Abinaya Parthasarathy, Shruthilaya Subash, D Ashokkumar, Varshini Karthik, "Design and development of arduino based multipurpose wheelchair for disabled patients", Proceedings of the IEEE 3rd International Conference on Smart Systems and Inventive Technology (ICSSIT 2020), ISBN: 978-1-7281-5820-4, pp. 882-886, 2020. (Scopus)*
7. *Adithyan S, Shivani S, Dhyaneshwar G, Varshini Karthik, D Ashokkumar, "Eye Tracking as a form of Alternate and Augmentative Communication for people with Speech, Language and Communication Needs", Proceedings of the IEEE 3rd International Conference on Smart Systems and Inventive Technology (ICSSIT 2020), ISBN: 978-1-7281-5820-4, pp. 942-945, 2020. (Scopus)*
8. *C Zizhou, D Ashokkumar*, D Raja, Karthik Varshini M O JMudzingwa "The effects of vertebral morphology on human lumbar spine with progressive decrease in bone mineral density – An FEM study", IOP Conference Series: Materials Science and Engineering (ICAME 2018), DOI: 10.1088/1757-899X/402/1/012091.(Scopus)*
9. *Arun Kuriakose, V, Karthik, V, Susai Manickam, P, D.Ashokkumar, "A biomechanical study of cervical disc degeneration in C4-C6 using finite element analysis", IOP Conference Series: Materials Science and Engineering (ICAME 2018), DOI: 10.1088/1757-899X/402/1/012007. (Scopus)*
10. *Muhammad Javad, D.Ashokkumar* and U.Snehalatha "Estimation of low bone mass using forearm and calcaneum bone mineral density in young indian population", Proceedings of International Conference on Electronics, Communication and Aerospace Technology (ICECA 2017), DOI: 978-1-5090-5686-6/17.2017. (Scopus)*
11. *Manish Acharya and D.Ashokkumar* "Semi-Automated Approach for the Evaluation of Osteoporosis with Forearm Radiographs", Proceedings of International Conference on*

Communication and Signal processing (ICCSP 2017), DOI: 978-1-5090-3799-5/17. 2017. (Scopus)

12. V.Balakumaran, Pandurangan harikrishnan, D.Ashokkumar*, V.Magesh, 'Three dimensional finite element model for a complicated craniofacial defect of human skull' *International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT 2016), DOI: 10.1109/ICEEOT.2016.7755227, pp297-300. 2016. (Scopus)*