

List of Journal Publication

1. Reddy K. M., Saravana Kumar G., Chand A. K. B., Family of shape preserving fractal-like Bezier curves , Fractals, 2020. IF: 4.536.
 2. Venkatesh Krishnan, Vicky Varghese, Saravana Kumar G., Narayan Yoganandan, Identification of Pedicle Screw Pullout Load Paths for Osteoporotic Vertebrae , Asian Spine Journal, 2020. IF: 1.785.
 3. Vicky Varghese, Venkatesh Krishnan, Saravana Kumar G., Comparison of pullout strength of pedicle screws following revision using larger diameter screws , Medical Engineering & Physics, 17:180-185, 2019. IF: 1.785.
 4. Ravi Khatri, Vicky Varghese, Sunil Sharma, Saravana Kumar G., and Harvinder Singh Chhabra, Pullout Strength Predictor: A Machine Learning Approach , Asian Spine Journal, 13(5):842-848, 2019. IF:1.117.
 5. Jobin D. John, Saravana Kumar G., and Narayan Yoganandan, Rear-impact neck whiplash: Role of head inertial properties and spine morphological variations on segmental rotations, ASME Journal of Biomechanical Engineering, 141(11):111008-111008-10. 2019. IF: 1.916.
 6. Jobin D. John, Saravana Kumar G., and Narayan Yoganandan, Cervical spine morphology and ligament property variations: A finite element study of their influence on sagittal bending characteristics, Journal of Biomechanics, 85: 18-26, 2019. IF: 2.431.
 7. Katiyar S.K., Chand A.K.B, and Saravana Kumar G., A New Class of Rational Cubic Spline Fractal Interpolation Function and its Constrained Aspects, Applied Mathematics and Computation, 346: 319-335, 2019. IF: 2.3.
 8. Nakkina Parameswara Rao, Prakash K. Arul, and Saravana Kumar G., A surrogate model based method to obtain optimal design in spiral casing of Francis turbine, , International Journal of Mathematical Modelling and Numerical Optimisation, 9(2): 105–126, 2019. IF: 0.4.
 9. Athertya J.S., Saravana Kumar G., Govindaraj J., Detection of Modic changes in MR images of spine using local binary patterns, Biocybernetics and Biomedical Engineering, 39(1):17-19, 2019. IF: 1.374.
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10. Vicky Varghese, Venkatesh K., and Saravana Kumar G., Pullout strength of pedicle screw- is bi layer model a better representation of vertebra?, Asian Spine Journal, 12(3): 398-406, 2018. IF: 1.117.
11. Vicky Varghese, Saravana Kumar G., and Venkatesh K., Evaluating pedicle screw instrumentation using decision tree analysis based on pullout strength, Asian Spine Journal, 12(4): 611-621, 2018. IF: 1.117.
12. Jobin D. John, Narayan Yoganandan, Mike W. J. Arun and Saravana Kumar G., Influence of morphological variations on cervical spine segmental responses from inertial loading, Traffic Injury Prevention, 19(1): 29-36, 2018. IF: 1.448.
13. Ramu P., Saravana Kumar G., Neelakantan P. and Bathula K.K., Cost-reliability trade-off of path generating linkages using multi-objective genetic algorithm, Int. J. Reliability and Safety, 11(3/4): 200-219, 2017. IF: 0.5
14. Saravana Kumar G. and Subin P. George, Optimization of custom cementless stem using finite element analysis and elastic modulus distribution for reducing stress-shielding effect, Journal of Engineering in Medicine - Proceedings of the Institution of Mechanical Engineers - Part H, 231(2): 149-159, 2017. IF: 0.996
15. Vicky Varghese, Saravana Kumar G., and Venkatesh K., Effect of various factors on pull out strength of pedicle screw in normal and osteoporotic cancellous bone models, Medical Engineering Physics, 40: 28-38, 2017. IF:1.619
16. Vicky Varghese, Saravana Kumar G., Palaniappan Ramu, and Venkatesh K., Pull out strength calculator for pedicle screws using a surrogate ensemble approach, Computer Methods and Programs in Biomedicine, 137:11-22, 2016. IF:1.862
17. Athertya J.S., Saravana Kumar G. Fuzzy clustering based segmentation of Vertebrae in T1-weighted spinal MR images, International Journal of Fuzzy Logic Systems, 6(2): 23-34, 2016.
18. Athertya J.S., Saravana Kumar G. Automatic segmentation of vertebral contours from CT images using fuzzy corners, Computers in Biology and Medicine, 72: 75-89, 2016. IF: 1.240
19. Nakkina Parameswara Rao, Prakash K. Arul, and Saravana Kumar G., Numerical studies on fluid flow characteristics through different configurations of spiral

- casing, *Engineering Applications of Computational Fluid Mechanics*, 10(1): 297-311, 2016. IF: 1.033
20. Vicky Varghese, Venkatesh K., and Saravana Kumar G., Comparative analysis of effect of density, insertion angle and reinsertion on pull-out strength of single and two pedicle screw constructs using synthetic bone model, *Asian Spine Journal* , 10(3): 414-421, 2016. IF: 0.844
21. Krishnan Kumar, and Saravana Kumar G., An experimental and theoretical investigation of surface roughness of poly-jet printed parts, *Virtual and Physical Prototyping*, 10(1): 23-34, 2015. IF: 1.600
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