

#### LIST OF PUBLICATIONS:

1. P. Padmagirisan, Sowmya ravichandran and V. Sankaranarayanan, "Power assist control of a human-electric hybrid bicycle with energy regeneration and cruise control" - to be appear in Journal of Systems and Control Engineering, 2018.
2. P. Padmagirisan, V. Sankaranarayanan, "Powertrain control of a solar photovoltaic-battery powered hybrid electric vehicle" - to be appear in Frontiers in Energy, Springer, 2018.
3. Joseph Godfrey, A., Sankaranarayanan, V., "A new electric braking system with energy regeneration for a BLDC motor driven electric vehicle" - to be appear in Engineering Science and Technology, an International Journal, 2018.
4. Sunila, M.S., Sankaranarayanan, V., Sundereswaran, K., "Optimised sliding mode control for MIMO uncertain non-linear system with mismatched disturbances" , IET Electronics Letters, Volume: 54, Issue: 5, pages 290-291, 2018.
5. M. S. Sunila ,V. Sankaranarayanan and K. Sundareswaran, "Comparative analysis of optimized output regulation of a SISO nonlinear system using different sliding manifolds", International Journal of Automation and Computing, Volume 14, Issue 4, pages 450-462 , 2017.
6. R. M. Brisilla and V. Sankaranarayanan, "Extended State Observer Based Sliding Mode Control of Multi Input Multi Output System with Multiple Disturbances" Journal of Control, Automation and Electrical Systems, volume 28, Issue 1, Pages 11-25, 2017.
7. R.M.Brisilla and V.Sankaranarayann, "Stablization of nonholonomic wheeled mobile robot using switched control-Theory and Experiment", International Journal of Automation and Control,volume 10,Issue 2,pages 193-213,2016.
8. R. M. Brisilla and V. Sankaranarayanan, "Nonlinear control of Mobile Inverted Pendulum." Robotics and Automation, Volume 70, Pages 145-155, August 2015.
9. V. Sankaranarayanan and Arun. D. Mahindrakar, "Configuration constrained stabilization of a wheeled mobile robot - Theory and Experiment", IEEE Transactions on Control System Technology, Volume 21, Issue 1, page 275-280,2013.
10. V. Sankaranarayanan, Arun D. Mahindrakar and Apilash P M, "Output feedback second-order sliding mode control of the cart on a beam system ", International Journal of Robust and Nonlinear Control, Volume 20, Issue 5, Pages 561-570,2010.

11. V. Sankaranarayanan, Arun D. Mahindrakar, "Control of a class of underactuated mechanical systems using sliding modes", IEEE Transactions on Robotics, volume 25, Issue 2, pages 459-467, 2009.
12. V. Sankaranarayanan and Arun D. Mahindrakar, "Switched control of nonholonomic mobile robot", Communications in Nonlinear Science and Numerical Simulation, Elsevier publication, Volume 14, Issue 5, pages 2319-2327, 2009.
13. V. Sankaranarayanan, M. Engin Emekli, Bilin Aksun Guvenc, Levent Guvenc, E. Serdar Ozturk, S. Server Ersolmaz, I. Erhan Eyol and Mustafa Sinal, "Semi-Active Suspension Control of a Light Commercial Vehicle", IEEE/ASME Transactions on Mechatronics, Volume 13, Issue 5, pages 598-604, 2008.
14. V. Sankaranarayanan, Arun D. Mahindrakar and Ravi N. Banavar, "A switched controller for an Underactuated underwater vehicle", Communications in Nonlinear Science and Numerical Simulations, Elsevier publication, Volume 13, Issue 10, pages 2266-2278, 2008.
15. Arun D. Mahindrakar and V. Sankaranarayanan, "State constrained stabilization of beam-balance systems", International Journal of Robust and Nonlinear Control, Volume 18, Issue 3, pages 333-350, 2008.
16. Juhi Ajmera, Siddharthan PR, Ramaravind K.M., Gautham Vasam, Naresh Balaji and V. Sankaranarayanan, "Autonomous Visual Tracking and Landing of a Quadrotor on a Moving Platform" in Proc. of IEEE ICIP 2015 at Shimla, India, Dec. 2015.
17. Sowmya Ranjan Sahoo, Brsilla Marry and V. Sankaranarayanan, "Disturbance observer based adaptive sliding mode control: An application to single machine infinite power system." in Proc. of IEEE SPICES at NIT-Calicut, Kerala, INDIA, Jan. 2015.
18. R. M. Brisilla, V. Sankaranarayanan and Joseph Godfrey A., "Extended State Observer Based Sliding Mode Control of Permanent Magnet DC motor" in the proceedings of India Conference (INDICON), 2015 Annual IEEE, Pages 1-6, 2015.
19. Kiran K. Gautam and V. Sankaranarayanan, "Sliding mode control of surface mounted permanent magnet synchronous generator." in Proc. Third Intl. conf. IFAC ACODS, IIT Kanpur, volume 47, Issue 1, Pages 1034-1038, 2017, Mar. 2014.

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21. Vijay Muralidharan, Arun D. Mahindrakar and Sankaranarayanan Velupillai, "A Constructive Method for Designing Higher Order Sliding Surfaces for Single-Input Nonlinear System", in the proceedings of 18th IFAC World Congress, Italy, volume 44, Issue 1, Pages 3944-3949, 2011.
22. V. Sankaranarayanan and Levent Guvenc, "Laser scanners for driver-assistance systems in intelligent vehicles", IEEE Control System Magazine, volume 29, Issue 2 , pages 17-19, April 2009.
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24. V. Sankaranarayanan, Sinan Oncu, Dincer Ozcan and Levent Guvenc, "Vehicle chassis control using adaptive semi-active suspension" , in Proceedings of 17th IFAC World Congress, Seoul, volume 41, Issue 2, pages 4677-4682, July 2008.
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26. M. Engin Emekli, V. Sankaranarayanan, Bilin Aksun Guvenc, Levent Guvenc, E. Serdar Ozturk, S. Server Ersolmaz, I. Erhan Eyol and Mustafa Sinal, "Transient active body control of a ford transit connect using semi-active suspensions" , in Proceedings of SAE COMVEC 2007, Chicago, USA, Oct.30-Nov.1, 2007
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28. Arun D. Mahindrakar and V. Sankaranarayanan, "Nonlinear control of a beam balance system with a single electromagnet", in Proceedings of the 1st International Conference on Advances in Control and Optimization of Dynamical Systems (ACODS' 07), IISc, Bangalore, Feb. 2007. (This paper was awarded the best in the session).

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30. V. Sankaranarayanan, Arun D. Mahindrakar and Ravi N. Banavar, "A switched finite-time point-to-point control of an Underactuated underwater vehicle", in Proceedings of IEEE-CCA, Istanbul, Turkey, July 2003.