

Publications

A. List of Publications in International (SCI) Journals

- [1] **H. Kar** and V. Singh, "Stability analysis of 2-D state-space digital filters using Lyapunov function: a caution," *IEEE Transactions on Signal Processing*, vol. 45, pp. 2620-2621, Oct. 1997.
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- [16] A. Dhawan and **H. Kar**, “LMI-based criterion for the robust guaranteed cost control of 2-D systems described by the Fornasini-Marchesini second model,” *Signal Processing*, vol. 87, pp. 479-488, March 2007.
- [17] **H. Kar**, “An LMI based criterion for the nonexistence of overflow oscillations in fixed-point state-space digital filters using saturation arithmetic,” *Digital Signal Processing*, vol. 17, pp.685-689, May 2007(**Listed in ScienceDirect’s Top 25 Hottest Articles**).
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B. List of Publications in International (Scopus) Journals

[91] A. Dey and **H. Kar**, “LMI-based criterion for the robust stability of 2D discrete state-delayed systems using generalized overflow nonlinearities,” *Journal of Control Science and Engineering*, vol. 2011, Article ID 271515, 12 pages, 2011.(Also indexed in Emerging Sources Citation Index, which is the New Edition of the Web of Science)

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[102] P.K. Gupta, K. Singh, V.K.R. Kandavli, and H. Kar, “New criterion for the stability of discrete-time systems with state saturation and time-varying delay,” *Journal of Control, Automation and Electrical Systems* (Springer), vol. 34, no. 4, pp. 700-708, 2023. <https://doi.org/10.1007/s40313-023-01005-5>.

[103] S. K. M. Kanithi, K. Singh, V. K. R. Kandavli and **H. Kar**, “Discrete-time state delayed systems with saturation arithmetic: Overflow oscillation-free realization,” *Smart Science* (Taylor & Francis), vol. 12, no. 1, pp. 43-52, 2024 (Impact factor: 1.7, ESCI/Scopus indexed).

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C. List of Publications in other peer-reviewed International Journals

- [106] A. Dhawan and **H. Kar**, “LMI approach to suboptimal guaranteed cost control for 2-D discrete uncertain systems,” *Journal of Signal and Information Processing*, vol. 2, pp. 292-300, Nov. 2011.
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