

Review of: "Backstepping Control Design in Conjunction with an EKF-based Sensorless Field-Oriented Control of an IPMSM"

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Potential competing interests: No potential competing interests to declare.

The authors have demonstrated the application of the Extended Kalman Filter technique for sensorless speed control of IPMSMs. The manuscript is well written; however, the article is too long. The literature review part in the Introduction section can be reduced. The themes of each paper in the literature review are explained in detail in paragraphs which can be limited to 2-3 sentences. When the EKF method is widely adopted by researchers for speed control of PMSMs, the authors need to bring clarity on the novelty of the work and must highlight the significant contributions of the work. Further, the results of the method can be compared with those of other conventional (PID) or intelligent controllers (Fuzzy Logic, ANFIS) to assess its performance. Performance metrics of the method must be tabulated in the results section.