

8. References

- [1]. P. Kundur, "Power System Stability and Control", New York, McGraw-Hill, 1994.
- [2]. P.M. Anderson, A.A. Fouad, "Power System Control and Stability, Ames", Iowa State University Press, 1977.
- [3]. A.T. Al-Awami, Y.L. Abdel-Magid, M.A. Abido, "A particle-swarm-based approach of power system stability enhancement with unified power flow controller", *Electrical Power and Energy System*, Vol. 29, pp. 251-259, 2007.
- [4]. A.J.F. Keri, A.S. Mehraban, X. Lombard, A. Eiriachy, A.A. Edris, "Unified power flow controller (UPFC): modeling and analysis", *IEEE Transactions on Power Delivery*, Vol. 14, pp. 648-654, 1999.
- [5]. H. Shayeghi, H.A. Shayanfar, S. Jalilzadeh, A. Safari, "A PSO based unified power flow controller for damping of power system oscillations", *Energy Conversion and Management*, Vol. 50, pp. 2583-2592, 2009.
- [6]. M. R. Banaei. B. Mohammadzadeh. R. Reza.Ahrabi "Damping of low frequency electro-mechanical oscillations using UPFC based on cuckoo optimization algorithm". *International Journal on Electrical Engineering and Informatics*, Vol. 6, No. 4, 2014.
- [7]. Gyugyi, L, "Dynamic Compensation of AC Transmission Line by Solid State Synchronous Voltage sources", *IEEE Transactions on Power Delivery*, Vol. 9, pp. 904-911,1994.
- [8]. H.F. Wang, "Design of SSSC damping controller to improve power system oscillation stability", *IEEE Africon*, Vol. 1, pp. 495-500, 1999.
- [9]. B. Mohammadzadeh. R. Gholizadeh-Roshanagh and S. Najafi Ravadanegh "Optimal designing of SSSC based supplementary controller for LFO damping of power system using COA", *ECTI Transactions on Electrical Eng., Electronics, and Communications*, Vol. 12, No. 2, pp. 64-72, 2014.
- [10]. S. Panda, N.P. Padhy, "A PSO-based SSSC controller for improvement of transient stability Performance", *International Journal of Intelligent Technology*, Vol. 2, pp. 28-35, 2007.
- [11]. H.F. Wang, "Phillips-Heffron model of power systems installed with STATCOM and applications", *IEE Proceedings Generation, Transmission and Distribution*, Vol. 146, pp. 521-527, 1999.
- [12]. K.R. Padiyar, N. Prabhu, "Design and performance evaluation of sub synchronous damping controller with STATCOM", *IEEE Transactions on Power Delivery*, Vol. 21, pp.1398-1405, 2006.
- [13]. A. Kazemi, M. Ladjevardi, M.A.S. Masoum, "Optimal Selection of SSSC Based Damping Controller Parameters for Improving Power System Dynamic Stability Using Genetic Algorithm", *Iranian Journal of Science & Technology, Transaction B, Engineering*, Vol. 29, No. B1, 2005.
- [14]. M.H. Etesami, N. Farokhnia, S.H. Fathi, "A method based on imperialist competitive algorithm (ICA), aiming to mitigate harmonics in multilevel inverters", *2nd Power Electronics, Drive Systems and Technologies Conference*, pp. 32-37, 2011.
- [15]. J. Kennedy, R. Eberhart, "Particle swarm optimization", *Proceeding of IEEE International Conference on Neural Networks 1995*;4:1942-8.
- [16]. I. Tsoulos, D. Gavrilis, E. Glavas, "Neural network construction and training using grammatical evolution", *Science Direct Neuro computing Journal*, Vol.72, Issues 1-3, December 2008, pp. 269-277.
- [17]. R. Eberhart, J. Kennedy, "A new optimizer using particle swarm theory", In: *Proceeding of Sixth International Symposium on Micro Machine Human Science*, vol. 4-6 October, 1995, p. 39-43.
- [18]. R. Rajabioun, "Cuckoo optimization algorithm", *Applied Soft Computing*, Vol. 11, pp. 5508-5518, 2011.

- [19]. M. Mokhtarifard, R. Noroozian, S. Molaei, “Determining the optimal placement and capacity of DG in intelligent distribution networks under uncertainty demands by COA”, *2nd Iranian Conference on Smart Grids (ICSG)*, 2012.
- [20]. M.A. Abido, “Analysis and assessment of STATCOM-based damping stabilizers for power system stability enhancement”, *Electric Power System Research*, Vol. 73, pp. 177-185, 2005.
- [21]. A. Ajami, M. Armaghan, “Application of multi-objective PSO algorithm for power system stability enhancement by means of SSSC”, *International Journal of Computer and Electrical Engineering*, Vol. 2, pp. 838-845, 2010.
- [22]. A. Ajami, M. Armaghan, “A comparative study in power oscillation damping by STATCOM and SSSC based on the multi-objective PSO algorithm”, *Turkish Journal of Electrical Engineering & Computer Sciences*, Vol. 21, pp. 213-224, 2013.



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