СПИСОК ЛІТЕРАТУРИ

1. Vas, Peter. Sensorless Vector and Direct Torque Control / Peter Vas – New York: Oxford University Press Inc, 1998. – 367 p.

2. Giera, Jacek F. Permanent magnet motor technology / Jacek F. Giera, Mitchell Wing. – New York: Marcel Dekker, Inc., 2002. – 611 p.

3. Бешта О.С. Обгрунтування доцільності використання синхронних двигунів з постійними магнітами з вбудованими магнітами / О.С.Бешта, О.В.Балахонцев, С.Г.Фурса // Вісник КДУ ім. М. Остроградського. - 2010. - Вип. 4 ч. 2. - С.73-75.

4. More D.S. Comparative analyis of Flux Reversal machine and Fractional slot concentrated winding IPMSM / D.S. More, H. Kalluru, B.G. Fernandes // 34th Annual Conf. of IEEE Ind. Electronics (IECON 2008) (10-13 nov. 2008, Orlando, FL, USA). - 2008. - P. 1131-1136.

5. Lee, Jae Jun. Comparison between concentrated and distributed winding in IPMSM for traction application / Jae Jun Lee,Won Ho Kim, Jin Seung Yu, Si Yeong Yun, Sang Min Kim, Jin Ju Lee, Ju Lee // Electrical Machines and Systems. – 2010. – P. 1172 - 1174.

6. Morimoto, S. Optimum Machine Parameters and Design of Inverter-Driven Synchronous Motors for Wide Constant Power Operation / Shigeo Morimoto, Masayuki Sanada, Yoji Takeda, Katsunori Taniguchi // Industry Applications Society Annual Meeting. – 1994. – Vol. 1. – P. 177 - 182. Murakami, Hiroshi, The Performance Comparison of SIPMSM ,I IPMSM and SynRM in Use as Air-conditioning Compressor / Hiroshi Murakami, Yukio Honda, Hiroyuki Kiriyama, Shigeo Morimoto, Yoji Takeda // Matsushiata Electric Industrial. – 1999. – P. 840 - 845.

7. Sanada, M. Axial type Flat PM Motor with Large Air Gap / Masayuki Sanada, Shigeo Morimoto, Yoji Takeda // Power Conversion. – 1997. – Vol. 2. – P. 643 – 647.

8. Gieras, Jacek F. Axial flux permanent magnet brushless machines / Jacek F. Gieras, Rong-Jie Wang, Maarten J. Kamper. – Springer, 2008. – 357 p.

9. Gao J. Comparison of control performance of IPMSM of different rotor structure / J.Gao, R.Li, S.Huang, Z.Chen // IEEE Vehicle Power and Propulsion Conf. (VPPC) (1-3 sep. 2010, Lille, France). - 2010. - P. 1-5.

10. Bernatt J. Electric motors with permanent magnets with two-zone rotational speed control / J.Bematt, T.Glinka, M.Jakubiec, E.Krol, R.Rossa // Int. Aegean Conf. Electrical Machines and Power Electronics (ACEMP '07) (10-12 sep. 2007, Bodrum, Greek). - 2007. - P. 653-658.

11. Finken T. Study and Comparison of several Permanent-Magnet excited Rotor Types regarding their Applicability in Electric Vehicles / T.Finken, M.Hombitzer, K.Hameyer // Emobility - Electrical Power Train (5-9 Nov. 2010, Leipzig). - 2010. - P. 1-7.

12. Stulrajter, Marek. Permanent Magnets Synchronous Motor Control Theory / Marek ˇStulrajter, Valeria Hrabovcova, Marek Franko // Electrical Engineering. – 2010. – Vol. 58, №2. – P. 79 – 84.

13. Bose, Bimal K. Modern power electronics and AC drives / Bimal Bose. – New Jersey : Prentice Hall PTR, 2002. – 711 p.

14. Kiuchi, M. V/f Control of Permanent Magnet Synchronous Motors suitable for Home Appliances by DC-link Peak Current Control Method / M. Kiuchi, T. Ohnishi, H. Hagiwara, Y. Yasuda // International Power Electronics Conference. – 2010. – P. 567 - 573.

15. Itoh, J.-I. A Comparison between V/f Control and Position-Sensorless Vector Control for the Permanent Magnet Synchronous Motor / Jun-Ichi Itoh, Naofumi Nomura, Hiroshi Ohsawa // Power Conversion. – 2002. –Vol. 3. – P. 1310 - 1315.

16. Perera, P.D.C. A Sensorless, Stable V/f Control Method for Permanent-Magnet Synchronous Motor Drives / P. D. Chandana Perera, Frede Blaabjerg, John K. Pedersen, Paul Thшgersen // Industry Applications. – 2003. –Vol. 39, №3. – P. 783 - 791.

17. Andreescu, G.-D. Stable V/f Control System with Unity Power Factor for IPMSM Drives / Gheorghe-Daniel Andreescu, Cristina-Elena Coman, Ana

Moldovan, Ion Boldea // Optimization of Electrical and Electronic Equipment. – 2012. – P. 432 - 438.

18. Matsushita, M. Stabilization Control of Sensorless Sinusoidal Wave Drive for Control of Power Factor of PM Motor / Motoshi Matsushita, Hiroyuki Kameyama, Yasuhiro Ikeboh, Shigeo Morimoto // Electrical Machines and Systems. – 2009. – P. 1 - 5.

19. Sue, Shinn-Ming. A New MTPA Control Strategy for Sensorless V/f Controlled IPMSM Drives / Shinn-Ming Sue, Tsai-Wang Hung, Jenn-Horng Liaw, Yen-Fang Li, Chen-Yu Sun // Industrial Electronics and Applications. – 2011. – P. 1840 - 1844.

20. Abdul Kadir, M.N. Comparison of Basic Direct Torque Control Designs for Permanent Magnet Synchronous Motor / M. N. Abdul Kadir, S. Mekhilef, W.P. Hew // Power Electronics and Drive Systems. – 2007. – P. 528 - 536.

21. Bossoufi, B. Performance Analysis of Direct Torque Control (DTC) for Synchronous Machine Permanent Magnet (IPMSM) / Badre Bossoufi, Mohammed Karim, Ahmed Lagrioui, Silviu Ioniţă // Design and Technology in Electronic Packaging. – 2010. – P. 237 - 242.

22. Dan, Sun. Study on the Direct Torque Control of Permanent Magnet Synchronous Motor Drives / Sun Dan, Fang Weizhong, He Yikang // Electrical Machines and Systems. – 2001. – Vol. 1. – P. 571 - 574.

23. Lamchich, Moulay Tahar. Torque control / Moulay Tahar Lamchich. – Rijeka : InTech, 2011. – 292 p.

24. Mino-Aguilar, G. A Direct Torque Control for a IPMSM / G. Mino-Aguilar, A. Michelle Domнnguez, R. Maya, R. Alvarez, L. Cortez, G. Mucoz, F. Guerrero, S. Maya, A. M. Rodriguez, F. Portillo, H. Azucena // Electronics, Communications and Computer. – 2010. – P. 260 - 264.

25. Tao, Zhang. Direct Torque Control of Permanent Magnet Synchronous Motor / Zhang Tao, Liu Baolian, Zhang Huiping // Proceedings of the 29th Chinese Control Conference. – 2010. – P. 3358 - 3361.

26. Zhong, L. Analysis of Direct Torque Control in Permanent Magnet Synchronous Motor Drives / L. Zhong, M. F. Rahman, W. Y. Hu, K. W. Lim // Power Electronics. – 1997. – Vol. 12, №3. – P. 528 - 536.

27. Inoue, Y. Comparative Study of IPMSM Control Strategies for Torque Ripple Reduction / Yukinori Inoue, Shigeo Morimoto, Masayuki Sanada // Power Electronics and Applications. – 2007. – P. 1 - 9.

28. Swierczynski, D. Direct Torque Control of Permanent Magnet Synchronous Motor (IPMSM) Using Space Vector Modulation (DTC-SVM) - Simulation and Experimental Results / Dariusz Swierczynski, Marian P. Kazmierkowski // Industrial Electronics. – 2002. – Vol. 1. – P. 751 - 755.

29. Vyncke, T.J. A Comparison of Stator Flux Linkage Estimators for a Direct Torque Controlled IPMSM Drive / T.J. Vyncke, R.K. Boel, J.A.A. Melkebeek // Industrial Electronics. – 2009. – P. 971 - 978.

30. Roos, J.G. Analysis, simulation and practical evaluation of torque vector control strategies for medium power highly responsive IPMSM drives / J.G. Roos, J.H.R. Enslin // Power Electronics and Variable-Speed Drives. – 1991. – P. 34 - 39.

31. Morimoto, S. Current Phase Control Methods for Permanent Magnet Synchronous Motors / Shigeo Morimoto, Yoji Takeda, Takao Hirasa // Power Electronics. – 1990. – Vol. 5, №2. – P. 133 - 139.

32. Пересада С.М. Векторное управление скоростью асинхронного двигателя при максимизации соотношения момент–ток в условиях токового управления / С.М. Пересада, С.С. Дымко // Электромеханические и энергосберегающие системы. – 2012. – КрНУ. – Вип. 3/2012 (19). – С. 56–60.

33. Пересада С.М. Прямое векторное управление моментом асинхронных двигателей с максимизацией соотношения момент–ток / С.М. Пересада, С.С. Дымко // Электромеханические и энергосберегающие системы. – 2011. – КрНУ. – Вип. 3/2011 (15). – С. 16–20.

34. Inoue, Yukinori. A novel control scheme for maximum power operation of synchronous reluctance motors including maximum torque per flux control / Yukinori Inoue, Shigeo Morimoto, Masayuki Sanada // IEEE Transactions on industry applications. – 2011. – Vol. 47, №1. – P. 115-121.

35. Перельмутер В.М. Прямое управление моментом и током двигателей переменного тока / В.М. Перельмутер. – Х. : Основа, 2004. – 210 с.

36. Morimoto, S. Design and control system of permanent magnet synchronous motor for high torque and high efficiency operation / S. Morimoto, Y. Takeda, K. Hatanaka, Y. Tong, T. Hirasa // Industry Applications. – 1991. – Vol. 1. – P. 176 - 181.

37. De Doncker, Rik. Advanced electrical drives: Analysis, modeling, control / Rik De Doncker, Duco W.J. Pulle, Andre Veltman. – Springer, 2011. – 455 p.

38. Krishnan, R. Permanent magnet synchronous and brushless DC motor drives / R. Krishnan. – CRC Press, 2010. – 564 p.

39. Morimoto, S. High performance servo drive system of salient pole permanent magnet synchronous motor / S. Morimoto, K. Hatanaka, Y. Tong, Y. Takeda,; T. Hirasa // Industry Applications. – 1991. – Vol. 1. – P. 463 - 468.

40. Morimoto, S. Servo Drive System and Control Characteristics of Salient Pole Permanent Magnet Synchronous Motor / Shigeo Morimoto, Keita Hatanaka, Yi Tong, Yoji Takeda, Takao Hirasa // Transactions On Industry Application. – 1993. – Vol. 29, №2. – P. 338 - 343.

41. Schröder, Dierk. Elektrische Antriebe – Regelung von Antriebssystemen / Dierk Schröder. – Berlin; Heidelberg : Springer, 2009. – 1336 p.

42. Boldea, Ion. Electric Drives: [Second Edition] / Ion Boldea, Syed A. Nasar. – USA: CRC Press, 2005. – 544 p.

43. 97. Wach, Piotr. Dynamics and control of electrical drives / Piotr Wach. – Berlin : Springer-Verlag, 2011. – 454 p.

44. Zhang, Jun. Decoupling Control of IPMSM Based on Exact Linearization / Jun Zhang, Zhaojun Meng, Rui Chen, Changzhi Sun, Yuejun An // Electronic &Mechanical Engineering and Information Technology. – 2011. – Vol. 3. – P. 1458 - 1461.

45. Krishnan, R. Control and operation of PM synchronous motor drives in the field-weakening region / R. Krishnan // Industrial Electronics, Control, and Instrumentation. – 1993. – Vol. 2. – P. 745 - 750.

46. Meyer, Michael. Optimum Control for Interior Permanent Magnet Synchronous Motors (IPMSM) in Constant Torque and Flux Weakening Range / Michael Meyer, Joachim Bocker // 12th International Power Electronics and Motion Control Conference. – 2006. – P. 282 - 286.

47. Morimoto, S. Expansion of Operating Limits for Permanent Magnet Motor by Optimum Flux-Weakening / Shigeo Morimoto, Yoji Takeda, Takao Hirasa, Katsunori Taniguchi // Industrial Electronics. – 1989. – Vol. 1. – P. 51 - 56.

48. Takiguchi, M. Maximum Torque/Minimum Flux Control of Interior Permanent Magnet Synchronous Motor Based on Magnetic Energy Model / Masashi Takiguchi, Toshiaki Murata, Junji Tamura, Takeshi Tsuchiya // Power Electronics and Applications. – 2007. – P. 1 - 10.

49. Zordan, M. Field-weakening in high-performance IPMSM drives: a comparative analysis / M Zordan, P Vas, M Rashd, S Bolognani, M Zigliotto // Industry Applications. – 2000. – Vol. 3. – P. 1718 - 1724.

50. 86. Sul, Seung-Ki. Control of electric machine drive system / Seung-Ki Sul. – New Jersey : John Wiley & Sons, Inc., 2011. – 399 p.

51. Hao, Shunghui. Closed-loop parameter identification of permanent magnet synchronous motor considering nonlinear influence factors / Shuanghui Hao, Jinghe Shi, Minghui Hao, Yoshio Mizugaki // Journal of Advanced Mechanical Design, Systems and Manufacturing. – 2010. – Vol.4, №6. – P. 1157 – 1165.

52. Inoue, Yukinori. Effectiveness of voltage error compensation and parameter identification for model-based sensorless control of IPMSM / Yukinori Inoue, Koji Yamada, Shigeo Morimoto, Masayuki Sanada // IEEE Transactions on industry applications. – 2009. – Vol. 45, №1. – P. 213-221.

53. Inoue, Yukinori. Performance improvement of sensorless IPMSM drives in a low-speed region using online parameter identification // IEEE Transactions on industry applications. – 2011. – Vol. 47, №2. – P. 798-804.

54. Kosaka, Manabu. Parameter identification for interior permanent magnet synchronous motor driven by sensorless control / Manabu Kosaka, Hiroshi Uda // Journal of low frequency noise, vibration and active control. – 2009. – Vol.28, №4. – P. 269-283.

55. Mink, F. Parametric Model and Identification of IPMSM Considering the Influence of Magnetic Saturation / Fabian Mink, Nicolai Kubasiak, Bastian Ritter, Andreas Binder // Optimization of Electrical and Electronic Equipment. – 2012. – P. 444 – 452.

56. Senjyu, T. Accurate Parameter Measurement for High Speed Permanent Magnet Synchronous Motors / Tomonobu Senjyu, Yoshiaki Kuwae, Naomitsu Urasaki, Katsumi Uezato // Power Electronics. – 2001. – Vol. 2. – P. 772 - 777.

57. Senjyu, Tomonobu. Parameter Measurement for IPMSM Using Adaptive Identification / Tomonobu Senjyu, Kaname Kinjo, Naomitsu Urasaki, Katsumi Uezato // Industrial Electronics. – 2012. – Vol. 3. – P. 711 - 716.

58. Senjyu, Tomonobu. Vector Control of IPMSM with On-Line Parameter Measurement Including Stator Iron Loss / Tomonobu Senjyu, Tsuyoshi Shimabukuro, Naomitsu Urasaki, Katsumi Uezato // Industrial Electronics, Control, and Instrumentation. – 1996. – Vol. 3. – P. 1717 - 1722.

59. Толочко О.І. Ідентифікація індуктивностей синхронного двигуна з постійними магнітами рекурентним методом найменших квадратів / О.І. Толочко, В.В. Божко // Наукові праці Донецького національного технічного університету. Серія: „Електротехніка і енергетика”. – 2012. – ДВНЗ „ДонНТУ”. – Вип. №1 (12)-2(13). – С. 234-238.

60. Трандафилов В.Н. Идентификация момента инерции электропривода ненормированным градиентным методом / В.Н Трандафилов, В.В. Божко, О.И. Толочко // Наукові праці Донецького національного технічного університету. Серія: „Електротехніка і енергетика”. – 2011. – ДВНЗ „ДонНТУ”. – Вип. 10 (180). – С. 194-199ю

61. МОЗ України Постанова №42 от 01.12.1999 "Санітарні норми мікроклімату виробничих приміщень ДСН 3.3.6.042-99"

62. Cavallaro, C. Analysis a DSP Implementation and Experimental Validation of a Loss Minimization Algorithm Applied to Permanent Magnet Synchronous Motor Drives / C. Cavallaro, A. O. Di Tommaso, R. Miceli, A. Raciti, G. Ricco Galluzzo, M. Trapanese // Industrial Electronics Society. – 2003. – vol .1. – P. 312-317.