Curriculum Vitae

Prof. EssamEddin Mohamed Rashad

Head of the Electrical Power and Machines Engineering Department Faculty of Engineering, Tanta University, Egypt

Jan. 2017



1- Personal information

Full Name	Essam Eddin Mohamed Rashad Ahmad Gaballa				
Nationality	Egyptian	gyptian Marital Status		Married + 3 sons	
Current Position	Professor and Head of the Electrical Power and Machines Engineering Department, Faculty of Engineering, Tanta University, Egypt			ε	
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2- Qualifications

Qualification	Place	Date
Ph D	Electrical Engineering Department, Faculty of Engineering, Alexandria University, Alexandria, EGYPT	1992
M Sc	Electrical Engineering Department, Faculty of Engineering, Alexandria University, Alexandria, EGYPT	1987
B Sc	Electrical Power and Machines Engineering Department, Faculty of Engineering, Menoufiya University, Shebin El-Kom, EGYPT	1983

3- Employment History

	From	To	Occupation	Place
1	Oct. 2014	Now	Department Head	Electrical Power and Machines Engineering Department, Faculty of Engineering, Tanta University, Egypt
2	Sept. 2011	Oct. 2014	Vice Dean for Education and Students Affairs	Faculty of Engineering, Tanta University, Egypt
3	Oct. 2009	Oct. 2011	Department Head	Electrical Power and Machines Engineering Department, Faculty of Engineering, Tanta University, Egypt
4	May 2006	Now	Professor	Electrical Power and Machines Engineering Department, Faculty of Engineering, Tanta University, Egypt
5	May 2004	July 2099	Department Head	Electrical Technology Department, Buraydah College of Technology, Technical and Vocational Training Corporation, Buraydah, Kingdom of Saudi Arabia
6	Sept. 2001	July2009	Assistant Professor	Electrical Technology Department, Buraydah College of Technology, Technical and Vocational Training Corporation, Buraydah, Kingdom of Saudi Arabia
7	Dec. 1999	May 2006	Associate Professor	Electrical Power and Machines Engineering Department, Faculty of Engineering, Tanta University, Egypt
8	Feb. 1992	Dec. 1999	Assistant Professor	Electrical Power and Machines Engineering Department, Faculty of Engineering, Tanta University, Egypt
9	Oct. 1992	Feb. 1993	Assistant Lecturer	Electrical Power and Machines Engineering Department, Faculty of Engineering, Tanta University, Egypt
10	Feb. 1990	Oct. 1992	Educational Engineer	Quessna Polytechnic Institute, Ministry of higher education, Quessna, Egypt
11	July 1985	Feb. 1990	Electrical Maintenance Engineer	Belayim Petroleum Company, Abu-Rudies fields. South Sinia, Egypt

4- Teaching Experience

a) <u>Undergraduate courses:</u>

Faculty of Engineering, Tanta University and its branch in Kafr El-Sheikh (currently Kafr El-Sheikh University), Egypt

• Electric circuits	• Energy Conversion	• Electrical Drawing
• Electrical Materials	• Electrical Machines (several	Automatic Control
	levels)	Engineering
 Power Electronics 	Energy Utilization	 Control of Electrical machines
• Special Electrical Machines	• Numerical Methods in Electrical Engineering	• Graduation project

b) Post-graduate courses

Faculty of Engineering, Tanta University, Egypt

Level	Courses			
PhD	High Performance Electric Drive Systems			
	Modern Trends in Power Electronics			
	Modern Trends in Electrical Machines			
	Independent Studies in Electric Machines			
	Independent Studies in Power Electronics			
	Independent Studies in Control of Electric Machines			
MSc	PWM techniques in Power Electronics			
	 Advanced Topologies in Power Electronic 			
	 Control of Electrical machines 			
	Special Electrical Machines			
	Control of Electric Machine Systems			
Diploma	Electrical Machines General Theory of Electric Machines			
	• Theories of Electrical Machines • Power Electronics in Electric Machines			
	Power Electronics New and Renewable Energy			

c) Technical Education

- 1. Quessna Polytechnic Institute, Ministry of higher education, Quessna, Egypt
 - Electrical Engineering
- Electrical Machines
- Electrical Equipments

- Power Electronics
- Computer.
- 2. Buraydah College of Technology, Technical and Vocational Training Corporation, Buraydah, Kingdom of Saudi Arabia
 - Electrical Circuits and Measurements
 - Generation Stations and Power Transmission
 - Electrical Networks
 - Electrical Traction
 - Graduation Project

- DC Machines and Transformers
- Electrical Distribution Technology
- Automatic Control Technology
- Electrical Machines

d) Training Courses

- Computers for postgraduate students, Tanta University, Egypt, 1998
- Application of industrial safety procedures, Buraydah College of Technology, Kingdom of Saudi Arabia, 2005-2006
- Maintenance of Electrical Power Stations, Buraydah College of Technology, Kingdom of Saudi Arabia, 2005-۲۰۰٦
- Recent technologies in electrical power and machines, Buraydah College of Technology, Kingdom of Saudi Arabia, 2007
- Practical technologies of automatic control, Buraydah College of Technology, Kingdom of Saudi Arabia, Y...A
- Recent technologies in generation of electrical energy, Buraydah College of Technology, Kingdom of Saudi Arabia, ۲۰۰۹

e) Other Teaching Experience

- 1. Computer courses in the following faculties and institutes:
 - Benha Higher Technology Institute, Egypt, from 1992-1997
 - Faculty of Specific Education, Benha, Egypt, 1994/1995
 - Faculty of Agriculture, Tanta University, Kafr El-sheikh Branch (Currently Kafr El-sheikh University), Egypt, 1998-1999
- 2. Complementary courses for Institute of Efficient Productivity graduates, Egypt, 1996-1999
- 3. Technical courses for Educational qualifying program, Tanta University, Egypt, 1994-2001

5- Scientific Missions and Visits:

- **Japan** (from Feb. to Aug. 2000 with full support of the Egyptian government) to study "sensorless control of electrical machines" in Electrical and Electronics labs, Faculty of Engineering, Nagasaki University, Nagasaki
- Canada (from July to Aug. 2003 with partial support of the Canadian university) to study "Vector control of electrical machines" in Electrical Drives labs, Faculty of Engineering and Applied Science, Memorial University of Newfoundland, St. John's, Newfoundland.
- **Belgium** (September 2015 with full support of the Egyptian government) according to the channel system for PhD supervision of the student M. N. Ibrahim

6- Awards

Tanta University Awards for international publication in years:

2012 - 2013 - 2014 - 2015 (2 awards) - 2016 (4 awards)

7- Contribution to Technical Conferences and Meetings

- ⇒ More than 50 national and international conferences.
- \Rightarrow Sample details are given in Appendix (1)

8- Academic activities

- **a)** Member of the Permanent Committee for Promotions of Faculty Staff to Professor and Associate Professor ranks (Round 11), Supreme Council of Universities, Egypt
- **b)** <u>IEEE (Institute of Electrical and Electronic Engineers)</u>
 - Member since 1994
 - Senior Member since 2002
 - Paper reviewer for Power & Energy Society PES (formerly Power Engineering Society)
 - Member of Electrical Machines Committee EMC since 2003
 - Current membership includes the following societies:
 - ⇒ Power& Energy Society PES (formerly Power Engineering Society)
 - ⇒ Industry Applications Society IAS
 - ⇒ Power Electronics Society PELS
 - ⇒ Industrial Electronics Society IELS

c) Scientific Committees of many national and international conferences

Sample details are given in Appendix (1)

d) Reviewer for many specialized journals;

For example

- Transaction on Energy Conversion (EC), PES, IEEE
- Transaction on Power Systems (PWRS), PES, IEEE
- Electric Power Components and Systems
- IET Power Electronics Journal
- Ain Shams Engineering Journal, Ain Shams University, Egypt.
- Alexandria Engineering Journal, Alexandria University, Egypt.
- Journal of Technology Research (JTR), Technical and Vocational Training Corporation, Kingdom of Saudi Arabia
- Qassim University Scientific Journal, Qassim University, Kingdom of Saudi Arabia
- The Journal of Engineering Research,(TJER),College of Engineering, Sultan Qaboos University
- Engineering Research Journal (ERJ), Faculty of Engineering, Minufiya University, Egypt.
- Mansoura Engineering Journal, MEJ, Faculty of Engineering, Mansoura University, Egypt
- Journal of Al Azhar University Gaza Palestine

e) Reviewer for many national awards

9- Educational and University Development activities

Egypt

- Establishment and development of Electrical Engineering department laboratories (Power & machines Computer & automatic control Communications & Electronics), Faculty of Engineering, Tanta University, Kafr El-sheikh branch (Later KafrEl-Sheikh University)
- Establishment and development of Electrical Power & Machines Engineering department laboratories, Faculty of Engineering, Tanta University
- Development of undergraduate curriculum applied in 1997 for Electrical Power and Machines Engineering department, Tanta University
- Many interviews for Channel 6 (local channel of meddle delta) of the Egyptian TV about technical electrical issues, such as electrical motors, maintenance of electrical home appliances, new and renewable energy.
- Director of the General Services Center for Computers and Technology GSCCT, Tanta University from August 2010 to August 2013
- Coordinator for Information Technology Clubs, Tanta University, from November 2010 to August 2013

Kingdom of Saudi Arabia

- Establishment of colleges of technology in both Al-zolfi (2004) and Onaiza (2005)
- Establishment and development of Electrical Technology department laboratories, College of Technology, Technical and Vocational Training Corporation, Buraydah, (2001-2009)
- Review of curriculum and course text books for Electrical Technology departments, Technical and Vocational Training Corporation

10- Research Interests

• Analysis and Design of Electrical Machines

- Electric Drive Systems
- Power Electronics Applications
- Renewable Energy Sources for Electric Power Generation.
- Application of Renewable Energy Systems
- Distributed Generating (DG) Systems
- Smart Grids

11- Published papers

- ⇒ More than 110 technical papers in international and national journals and conferences.
- \Rightarrow Details are given in Appendix (2)

Appendix (1)

Contributing to Specialized National and International Conferences

(Paper presentation/Scientific committees / Session Chair ..)

Attended conferences are shaded bold

	Conference	Country	Year
1	The 9 th National Radio Science Conference, NRSC'92, Military Technical Collage MTC, Cairo, Egypt, Feb. 1992	Egypt	1992
2	IEEE-PES Summer Meeting, Seatle, WA, USA, July 12-16, 1992.	USA	1992
3	The 2 nd International Conference on Engineering Research, ICER-9, Suez Canal University, Port Said, Egypt, December 19-21, 1995.	Egypt	1995
4	IEEE-PES Summer Meeting, Colorado, USA, July 28-August 1, 1996.	USA	1996
5	The 5 th International Meddle East Power System Conference MEPCON'97, Alexandria University, Egypt, 4-6 January, 1997	Egypt	1997
6	The 2 nd International Engineering Conference, Faculty of Engineering, Mansoura University, Egypt, 8-10 April, 1997	Egypt	1997
7	The 6 th International Meddle East Power System Conference MEPCON'98, Mansoura University, Egypt, 15-17 December 1998	Egypt	1998
8	The 33 rd Universities Power Engineering Conference, UPEC'98, Napier Univ., Edinburgh, UK, Sept. 8-10, 1998.	United Kingdom	1998
9	The 2 nd conference of Egyptian Rural Development, Faculty of Engineering, Menoufyia University, Shebin El-Kom Egypt, 27-29 April 1999.	Egypt	1999
10	IEEJ-Rotating Machines Committee Meeting, Tokyo, Japan, 14-15 June 2000	Japan	2000
11	International Conference on Power Electronics and Drives Systems (PEDS01), Bali, Indonesia, Oct. 2001.	Indonesia	2001
12	The 8 th International Meddle East Power system Conference MEPCON 2001, Helwan University, Cairo, Egypt, 29-31 Dec. 2001.	Egypt	2001
13	The 9 th annual IEEE-Technical Exchange Meeting, King Fahd University for Petroleum ad Minerals KFUPM, Saudi Arabia, 16-17 April 2002.	Saudi Arabia	2002
14	The IEEE-PES general meeting, Toronto, Canada, 13-17July 2003.	Canada	2003
15	First Baha Technical Meeting (BTM'2004), Baha College of Technology, Baha, Saudi Arabia, May 3-5, 2004.	Saudi Arabia	2004
16	The 3rd Saudi Technical Conference (STCEX'3), Riyadh, Saudi Arabia, 11-15 Dec. 2004.	Saudi Arabia	2004
17	The 2004 IEEE Canadian Conference on Electrical and Computer Engineering – CCECE 2004, Niagra falls, Ontario, Canada, 2-5 May, 2004.	Canada	2004
18	The 39 th IEEE Industry Application Society Annual Meeting, Seattle, Washington, 2-7 Oct. 2004.	USA	2004

19	The 9th Spanish-Portuguese congress on electrical engineering (9chlie), Marbella, Spain on June 30, July 1, 2, 2005	Spain	2005
20	The Sixth International Conference on Power Electronics and Drive Systems (PEDS 2005), Kuala Lumpur, Malaysia, 28 Nov - 1 Dec 2005	Malaysia	2005
21	The 2005 IEEE International Symposium on Industrial Electronics-ISIE2005, Dubrovnik, Croatia, June 20-23,	Croatia	2005
22	The IEEE Industry Applications Society 40th Annual Meeting, Kowloon, Hong Kong, 2-6 October 2005	Hong Kong	2005
23	The International Conference of Engineering Education, ICEE2006, Faculty of Engineering, Qassim University, Saudi Arabia, 4-6 March 2006	Saudi Arabia	2006
24	The 4th Saudi Technical Conference (STCEX2006), Riyadh, Saudi Arabia, 2-6 Dec. 2006.	Saudi Arabia	2006
25	The 2 nd International Conference on electrical systems "ICES'06", Oum El-Bouaghi (Algeria), May 08-10, 2006	Algeria	2006
26	The IEEE Industry Applications Society 42nd Annual Meeting, (IAS 2007) held Sept. 23 - 27, 2007 in New Orleans, Louisiana, USA	USA	2007
27	The International Conference on Electrical Engineering Design and Technologies (ICEEDT) held on November 5-6, 2007 inHammamet, Tunisia.	Tunisia	2007
28	The Seventh International Conference on Power Electronics and Drive Systems (PEDS'07) held in Bangkok, Thailand from November 27 to 30, 2007	Thailand	2007
29	The International Electric Machines and Drives Conference (IEMDC2009) held on May 3-6, 2007, Maimi-Florida- USA	USA	2007
30	The 2010 IEEE International Conference on Power and Energy (PEcon2010), Nov 29 - Dec 1, 2010, Kuala Lumpur, Malaysia	Malaysia	2010
31	The 14 th International Middle East Power Systems Conference(MEPCON'10), Cairo University, Cairo, Egypt, December 19-21, 2010.	Egypt	2010
32	The 15 th International Middle East Power Systems Conference MEPCON'12, held in Alexandria, Egypt, from 23 to 25 December 2012	Egypt	2012
33	Innovations in Energy, Power and Electrical Machines Conference IEPEM-2013, held in Koc University, Istanbul, Turkey, from 5 to 7 September 2013	Turkey	2013
34	The 2013 International Conference on Electrical Machines and Systems, Busan, Korea from October 26 to 29, 2013.	Korea	2013
35	The 7 th IET International Conference on Power Electronics, Machines and Drives (PEMD 2014), Manchester, UK, 8-10 April 2014	United Kingdom	2014
36	The 16th International Middle- East Power Systems Conference - MEPCON'2014, Ain Shams University, Cairo, Egypt, December 23 - 25, 2014	Egypt	2014

37	2014IEEE/SICE International Symposium on System Integration, Chuo University, Tokyo, Japan, Dec. 13-15, 2014.	Japan	2014
38	The 8th IEEE GCC Conference and Exhibition, Muscat, Oman, 1-4 February, 2015	Oman	2015
39	The 10 th IEEE International Symposium on Diagnostics for Electric Machines, Power Electronics and Drives (SDEMPED 2015), Guarda, Portugal, 1-4 Sept. 2015	Portugal	2015
40	The 18 th International Conference on Electrical Machines and Systems (ICEMS),Pattaya city, Thailand, 25-28 Oct. 2015	Thailand	2015
41	The Fourth International Conference on Electric Power and Energy Conversion Systems (EPECS 2015), American University of Sharjah, UAE, 24–26Nov. 2015	Sharjah	2015
42	The 17 th International Middle-East Power Systems Conference - MEPCON'2015, Mansoura University, Cairo, Egypt, December 15-17, 2015	Egypt	2015
43	The 1st Future University International Conference on New Energy and Environmental Engineering (ICNEEE 2016)held in Cairo, Egypt, April 11-14, 2016	Egypt	2016
44	The XXIIth International Conference on Electrical Machines (ICEM'2016) SwissTech Convention Center, Lausanne - Switzerland September 4-7, 2016	Switzerland	2016
45	The 19th International Conference on Electrical Machines and Systems (ICEMS 2016), Chiba-Japan, November 13-16, 2016	Japan	2016
46	2016 IEEE International Conference on Power and Energy (PEcon2016)., Nov 28-29, 2016, Melaka, Malaysia	Malaysia	2016
47	The 18th International Middle- East Power Systems Conference - MEPCON'2016, Helwan University, Cairo, Egypt, December 27-29, 2016	Egypt	2016

Appendix (2)

List of Publications Prof. Essam Eddin Mohamed Rashad

Head of the Electrical Power and Machines Engineering Department, Faculty of Engineering, Tanta University, Egypt

Jan 2017

I - Journal papers

- [1] A. S. Mostafa, A. L. Mohamadein and <u>E. M. Rashad</u>, "Application of Floquet theory to the analysis of series-connected wound-rotor self-excited synchronous generator", *IEEE Trans. on EC*, Vol. 8, No. 3, Sept. 1993, pp. 369-376.
- [2] A. S. Mostafa, A. L. Mohamadein and **E. M. Rashad**, "Analysis of series-connected wound-rotor self-excited induction generator", *IEE Proc. B*, Vol. 140, No. 5, Sept. 1993, pp. 329-336.
- [3] **E. M. Rashad**, M. E. Abdel-Karim and Y. G. Desouky, "Theory and analysis of three phase series-connected parametric motors", *IEEE Trans. on EC*, Vol. 11, No. 4 pp. 715-720, Dec. 1996.
- [4] **E. M. Rashad**, "Dynamic model of isolated parametric generator with application in wind energy systems" *Alexandria Engineering Journal*, Vol. 35, No. 6, pp B171-B183, Nov. 1996.
- [5] S. S. Shokralla and <u>E. M. Rashad</u>, "Dynamic analysis and speed control of ac-dc boost converter-fed dc motor", *Engineering Research Bulletin*, Faculty of Engineering, Minufiya University, Egypt, Vol. 22, No. 2, pp. 79-99, July 1999.
- [6] <u>E. M. Rashad</u>, "Feasibility of operating parametric motor in the sub-synchronous mode", *Engineering Research Bulletin*, Faculty of Engineering, Minufiya University, Egypt, Vol. 22, No. 2, pp. 165-189, July 1999.
- [7] S. M. R. Tahoun, <u>E. M. Rashad</u> and M. M. El-Shanawany, "Separately-excited three-phase reluctance generator", *Engineering Research Bulletin*, Faculty of Engineering, Minufiya University, Egypt, Vol. 22, No. 2, pp. 219-236, July 1999.
- [8] S. S. Shokralla and <u>E. M. Rashad</u>, "PV System fed dc Motor Controlled by boost converter", *Engineering Research Bulletin*, Faculty of Engineering, Minufiya University, Egypt, Vol. 22, No. 2, pp. 237-259, July 1999.
- [9] <u>E. M. Rashad</u>, "Dynamic Analysis of Series-Connected Wound Rotor Induction Motor for Variable Speed Drives", *Journal of Electrical Systems (JES)*, Electrical Engineering Institute, Oum El-Bouaghi University, Algeria. Vol. 1, No. 4, pp. 1-16, December 2005
- [10] E. M. Rashad, "Dynamics and Stability of Inverter-fed Series-Connected Wound Rotor Induction Motor, "Engineering Research Journal (ERJ), Faculty of Engineering, Minufiya University, Egypt, Vol. 29, No. 1, Jan. 2006, pp. 21-32
- [11] <u>Essam M. Rashad</u> and Sheriff M. Dabour, "A Novel Five-Phase Matrix-Converter Using Space-Vector Modulation Control Algorithm, "*Engineering Research Journal (ERJ)*, Faculty of Engineering, Minufiya University, Egypt, Vol. 34, No. 4, Oct. 2011, pp. 321-328
- [12] M. Nabil, S. M. Allam and <u>E. M. Rashad</u>, "Modeling and Design Considerations of a Photovoltaic Energy Source Feeding a Synchronous Reluctance Motor Suitable for Pumping

- Systems," *Ain Shams Engineering Journal*, Ain Shams University, Egypt, Vol. 3, Issue 4, December 2012, pp 375–382
- [13] Sheriff Dabour and <u>E. M. Rashad</u>, "Analysis and Implementation of Space-Vector-Modulated Three-Phase Matrix Converter," *IET Power Electronics*, Volume 5, Issue 8, Sept 2012, pp. 1374-1378
- [14] M. Nabil, S. M. Allam and <u>E. M. Rashad</u>, "Performance Improvement of a Photovoltaic Pumping System Using a Synchronous Reluctance Motor," *Electric Power Components and Systems*, Vol. 41, Issue 4, 2013, pp. 447-464
- [15] Ahmed E. ElGebaly, Mohamed K. El-Nemr and **EssamEddin M. Rashad**, "Optimal Control of the Design of the Total Artificial Heart Using Halbach Array Linear Motor", *Engineering Research Journal (ERJ)*, Faculty of Engineering, Minufiya University, Egypt, Vol. 36, No. 1, Jan. 2013, pp. 1-8
- [16] Sherif M. Dabour, Abd El-Wahab Hassan and **Essam M. Rashad**, "Analysis and implementation of space vector modulated five-phase matrix converter", *International Journal of Electrical Power & Energy Systems*, Volume 63, December 2014, Pages 740-746
- [17] Sherif Imam, Ahmed Azmy, **Essam Rashad** and Geza Husi, "Sizing and Economic Analysis of Hybrid PV/PEMFC Systems for Remote Areas Residential Utilization", *Nonconventional Technologies Review, Romania, Romanian Association of Nonconventional Technologies* September, 2015, Pages 37-42
- [18] M. N. Ibrahim, Peter Sergeant and <u>E. M. Rashad</u>, "Synchronous Reluctance Motor Performance Based on Different Electrical Steel Grades", IEEE Transactions on Magnetics, VOL. 51, No. 11, Nov. 2015, pp.1-4 (Article#:7403304)
- [19] Hossam A Abdel-Ghany, Ahmed M Azmy, Nagy I Elkalashy and <u>Essam M Rashad</u>, "Optimizing DG penetration in distribution networks concerning protection schemes and technical impact", Electric Power Systems Research, Vol. 128, Nov. 2015, pp.113-122
- [20] M. N. Ibrahim, Peter Sergeant and <u>E. M. Rashad</u>, "Simple Design Approach for Low Torque Ripple and High Output Torque Synchronous Reluctance Motors" *Energies*, vol. 9, pp. 942, 2016, ISSN 1996-1073.
- [21] Sherif M. Dabour, S. M. Allam and Essam M. Rashad, "A carrier-based PWM scheme for maximizing the voltage transfer ratio of five-phase to three-phase matrix converter" Electrical Engineering December 2016
- [22] S. M. Allam, S. M. Dabour, <u>E. M. Rashad</u>, "Three-to five-phase matrix converter using carrier-based PWM algorithm", Journal of Renewable Energy and Sustainable Development (RESD) Volume 2, Issue 2, December 2016
- [23] M. N. Ibrahim, P. Sergeant and <u>E. E. M. Rashad</u>, "Combined Star-Delta Windings to Improve Synchronous Reluctance Motor Performance," in IEEE Transactions on Energy Conversion, vol. 31, no. 4, pp. 1479-1487, Dec. 2016.
- [24] M. N. F. Ibrahim; P. Sergeant; **E. M. Rashad**, "Relevance of Including Saturation and Position Dependence in the Inductances for Accurate Dynamic Modelling and Control of SynRMs," in *IEEE Transactions on Industry Applications*, vol. 53. no.1, pp.151-160, January/February 2017

II – Conference papers

[25] A. S. Mostafa, A. L. Mohamadein and <u>E. M. Rashad</u>, "Analysis of varying inductance circuits using sampling technique and application as parametric generator", *in Proc. of 9th National*

- Radio Science Conference, NRSC'92- Military Technical Collage MTC, Cairo, Egypt, Feb. 1992
- [26] A. S. Mostafa, A. L. Mohamadein and <u>E. M. Rashad</u>, "Application of Floquet theory to the analysis of series-connected wound-rotor self-excited synchronous generator", *in Proc. of the IEEE-PES Summer Meeting*, Seatle, WA, USA, July 12-16, 1992.
- [27] **E. M. Rashad**, "Dynamic analysis of wind-driven three-phase parametric generator" *in Proc.* of 2nd International Conference on Engineering Research, ICER-95, 19-21 December 1995, Suez Canal University, Port Said, Egypt, pp. 55-69
- [28] E. M. Rashad, M. E. Abdel-Karim and Y. G. Desouky, "Theory and analysis of three phase series-connected parametric motors", in *Proc. of the IEEE-PES Summer Meeting*, Denver, Colorado, USA, July 28-Aug. 1, 1996.
- [29] <u>E. M. Rashad</u>, "Sub-synchronous operation of the three-phase parametric motor", *in Proc. of* 33rd Universities Power Engineering Conference, UPEC'98, 8-10 Sept. 1998, Napier University, Edinburgh, UK, pp. 608-611.
- [30] <u>E. M. Rashad</u>, "Electricity from renewable energy sources in rural area" *in Proc. of the 2nd conference of Egyptian Rural Development*, 27-29 April 1999, Faculty of Engineering, Menoufyia University, Egypt, pp. 179-197 (in Arabic)
 - عصام الدين محمد رشاد: "الكهرباء من المصادر المتجددة: هل من ضرورة مستقبلية لها في المناطق النائية؟" المؤتمر الثانيلتنمية الريف المصري، كلية الهندسة بشبين الكوم جامعة المنوفية مصر، ٢٧-٢٩ أبريل ١٩٩٩
- [31] **E. M. Rashad**, "Operation of wound-rotor induction motor in the sub-synchronous series connected mode compared with the normal operation mode", *in Proc. of 3rd International Conference on Engineering Research, ICER-99*, 9-11 November 1999, Suez Canal University, Port Said, Egypt, pp. 131-143
- [32] S. S. Shokralla and <u>E. M. Rashad</u>, "Modeling and speed control of ac-to-dc boost converter feeding dc motor", *in Proc. of 3rd International Conference on Engineering Research, ICER-99*, 9-11 November 1999, Suez Canal University, Port Said, Egypt, pp. 144-156.
- [33] S. S. Shokralla and E. M. Rashad, "PV System fed dc Motor Controlled by boost converter", in Proc. of 7th International Meddle East Power system Conference MEPCON 2000, 28-30 March 2000, AinShams University, Cairo, Egypt, pp 753-758.
- [34] E. M. Rashad, "Magnetic Levitation", A review article submitted and presented to the Scientific Permanent Committee For University Staff Promotion, as partial requirement for promotion to the Associate Professor rank, Egypt, Oct. 1999
- [35] **E. Rashad**, M. Mamo, J. Oyama, T. Abe, T. Higuchi and E. Yamada "Carrier frequency component method for sensorless control of IPM motor and its speed range expansion", *in Proc. of IEEJ-Rotating Machines Meeting*, 14-15 June 2000, Tokyo, Japan, pp. 43-47.
- [36] J. Oyama, K. Ogawa, T. Higuchi, E. M. Rashad, M. Mamo and M. Sawamura, "Sensorless vector control of IPM motor over whole Speed range", in Proc. of the International Conference on Power Electronics and Drives Systems (PEDS01), Bali, Indonesia, Oct. 2001
- [37] M. K. El-Nemr, M. A. El-khazendar, <u>E. M. Rashad</u> and M. A. Hassanin, "Analysis of Switched Reluctance Generator Connected to A Common Network", *in Proc. of 8th International Middle East Power system Conference MEPCON 2001*, 29-31 Dec. 2001 University of Helwan, Cairo, Egypt, pp 643-649
- [38] M. K. El-Nemr, M. A. El-khazendar and **E. M. Rashad**, "Implementation of Object-Oriented programming in Electrical Machine Systems", in *Proc. of 8th International Middle East Power system Conference MEPCON 2001*, 29-31 Dec. 2001 University of Helwan, Cairo, Egypt, pp 663-669

- [39] M. K. El-Nemr, M. A. El-khazendar, <u>E. M. Rashad</u> and M. A. Hassanin, "Analysis of Switched Reluctance Generator Feeding Isolated Load", presented at the 2nd world conference on technology advances for sustainable development, Cairo, Egypt, March 2002
- [40] **E. M. Rashad**, J. Oyama and M. Mamo, "Analysis of Carrier Frequency Component Voltage of sinusoidal PWM inverter for Sensorless Control of IPM Motors", in Proc. of the 9th annual IEEE-Technical Exchange Meeting, 16-17 April 2002, KFUPM, Saudi Arabia.
- [41] M. K. El-Nemr, M. A. Al-Khazendar, <u>E. M. Rashad</u>, and M.A.Hassanin, "Modeling and Steady-State Analysis of Stand-Alone Switched Reluctance Generators", *in Proc. of IEEE-PES general meeting*, TorontoCanada, 13-17 July 2003.
- [42] E. M. Rashad, T. S. Radwan and M. A. Rahman, "Characteristics of Series-Connected Wound-Rotor Induction Motor Under Vector Control", *in Proc. of the First Baha Technical Meeting (BTM'2004)*, Baha College of Technology, Baha, Saudi Arabia, 3-5 May 2004
- [43] <u>E. M. Rashad</u>, "Magnetic Levitation: A New Trend or a New Technology?", *in Proc. of the First Baha Technical Meeting (BTM'2004)*, Baha College of Technology, Baha, Saudi Arabia, 3-5 May 2004
- [44] T. S. Radwan, E. M. Rashad, M. NasirUddin and M. A. Rahman, "Fuzzy-Logic-Based Controller for Synchronous Reluctance Motor", in Proc. of the 2004 IEEE Canadian Conference on Electrical and Computer Engineering CCECE2004 held in Niagra falls, Ontario, Canada, 2-5 May, 2004, Vol. 3, pp 1731-1735
- [45] <u>E. M. Rashad</u>, M. A. Rahman and T.S. Radwan and, "A Maximum Torque per Ampere Vector Control Strategy for Synchronous Reluctance Motors Considering Saturation and Iron Losses", in Proc. of the 39th IEEE Industry Application Society Annual Meeting held in Seattle, Washington from 2 to 7 Oct. 2004, Vol. 4, pp 2411-2417
- [46] **E. M. Rashad**, T. S. Radwan and M. A. Rahman, "Starting and Vector Control of Series-Connected Wound-Rotor Induction Motor in Super-Synchronous Mode", *in Proc. of the* 39thIEEE Industry Application Society Annual Meeting, Seattle, Washington, 2-7 Oct. 2004, Vol. I, pp 32-39
- [47] T. S. Radwan, <u>E. M. Rashad</u>, M. NasirUddin and M. A. Rahman, "Control of Synchronous Reluctance Motor Based on Fuzzy-Logic", *in Proc. of the Third Saudi Technical Conference(STCEX'3)* held in Riyadh, Saudi Arabia, from 11 to 15 Dec. 2004, Vol. II, pp 1-5
- [48] E. M. Rashad, T. S. Radwan and M. A. Rahman, "A New Vector Control Strategy for Maximum Torque per Ampere in Synchronous Reluctance Motor Drives" *in Proc. of the 3rd Saudi Technical Conference (STCEX'3)* Riyadh, Saudi Arabia, 11-15 Dec. 2004, Vol. II, pp 103-110
- [49] E. M. Rashad, "Accuracy Investigation of CFC Method for Sensorless Vector Control of Salient Pole Synchronous Motors", in Proc. of the 9th. Spanish-Portuguese congress on electrical engineering (9chlie), Marbella, Spain, 30 June 2 July 2005
- [50] <u>E. M. Rashad</u>, "Stability of Saturated Interior Permanent Magnet Motors", in Proc. of the Sixth International Conference on Power Electronics and Drive Systems (PEDS'5), Kuala Lumpur, Malaysia, 28 Nov.-1 Dec 2005.
- [51] E. M. Rashad, "Professional Ethics in the Engineering and Technological Curriculums," in Proc. of the International Conference of Engineering Education, ICEE2006, held by Faculty of Engineering, Qassim University, Kingdom of Saudi Arabia, 4-6 March 2006 (in Arabic) عصام الدين محمد رشاد: "أخلاقيات وآداب العمل في خطط التعليم الهندسي والتقني" بحث ألقي في المؤتمر الدولي للتعليم

الهندسي -ICEE2006 كلية الهندسة بجامعة القصيم – المملكة العربية السعودية، ٤ إلى ٦ مارس ٢٠٠٦

- [52] **E. M. Rashad**, "Saturation Effect on Steady-state Stability Limits of Interior Permanent Magnet Motors" *in Proc. of the Fourth Saudi Technical Conference(STCEX2006)* held in Riyadh, Saudi Arabia, from 2 to 6 Dec. 2006, Vol. II, pp 44-51
- [53] <u>E. M. Rashad</u>, "Accuracy Investigation of CFC Method for Sensorless Vector Control of Salient Pole Synchronous Motors," *in Proc. of the Fourth Saudi Technical Conference* (STCEX2006) held in Riyadh, Saudi Arabia, from 2 to 6 Dec. 2006, Vol. II, pp 64-72
- [54] **E. M. Rashad,** "Aspects of Professional Ethics in the Technology Education Curriculums," *in Proc. of the Fourth Saudi Technical Conference (STCEX2006)* held in Riyadh, Saudi Arabia, from 2 to 6 Dec. 2006, Vol. I, pp 99-106(in Arabic)
 - عصام الدين محمد رشاد: "جوانب الأخلاقيات المهنية وآداب العمل في خطط التعليم التقني" بحث ألقي في المؤتمر والمعرض التقني السعودي الرابع STCEX2006 المؤسسة العامة للتعليم الفني والتدريب المهني المملكة العربية السعودية ، ٢ ٦ ديسمبر ٢٠٠٦، المجلد الأول الصفحات من ٩٩-١٠٦
- [55] Essam Eddin M. Rashad, "Dynamic Performance of Series-Connected Wound Rotor Induction Motor," in Proc. of 2010 IEEE International Conference on Power and Energy (PEcon2010)., Nov 29 Dec 1, 2010, Kuala Lumpur, Malaysia
- [56] EssamEddin M. Rashad, "Stability of Variable Speed Series-Connected Wound Rotor Induction Motor in Super-Synchronous Mode," in Proc. of 2010 IEEE International Conference on Power and Energy (PEcon2010)., Nov 29 Dec 1, 2010, Kuala Lumpur, Malaysia
- [57] Sheriff M. Dabour and <u>Essam M. Rashad</u> "Improvement of Voltage Transfer Ratio of Space Vector Modulated Three-Phase Matrix-Converter," *in Proc. of the 15th International Middle East Power Systems Conference MEPCON'12*, held in Alexandria, Egypt, December from 23 to 25 2012
- [58] M. Nabil, S. M. Allam and <u>E. M. Rashad</u>, "Design Considerations and Performance Improvement of Photovoltaic Pumping System Based on a Synchronous Reluctance Motor," *in Proc. of the 15th International Middle East Power Systems Conference MEPCON'12*, held in Alexandria, Egypt, December from 23 to 25 2012
- [59] S. M. Allam and E. M. Rashad, "Minimum Requirements for Successful Self-Excitation of Series-Connected Wound-Rotor Induction Generator," in Proc. of the 15th International Middle East Power Systems Conference MEPCON'12, held in Alexandria, Egypt, December from 23 to 25 2012
- [60] Nabil A. Hussein, Ayman A. Eisa and **EssamEddin M. Rashad**, "Analyzing the Interline Power Flow Controller (IPFC) Steady State Performance in Power Systems," in Proc. of the 15th International Middle East Power Systems Conference MEPCON'12, held in Alexandria, Egypt, December from 23 to 25 2012
- [61] Ahmed E. ElGebaly, Mohamed K. El-Nemr, Mohamed A. El-Khazendar and **Essam EddinM. Rashad**, "Design of Halbach Array Linear Motor for Total Artificial Heart," in Proc. of the 15th International Middle East Power Systems Conference MEPCON'12, held in Alexandria, Egypt, from 23 to 25 December 2012
- [62] Sheriff M. Dabour, Abd El-Wahab Hassan and <u>Essam M. Rashad</u> "Five-Phase Induction Motor Drive System Fed from Five-Phase Matrix-Converter," *in Proc. of the 15th International Middle East Power Systems Conference MEPCON'12*, held in Alexandria, Egypt, from 23 to 25 December 2012
- [63] Ahmed M. Omara, Mohamed K. El-Nemr and **Essam M. Rashad**, "Implementation of Real Time Embedded Control System for Interior Permanent Magnet Motors", *in Proc. of, Innovations in Energy, Power and Electrical Machines Conference IEPEM-2013*, held in Koc University, Istanbul, Turkey, from 5 to 7 September 2013

- [64] Fatma A. Khera and **EssamEddin M. Rashad**, "Performance Analysis of Z-Source Inverter Considering Inductor Resistance", *in Proc. of Innovations in Energy, Power and Electrical Machines Conference IEPEM-2013*, held in Koc University, Istanbul, Turkey, from 5 to 7 September 2013
- [65] Ahmed M. Omara, Mohamed K. El-Nemr and Essam M. Rashad, "Real Time Implementation of High Performance Closed Loop Embedded Control System for Interior Permanent Magnet Motors", in Proc. of 2013 International Conference on Electrical Machines and Systems, held in Busan, Korea from October 26 to 29, 2013.
- [66] S. M. Dabour and <u>E M. Rashad</u>, "A new continuous PWM strategy for three-phase direct matrix converter using indirect equivalent topology," *Power Electronics, Machines and Drives* (*PEMD 2014*), 7th IET International Conference on , vol., no., pp.1,6, 8-10 April 2014
- [67] Sherif Imam, Ahmed Azmy, <u>EssamRashad</u>, and GezaHusi, "Assessing the Effect of Design Parameters on Optimal Size of Isolated PV Systems for Residential Utilizations", in Proc. of 2014 IEEE/SICE International Symposium on System Integration, Korakuen Campus, Chuo University, Tokyo, Japan, December 13-15, 2014.
- [68] Ahmed M. Omara, Mohamed K. El-Nemr and Essam M. Rashad, "Cost Effective Real Time Embedded Control System for Interior Permanent Magnet Synchronous Motors", in Proc. ofthe16thInternational Middle- East Power Systems Conference -MEPCON'2014 Ain Shams University, Cairo, Egypt, December 23 25, 2014
- [69] Sherif M. Imam, Ahmed M. Azmy and E. Rashad, "Sizing and Economic Analysis of Standalone PV Systems for Residential Utilization", in Proc. ofthe16th International Middle-East Power Systems Conference-MEPCON'2014 Ain Shams University, Cairo, Egypt, December 23 25, 2014
- [70] Fatma A. Khera and **Essam Eddin M. Rashad**, "Performance Analysis of Z-Source Inverter Considering Components Non-Idealities", in Proc. ofthe16th International Middle- East Power Systems Conference -MEPCON'2014 Ain Shams University, Cairo, Egypt, December 23 25, 2014
- [71] Nabil A. Hussein, Ayman A. Eisa, Safey A. Shehata and **EssamEddin M. Rashad**, "Impact of Changing Inter-line Power Flow Controller Parameters on the Power System", *in Proc. ofthe16th International Middle- East Power Systems Conference -MEPCON'2014 Ain Shams University, Cairo, Egypt, December 23 25, 2014*
- [72] Sheriff M. Dabour, S. M. Allam and Essam M. Rashad, "Space Vector PWM Technique for Three-to-Seven-Phase Matrix Converters", in Proc. ofthe 16th International Middle- East Power Systems Conference -MEPCON'2014 Ain Shams University, Cairo, Egypt, December 23 25, 2014
- [73] Sherif M. Dabour, S. M. Allam and Essam M. Rashad, "Indirect Space-Vector PWM Technique for Three toNine Phase Matrix Converters", in Proc. of the 8thIEEE GCC Conference and Exhibition, Muscat, Oman, 1-4 February, 2015
- [74] S. A. AbouHashesh, M. K. El-Nemr and <u>E. M. Rashad</u>, "Correlative Angles Switching Technique for Switched Reluctance Motor Drive Systems", in Proc. of the 8thIEEE GCC Conference and Exhibition, Muscat, Oman, 1-4 February, 2015
- [75] Mohamed G. Mousa, S. M. Allam, and Essam M. Rashad, "Maximum Power Tracking of a Grid-Connected Wind-Driven Brushless Doubly-Fed Reluctance Generator using Scalar Control", in Proc. of the 8thIEEE GCC Conference and Exhibition, Muscat, Oman, 1-4 February, 2015

- [76] Sherif M. Dabour, S. M. Allam and <u>Essam M. Rashad</u>, "A Simple CB-PWM Technique for Five-Phase Matrix Converters Including Over-Modulation Mode", in Proc. of the 8thIEEE GCC Conference and Exhibition, Muscat, Oman, 1-4 February, 2015
- [77] M. N. Ibrahim, Peter Sergeant, <u>E. M. Rashad</u>, "Synchronous reluctance motors performance based on different electrical steel grades," in 2015 IEEE Magnetics Conference (INTERMAG), Beijing, China, 11-15 May 2015
- [78] Mahmoud I. Masoud, Sherif M. Dabour, Abd El-Wahab Hassan and Essam M. Rashad, "Control of five-phase induction motor under open-circuit phase fault fed by fault tolerant VSI," in 2015 IEEE 10th International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED2015), pp.327-332, Guarda, Portugal, 1-4 Sept. 2015
- [79] Mohamed. N. Ibrahim, **Essam M. Rashad** and Peter Sergeant, "Steady-state analysis and stability of synchronous reluctance motors considering saturation effects," in 2015 IEEE 10thInternational Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED2015), pp. 345-350, Guarda, Portugal, 1-4 Sept. 2015
- [80] Mohamed. N. Ibrahim, **Essam M. Rashad** and Peter Sergeant, "Transient Analysis and Stability Limits for Synchronous Reluctance Motors Considering Saturation Effects", in the 18thInternational Conference on Electrical Machines and Systems (ICEMS), Pattaya city, Thailand, 25-28 Oct. 2015
- [81] Rawda Ramadan, Doaa Mokhtar Yehia, Essam M. Rashad, "Impact of Hybrid Energy Storage System on Solar Power Generation Integrated in Microgrids", in the Fourth International Conference on Electric Power and Energy Conversion Systems (EPECS 2015), American University of Sharjah, UAE, 24–26Nov. 2015
- [82] Mohamed Gamal, Said Allam, **Essam Rashad**, "A Sensorless Scalar-Control Strategy for Maximum Power Tracking of a Grid-Connected Wind-Driven Brushless Doubly-Fed Reluctance Generator", in the Fourth International Conference on Electric Power and Energy Conversion Systems (EPECS 2015), American University of Sharjah, UAE, 24–26Nov. 2015
- [83] Mohamed Gamal, Said Allam and <u>Essam Rashad</u>, "Vector Control Strategy for Maximum Wind-Power Extraction of a Grid-Connected Wind-Driven Brushless Doubly-Fed Reluctance Generator", in the Fourth International Conference on Electric Power and Energy Conversion Systems (EPECS 2015), American University of Sharjah, UAE, 24–26Nov. 2015
- [84] Mahmoud Elmorshedy, Said Allam and <u>Essam Rashad</u>, "Voltage and Frequency Control of a Stand-alone Wind-Energy Conversion System Based on PMSG", in the Fourth International Conference on Electric Power and Energy Conversion Systems (EPECS 2015), American University of Sharjah, UAE, 24–26Nov. 2015
- [85] S. M. Allam, Mohamed G. Mousa, and <u>Essam M. Rashad</u>, "A Proposed Grid-Synchronization Strategy of a Wind-Driven Brushless Doubly-Fed Reluctance Generator", *in the 17th International Middle-East Power Systems Conference (MEPCON'2015), Mansoura University, Mansoura, Egypt*, December 15- 17, 2015
- [86] Hossam A. Abd el-Ghany, Ahmed M. Azmy, Nagy I. Elkalashy and <u>Essam M. Rashad</u>, "Optimal Siting and Sizing of DG Units Based on Protection Schemes and Technical Aspects", in the 17th International Middle-East Power Systems Conference (MEPCON'2015), Mansoura University, Mansoura, Egypt, December 15- 17, 2015
- [87] M. F. Elmorshedy, S. M. Allam, Ahmed I. A. shobair and **Essam M. Rashad**, "Voltage and Frequency Control of a Stand-alone Wind-driven Permanent Magnet Synchronous Generator" *in the 17th International Middle-East Power Systems Conference (MEPCON'2015), Mansoura University, Mansoura, Egypt*, December 15- 17, 2015

- [88] Mohamed A. Almozayen, Mohamed K. El-Nemr, <u>Essam M. Rashad</u> and Ahmed I. Shobair, "Voltage Balancing and Harmonic Reduction for Axial Field Permanent Magnet Synchronous Generator", in the 17th International Middle-East Power Systems Conference (MEPCON'2015), Mansoura University, Mansoura, Egypt, December 15- 17, 2015
- [89] S. M. Allam, M. F. Elmorshedy, <u>Essam M. Rashad</u> and Ahmed I. A. shobair, "Voltage and Frequency Control with Maximum Power Extraction of a Stand-Alone Wind-Driven Permanent Magnet Synchronous Generator", in the 17th International Middle-East Power Systems Conference (MEPCON'2015), Mansoura University, Mansoura, Egypt, December 15- 17, 2015
- [90] Hasnaa M. El-Arwash, Ahmed M. Azmy and Essam M. Rashad, "Online Harmonic Simulation and Evaluation in Electric Power Distribution Systems", *in the 17th International Middle-East Power Systems Conference (MEPCON'2015), Mansoura University, Mansoura, Egypt*, December 15- 17, 2015
- [91] Kotb M. Kotb, AbdEl-wahab Hassan and <u>Essam M. Rashad</u>, "Selective Harmonic Elimination using Genetic Algorithm for An Asymmetric Cascaded Multilevel Inverter", *in the* 17th International Middle-East Power Systems Conference (MEPCON'2015), Mansoura University, Mansoura, Egypt, December 15- 17, 2015
- [92] Mohamed G. Mousa, S. M. Allam and Essam M. Rashad, "Scalar Control Strategy for Maximum Wind-Power Extraction of a Grid-Connected Wind-Driven Brushless Doubly-Fed Reluctance Generator" ", in the 17th International Middle-East Power Systems Conference (MEPCON'2015), Mansoura University, Mansoura, Egypt, December 15- 17, 2015
- [93] M. A. Almozayen, M. K. El-Nemr, <u>E. M. Rashad</u> and A. I. Shobair, "Design and Dynamic Performance of Wind-Driven Permanent Magnet Axial Field Synchronous Generator", *in the 1st Future University International Conference on New Energy and Environmental Engineering (ICNEEE 2016)* held in Cairo, Egypt, April 11-14, 2016.
- [94] R. Ramadan, Doaa M. Yehia and Essam M. Rashad, "Improved Performance of Wind Power Generation Using Hybrid Battery / Supercapacitor Energy Storage Systems", in the 1st Future University International Conference on New Energy and Environmental Engineering (ICNEEE 2016)held in Cairo, Egypt, April 11-14, 2016.
- [95] S. M. Allam, M. F. ELmorshedy, Ahmed I. A. Shobair and Essam M. Rashad, "Power Management Strategy with Maximum Power Extraction of a Stand-Alone Wind-Driven Permanent Magnet Synchronous Generator", in the 1st Future University International Conference on New Energy and Environmental Engineering (ICNEEE 2016) held in Cairo, Egypt, April 11-14, 2016.
- [96] Mohamed G. Mousa, S. M. Allam and Essam M. Rashad, "Maximum Wind-Power Extraction under Minimum Converter Current of a Grid-Connected Wind-Driven Brushless Doubly-Fed Reluctance Generator", in the 1st Future University International Conference on New Energy and Environmental Engineering (ICNEEE 2016) held in Cairo, Egypt, April 11-14, 2016.
- [97] M. ELmorshedy, S. Allam, Ahmed I. Shobair and Essam M. Rashad, "Analysis and Control of a PMSG-Based Stand-alone Wind-Generating System",in the 1st Future University International Conference on New Energy and Environmental Engineering (ICNEEE 2016)held in Cairo, Egypt, April 11-14, 2016.
- [98] Kotb. M. Kotb, AbdElwahab Hassan and Essam M. Rashad, "Minimization of Total Harmonic Distortion for an Asymmetric Multilevel Inverter Fed from Photovoltaic Modules", in the 1st Future University International Conference on New Energy and Environmental Engineering (ICNEEE 2016) held in Cairo, Egypt, April 11-14, 2016.
- [99] M. N. Ibrahim, P. Sergeant and E. M. Rashad, "Influence of rotor flux-barrier geometry on torque and torque ripple of permanent-magnet-assisted synchronous reluctance motors," 2016

- XXII International Conference on Electrical Machines (ICEM), Lausanne, Switzerland, 2016, pp. 398-404.
- [100] S. M.Allam, M. F. Elmorshedy and <u>E. M. Rashad</u>, "Load power and state-of-charge management strategy with MPPT of wind-driven isolated PMSG," 2016 XXII International Conference on Electrical Machines (ICEM), Lausanne, Switzerland, 2016, pp. 1098-1104.
- [101] M. G. Mousa, S. M. Allam and <u>E. M. Rashad</u>, "Maximum wind-power extraction of a grid-connected wind-driven brushless Doubly-Fed Reluctance Generator under different vector-control strategies," 2016 XXII International Conference on Electrical Machines (ICEM), Lausanne, Switzerland, 2016, pp. 1105-1111.
- [102] M. F. Elmorshedy, S. M. Allam and <u>E. M. Rashad</u>, "Performance analysis and control of a stand-alone wind-driven PMSG including unbalanced conditions," 2016 XXII International Conference on Electrical Machines (ICEM), Lausanne, Switzerland, 2016, pp. 1145-1151.
- [103] M. A. Almozayen, M. K. El-Nemr, <u>E. M. Rashad</u> and A. I. Shobair, "Voltage balance and harmonic reduction for axial field permanent magnet synchronous generator with concentrated winding," 2016 XXII International Conference on Electrical Machines (ICEM), Lausanne, Switzerland, 2016, pp. 2817-2823.
- [104] M. N. Ibrahim, P. Sergeant and <u>E. M. Rashad</u>, "Rotor Design With and Without Permanent Magnets and Performance Evaluation of Synchronous Reluctance Motors", in the 19th International Conference on Electrical Machines and Systems (ICEMS 2016), Chiba-Japan, November 13-16, 2016
- [105] Essam Eddin M. Rashad, "Theory and Steady-State Analysis of Series-Connected Wound-Rotor Induction Motor in Sub-Synchronous Mode", in Proc. of 2016 IEEE International Conference on Power and Energy (PEcon2016)., Nov 28-29, 2016, Melaka, Malaysia
- [106] Essam Eddin M. Rashad, "Effect of Parameters on Sub-Synchronous Operation of Series-Connected Wound-Rotor Induction Motor", in Proc. of 2016 IEEE International Conference on Power and Energy (PEcon2016)., Nov 28-29, 2016, Melaka, Malaysia
- [107] Mohamed K. El-Nemr, <u>Essam M. Rashad</u> and Ahmed M. Omara "Variable Speed Drive System of a Line-Start Interior Permanent Magnet Synchronous Motor for Industrial Applications", in the 18th International Middle-East Power Systems Conference (MEPCON'2016), Helwan University, Cairo, Egypt, December 27- 29, 2016
- [108] M. F. ELmorshedy, S. M. Allam and <u>Essam M. Rashad</u>, "Load Voltage Control and Maximum Power Extraction of a Stand-Alone Wind-Driven PMSG Including Unbalanced Operating Conditions", in the 18th International Middle-East Power Systems Conference (MEPCON'2016), Helwan University, Cairo, Egypt, December 27- 29, 2016
- [109] M. A. Almozayen, M. K. El-Nemr, <u>E. M. Rashad</u>, A. I. Shobair, "Finite-Element-Based Design of Axial Field PMSG for Wind Energy Conversion with MPPT Control", in the 18th International Middle-East Power Systems Conference (MEPCON'2016), Helwan University, Cairo, Egypt, December 27- 29, 2016
- [110] Sherif M. Dabour, <u>Essam M. Rashad</u>, Ayman Abdel-khalik, Shehab Ahmed, Ahmed Massoud, "A New Fifteen-Switch Inverter Topology for Two Five-Phase Motors Drive", in the 18th International Middle-East Power Systems Conference (MEPCON'2016), Helwan University, Cairo, Egypt, December 27- 29, 2016
- [111] Kotb M. Kotb, Abd El-Wahab Hassan and <u>Essam M. Rashad</u>, "Simplified sinusoidal Pulse Width Modulation for Cascaded Half-Bridge Multilevel Inverter", in the 18th International Middle-East Power Systems Conference (MEPCON'2016), Helwan University, Cairo, Egypt, December 27- 29, 2016