

DISTINGUISHED LECTURE PROGRAM



CONTACT INFORMATION

Applicant's First Name: Prof. Muhammad H
Applicant's Last Name: Rashid
Applicant's IEEE Member #: 07325616
Applicant's IEEE grade: Fellow
Mailing Address: Departem of Electrical and Computer Engineering, 111000 University Parkway
City: Pensacola
Province/State: Florida
Postal Code: 21514
Email: mrashid@ieee.org
Country: USA
Languages spoken other than English: Bengali

EDUCATION

First Professional Degree

University: Bangladesh University of Engineeriqn & Technology
Degree Received: BS in Electrical Engineering
Date Graduated: 1967

Masters

University: University of Birmingham, United Kingdom
Degree Received: MS in Infromation System Engineering
Date Graduated: 1971

Doctorate / Ph.D.

University: University of Birmingham, United Kingdom
Date Graduated: 1976
Degree Received: Ph.D. in Electrical and Electronic Engineering

PRESENT OCCUPATION

Title or Position: Professor (and past Director/Chair for 18 years)
Company Name: University of West Florida
Address: 11000 Univerity Parkway
City: Pensacola, Florida
Country: USA
Postal Code: 32514
Business Phone: 850 474 2976
Business Fax: 850 474 3212

TOPICS PROPOSED

Please write the topic of presentation that you proposes as part of the DLP:

Topic 1: Outcome-Base Education and Assesseemnts
Topic 2: Advances in Power Electronics and Its Applications

We encourage you to include your resume with your application. You may send your resume to us as an email attachment

Submit by Email

Short Biography of Dr. Muhammad H. Rashid

Muhammad H. Rashid is employed by the University of Florida as *Professor of Electrical and Computer Engineering* and *Director* of the UF/UWF Joint Program in Electrical and Computer Engineering. Dr. Rashid received B.Sc. degree in Electrical Engineering from the Bangladesh University of Engineering and Technology, and M.Sc. and Ph.D. degrees from the University of Birmingham in UK. Previously, he worked as Professor of Electrical Engineering and the Chair of the Engineering Department at Indiana University- Purdue University at Fort Wayne. Also, he worked as Visiting Assistant Professor of Electrical Engineering at the University of Connecticut, Associate Professor of Electrical Engineering at Concordia University (Montreal, Canada), Professor of Electrical Engineering at Purdue University Calumet, and Visiting Professor of Electrical Engineering at King Fahd university of Petroleum and Minerals (Saudi Arabia), as a design and development engineer with Brush Electrical Machines Ltd. (England, UK), a Research Engineer with Lucas Group Research Centre (England, UK), a Lecturer and Head of Control Engineering Department at the Higher Institute of Electronics (Malta).

Dr. Rashid is actively involved in teaching, researching, and lecturing in power electronics. He has published 16 books and more than 130 technical papers. His books are adopted as textbooks all over the world. His book, *Power electronics* has translations in Spanish, Portuguese, Indonesian, Korean and Persian. His book, *Microelectronics* has translations in Spanish in Mexico and Spain. He has had many invitations from foreign governments and agencies to be keynote lecturer and consultant, from foreign universities to serve as an external Ph.D. examiner, and from funding agencies research proposal reviewer. His contributions in education is recognized by foreign governments and agencies to lecture and consult (NATO for Turkey in 1994, UNDP for Bangladesh in 1989 and 1994, Saudi Arabia in 1993, Pakistan in 1993, Malaysia in 1995 and 2002, Bangkok in 2002), by foreign universities (in Australia, Canada, Hong Kong, India, Malaysia, Singapore) to serve as an external examiner (for undergraduate, master's and Ph.D. examinations), by funding agencies (in Australia, Canada, USA, Hong Kong) to review research proposals, and by U.S. and foreign universities to evaluate promotion cases for professorship.

He authored nine Prentice-Hall books: *Power Electronics - circuits, devices and applications* (1988, 2/e 1993, 2003, 3/e), *SPICE For Power Electronics* (1993), *SPICE For Circuits and Electronics Using PSpice* (1990, 2/e 1995, 2003, 3/e), *Electromechanical and Electrical Machinery* (1986), and *Engineering Design for Electrical Engineers* (1990). Also, authored five IEEE self-study guides, *Self-Study Guide on Fundamentals of Power Electronics*, *Power Electronics Laboratory Using PSpice*, *Selected Readings on SPICE Simulation of Power Electronics*, and *Selected Readings on Power Electronics* (IEEE Press, 1996) and *Microelectronics Laboratory Using Electronics Workbench* (IEEE Press, 2000). Also authored two books: *Electronic Circuit Design using Electronics Workbench* (January 1998), and *Microelectronic Circuits - Analysis and Design* (April 1999) by PWS Publishing). Edited: *Power Electronics Handbook* published by Academic Press, 2001.

He was a registered Professional Engineer in the Province of Ontario (Canada), a registered Chartered Engineer (UK), a *Fellow* of the Institution of Electrical Engineers (IEE, UK) and a *Fellow* of the Institute of Electrical and Electronics Engineers (IEEE, USA). He was elected as an IEEE Fellow with the citation "*Leadership in power electronics education and contributions to the analysis and design methodologies of solid-state power converters.*" Dr. Rashid is the recipient of the *1991 Outstanding Engineer Award* from The Institute of Electrical and Electronics Engineers (IEEE). He received the 2002 IEEE Educational Activity Award (EAB) Meritorious Achievement Award in Continuing Education with the following citation "*for contributions to the design and delivery of continuing education in power electronics and computer-aided-simulation*", and the *2008 IEEE Undergraduate Teaching Award* with the citation "*For his distinguished leadership and dedication to undergraduate electrical engineering education, motivating students and publication of outstanding textbooks*"

Dr. Rashid was an ABET program evaluator for electrical engineering from 1995-2000 and he is currently an engineering evaluator for the Southern Association of Colleges and Schools (SACS, USA). He has been elected as an IEEE-Industry Applications Society (IAS) a Distinguished Lecturer and Speaker. He is the Series Editors of *Power Electronics and Applications*, and *Nanotechnology and Applications* with the CRC Press. He is also the Editor-in-Chief of the *Electric Power and Energy Series* with Elsevier Publishing.

SUMMARY OF PROFESSIONAL ACCOMPLISHMENTS – Muhammad H. Rashid

1. Professional Accomplishments

- Fellow of IEEE since January 2001. Citation: *For leadership in power electronics education and contributions to the analysis and design methodologies of solid-state power converters.*
- Recipient of the 2008 IEEE Undergraduate Teaching Award with citation: *For his distinguished leadership and dedication to quality undergraduate electrical engineering education, motivating students and publication of outstanding textbooks.* This is a prestigious professional award and is highly competitive.
- Received the 2002 IEEE Educational Activity Award (EAB) Meritorious Achievement Award in Continuing Education with the citation "*for contributions to the design and delivery of continuing education in power electronics and computer-aided-simulation*".
- Elected as a *Distinguished Lecturer and Speaker* of IEEE-Industry Applications Society.
- *Outstanding Engineer Award* in 1991 from the region 4 of The Institute of Electrical and Electronics Engineers (IEEE).

2. Text Books: As a teacher, I am an internationally known author of textbooks. My books are used around the world in different languages. I authored and/or co-authored 25 books in different editions and translations (19 with Prentice Hall, 4 with the IEEE Press and 2 with the CRC Press). My books are available in both North American and International editions. My Power Electronics book is also available in Eastern Economy Edition in India and it has translations in Spanish, Portuguese, Korean, Indonesian and Persian languages. My Microelectronics book has translations in Spanish in Spain, Spanish in Mexico, Italian and Chinese languages. You may find my books at:

<http://www.amazon.com/exec/obidos/search-handle-url/105-8859200-5106022?%5Fencoding=UTF8&search-type=ss&index=books&field-author=Muhammad%20H.%20Rashid>

http://www.fetchbook.info/search_Muhammad_H._Rashid/searchBy_Author.html

- ### 3. Research Publications: As a researcher, I have published more than 140 technical papers and technical reports, and am actively involved in professional societies. I am the Editor-in-Chief of a Book Series on ‘Power Electronics and Applications’ with the CRC Press. Because of my reputation, I am often invited to serve as an external examiner for Ph.D. theses, to review research proposals, and to serve on technical committees for international conferences. My professional societies recognized my contributions and honored me by electing me to the highest membership grade, Fellow IEEE (USA) and Fellow IEE (UK).
- ### 4. Administrative Duties and Accomplishments: At the University of West Florida (UWF), I have been assigned as the Administrative Head of the UF/UWF Joint Program in Electrical and Computer Engineering. Over the last 9 years, the UF/UWF Joint Program has grown to a full-fledged engineering unit that continues to grow through new initiatives, program expansion and community partnership while maintaining academic excellence. Due to the engineering manpower demand in the Northwest Florida region, we are facing multi-faced challenges in meeting the growing expectations from the local community and UWF administration. In compared to other UF faculty members, I do not have any funded research and graduate students. But at my UWF workplace environment, I always go beyond the call of my duties by providing leadership in developing new programs and initiatives. At UWF, I serve as the Director of Engineering. I perform the functions of Chair of the ECE Department, Director of FEEDS and Director of Pre-Engineering. I serve as the administrative head of the engineering educational unit at UWF (with approximately 340 students). Examples of major milestones and notable accomplishments are as follow:

- Fall 1998 – new computer engineering degree program: I initiated and proposed the amendment of the UF/UWF cooperative agreement. The proposal, which was submitted to the Director of Academic Programs Review, State University System of Florida, was approved, effective fall 1998.
 - 2000 - ABET Accreditation; The electrical and computer engineering programs were accredited for the first time in Fall 2000 as separate programs through UF under the EAC-2000 criteria. The programs are reaccredited in 2003 and the last general review was due in 2006. I work very closely with UF and UWF administration and faculty in preparation of the ABET documents and the actual visit.
According to the University of Florida's ABET report for the UF/UWF Joint Program, dated January 2, 2001, "The Director of the Joint Program is dynamic and committed to the success of the program. He has been extremely effective as a leader and administrator. He enthusiastically carries on his duties and has significantly contributed to the smooth and seamless operation of a potentially complex cooperative venture."
 - Fall 2002 - FWB Program Expansion: Offering complete degree programs in electrical and computer engineering at Fort Walton Beach area (60 miles from the UWF campus) through high-tech distance-learning (DL) classrooms
 - Spring 2002 - \$1.0 Million campaign: Worked with the Engineering Advisory Council and UWF Foundation to the support the expansion. Have two endowments of \$ 150,000 each for scholarships.
 - Fall 2003 - High School Engineering program: UWF President Dr. John C. Cavanaugh signed an agreement with the School District of Okaloosa County to develop a High School Engineering program. This program, which was started in August 4, 2003 for the Choctawhatchee High School students from 9th to 12th grades, has become an award-winning program. The student enrollment continues to grow.
 - Spring 2005 - Gulf Power Educational Partnership: I initiated and prepared the partnership proposal. Under this agreement, we offer courses for non-engineers, EIT and PE review courses for Gulf Power employees through the UWF Continuing Education. The initial term of this contract is four years, extendable by mutual agreements. The other bidders were Georgia Tech, Mississippi State, U Alabama Birmingham, and Auburn University.
 - 2006 – Sharing with UF-REEF: Effective fall 2007, the FWB facilities will be moved to REEF and we are working on details of the move including distance delivery classrooms and Labs.
 - Spring 2007 – BEST Hub: UWF will soon become the first Florida BEST Robotic competition hub. The mission of Boosting Engineering, Science, and Technology (BEST) is to inspire students to pursue careers in engineering, science, and technology through participation in a sports-like, science- and engineering-based robotics competition each fall. This program pits teams from schools across the region in head-to-head competition.
 - Fall 2008 – separation from UF: As we will be coming nearer to the separation date on January 1, 2009, we will have two sets of curriculums: one set for UF engineering degrees and another set for UWF engineering degrees. We are working on a transition plan for a smoother transfer of degrees from UF to UWF in Spring 2009.
 - Spring 2009 – Requiring FE Exam: All UWF engineering graduates will be required to sit for the FE exam, but not passing the exam. We are working on the details of implementation.
5. Professional Services and Activities: Keynote speaker at a number of international conferences and congresses; Site Visiting Team Member for Evaluation of NSERC Research Chair Proposals; NSF panel reviewer for LLCM (summer 2003, 2004, 2006); NSF grant proposal reviewer; External Examiner for the School of Electrical & Electronics Engineering, University of Sciences, Penang, Malaysia, 2002-2003; External Examiner for Electrical Engineering, Kolej of Universiti Teknologi & Pengurusan Malaysia (KUTPM), Shah Alam, Malaysia, 2003-2007; Member of *The Editorial Board for The Journal of Electric Machines and Power Systems*; Grant Proposal Reviewer for (a) Australian Research Council, and (b) University Grants Commission for the Govt. of Hong Kong.

May 14, 2008

NAME: Dr. Muhammad H. Rashid

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e-mail: mrashid@uwf.edu

STATUS: Professor (tenured) and Program Director (from August 1997 – July 2007)
UF/UWF Joint Program
University of West Florida
11000 University Parkway, Florida 32514-5750, USA
Tel: (850) 474 – 2976
Fax: (850) 474 - 3412
E-mail: mrashid@uwf.edu
Web-site: <http://uwf.edu/mrashid>

DATE OF APPOINTMENT TO UNIVERSITY OF FLORIDA: August 8, 1997

RESEARCH INTERESTS:

Power Electronics; Smart Power; Microelectronics; Electric Motor Drives; Industrial Electronics and Control; Microprocessors Control

EDUCATIONAL QUALIFICATIONS:

<u>Degree</u>	<u>Year</u>	<u>Subject</u>	<u>University</u>
Ph.D.	1976	Electronic and Electrical Engineering	University of Birmingham England, United Kingdom
M.Sc.	1971	Information and Systems Engineering	University of Birmingham England, United Kingdom
B.Sc.(Eng.)	1967	Electrical Engineering	University of Engineering and Technology, Bangladesh

ACADEMIC EXPERIENCE:

August 1997 - : Professor and Director (from August 1997 – July 2007)

UF/UWF Joint Program in Electrical and Computer Engineering
University of Florida

Director of the Florida Engineering Education Delivery System (FEEDS) at UWF
Coordinator of Pre-engineering program at UWF

Principal responsibilities include (a) Administration, of engineering unit including faculty hiring, annual faculty reviews, and promotion and tenure;; (b) Teaching courses on electronics, electronic design Lab, senior design projects, and power electronics; (c) Course and curriculum development to meet EACH/ABET criteria and the needs of local industries; (d) promoting and monitoring the quality of co-op program; and (e) preparation of ABET Self-Study Reports for Electrical and Computer Engineering. The Joint Program went through the first ABET accreditation visit in Fall 2000 for electrical and computer engineering programs under EAC-2000 criteria. The programs were accredited for 3 years with a subsequent focused visit in February 2003. The next general review is scheduled in October 18-20, 2006 as UF programs. Dr. Rashid worked closely with UF and UWF administration and faculty in preparation of the ABET documents and the actual visit.

Currently, there is no identifiable College or Division of Engineering at UWF. The Director of the Joint Program, Dr. Rashid, serves as Chair of the Electrical and Computer Engineering Program and works with the Departments of Computer Science, Mathematics and Statistics, and Physics to provide the math and science courses needed for the BSEE and BSCEN degrees. Dr. Rashid serves as the Director of Engineering at UWF and as such, he works closely with the Dean of the College of Arts and Sciences, and the Vice-President for Academic Affairs/Provost. In his Director's capacity, he performs the functions of Chair of the UWF-ECE Department, Director of FEEDS and Director of Pre-Engineering. Dr. Rashid is the administrative head of the engineering educational unit. This unit will serve as the framework for adding other engineering programs leading to the formation of a College of Engineering at UWF.

July 1989- 97: Chair of Engineering Department and Professor of Electrical Engineering
Purdue University at Fort Wayne

The Engineering Department offers the following Purdue University programs:

BSEE (EAC/ABET accredited)

BSME (EAC/ABET accredited)

BSE (interdisciplinary)

Co-op, day and evening (EAC/ABET accredited)

Freshman engineering for all disciplines (so that students can transfer to West Lafayette to major in Aeronautics and Astronautics, Agricultural, Chemical, Civil, Industrial, Materials, Nuclear)

MS and MSE (through the Purdue Continuing Education in Engineering Unit by offering live and IHETS (TV) classes)

MSCE, MSEE, MSIE and MSME (through the Purdue Schools by offering live and IHETS (TV) classes)

Principal responsibilities included: (a) Administration of the engineering department including faculty hiring, annual faculty reviews, and promotion and tenure; (b) Research, and advising approximately 40 masters students; (c) Teaching courses on electronics, electronic design Lab, senior design projects, and power electronics; (d) Curriculum development to meet EAC/ABET criteria and the needs of local industry; (e) Integration of computers uses and design components; (f) Advising, including approximately 150 freshmen in summer sessions, and evaluating transfer credits; (g) Promoting and monitoring the quality of coop program; (h) Preparation of ABET self-study questionnaires - Volumes I and II for BS programs in electrical and mechanical engineering; and (i) Preparation and planning of EAC/ABET visit. Electrical, mechanical and coop programs were accredited for the first time in 1991 by EAC/ABET under Dr. Rashid's leadership. The electrical program was re-accredited for 6 years in 1993; the mechanical program was re-accredited for 3 years in 1993 and 1996.

Under Dr. Rashid's dynamic leadership (for eight years at IPFW), the engineering grown to a unified and cohesive department and became a leading one within the School of Engineering and Technology and also within the University. Among other things, increase in students enrollment and credits hours, the quality of engineering programs, high faculty moral, and research inducement, and one-to-one students advising are worth mentioning.

Added new BSEE and BSME degrees to the previous BSE degree (with options in electrical and mechanical engineering). Developed programs for the BSE degree in co-operation with Business School, and the Departments of Physics, Chemistry, Geo-science and Computer science .

Dr. Rashid was instrumental in negotiating and signing the articulation agreements with the Pakistan University of Engineering & Technology (PUET), Pakistan, and the International University of Business Agriculture and Technology (IUBAT), Bangladesh.

Aug. 1995 - 1996: Professor of Electrical Engineering
King Fahd University of Petroleum and Minerals (KFUPM)
Dhahran, Saudi Arabia

August 1985 - 1987: Associate Professor of Electrical Engineering

August 1987 - 1989: Professor of Electrical Engineering
Purdue University Calumet, Indiana

Principal responsibilities included: (a) Teaching courses on electronics, power electronics, electronics Lab, integrated circuits, and electrical machines; (b) Integration of computer uses and design components; (d) Advising EE junior and senior students, and supervising senior design projects; (e) Associate head for EE program and assisting the Head of engineering department in EAC/ABET visit preparation and planning; and (f) Curriculum development to meet local needs and EAC/ABET criteria.

Aug. 1987 - 1989: Adjunct Professor, Department of Electrical Engineering
Concordia University, Montreal, Quebec, Canada

Responsibilities were graduate students supervision and research.

May 1986 to July 1986: Faculty Research Participant
Argonne National Laboratory, Argonne, Illinois

Designing high-current power supplies with low ripples for multi-magnets control.

June 1981 to Aug. 1985: Associate Professor of Electrical Engineering (Tenured)
Department of Electrical Engineering, Concordia University

Principal responsibilities included: (a) Teaching graduate and undergraduate courses on electronics, basic circuits, electrical machines, power electronics, electric motor drives, and modeling of physical systems; (b) Graduate students supervision, and research; and (c) Undergraduate coordinator - responsible for advising, curriculum development, and preparing documents for accreditation of electrical and computer engineering programs by Canadian Accreditation Agency.

Sept. 1980 to May 1981: Visiting Assistant Professor
Department of Electrical Engineering & Computer Science
University of Connecticut, Connecticut, USA

Responsibilities included: Teaching courses on electronics, and research.

Oct. 1977 to Aug. 1980: Lecturer and Head, Department of Control Engineering
Higher Institute of Electronics, Malta (and Libya).

Principal responsibilities included: (a) Administration of the control engineering department; (b) Course, curriculum and laboratory development; and (c) Teaching and research.

The day Dr. Rashid joined the department, he was the only faculty. The day Dr. Rashid left, there were 8 faculty with Doctoral degrees and 5 teaching assistants with B.Sc. (Eng.) degrees.

INDUSTRIAL RESEARCH & DEVELOPMENT:

March 1976 to Sept. 1977: Research Officer, Lucas Group Research Centre
Birmingham, England, UK

Design, development, computer-aided modeling, proto-type development, and testing of motor controllers for battery electric vehicles and for industrial variable speed drives to meet the customers' needs in terms of specifications and costs. Preparing reports for future research direction and distribution to Lucas group of companies.

July 1974 to Feb. 1976 : Senior Development Engineer, Brush Electrical Machines Ltd.
Loughborough, England, UK

Design and development of variable speed motor drives to meet the customers' needs in terms of specifications and costs.

May 1968 to Sept. 1970 : Engineer - Instruments & Control, Eastern Refinery Ltd.
Chittagong, Bangladesh

Operation, maintenance, and repair of process control instruments. Supervision of technicians.
Design and modifications of process control loops.

Feb. 1968 to Apr. 1968 : Assistant Engineer, Water & Power Development Authority
Chittagong, Bangladesh

Day-to-day operation, maintenance, and repair of electricity supply equipment. Supervision of technicians. Design and modifications of electricity supply networks and transmission lines.

PROFESSIONAL REGISTRATION:

Professional Engineer, Ontario, Canada
Chartered Engineer, London, England

AWARDS RECEIVED:

2008 IEEE* Undergraduate Teaching Award

Citation: *For his distinguished leadership and dedication to quality undergraduate electrical engineering education, motivating students and publication of outstanding textbooks*

2002 IEEE Educational Activities Board Meritorious Achievement Award in Continuing Education

Citation: *For contributions to the design and delivery of continuing education in power electronics and computer-aided-simulation.*

2001-2003: *Distinguished Lecturer and Speaker* of IEEE-Industry Applications Society.

1991 IEEE: *Outstanding Engineer Award*

* The Institute of Electrical and Electronics Engineers (IEEE)

This was awarded (a) for contributions to the knowledge of power electronics and motor drives, (b) the development of a novel piece-wise linear technique for analyzing non-linear magnetic circuits and novel methodologies for design and analysis of power electronics circuits, (c) for the education of power electronics and motor drives through a leading textbook on "power electronics," and short courses for practicing engineers, (d) for the education of computer integration in electrical engineering curriculum through a leading book on "SPICE for Circuits and Electronics using PSpice," and (e) for leadership in electrical engineering education through student participation in professional societies, and course and curriculum development.

1970-1974 : Received Burmah-Eastern Scholarship (including full-tuition fees) to support M.Sc. and Ph.D. degrees at the University of Birmingham, U.K.

1963-1967 : Received National Merit and Talent Scholarships (including full-tuition fees) to support the BSEE degree at the University of Engineering & Technology, Bangladesh.

1961-1963 : Received National Talent Scholarship for Higher Secondary Certificate (HSC) Education at Comilla Victoria College, Bangladesh.

PROFESSIONAL SOCIETY MEMBERSHIP:

Fellow, The Institution of Electrical Engineers (London)

Fellow, The Institute of Electrical and Electronics Engineers (New York)

Citation: *For leadership in power electronics education and contributions to the analysis and design methodologies of solid-state power converters.*

BOOK EDITORSHIPS:

Editor-in-Chief of a *Series in Power Electronics and Applications* with CRC Press, effective August 2002. <http://www.crcpress.com/>

Editorial Advisor Elsevier Science & Technology Books on Electric Power and Energy, Elsevier Publishing Inc., since January 2004,

PROFESSIONAL SOCIETY INVOLVEMENTS:

Editorial Board Member for The Journal of Electric Machines and Power Systems

Chair, Vice-Chair and Secretary, Industrial Control and Automation Committee of the IEEE - Industry Applications Society (1993-2000)

Associate Editor and reviewer of Trans. on Industrial Electronics (1987 - 1993).

Chair - IEEE Industrial Electronics Sub-Committee on Motor Controls (1987-1993)

Chair, IEEE - Industry Applications Society, Calumet Section (1987)

Member, IEEE - Industry Applications Society

Member, Static Power Conversion Committee of IEEE - Industry Applications Society

Member, Industrial Drives Committee of IEEE - Industry Applications Society

Member, Industrial Control Committee of IEEE - Industry Applications Society

Member, Power Semiconductor Committee of IEEE - Industry Applications Society

Secretary, Power Semiconductor Committee of IEEE - Industry Applications Society, 1993-95

Member, IEEE - Power Electronics Society

Member, Administrative Committee of Power Electronics Society and

Superconductivity Representative, 1993 -

Member, IEEE - Industrial Electronics Society

Member, IEEE - Magnetics Society Society

Member, IEEE - Power Engineering Society

Member, IEEE - Education Society

Muhammad H. Rashid

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Member, The American Society of Engineering Education (ASEE)

CONFERENCE INVOLVEMENTS:

Session Chair, IEEE - IAS Annual Meetings, 1990 - 1999

Session Chair, Midwest Symposium on Circuits and Systems, Urbana, 1989.

Advisory Committee Member for the Power Conversion and Industrial Electronics Conference,

Singapore (1986 & 1992)

Technical Committee Member for the International Power Electronics Conference, Japan (1995)

Member of the First International Power Electronics & Motion Control Conference (IPEMC'95), Beijing, China.

Prize award reviewer for IEEE - IAS static power conversion committee, 1987.

Member, Technical Program Committee IEEE - IECON'87

Session Chair, IEEE - IECON'87, Boston, 1987

Member, Technical Program Committee IEEE - IECON'86

Session Chair, IEEE - IECON'86, Milwaukee, 1986

Session Chair of 1996-98, 1990-94 and 1986 IAS Annual Meetings

Member, Advisory Committee for Conference on Power Conversion and Industrial Electronics, Singapore, 1986.

Member, Technical Program Committee IEEE - IECON'85

Session Chair, IEEE - IECON'85, San Francisco, 1985,

Member, Technical Program Committee IEEE - IECON'85

Session Chair, 1st Latin American Conference on Automatic Control, Brazil, 1984.

Member of Technical Program Committee for ICEM'98, IECON'98, JIEEEEC'98, APEC'98, ICE'98, and IPEMC'97. Program Committee member of APEC'91 - APEC'98.

JOURNAL REVIEWER:

IEEE Transactions on Industrial Electronics

IEEE Transactions on Power Electronics

IEEE Transactions on Education

IEEE Transactions on Industry Applications Society for Static Power Conversion Committee

IEEE Transactions on Industry Applications Society for Industrial Drives Committee

IEEE Transactions on Industry Applications Society for Industrial Control Committee

The Journal of Electric Machines and Power Systems

The Canadian Electrical Engineering Journal

The IEE Proceedings on Electric Power Applications

The IEE Electronics Letters

ACCREDITATION EXPERIENCE:

IEEE - EAC/ABET Program Evaluator, since 1995-2000.

Engineering Evaluator, Southern Association of Colleges and Schools, since 1999.

"ABET/EAC -2000 Evaluator Training Session," March and June, 1998 and June 2006.
 "IEEE-ABET/EAC Evaluator Training Session," March 24, 1995, Nashville.
 Dr. Rashid prepared ABET self-study questionnaires for Volume I and II for electrical and mechanical engineering programs, and has extensive experience in ABET accreditation process. He is fully familiar with the ABET criteria and accreditation issues.
 Invited by the University of Texas at Pan American to review the engineering programs from October 21 - 25, 1993. This was in preparation of forthcoming ABET accreditation visit.
 "EE-ABET Evaluator Training Session," 1992 AESE Annual Meeting, June 21, Toledo, Ohio.
 "ME-ABET Evaluator Training Session," 1991 AMSE Winter Annual Meeting, December 1, 1991, Atlanta, Georgia.
 "The Future of Engineering Education and The Role of Accreditation," EAC Day and ABET Annual Meeting, San Antonio, October 28-30, 1992 to keep updated with changes in ABET criteria for engineering programs.
 "An Engineering Look Forward," ABET Annual Meeting, October 17-18, 1990 to keep updated with changes in ABET criteria for engineering programs.
 "Evaluating the Evaluators," ABET Annual Meeting, November 8-9, 1989 to keep updated with changes in ABET criteria for engineering programs.
 "Evaluating the Evaluators," ABET Annual Meeting, November 8-9, 1989 to keep updated with changes in ABET criteria for engineering programs.
 Attended the ABET Annual Meetings in 2006, 2005, 2004, 2003 and 2002 to keep updated with changes in ABET criteria for engineering programs.

COURSES TAUGHT:

Undergraduate (UF/UWF Joint Program)

Professional Ethics – EGN 4034	(1 Cr)
Electronic Circuits I - EEL 3304	(3 Cr)
Electronics Lab - EEL 4304L	(1 Cr)
Power Electronic Circuits - EEL 4242C	(3 Cr)
Electronic Drives and Motor Control - EEL 4230	(3 Cr)

Undergraduate (Purdue University)

Linear Circuit Analysis - EE 201	(3 Cr)
Electronic Measurement Techniques Lab - EE 207	(1 Cr)
Electronics Analysis and Design I - EE 265	(3 Cr)
Electronics Analysis and Design II - EE 355	(3 Cr)
Electronics Design Laboratory - EE 457	(1 Cr)
Electronics-Devices (including Lab) - EE 275	(2 Cr)
Electronics-Systems (including Lab) - EE 335	(3 Cr)
Electromechanical Energy Conversion - EE 321	(3 Cr)
Senior Design Project I - EE 405	(2 Cr)
Senior Design Project II - EE 406	(3 Cr)

Graduate (Purdue University)

Power Electronics - EE 595R (3 Cr)
Integrated Circuit Design - EE595R (3 Cr)

Graduate (Concordia University)

Thyristor Rectifier and Cycloconverter Circuits - ELEC N641 (3 Cr)
Inverter and Chopper Thyristor Circuits - ELEC N646 (3 Cr)
Electric Motor Drives - ELEC N742 (3 Cr)
Design of Power Electronic Circuits - ELEC N744 (3 Cr)
Reactive Power Control - ELEC N745 (3 Cr)

Undergraduate (Concordia University)

Fundamentals of Electrical Engineering - ELEC C251 (3 Cr)
Basic Circuit Analysis - ENGR C273 (3 Cr)
Physical Systems - ENGR C274 (3 Cr)
Electronics I - ELEC C311 (3 Cr)
Electronics II - ELEC C312 (3 Cr)
Industrial Electronics - ELEC C318 (3 Cr)
Electromechanics - ELEC C331 (3 Cr)
Electric Machinery - ELEC C334 (3 Cr)

Undergraduate (Connecticut University)

Electronic Devices and Circuits - EE204 (3 Cr)
Electronic Circuits Applications - EE240 (3 Cr)
Electronic and Electro-mechanical Components and Devices - EE239 (3 Cr)

Undergraduate (Higher Institute of Electronics)

Control Engineering I (3 Cr)
Control Engineering II (3 Cr)
Control Systems Design (3 Cr)
Computer Simulation (3 Cr)
Industrial Electronics (3 Cr)
Microprocessors (3 Cr)

COURSE DEVELOPMENT:

Graduate (Purdue University)

Power Electronics - EE 595R
Integrated Circuit Design - EE 595R

Graduate (Concordia University)

Design of Power Electronic Circuits - ELEC N744
Reactive Power Control - ELEC N745

Undergraduate (Higher Institute of Electronics)

Control Engineering, Control Systems Design, Industrial Electronics, Computer Simulation, Digital Control Systems, Instrumentation and Measurement. Actively involved in developing courses for a B.Sc. program in Control Engineering.

LABORATORY DEVELOPMENT:

Purdue University

Developed Laboratory Experiments for
Electronics-Devices - EE275
Electronics-Systems - EE335
Electronics Design Laboratory - EE 457

Concordia University

Developed a completely new Laboratory on Industrial Electronics. This includes (a) preparing a list of experiments and equipment, and (b) writing the Laboratory manuals.

Higher Institute of Electronics

Developed Laboratories including preparation of Lab. manuals for courses in "Control Engineering, Industrial Electronics, Computer Simulation and Control System Components." Prepared a list of experiments and equipment for a B.Sc. program in Control Engineering.

SHORT COURSES ATTENDED:

"Department Chairpersons Workshop," organized by the Institute For Academic Leadership (IAL), The Florida State University from October 10 -13, 1999, Howey-in-the-Hills, Florida.

"Department Chairpersons Workshop," organized by the Institute For Academic Leadership (IAL), The Florida State University from June 7 -9, 1998, Howey-in-the-Hills, Florida.

"Leadership Workshop For IPFW chairpersons," Indiana University-Purdue University Fort Wayne. February 26, 1992, Fort Wayne.

"Leadership Workshop For chairpersons," Indiana University-Purdue University Fort Wayne, February 12, 1991, Fort Wayne.

"Administering the Academic Department" by Kansas State University Center for Faculty Evaluation & Development. February 4 - 5, 1991, Orlando.

"Academic Leadership - Faculty Evaluation," Indiana University-Purdue University Fort Wayne. February 13, 1990, Fort Wayne.

"Supervision Under Pressure," Keye Productivity Center on August 19, 1990, Fort Wayne.
"Basic Supervision," Keye Productivity Center on September 26, 1989, Fort Wayne.

MINORITY WORKSHOPS ATTENDED:

"Valuing Diversity," by Lisa Childs at Indiana University-Purdue University Fort Wayne.
December 1, 1994, Fort Wayne.
'Enhancing Minority Attainment III: Empowerment Through Coalition," A Conference on
Minority in Higher Education, Indiana University at Kokomo, September 10-12, 1993.
'Enhancing Minority Attainment II: Barriers Beyond the Classroom," A Conference on Minority in
Higher Education, Indiana University at Kokomo, September 11-13, 1992.
'Achieving Excellence in Minority Engineering Education,' NSF Chautauqua Short Course,
Los Angeles, April 23-24, 1992,
'Multi-cultural Organizational Development in Higher Education' by Barbara Love, Indiana
University-Purdue University Fort Wayne, October 4, 1990.

SHORT COURSES OFFERED:

'Power Electronics' at the IEEE - Milwaukee Section, November 12, 1994.
'SPICE For Power Electronics' at the IEEE - Industry Applications Society Annual Meeting,
October 1994, 1996, and 1997.
'SPICE For Power Electronics' at the IEEE - Industry Applications Society Annual Meeting,
October 4, 1993, Toronto, Canada.
'Power Electronics' organized by George Washington University Continuing Education, from
August 10 - 12, 1992 in Washington, DC.
'Electric Motor Drives' organized by George Washington University Continuing Education, from
August 13 - 14, 1992 in Washington, DC.
'Power Electronics' organized by George Washington University Continuing Education, from
August 11 - 13, 1991 in Washington, DC.
'Electric Motor Drives' organized by George Washington University Continuing Education, from
August 14 - 15, 1991 in Washington, DC.
'Analyzing Electrical and Electronic Circuits: SPICE and PSpice," organized by George
Washington University Continuing Education, from August 6 - 8, 1990, Washington, DC.
'Power Electronics' organized by George Washington University Continuing Education, from
August 6 - 8, 1990 in Washington, DC.
'Electric Motor Drives' organized by George Washington University Continuing Education, from
August 9 - 10, 1990 in Washington, DC.
'Power Electronics' organized by George Washington University Continuing Education, from
August 21 - 24, 1989 in Washington, DC.
'Power Electronics' organized by George Washington University Continuing Education, from
March 20-24, 1989 in Washington, DC.
'Power Electronics' organized by Hughes Institute of Continuing Education (Milwaukee,
Wisconsin) on October 25, 1988 in Detroit, Michigan.
'Power Electronics' organized by Purdue University Calumet Continuing Education, from
May 16 - 18, 1988 in Hammond, Indiana.

- 'Power Electronics' organized by George Washington University Continuing Education, from March 28-31, 1988 in Washington, DC.
- 'Power Factors and Harmonics' organized by Purdue University Calumet Continuing Education, from March 3, 1988 in Hammond, Indiana.
- 'Power Electronics' at Bangladesh University of Engineering & Technology, from June 26 - 30, 1987 in Dhaka, Bangladesh.
- 'Power Electronics' organized by Hughes Institute of Continuing Education (Milwaukee, Wisconsin) on June 5, 1987 in Washington, DC.
- 'Power Electronics' organized by Hughes Institute of Continuing Education (Milwaukee, Wisconsin) on May 1, 1987 in San Diego, California.
- 'Power Electronics' organized by the IEEE Conference IEECON'86 on September 29, 1986 in Milwaukee, Wisconsin.

OTHER DUTIES AT PURDUE UNIVERSITY - Fort Wayne:

- 1989-1997 Graduate Co-ordinator and Advisor for Purdue Graduate Program
- 1994-1995 Member, Search and Screening Committee for Vice-Chancellor For Academic Affairs
- 1993 - 94 Member, Minority Council Subcommittee on Faculty/Staff Development
- 1993-1994 Member, University Promotion and Tenure Committee
- 1991-1992 Member, Search and Screening Committee for Vice-Chancellor For Academic Affairs
- 1991-1992 Member, University Promotion and Tenure Committee
- 1989-1991 Member, School of Engineering & Technology Promotion and Tenure Committee
- 1989-1991 Member, School of Engineering & Technology Selection Committee for Excellence in Teaching, Research and Service Awards.

OTHER DUTIES AT PURDUE UNIVERSITY - Calumet:

- 1988-1989 Member, Dean Search Committee, School of Professional Studies
- 1987-1989 Member, School of Professional Studies Area Promotions Committee
- 1988-1990 Senate Member, School of Professional Studies
- 1987-1989 Electrical Engineering Faculty Search Committee
- 1987-1989 Member, Primary Promotions Committee for Engineering
- 1987-1988 Member, Primary Promotions Committee for Electrical Engineering Technology
- 1986-1989 Member, Campus Appeal Board
- 1986-1989 Member, Faculty Grievance Committee
- 1986-1987 Senate Member, School of Professional Studies
- 1986-1987 Member, Academically Advanced Program Faculty Advisory Committee
- 1986-1987 Member of Grade Appeals Committee, School of Professional Studies
- 1985-1986 Member, School of Professional Studies Outstanding Teacher Award Committee
- 1985-1986 Departmental Undergraduate Curriculum Committee
- 1985-1986 Electrical Engineering Faculty Search Committee

OTHER DUTIES AT CONCORDIA UNIVERSITY:

1984-1985 Undergraduate Program Coordinator of Electrical Engineering
1983-1984 Member, Faculty Committee of Honorable Conduct
1982-1983 Member, EE Department Scholarship Committee

OTHER DUTIES AT HIGHER INSTITUTE OF ELECTRONICS:

Member, Academic Council
Chair, Curriculum Development Committee
Member, Examination Committee
Member, Laboratory Equipment Committee
Head, Department of Control Engineering

INTERNATIONAL DIRECTORY:

Listed in the "Who's Who in Technology Today,"
"Who's Who in American Education,"
"Who's Who in American,"
"Who's Who in American Men and Women of Science,"
"Who's Who in science & Technology," and
"Directory of International Biography"

CONSULTING EXPERIENCE:

Magnetek Corporation, Inc., Huntington, Indiana (1990-1992): Consulting on problems relating to static power conversion and harmonic reduction.
United Nations Development Programs (UNDP) consultant to (a) Bangladesh Institute of Technologies (BITs) for course and curriculum reviews, May - June, 1989, and (b) International University of Business, Agriculture and Technology, May - June, 1994.
Consultant for Martin Marietta Energy Systems, Inc. (1988).
1986 Summer Faculty Research Participant with National Argonne Laboratory, Argonne, Illinois and worked on "developing pulse width modulated power supply for the 6 GeV light source."
Consultant on behalf of Canadian Executive Service Overseas (CESO) to Ngee Ann Polytechnic, Singapore to review and restructure the curriculum for the Department of Electrical and Electronic Engineering from June 15 to August 10, 1984.
Consultant to Power Technologies Inc., Calgary, Alberta (1984).

INVITED LECTURES AND EXTERNAL EXAMINER:

Invited to lecture on "Assessment for Program Quality Improvements," Ajman University of Science & Technology, October 2, 2005.
Invited to lecture on "Power Electronics," American University in Dubai, Dubai, United Arab Emirates, October 4, 2005

Invited to give lectures on (all expenses paid) "Power Electronics' at the Bandung Institute of Technology, Indonesia, February 7-9, 2001.

Invited to give a series of lectures (all expenses paid) at the King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia, December 18 - 29, 1993, and at the King Saud University, Riyadh, Saudi Arabia, December 29, 1993 to January 5, 1994. All expenses were paid by the universities.

Invited to give a lecture on "SPICE Simulation" and participate in a workshop on "Modern Electrical Drives, sponsored by NATO Advanced Study Institute, January 31 to February 1, 1994 at Antalya, Turkey. All expenses were paid by NATO.

External Examiner for four Ph.D. theses in Electrical Engineering, The University of Hong Kong, 1987-1994.

External Examiner for one Ph.D. thesis in Electrical Engineering, The University of New South Wales, 1994-1995.

External Examiner for one Ph.D. thesis in Electrical Engineering, Indian Institute of Technology, Madras, 1994-1995.

External Examiner for a M.Eng. thesis in Electrical Engineering, The National University of Singapore, 1987.

External Examiner for the Department of Electrical Engineering, Ngee Ann Polytechnic, Singapore for the sessions 1993-94 and 1994-95. All expenses for trips to Singapore were paid by the Polytechnic.

External Examiner for the Department of Electronic Engineering, Ngee Ann Polytechnic, Singapore for the sessions 1987-88 and 1988-89. All expenses for trips to Singapore were paid by the Polytechnic

External Examiner for the Department of Electrical and Electronic Engineering, Ngee Ann Polytechnic, Singapore for the sessions 1985-86 and 1986-87. All expenses for trips to Singapore are paid by the Polytechnic

External Examiner for Electrical Engineering, Kolej of Universiti Teknologi & Pengurusan Malaysia (KUTPM), Shah Alam, Malaysia, 2003-2006.

LIST OF PUBLICATIONS:

A *BOOKS*

Dr. Rashid is nationally and internationally known author of leading text books. His books are also published by the prestigious publisher Prentice-Hall, Inc., and are used by universities and colleges around the world.

1. M. H. Rashid, "Power Electronics - Circuits, Devices and Applications," Prentice-Hall Inc., 3rd edition, 2003, 712 pages, ISBN : 0-13-101140-5.
2. M. H. Rashid and H.M. Rashid, "SPICE for Power Electronics and Electric Power" CRC Press, 2005, ISBN: 10-0-8493-3418-7.
3. F. L. Luo, H. YE and M. H. Rashid, "Digital Power Electronics", Elsevier Publishing, 2005.

4. M. H. Rashid and H.M. Rashid, "SPICE for Power Electronics and Electric Power" CRC Press, 2005, ISBN: 10-0-8493-3418-7.
5. F. L. Luo, H. YE and M. H. Rashid, "Digital Power Electronics", Elsevier Publishing, 2005.
6. M. H. Rashid, "Introduction to PSpice Using OrCAD for Circuits and Electronics," Prentice-Hall Inc., 3rd edition 2003, 480 pages, ISBN 0-13-101988-0.
7. Edited by M. H. Rashid, "Power Electronics Handbook", Handbook with contributions from more than 35 leading authors from around the world. Academic Press, 2001, 894 pages.
8. M. H. Rashid, "Microelectronic Circuits: Analysis and Design," PWS Publishing, 1999, 990 pages, ISBN 0-534-95174-0.
9. M. H. Rashid, "Microelectronics Laboratory Using Electronics Workbench: A self-study course," IEEE Press, 2000, 170 pages. , ISBN 0-7803-2309-2.
10. M. H. Rashid, "Electronics Circuit Design Using Electronics Workbench," PWS Publishing, 1998, 192 pages, ISBN 0-534-95174-0.
11. M. H. Rashid, "Fundamentals of Power Electronics: A self-study course," IEEE Press, 1996, 203 pages, ISBN 0-7803-2308-4.
12. M. H. Rashid "Recent Developments in Power Electronics," IEEE Press, 1996, 688 pages (a collection of reprints), ISBN 0-7803-2311-4.
13. M. H. Rashid, "Power Electronics Laboratory using SPICE: A self-study course," IEEE Press, 2000 (1st edition 1996), 156 pages, ISBN 0-7803-2309-2.
14. M. H. Rashid "Recent Developments in SPICE Simulations of Power Electronics," IEEE Press, 150 pages (a collection of reprints), 1996.
15. M. H. Rashid, "Power Electronics - Circuits, Devices and Applications," Prentice-Hall Inc., 2nd edition, 1993, 695 pages, ISBN 0-13-678996-X.
16. M. H. Rashid, "SPICE For Power Electronics and Electric Power," Prentice-Hall Inc., 1st edition, 1993, 416 pages, ISBN 0-13-030420-4. It is being translated into Russian.
17. M. H. Rashid, "SPICE For Circuits and Electronics Using PSpice," Prentice-Hall Inc., 2nd edition 1994, 364 pages, ISBN 0-13-124652-6.
18. J. F. Lindsay and M. H. Rashid, "Electromechanics and Electrical Machinery," Prentice-Hall Inc., 1st edition, 1986, 230 pages.

19. M. H. Rashid, "SPICE For Circuits and Electronics Using PSpice," Prentice-Hall International Inc., International Edition, 2nd edition, 1994, 364 pages, ISBN 0-13-149519-4.
20. M. H. Rashid, "Power Electronics - Circuits, Devices and Applications," Prentice-Hall International Inc., International Edition, 2nd edition, 1993, 695 pages, ISBN 0-13-334483-5. This book has an Eastern Economy Edition in India.
21. M. H. Rashid, "SPICE For Power Electronics and Electric Power," Prentice-Hall International Inc., International Edition, 1st edition, 1993, 416 pages, ISBN 0-13-560129-0.
22. M. H. Rashid, "Power Electronics - Circuits, Devices and Applications," Prentice-Hall Inc., 1st edition, 1988, 585 pages, ISBN 0-13-687667-6. This book has been translated in Korean Language, ISBN 89-386-0000-9.
23. M. H. Rashid, "SPICE For Circuits and Electronics Using PSpice," Prentice-Hall Inc., 1st edition, 1990, 240 pages, ISBN 0-13-834672-0.
24. M. H. Rashid, "Power Electronics - Circuits, Devices and Applications," Prentice-Hall International Inc., International Edition, 1st edition, 1988, 585 pages. This book has been translated in Korean Language.
25. M. H. Rashid, "SPICE For Circuits and Electronics Using PSpice," Prentice-Hall International Edition, 1st edition, 1990, 240 pages.

B *CONTRIBUTION TO BOOK*

1. "Power Module," M. H. Rashid in the book by A. D. Wilcox, "Engineering Design for Electrical Engineers," Prentice-Hall, Inc., 1990. pp. 167-201, ISBN 0-13-278136-0. This book has been translated in German Language, ISBN 3-446-16189-9.
2. "Sinusoidal Excitation and Phasors," M. H. Rashid in the book edited by Richard Dorf, "The Engineering Handbook," Chapter 105, 9 pages, CRC Press Inc., 1995.

C *REFEREED JOURNAL PUBLICATIONS*

1. B. Mellitt and M. H. Rashid, "Analysis of dc chopper circuits by computer based piecewise linear technique," Proc. IEE, March 1974, vol. 121, no. 3, pp. 173-178.
2. B. Mellitt and M. H. Rashid, "A volt-time integral method for measuring machine inductance," Proc. IEE, September 1974, vol. 121, no. 9, pp. 1016-1017.
3. B. Mellitt and M. H. Rashid, "Discussions on analysis of dc chopper circuits by computer based piecewise linear technique," Proc. IEE, August 1974, vol. 121, no. 8, pp. 862-864.

4. M. H. Rashid, "Commutation limits of dc chopper on O/P voltage control," *Electronic Engineering*, April 1979, vol. 51. no. 620, pp. 103-105.
5. M. H. Rashid, "Design of thyristor commutation circuits," *Journal of the Institute of Engineers (Bangladesh)*, October 1979, vol. 7, no. 4, pp. 31-38.
6. M. H. Rashid, "Battery electric vehicle control," *Journal of the Institute of Engineers (Bangladesh)*, April 1980, vol. 8, no. 2, pp.27-34
7. M. H. Rashid, "Automatic armature and field control of dc series motor," *Proc. IEE, Part B, Electric Power Applications*, January 1981, vol. 128, no. 1, pp. 73-78.
8. M. H. Rashid, "Designing high power thyristor chopper circuits," *Bulletin of the Faculty of Al-Fateh University*, 1981, vol. 3, no. 4.
9. M. H. Rashid, "Dynamic responses of dc chopper controlled series motor," *IEEE Trans. on Industrial Electronics and Control Instrumentation*, November 1981, vol. IECI-28, no. 4, pp. 323-330.
10. M. H. Rashid, "Automatic armature and field control of dc series motor," *Proc. IEE, Part B, Electric Power Applications*, November 1981, vol. 128, no. 6, pp. 358-359.
11. M. H. Rashid, "Commutation losses of thyristor chopper circuits," *International Journal of Electronics*, March 1982, vol. 128, no. 6, pp. 231-239.
12. M. H. Rashid, "A thyristor chopper with minimum limits on voltage control of dc drives," *International Journal of Electronics*, July 1982, vol. 53, no. 1, pp. 71-81.13.
13. M. H. Rashid, "Effects of load inductance on the ripples of multiphase chopper controlled dc motor drive," *Electric Machines and Electromechanics*, 1982, vol. 7, no. 6, pp. 483-495.
14. M. H. Rashid, "Design considerations of LC input filter for multiphase dc choppers," *Proc. IEE, Part B, Electric Power Applications*, January 1983, vol. 130, no. 1, pp. 39-44.
15. M. H. Rashid, "Effects of reverse recovery time and stray inductance on reverse bias time of thyristor chopper," *International Journal of Electronics*, February 1983, vol. 54, no. 2, pp. 311-318.
16. M. H. Rashid, "Regenerative characteristics of dc chopper control series motor," *IEEE Trans. on Vehicular Technology*, February 1984, vol. VT-33, no. 1. pp. 3-13.
17. M. H. Rashid, "Dynamic responses of automatic armature and field control dc series motor," *Trans. Institute of Electrical Engineers of Japan, Section E*, 1984, vol. 104, no. 7/8, pp. 129-136.

18. M. H. Rashid and S. N. Bhadra, "Filter design for multiphase dc choppers," Proc. IEE, Part B, Electric Power Applications, vol. 132, no. 2, March 1985, pp. 77-80.
19. P. D. Ziogas, S. I. Khan and M. H. Rashid, "Some improved PWM voltage control methods for forced commutated cycloconverters," IEEE Trans. on Industry Applications, Sept/Oct. 1985, vol. IA-121, no. 5, pp.1242-1253.
20. M. H. Rashid, "Transient responses of combined regenerative and rheostatic braking for dc chopper controlled series motor," IEEE Trans. on Vehicular Technology, vol. VT-34, no. 2, May 1985, pp. 45-54.
21. P. D. Ziogas, S. I. Khan and M. H. Rashid, "Analysis and design of forced commutated cycloconverter's structures with improved characteristics," IEEE Trans. on Industrial Electronics, vol. IE-33, no. 3, August 1986, pp. 271-280.
22. S. I. Khan, M. H. Rashid and P. D. Ziogas, "Design aspects of logic control circuits for direct frequency changers," Canadian Journal of Electrical Engineering, vol. 11, no. 4, 1986, pp. 151-158.
23. S. I. Khan, P. D. Ziogas and M.H. Rashid, "Forced commutated cycloconverters for high frequency link applications," IEEE Trans. on Industrial Applications, vol. IA-23, no. 4, July/August 1987, pp. 661-672.
24. M. H. Rashid and A. I. Maswood, "Analysis of 3-phase ac-dc converter under unbalanced supply conditions," IEEE Trans. on Industry Applications, Vol. IA-24, no. 3, May/June, 1988, pp. 449-455.
25. S. K. Tso and M. H. Rashid, "Simulation of a fast acting reactive current compensator," Electric Machines and Power Systems, Vol. 13, 1988, pp. 409-419.
26. P. N. Enjeti, J. F. Lindsay, P. D. Ziogas, and M.H. Rashid, "New current control scheme for PWM inverters," IEE Proc. Vol. 135, Part B, No. 4, July 1988, PP. 172-179.
27. M. H. Rashid and A. I. Maswood, "A novel method for harmonic assessment generated by 3-phase ac-dc converters under unbalanced supply conditions," IEEE Trans. on Industry Applications, Vol. IA-24, no. 4, July/August, 1988, pp. 590-597.
28. S. I. Khan, P. D. Ziogas, and M. H. Rashid, "A novel single to three phase static converter," IEEE Trans. on Industry Applications, Vol. IA-25, no. 1, January/February, 1989, pp. 143-152.
29. P. N. Eniti, P. D. Ziogas, J. F. Lindsay, and M. H. Rashid, "A new PWM speed control system for high-performance ac motor drives," IEEE Trans. on Industrial Electronics, Vol. IE-37, no. 2, April, 1990, pp. 143-151.

30. A. Hossain and M.H. Rashid, "Force transducer using amorphous metglas ribbon 2605SC," IEEE Trans. on Industry Applications, November/December 1990, pp. 1158-1164.
31. H. Y. Zhong, H. P. Messenger, and M. H. Rashid, "A new microcomputer based torque control system for three-phase induction motors," IEEE Trans. on Industry Applications, March/April 1991, pp. 294 - 298.
32. A. Hossain and M. H. Rashid, "Pyroelectric detectors and their applications," IEEE Trans. on Industry Applications, September/October 1991, pp. 824-829.
33. P. N. Eniti, P. D. Ziogas, J. F. Lindsay, and M. H. Rashid, "A new current control scheme for ac motor drives," IEEE Trans. on Industry Applications, Vol. IA-28, no. 4, July/August, 1992, pp. 842-849.
34. A. I. Maswood, M. H. Rashid and L. Jian, "Optimum PWM-SHE switching on NPC inverter: a winning match for high power conversion," *Electric Power system Research*, Vol. 48, pp. 19-24, 1998.
35. Zuo Z. Liu, Fang L. Luo and M. H. Rashid, "Nonlinear MIMO Speed Sensorless Controller for DC Motor Field Weakening," *Electric Machines and Power System*, Vol. 28 (1), pp. 69-77, 2000.
36. Zuo Z. Liu, Fang L. Luo and M. H. Rashid, "Nonlinear Load-Adaptive MIMO Controller for DC Motor Field Weakening," *Electric Machines and Power System*, Vol. 28, pp. 929-944, 2000.
37. Luo F. L., Ye H. and M. H. Rashid, "Multiple Quadrant Operation Luo-Converters" IEE-Electric Power Applications Proceedings, Vol. 149, No. 1, January 2002, pp. 9-18.
38. Liu Z. Z., Luo F. L. and M. H. Rashid, "Adaptive MIMO Backstepping Controller for high performance DC motor field weakening" *Electrical Power Components and Systems*, Vol. 31, No. 9, September 2003, pp. 913-924.
39. Zuo Zong Liu; Fang Lin Luo; Rashid, M.H., "Speed nonlinear control of DC motor drive with field weakening," *Industry Applications, IEEE Transactions on* , Volume: 39, Issue: 2, March-April 2003, Pages: 417 – 423.
40. Liu, Z.Z.; Luo, F.L.; Rashid, M.H., "Robust high speed and high precision linear motor direct-drive XY-table motion system," *Control Theory and Applications, IEE Proceedings-* Volume: 151 , Issue: 2 , March 2004 , Pages:166 – 173.

D *REFEREED CONFERENCE PUBLICATIONS*

41. M. H. Rashid, D. Alizade, and M. Suri, "Microprocessors based 'PID` process controller," IFAC international Conference on Appropriate Applications of Automatic Control in the Oil Industry and Desalination, Tripoli, May 12-15, 1980.
42. M. H. Rashid, "Regenerative characteristics of dc chopper control series motor," 32nd IEEE Vehicular Technology Conference, San Diego, California, May 23-26, 1982, 2A4, pp. 40-48.
43. M. H. Rashid, "Dynamic responses of automatic armature and field control of dc series motor," International Power Electronics Conference, Tokyo, March 27-31, 1983, pp. 1197-1208.
44. M. H. Rashid and N. A. Chowdhury, "Comparative losses of forced commutated and gate turn off thyristor choppers," 3rd IFAC Symposium on Control in Power Electronics and Electrical Drives, Lauzanne, Switzerland, September 12-14, 1983, pp. 225-229.
45. M. H. Rashid and V. K. Sood, "Comparative evaluations of thyristor choppers for railway applications," 34th IEEE Vehicular Technology Conference, Pittsburgh, Pennsylvania, May 21-23, 1984, pp.235-241
43. M. H. Rashid and S. N. Bhadra, "Sequential choppers for field control of dc series motors," International Conference on Electrical Machines, Lausanne, Switzerland, September 18-21, 1984, pp. 902-905.
44. S. K. Tso and M. H. Rashid, "Analog/hybrid simulation of static reactive power," 1st Latin American Conference on Automatic Control, Campina Grande, Brazil, September 3-6, 1984, pp. 1056-1061.
45. V. K. Sood and M. H. Rashid, "Performance evaluations of a line side commutated chopper in regenerative braking," 1st Latin American Conference on Automatic control, Campina Grande, Brazil, September 3-6, 1984, pp. 1135-1140.
46. N. A. Chowdhury and M. H. Rashid, "Harmonic sensitivity of GTO thyristor inverters," IEEE - Industry Applications Society Annual Meeting, Chicago, Illinois, September 30-October 4, 1984, pp. 779-783.
47. P. D. Ziogas, S. I. Khan and M. H. Rashid, "Some improved PWM voltage control methods for forced commutated cycloconverters," IEEE - Industry Applications Society Annual Meeting, Chicago, Illinois, September 30 - October 4, 1984, pp. 793-795. This paper received a merit award from the IEEE - IAS Static Power Conversion Committee
48. V. K. Sood and M. H. Rashid, "Losses and efficiency of a line side commutated thyristor chopper for railway applications," IEEE International Conference on Communications and Energy, Montreal, October 2-4, 1984, pp. 112-115.
49. M. H. Rashid and N. A. Chowdhury, "Comparative analysis of 3-phase ac-dc converters under unbalanced supply conditions," IEEE International Conference on Computers, Systems and Signal Processing, Banglore, India, December 10-12, 1984, pp. 636-639.

50. M. H. Rashid and N. A. Chowdhury, "Effects of control schemes on power factor and harmonics of three-phase converter," 5th CEPSI Conference, Manila, November 19-23, 1984.
51. M. H. Rashid, "Switching schemes for 3-phase ac-dc converters," Jordan International Electrical and Electronic Engineering Conference, Amman, Jordan, April 28 - May 1, 1985, pp. 114-117.
52. P. D. Ziogas, S. I. Khan and M. H. Rashid, "Analysis and design of forced commutated cycloconverter's structures with improved characteristics," Power Electronics Specialist Conference, Toulouse, France, June 24-28, 1985, pp. 610-622.
53. M. H. Rashid and A. I. Maswood, "Analysis of 3-phase ac-dc converter under unbalanced supply conditions," IEEE - Industry Applications Society Annual Meeting, Toronto, October 6-11, 1985, pp. 1190-1194.
54. M. H. Rashid and A. I. Maswood, " Effects of unbalances on power factor and harmonics of three-phase converter-fed dc motor drives ," 5th Power Electronics Conference, Budapest, October 22-26, 1985, pp. 315-324.
55. M. H. Rashid and M. Sussi, "Survey of thyristor choppers for tractions applications," 5th Power Electronics Conference, Budapest, October 22-26, 1985, pp. 207-216.
56. P. Enjeti, J. F. Lindsay and M. H. Rashid, "Parameter identification of permanent magnet synchronous machine," IEEE - Industry Applications Society Annual Meeting, Toronto, October 6-11, 1985, pp. 627-633.
57. M. H. Rashid, "Analysis of forced commutated techniques for ac-dc converters," European Conference on Power Electronics and Applications, October 16-18, 1985, pp. 2.263-2.266.
58. S. N. Bhadra, M. H. Rashid and S. Ganguly, "Generalized analytical approach for multiphase thyristor dc chopper driving separately excited motors," IEEE - Industry Applications Society Annual Meeting, Toronto, October 6-11, 1985, pp. 399-404.
59. P. Enjiti, M. H. Rashid and J.F. Lindsay, "Stability and dynamic performances of variable speed permanent magnet synchronous motor," IEEE - IECON'85, San Francisco, November 19-21, 1985, pp. 749-754.
60. S.I. Khan, M. H. Rashid and P.D. Ziogas, "Design aspects of logic control circuits for direct frequency changers," IEEE - IECON'85, San Francisco, November 19-21, 1985, pp. 277-284.
61. M. H. Rashid and A.I. Maswood, "Harmonics generated by ac-dc converters into the power supply," 28th Midwest Symposium on Circuits and Systems, Louisville, Kentucky, August 19-21, pp. 337-340, 1985.

62. Q. Perera and M. H. Rashid, "Optimum efficiency of induction motor drive," IEEE - IECON'86, Milwaukee, Sept. 29 - Oct. 3, 1986.
63. M. H. Rashid and A. I. Maswood, "A novel method for harmonic assessment generated by 3-phase ac-dc converters under unbalanced supply conditions," IEEE - Industry Applications Society Annual Meeting, Denver, Sept. 29 - Oct. 3, 1986, pp. 679-684.
64. S. I. Khan, P. D. Ziogas and M. H. Rashid, "Forced commutated cycloconverters for high frequency link applications," IEEE - Industry Applications Society Annual Meeting, Denver, Sept. 29 - Oct. 3, 1986, pp. 476-487.
65. J. F. Lindsay, P. Enjiti and M. H. Rashid, "A novel current controlled PWM inverter for variable speed ac," IEEE - Industry Applications Society Annual Meeting, Denver, Sept. 29 - Oct. 3, 1986, pp. 235-243.
66. M. H. Rashid, "Control characteristics of ac-dc static power converters," 29th Midwest Symposium on Circuits and Systems, Lincoln, Nebraska, August 11-12, 1986, pp. 305-311.
67. I. A. Maswood and M. H. Rashid, "Problems of harmonics in shunt compensation," First Symposium on Electric Power Systems in Fast Developing Countries, March 21-24, 1987, Riyadh, Saudi Arabia, pp. 361-364.
68. Q. Perera and M. H. Rashid, "Optimum efficiency of an induction motor drive," Beijing International Conference on Electrical Machines, Beijing, August 10-14, 1987, pp. 468-472.
69. E. Prasad, P. D. Ziogas, J. F. Lindsay and M. H. Rashid, "A new current control scheme for ac motor drives," IEEE - Industry Applications Society Annual Meeting, Atlanta, Oct. 18- 23, 1987, pp. 202-208.
70. P. D. Ziogas, S. I. Khan and M. H. Rashid, "A novel single to three phase static converter," IEEE - Industry Applications Society Annual Meeting, Atlanta, Oct. 18-23, 1987, pp. 658-665.
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73. S. I. Khan, M. H. Rashid and P. D. Ziogas, "Analysis and design of improved three-phase to single-phase cycloconverter," IECON'88, Singapore, October 25-27, 1988, pp. 603-610.
74. M. H. Rashid, "Switching losses of gate turn-off (GTO) thyristors," Midwest Symposium on Circuits and Systems, St. Louis, Missouri, August 9-12, 1988, pp.223-226.

75. M. H. Rashid, "A model course on power electronics," ASEE Frontiers in Education, Santa Barbara, California, October 22 - 25, 1988, pp. 81-84.
76. A. Hossain and M. H. Rashid, "Force transducer using amorphous metglas ribbon 2605SC," IEEE - Industry Applications Society Annual Meeting, Pittsburgh, Oct. 2-7, 1988, pp. 1815 - 1822.
77. M. H. Rashid and I. A. Maswood, "Harmonics of phase controlled converters at various load power factor conditions," Middle East Power System Conference - MEPCON 89, January 9 -13, 1989, pp. 372 - 375.
78. S. M. Islam and M. H. Rashid, "Four quadrant quick response optimally efficient inverter fed induction motor drive," Midwest Symposium on Circuits and Systems, Urbana, Illinois, August 14-16, 1989, pp. 766-770.
79. S. I. Khan, M. H. Rashid and M. R. Khan, "Generalized circuit model for analysis of static power converters," Midwest Symposium on Circuits and Systems, Urbana, Illinois, August 14-16, 1989, pp.771-776.
80. A. I. Maswood and M. H. Rashid, "Performance parameters of three-phase controlled converters at various fixed load dc voltage," Midwest Symposium on Circuits and Systems, Urbana, Illinois, August 14-16, 1989, pp. 777-780.
81. A. Hossain and M. H. Rashid, "Pyroelectric detectors and their applications," IEEE - Industry Applications Society Annual Meeting, San Diego, Oct. 1-5, 1989, pp. 2301-2307.
82. Y. Zhong, H. P. Messenger, and M. H. Rashid, "A new microcomputer based torque control system for three-phase induction motors," IEEE - Industry Applications Society Annual Meeting, San Diego, Oct. 1-5, 1989, pp. 2322-2326.
83. M. H. Rashid, "Integration of SPICE/PSpice in basic circuits and electronics courses," ASEE Frontiers in Education, Binghamton, New York, October 14 - 17, 1989, pp. 152-154.
84. A. Hossain and M. H. Rashid, "Hardware and software interface of a programmable logic controller to an industry grade processor control system," IEEE - Industry Applications Society Annual Meeting, Seattle, Oct. 7-12, 1990., pp. 1862-1868.
85. Paul I-Hai Lin and M. H. Rashid, "A PC-based measurement and control system for dc motors," IEEE - Industry Applications Society Annual Meeting, Seattle, Oct. 7-12, 1990, pp. 1829-1834.
86. Hassan H. Moghbelli and M. H. Rashid, "Performance review of ac adjustable drives," IEEE - IECON'90, Pacific Grove, California, November 27-30, 1990.

87. A. I. Maswood and M. H. Rashid, "Unbalance supply and its effect on rectifier input filter KVA ratings," IEEE - Applied Power Electronics Conference, Dallas, March 10 - 15, 1991.
88. M. H. Rashid, "Integration of Design in Electronics circuits," ASEE Frontiers in Education, West Lafayette, Indiana, September 21 - 24, 1991, pp. 63-66.
89. A. Hossain and M. H. Rashid, "Computer-aided monitoring and controlling of a real-time industrial process using video animation," IEEE - Industry Applications Society Annual Meeting, Dearborn, Michigan, September 28 - October 4, 1991, pp. 1685-1691.
90. H. Y. Zhong, A. K. Behera and M. H. Rashid, "8096 Microcontroller-based field acceleration method control for induction motor with new digital PWM inverter technique," IEEE - Industry Applications Society Annual Meeting, Dearborn, Michigan, September 28 - October 4, 1991, pp. 1662-1668.
91. M. H. Rashid, "Harmonics and power factor of multiple converter," 4th European Conference on Power Electronics and Applications, Florence, Italy, September 3 - 6, 1991, Vol. 1, pp. 345 - 348.
92. Hassan H. Moghbelli and M. H. Rashid, "The switched Reluctance Motor Drives: Characteristics and Performances," 4th European Conference on Power Electronics and Applications, Florence, Italy, September 3 - 6, 1991, Vol. 1, pp. 398 - 403. .
93. M. H. Rashid, "Analog simulation of control systems by PSpice," The Illinois/Indiana Section ASEE Conference, University of Notre Dame, March 13 - 14, 1999
94. M. H. Rashid, "SPICE simulation of AC-DC power converters," The International AEGEAN Conference on Electrical Machines and Power Electronics, Kusadai, Turkey, May 27 - 29, 1992, pp. 189 - 193.
95. O. Kaynak and M. H. Rashid, "A simple Algorithm for predictive control of servo system," The International AEGEAN Conference on Electrical Machines and Power Electronics, Kusadai, Turkey, May 27 - 29, 1992, pp. 310 - 314.
96. M. H. Rashid, "Sources of Power Quality Problems," A Report of Working Group, The NSF Workshop on Electric Power Quality, January 1991, Grand Canyon, pp. 4 - 7.
97. M. H. Rashid, "Control system simulation by SPICE," IFAC Workshop on Automatic Control For Quality and Productivity (ACQP'92), June 3-5, Istanbul, Turkey, June 3 - 5, 1992, pp. 633 - 637.
98. E. Hussain, S. M. Islam and M. H. Rashid, "Microprocessor controlled solid state PFS meter for induction motor," North American Power Symposium, Howard University, Washington, DC, October 11- 12, 1993, pp. 544 - 547.

99. T. J. Lemon and M. H. Rashid, "SPICE simulation of 12-pulse controlled rectifiers," North American Power Symposium, Kansas State University, Manhattan, October 26-27, 1995, pp. 783 - 792
100. M. H. Rashid, "Simulation of power electronics circuits", Workshop on Modern Electrical Drives, sponsored by NATO Advanced Study Institute, Antalya, Turkey, 1994.
100. M. H. Rashid, "Input Filters for Power Converters," CEEMP'95 Conference, June 3-5, 1995, Antalya, Turkey, June 2 - 5, 1995.
101. M.H. Rashid, "Engineering Versus Technology Programs," and "Criteria for Accrediting Technology Programs," The Saudi Technology Education Conference in Riyadh, March, 1996.
102. M.H. Rashid, "Power Electronics Laboratory Using SPICE," Frontiers in Education (FIE'96), Salt Lake City, Utah, Nov. 6-9, 1996.
103. Kassas and M. H. Rashid, "Harmonics Study of an AC Voltage Regulator and a Tap-Changer and the Effect of the Input Power Factor," North American Power Symposium, MIT, Boston, Nov. 10-12, 1996.
104. M. H. Rashid, "Experience In Using Electronics Workbench", Frontiers in Education, Pittsburgh, November 5-8, 1997.
105. M. H. Rashid, "Power Electronics and its Challenges," The 2nd International Conference on Power Electronics Drives and Energy Systems for Industrial Growth (PEDES'98), Perth, Western Australia, December 1-3, 1998.
106. A. I. Maswood and M. H. Rashid, "Performance of a Rectifier Inverter Structure Under Non-Ideal Load Conditions Meeting the New IEEE Standard," The 2nd International Conference on Power Electronics Drives and Energy Systems for Industrial Growth (PEDES'98), Perth, Western Australia, December 1-3, 1998.
107. Luo F. L., Ye H. and Rashid M. H. "Switched Inductor Four-Quadrant Luo-Converter" Proceedings of the IEEE-IAS Annual Meeting, IAS'99, Phoenix, Arizona, USA, 3-7 October 1999, pp. 1631-1638.
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109. M.H. Rashid, "The first course on electronics and ABET Criteria 2000," Frontiers in Education Conference, 1999, Vol. 1, p.11A4/13.

110. M. H. Rashid, "Skill Assessments of First Electronics Course", *Frontiers in Education*, Kansas City, October 19-21, 2000
111. M. H. Rashid and A. W. Trembly, "A web-based self-study course on Power Electronics" NSF Workshop on Multimedia Delivery of Power Electronics, Orlando, November 9-11, 2000.
112. Liu, Z.Z.; Luo, F.L.; Rashid, M.H. "Nonlinear adaptive MIMO controller for high performance DC motor field weakening," *Power Electronics Specialists Conference*, 2000, Volume 3, Page(s): 1100 –1105
113. Luo, F.L.; Hong Ye; Rashid, M.H., "Four quadrant operating Luo-converters", *Power Electronics Specialists Conference*, 2000, Volume: 2, Page(s): 1047 – 1052.
114. Fang L. Luo; Hong Ye; Rashid, M.H., "Two-quadrant DC/DC ZCS quasi-resonant Luo-converter", *Power Electronics and Motion Control Conference*, 2000, Volume: 1, Page(s): 272 –277.
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117. Fang Lin Luo; Hong Ye; Rashid, M.H., "Analysis of a cascade double /spl Gamma/-CL current source resonant inverter," The IEEE Industry Applications Conference, 2001. Thirty-Sixth IAS Annual Meeting. Conference Record of the 2001, Volume: 1 , 2001 Page(s): 289 – 296.
118. Zuo Zong Liu; Fang Lin Luo; Rashid, M.H. "Speed nonlinear control of DC motor drive with field weakening," The IEEE Industry Applications Conference, Thirty-Sixth IAS Annual Meeting. Conference Record of the 2001 IEEE, Volume: 1, 2001 Page(s): 541 –
119. Fang Lin Luo; Hong Ye; Rashid, M.H., "Super-lift Luo-converters ", *Power Electronics Specialists Conference*, 2002, IEEE 33rd Annual, Volume: 2 , 2002 , Page(s): 425–430.
120. Fang Lin Luo; Hong Ye; Rashid, M.H., "Multiple-lift push-pull switched-capacitor Luo-converters", *Power Electronics Specialists Conference*, IEEE 33rd Annual, Volume: 2, 2002, Page(s): 415–420.
121. Fang Lin Luo; Hong Ye; Rashid, M.H., "Four-quadrant zero-transition DC/DC Luo-Converters", *Power Electronics Specialists Conference*, IEEE 33rd Annual, Volume: 3, 2002, Page(s): 1331 –1336.

122. Liu, Z.Z.; Luo, F.L.L.; Rashid, M.H., "QFT-based robust and precision motion control system for a high speed direct-drive XY table positioning mechanism," Industry Applications Conference, 2003. 38th IAS Annual Meeting. Conference Record of the IAS, Volume: 1, 12-16 Oct. 2003, Pages: 293 – 300.
123. Mark Bloech and M. H. Rashid, "PSpice Models of Single-Phase Transformer," 36th North American Power Symposium, University of Idaho, Moscow, August 9-12, 2004, pp. 464 – 70.
124. M. Racine, J. Parham, M. Rashid, *An Overview of Uninterruptible Power Supplies*. North American Power Symposium, Iowa State University, Ames, Iowa from Sunday, October 23 - Tuesday, October 25, 2005.
125. T. Carbino, M.Gassman, J.Glass, M. Rashid, *A Brief History and Theory Behind AC, DC and Maglev Trains and Subways*. North American Power Symposium, Iowa State University, Ames, Iowa from Sunday, October 23 - Tuesday, October 25, 2005.
126. J. Smith, J. Speakes, M. H. Rashid, *An Overview of the Modern Light Dimmer: Design, Application*. North American Power Symposium, Iowa State University, Ames, Iowa from Sunday, October 23 - Tuesday, October 25, 2005.
127. Roy T. Albertson IV, Joseph Arthur and M. H. Rashid, Overview of Electromagnetic, North American Power Symposium, University of Southern Illinois Carbondale, from Sunday, September 18 - 19, 2006.

E. INVITED PAPERS AT MEETINGS/CONFERENCES

128. Keynote invited lecture on "Outcome-Based Engineering Education", ELECO'2005, Bursa, Turkey, Dec 8-11, 2005.
129. Keynote invited lecture on "Teaching of Power Electronics," US-UAE Workshop on Power Electronics Education and Research, American University of Sharjah, United Arab Emirates, December 13-15, 2005
130. Keynote invited lecture on "Engineering Education in the 21st Century ", World Engineering Congress (WEC 2002), Kuching, Malaysia, July 22-25, 2002.
131. Invited lecture on "Power Electronics and Development", World Engineering Congress (WEC 2002), Kuching, Malaysia, July 24, 2002.
132. Invited half-day tutorial on "Issues on Power Electronics Generated EMI", IEEE - ICEMC2002, Bangkok, Thailand, July 24th - 27th, 2002.

133. "Integrated Power Electronics System" at the IEEE International Power Electronics, Acapulco, Acapulco, Mexico, October 15-19, 2000. One of 4 Keynote Speakers outside Mexico.
134. "Power Electronics' at the 2nd International Congress on Electronic Engineering, Veracruz Institute of Technology, Veracruz, Mexico, March 28-30, 2001. One of 4 Keynote Speakers outside Mexico (one from Georgia Tech, one from MIT and one from Germany).
135. Keynote invited lecture on at the Internal International IEEE International Power Electronics, Acapulco, Acapulco, Mexico, October 15-19, 2000. One of 3 Keynote Speakers outside Mexico.
136. Invited Keynote lecture on "Power Electronics and its Challenges" at the PEDES'98 Conference, December 1 - 3, 1998, Perth, Australia

F RESEARCH REPORTS

137. M. H. Rashid, "Design of a resonant pulse chopper at variable frequency operation," Lucas Industries Ltd. (U.K.), Group Research Centre, GRN 847, October 27, 1976.
138. M. H. Rashid, "Comparative chopped dc test results of experimental shunt-wound MT286 and a similar fully-laminated machine," Lucas Industries Ltd. (U.K.), Group Research Centre, GRN 859, March 25, 1977.
139. M. H. Rashid, "Failure of battery vehicle control," Lucas Industries Ltd. (U.K.), Group Research Centre, Memo. of August 18, 1976 to Electric Vehicle Project.
140. M. H. Rashid, "A piecewise linear model for efficiency evaluation of a chopper controlled dc traction motor drive," Lucas Industries Ltd. (U.K.), Group Research Centre, CPM 094, July 12, 1977.
141. M. H. Rashid, "Efficiency evaluation of a dc chopper motor drive for a specified speed-power duty," Lucas Industries Ltd. (U.K.), Group Research Centre, CPM 095, August 1, 1977.
142. M. H. Rashid, "Modifications of programs 'CHOPLOSS 1' (CPM 094) and 'CHOPLOSS 2' (CPM 095)," Lucas Industries Ltd. (U.K.), Group Research Centre, September 20, 1977.
143. M. H. Rashid, "Comparative performances of traction motor drives using MT-286 series and MT-286 shunt-wound motors to meet specified traction duty," Lucas Industries Ltd. (U.K.), Group Research Centre, GRN 869, September 30, 1977.
144. M. H. Rashid, "Comparative designs of two resonant pulse commutated inverter circuits suitable for PWM operation," Lucas Industries Ltd. (U.K.), Group Research Centre, GR 90 827, December 12, 1977.

F CONTRIBUTIONS TO IEEE STANDARDS

145. Document IEEE-P519 "IEEE Recommended Practice and Requirements for Harmonic Control in Electric Power Systems," December 1990.
146. ANSI/IEEE Std 995-1987 "IEEE Recommended Practice for efficiency Determination of Alternating Current Adjustable Speed Drives," December 1992.

RESEARCH GRANT REVIEWER:

Dr. Rashid reviews grant proposals for

National Science Foundation (NSF)

National Science and Engineering Council of Canada (NSERC).

Australian Research Council (ARC)

University Grants Commission, Government of Hong Kong

Site Visiting Team Member to Ryserson University in Toronto for Evaluation of NSERC Research Chair Proposal on Power Electronics, April 21, 2006.

Member of the Canada Foundation for Innovation's (CFI's) Microelectronics expert committee, Toronto, June 13, 2006

NSF panel reviewer for LLCM (summer 2003, 2004, 2006)

RESEARCH GRANTS:

During the period from 1982 to 1989, Dr. Rashid received external funding from NSERC (National Science and Engineering Council of Canada) and FCAR (Fonds Pour La Formation De Chercheus Et La'Aide a La Recherche, Quebec Govt., Canada), while he had been with Concordia University, and supported graduate students and research.

With my academic administrative responsibilities including accreditation, developing new programs and also for the lack of graduate programs, I was focusing mostly (since 1989) on teaching and administrative aspects rather than funded research.

MASTER'S STUDENTS SUPERVISED:

1. N. A. Chowdhury, "Analysis of switching schemes for 3-phase static ac - dc converters," M. Eng. Thesis, 1984, Concordia University.
2. Mohamed Sussi, "Survey of thyristor commutation circuits for dc choppers," M. Eng. Report, 1985, Concordia University.
3. Mohamed Aboudina, "Analysis of forced commutated ac-dc converters," M.Eng. Report, 1985, Concordia University.

4. Quintus Perera, "Optimum efficiency drive for an induction motor and its simulation," M. Eng. Report, 1986, Concordia University.
5. Omran Murad, "Design of phase locked loop for permanent magnet dc motor," M. Eng. Report, 1986, Concordia University.
6. Anisur Rahman, "Solid static series tapping of HVDC transmission," 1986, Concordia University.

Ph.D. STUDENTS SUPERVISED:

1. Shahidul Islam Khan, "Analysis and design of forced-commutated cycloconverters for three-phase and single-phase applications," Ph.D. Thesis, 1986, Concordia University.
2. P. Enjiti, "Current-source inverter-fed synchronous motor drives," Ph.D. Thesis, 1987, Concordia University.
3. A. I. Maswood, "Analysis and performance of AC-DC converters under unbalanced supply conditions," Ph.D. Thesis, 1988, Concordia University.

MASTERS EXAMINATION COMMITTEE:

1. M. M. Maurice, "Design of general purpose power switch converter," M.Eng. Project, 1981, Concordia University.
2. C.F. Lucente, "A fast-hopping phase-locked frequency synthesizer," M.Eng. Project, 1983, Concordia University.
3. M. Oveissi, "Comparative study of voltage source inverter and current source inverter fed induction motor drive," M.Eng. Thesis, 1983, Concordia University.
4. S. Bitton, "Design of dc-dc switching power supplies," M.Eng. Project, 1985, Concordia University.

Ph.D. EXAMINATION/COMPREHENSIVE COMMITTEE:

Graduate Faculty of the Department of Electrical and Computer Engineering, University of Florida

1. Stefanos Manias, "Some novel power conversion schemes employing pulse width modulated high frequency links," Ph.D. Thesis, 1984, Concordia University.
2. Jose C. M. Bermudez, "Generation, Design and Optimization of stray insensitive SC networks," Ph. D. Thesis, 1985, Concordia University.

3. P. B. Lopes, "A study of the active compensation of voltage amplifiers and RC-active filters," Ph. D. Thesis, 1985, Concordia University.
4. M. D. Tabakoli, "A study of sinusoidal canonic RC oscillators using operational amplifiers," Ph. D. Thesis, 1985, Concordia University.
5. Y. Kang, "Analysis and design of optimum of three-phase PuateWM rectifier and rectifier-inverter type of frequency changers ," Ph. D. Thesis, 1985, Concordia University.
6. E. P. Weichmann, "Power conversion schemes for variable frequency static power conversion," Ph. D. Thesis, 1985, Concordia University.
7. Shahidul Islam Khan, "Analysis and design of forced-commutated cycloconverters for three-phase and single-phase applications," Ph.D. Thesis, 1986, Concordia University.

EXTERNAL THESIS EXAMINER:

1. Tang Kwok How, "Digital control enhancement of TRIAC cycloconverter systems," Ph.D. thesis, 1987, The University of Hong Kong.
2. G. BilLis, "The design and evaluation of a microprocessor controlled TRIAC cycloconverter two-phase induction motor drive," Ph.D. thesis, 1988, The University of Hong Kong.
3. Er Meng Joo, "Digital realization of a high performance controller for a converter-fed dc drive," M. Eng. Thesis, 1988, The National University of Singapore.
4. Rajiv Kumar, "Software controlled delta modulated inverters," M.Eng., 1988, The Memorial University of Newfoundland.
5. K. S. Low, "Control strategies for high performance permanent magnet synchronous motor brushless drive," Ph.D. thesis, 1994, The University of New South Wales, Australia.
6. A. L. Naikodi, "An efficient controller for wave power generation," Ph.D. thesis, 1994, Indian Institute of Technology, Madras, India.
7. Z. Hua, "Digital vector control of forced commutated cycloconverter drives," Ph.D. thesis, 1995, The University of Hong Kong.
8. A.K.M. Abdul Malek Azad, "Computer Control and CDA-Based Automation of an Embroidery Machine," M. S. Thesis, 1998, University of Malaya, Malaysia.
8. Liu Tianmu, "Modeling of Flourecent Lamp for Design of Electronic Ballast," M. Eng. Thesis, 1999, Nanayang Technical University, Singapore.

10. P. A. Jones, "Modeling a current fed resonant inverter," Ph.D. thesis, 1998, The University of New South Wales, Australia.

TECHNICAL REVIEW:

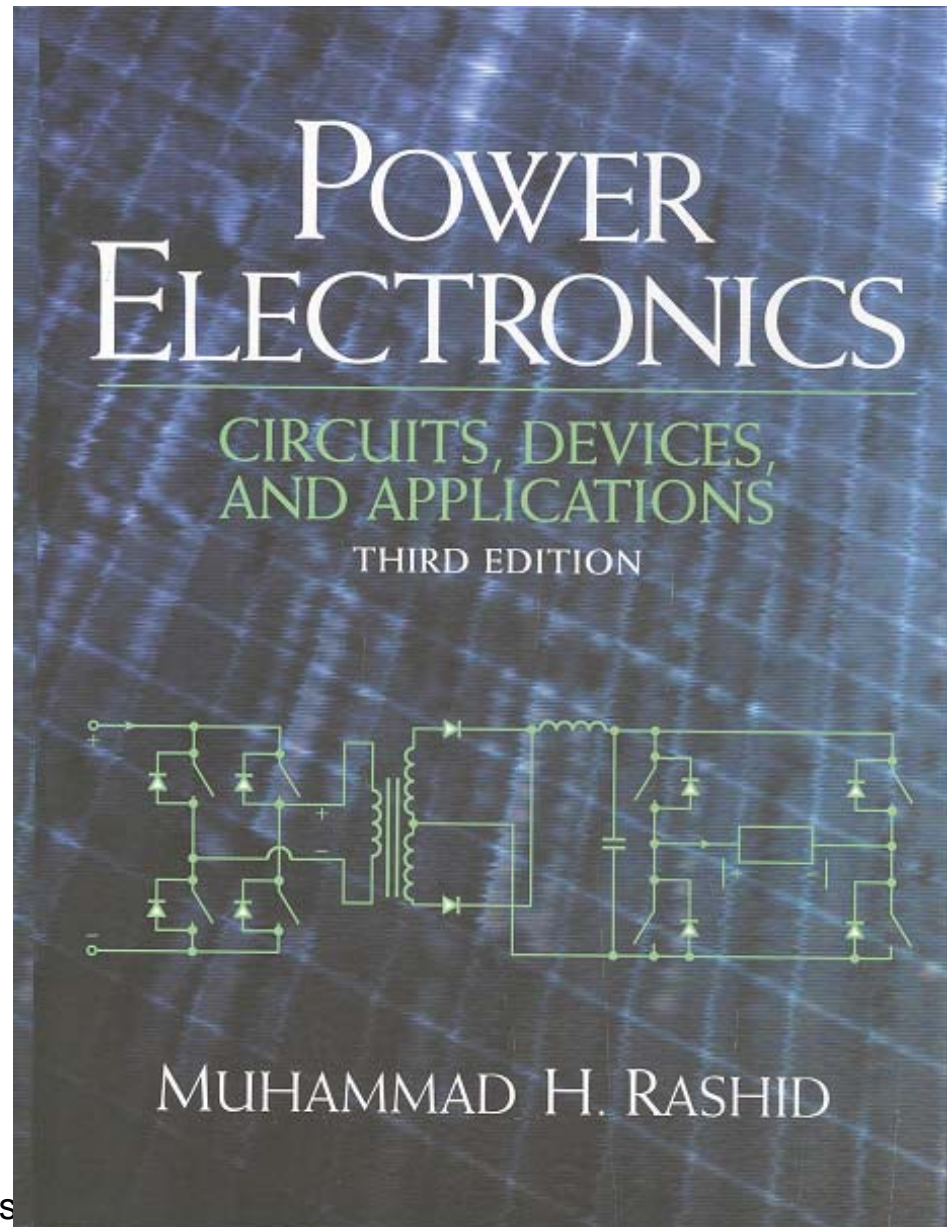
Reviewed more than 250 papers for IEEE Trans. on Industry Applications, IEEE Trans. on Industrial Electronics, IEEE Trans. on Power Electronics, The Journal of Electric Machines and Power Systems, and Canadian Journal of Electrical Engineering. Reviewed more than 100 papers for IEEE - IECON, IEEE - Industry Applications Annual Meeting, IEEE - Applied Power Electronics Conference and other conferences.

SAMPLES OF DR. MUHAMMAD RASHID'S BOOKS

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Power Electronics, Prentice-Hall Inc. 3rd edition,
2003.

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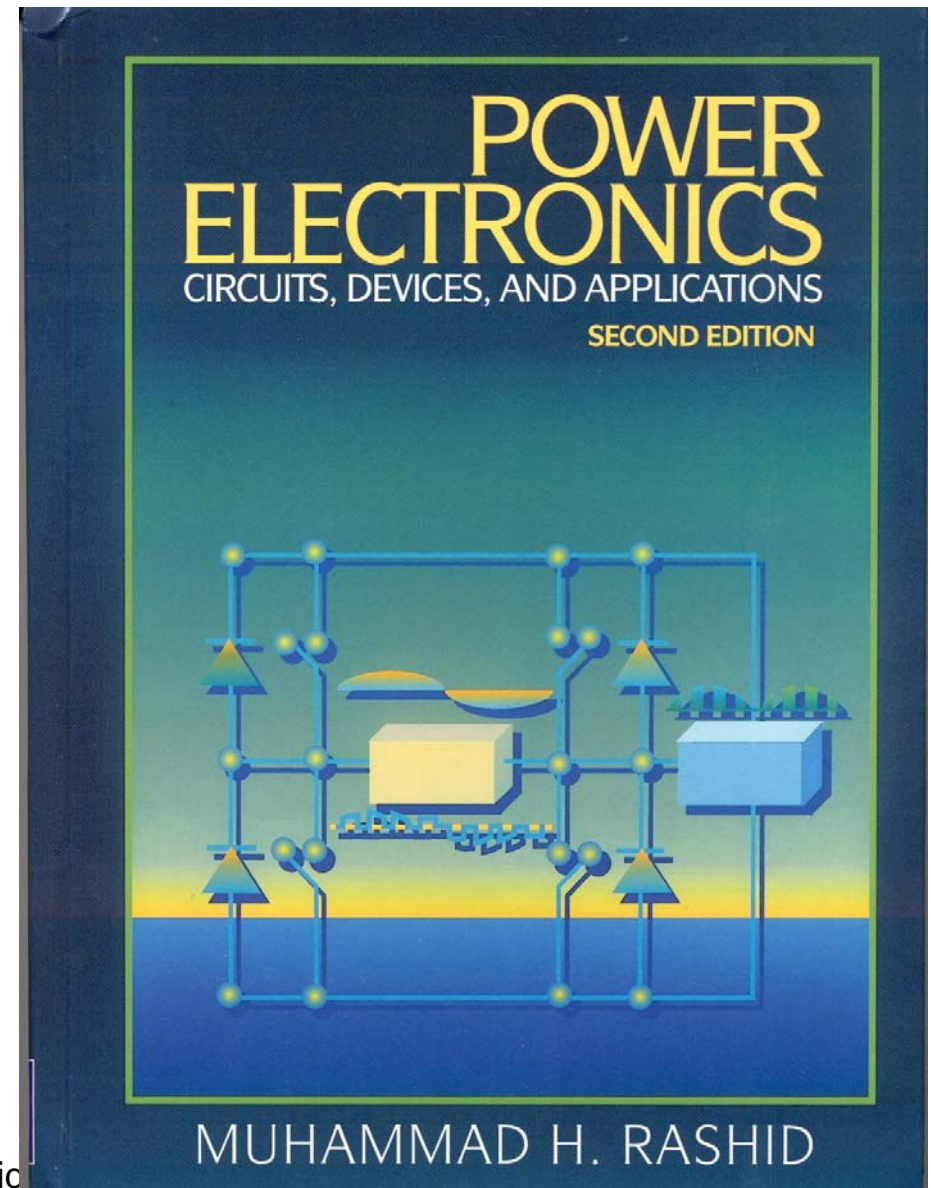


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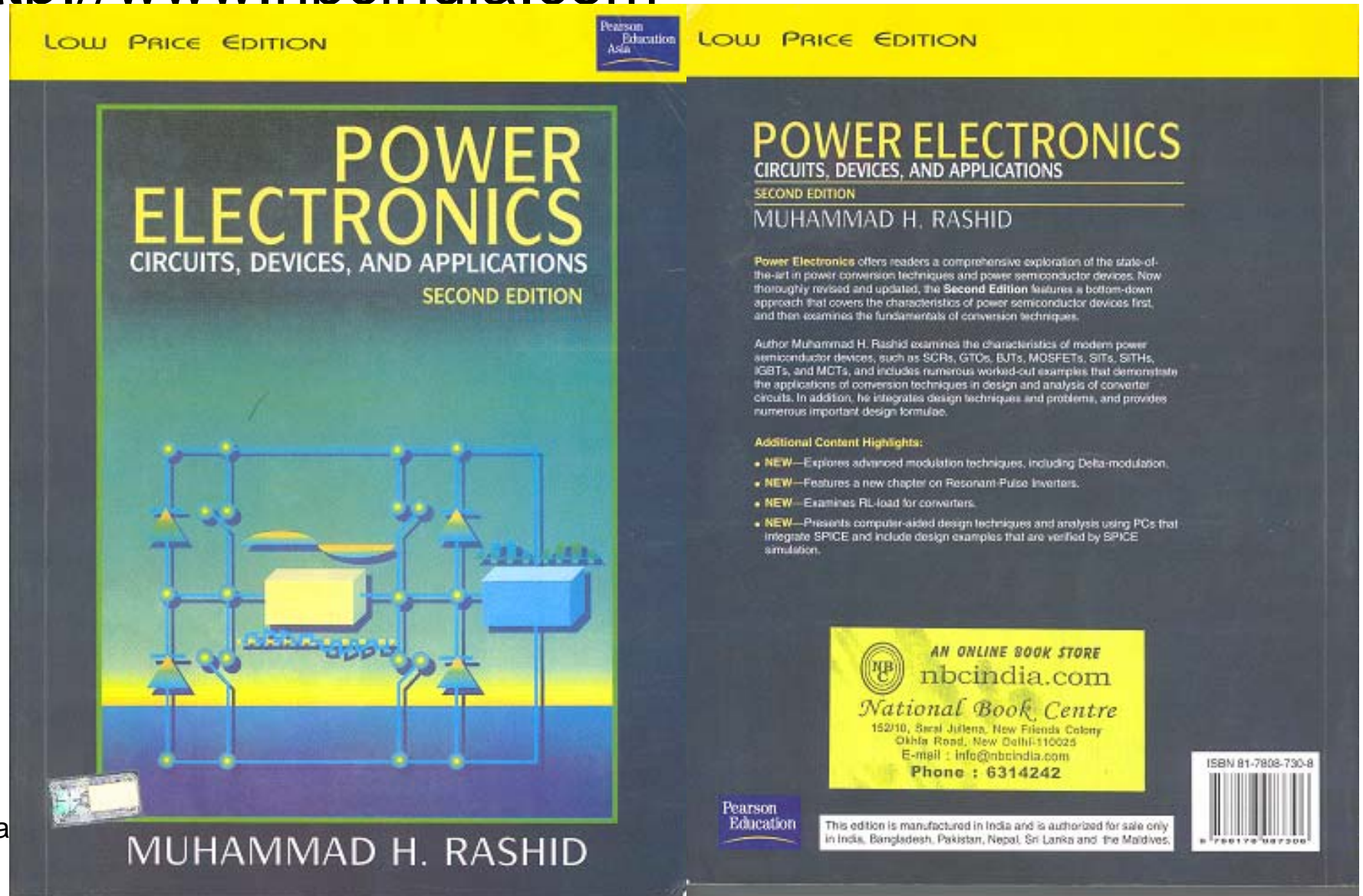


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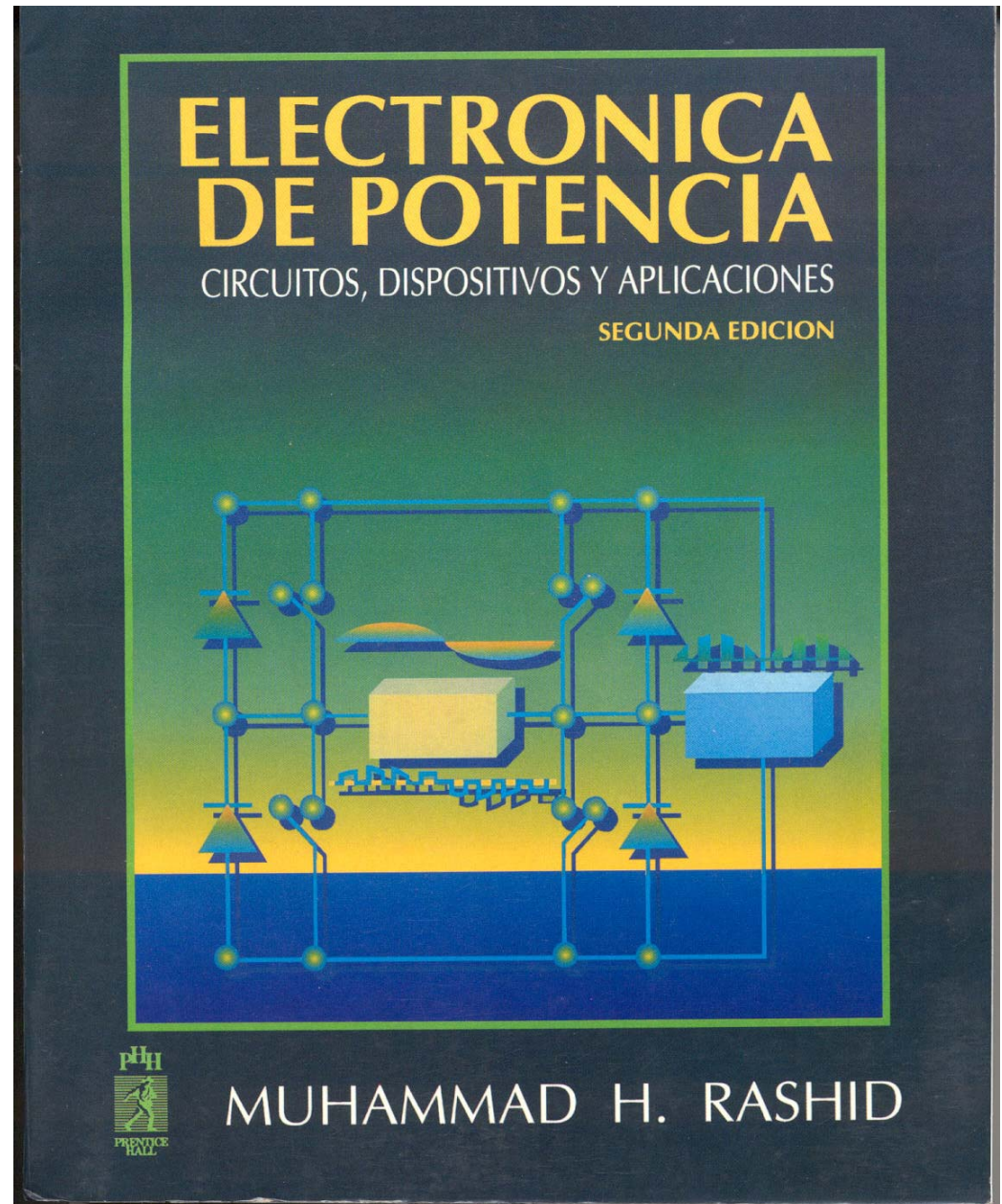
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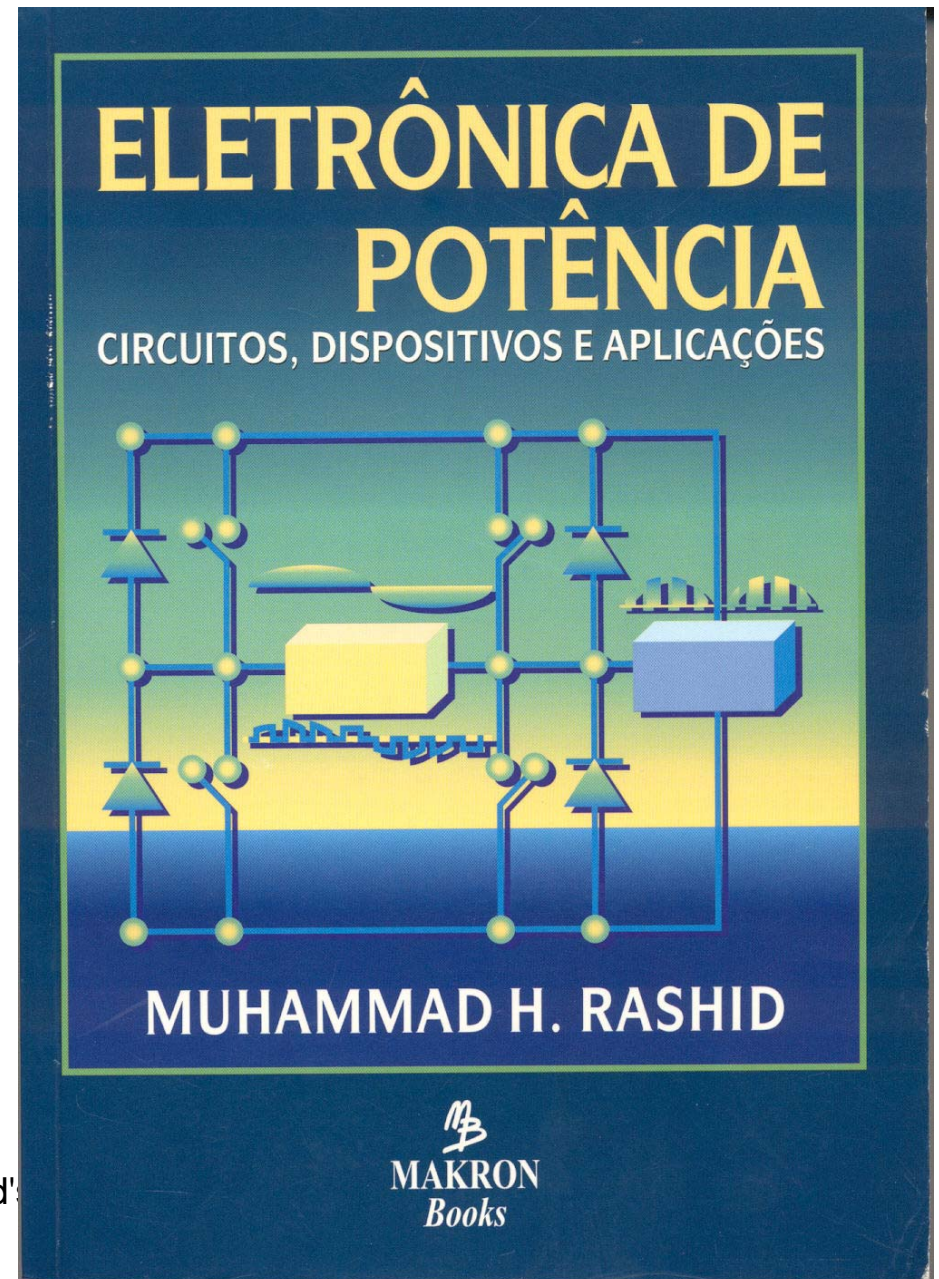
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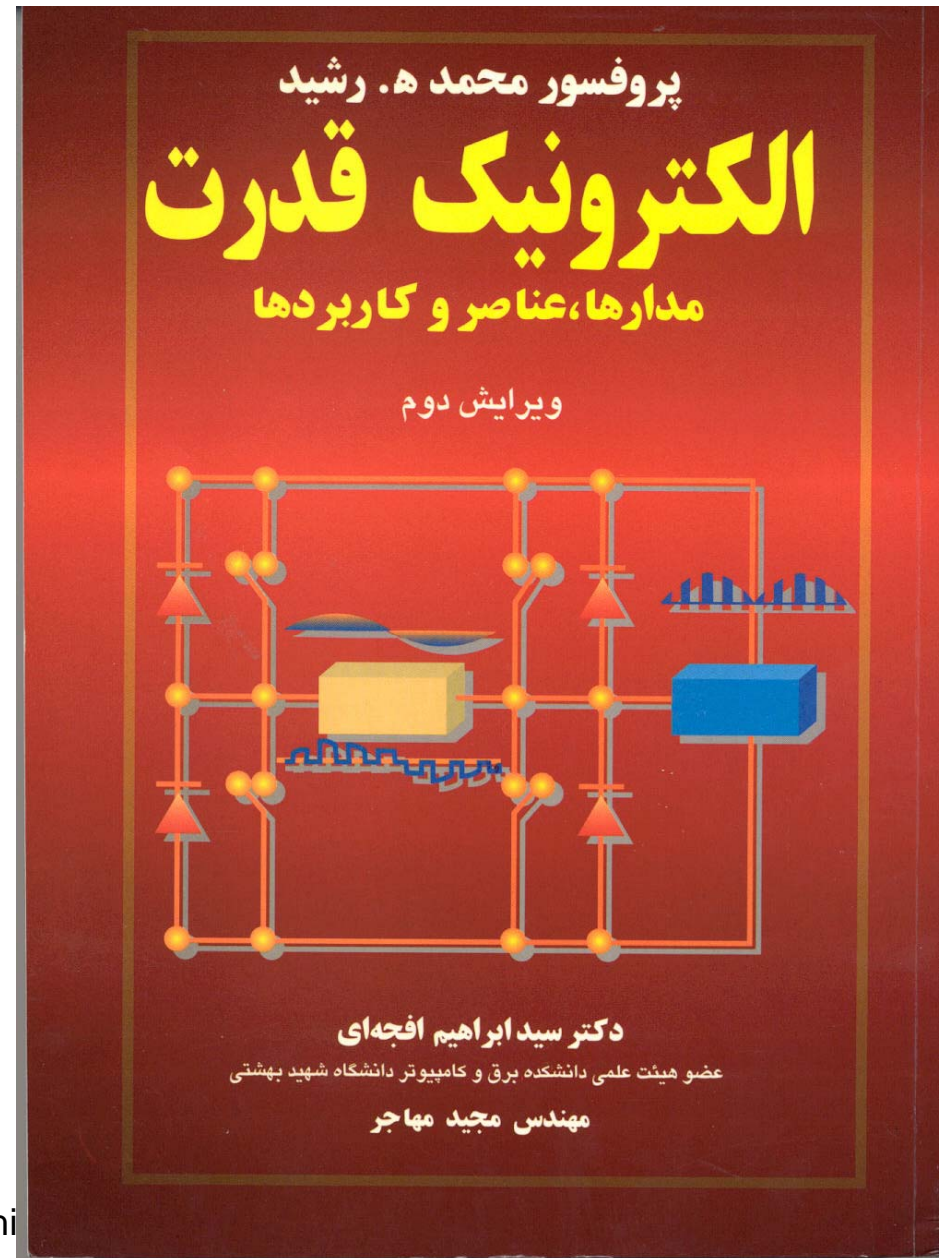
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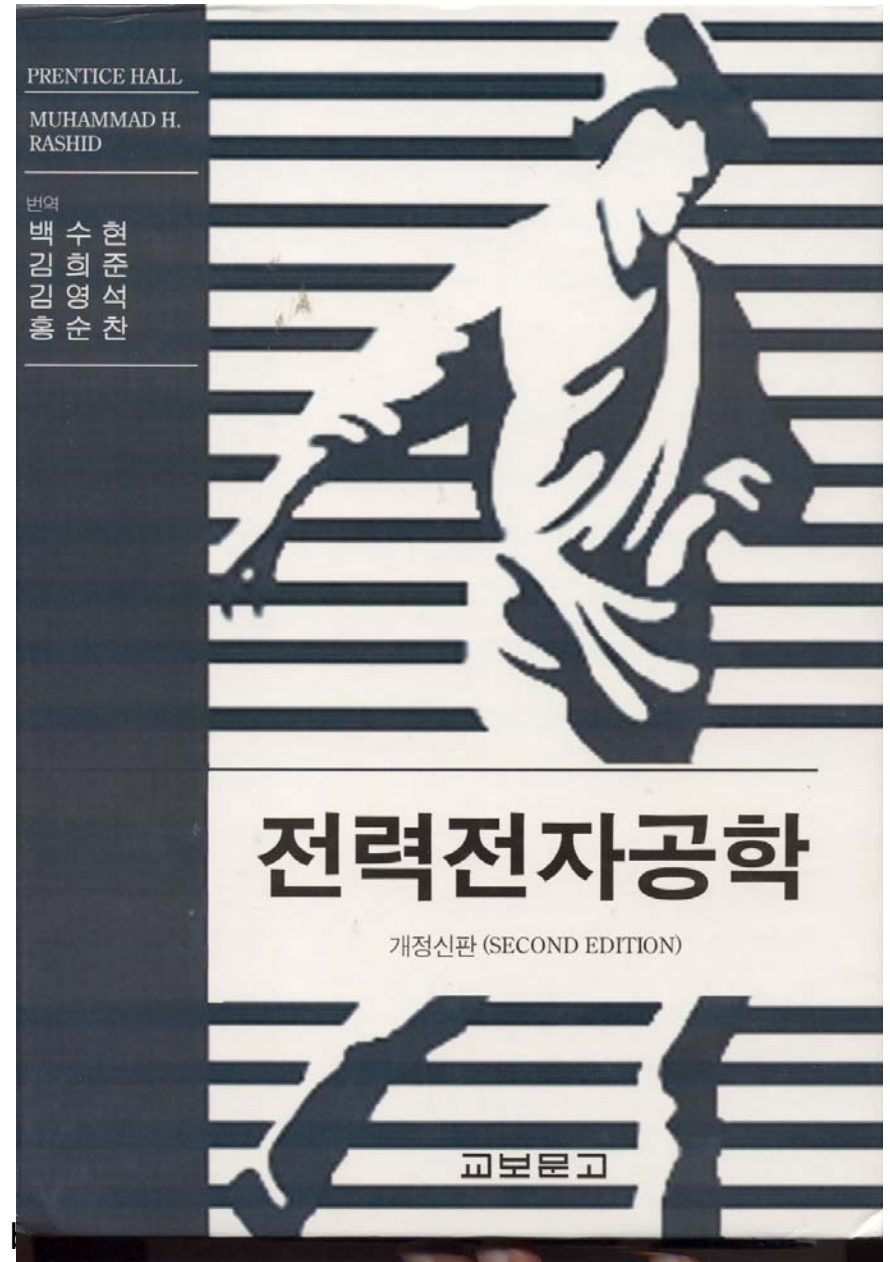
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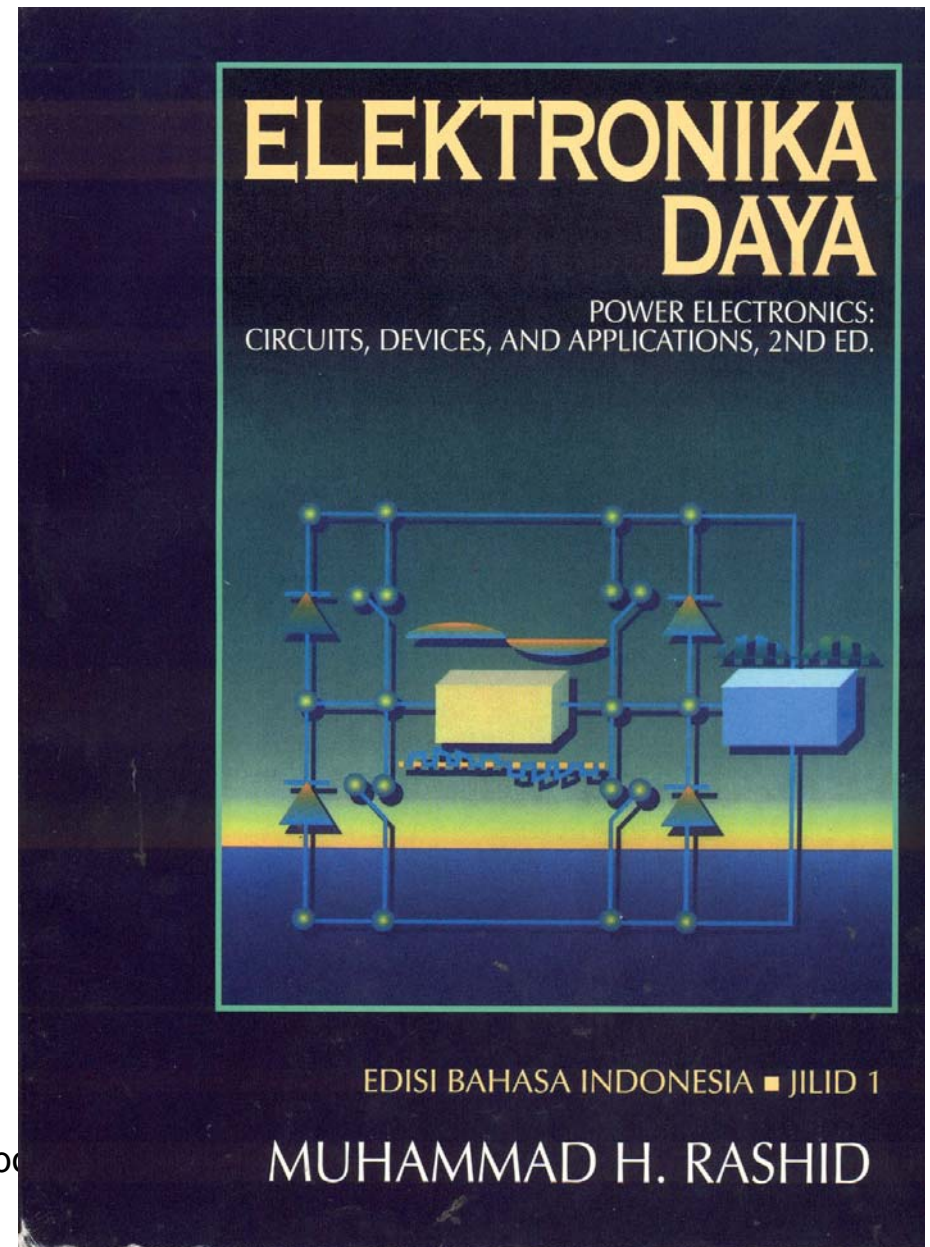
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Indonesia Translation



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2003

For Thai Language?

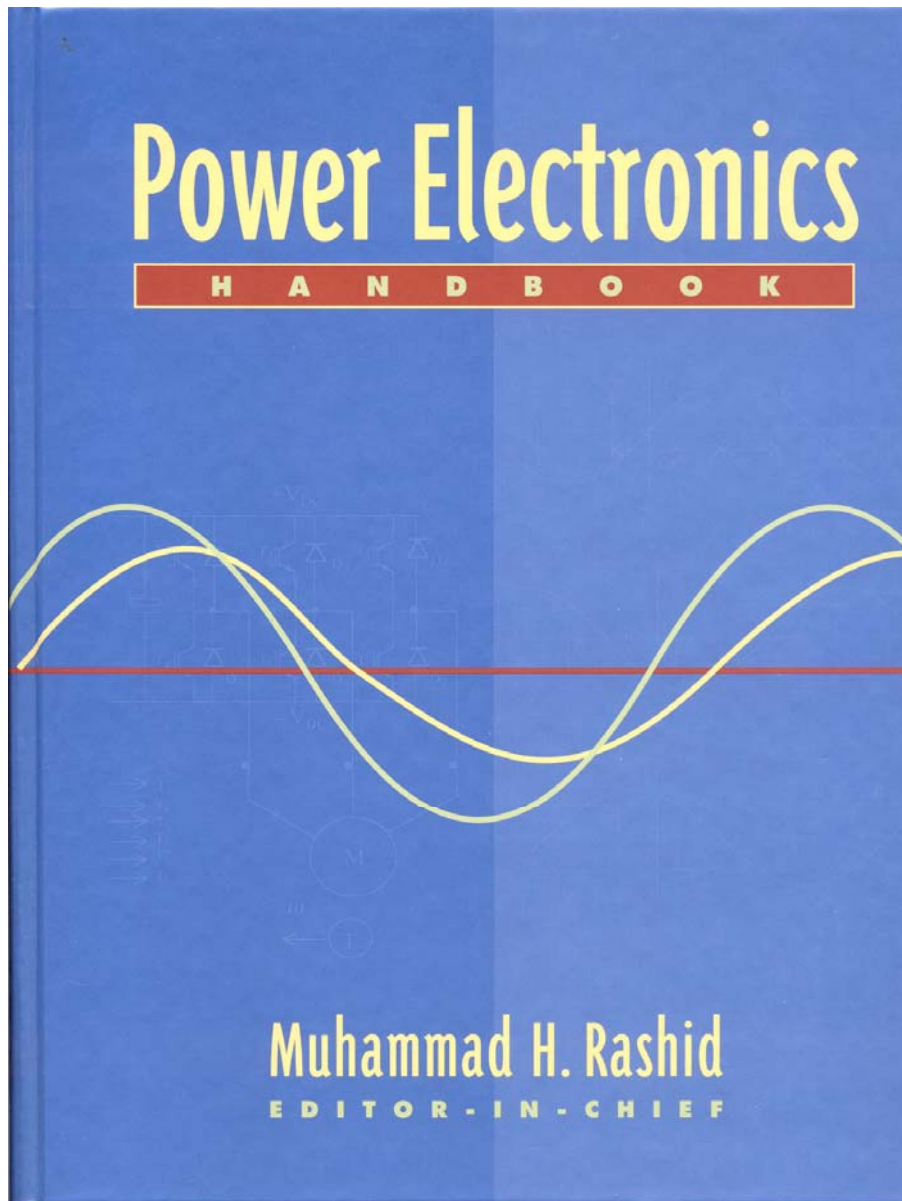
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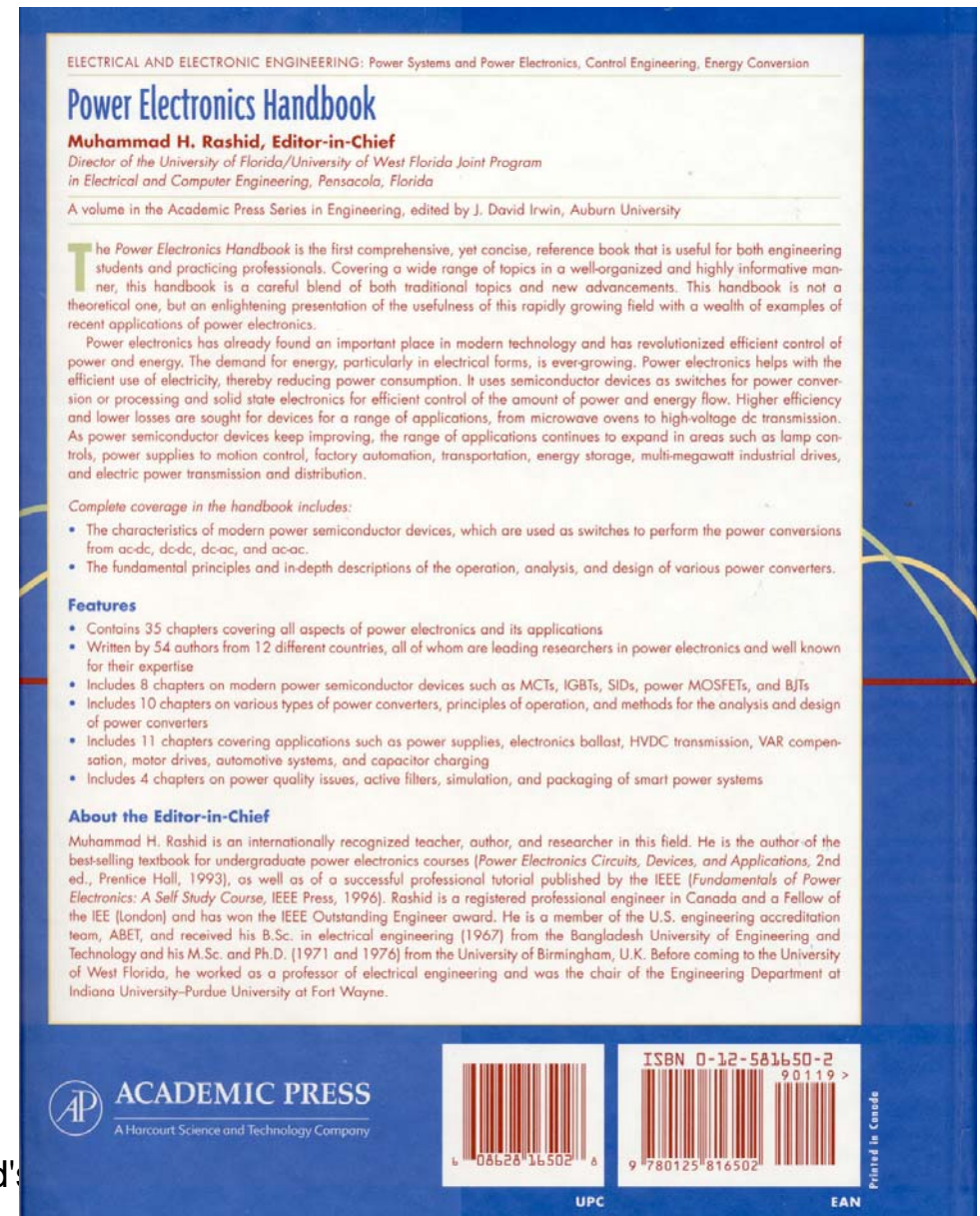
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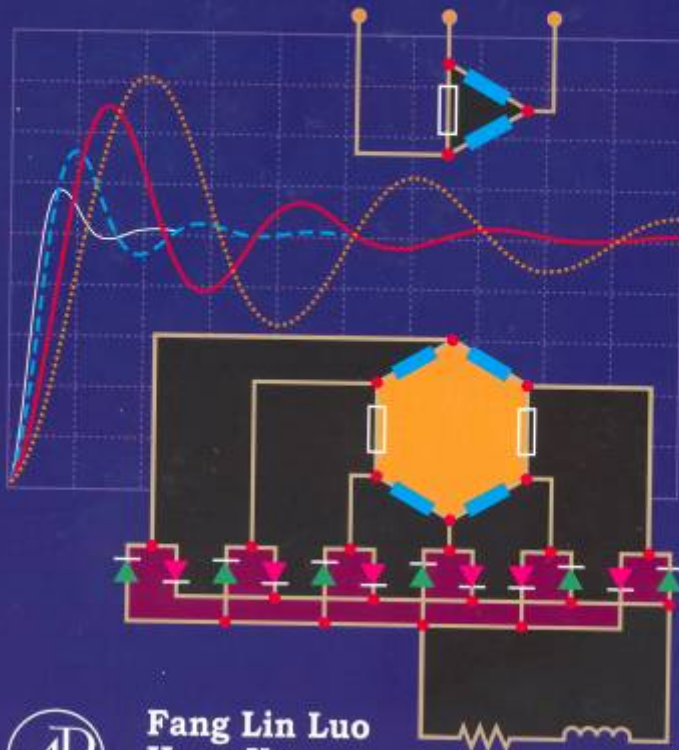
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Digital Power Electronics, Academic Press, 2005

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Digital Power Electronics *and* Applications



Fang Lin Luo
Hong Ye
Muhammad Rashid



Electrical and Electronic Engineering / Power Systems and Power Electronics / Control Engineering / Energy Conversion

Digital Power Electronics *and* Applications

Fang Lin Luo • Hong Ye • Muhammad Rashid

A milestone in the development of Power Electronics and Energy Systems!

The purpose of this book is to describe the theory of Digital Power Electronics and its applications. The authors apply digital control theory to power electronics in a manner thoroughly different from the traditional, analog control scheme. In order to apply digital control theory to power electronics, the authors define a number of new parameters, including the energy factor, pumping energy, stored energy, time constant, and damping time constant. These parameters differ from traditional parameters such as the power factor, power transfer efficiency, ripple factor, and total harmonic distortion. These new parameters result in the definition of new mathematical modeling:

- A zero-order-hold (ZOH) is used to simulate all AC/DC rectifiers
- A first-order-hold (FOH) is used to simulate all DC/AC inverters
- A second-order-hold (SOH) is used to simulate all DC/DC converters
- A first-order-hold (FOH) is used to simulate all AC/AC (AC/DC/AC) converters

Key Features

- Presents most up-to-date methods of analysis and control algorithms for developing power electronic converters and power switching circuits
- Provides an invaluable reference for engineers designing power converters, commercial power supplies, control systems for motor drives, active filters, etc.
- Presents methods of analysis not available in other books

Related Titles



Wu, *Switch-Mode Power Converters* 0-12-088795-9

Rashid, *Power Electronics Handbook* 0-12-581650-2



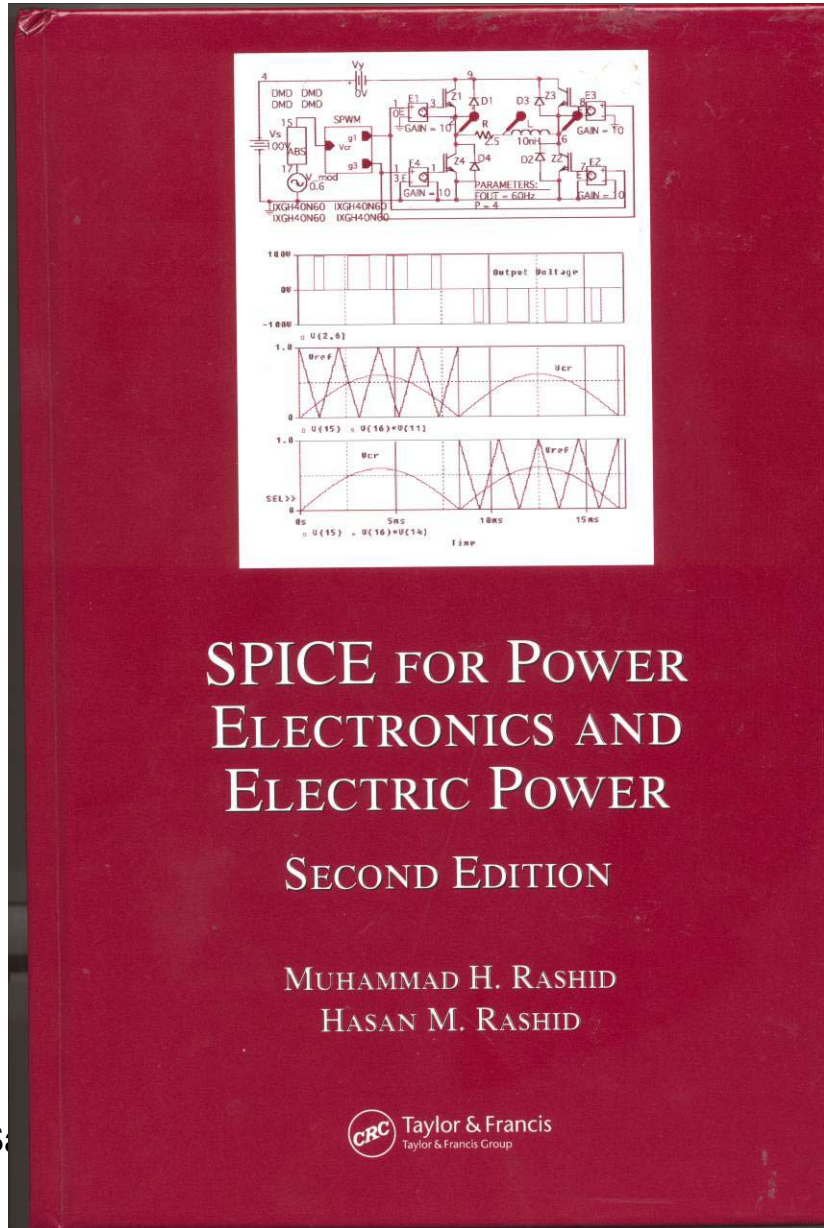
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SPICE For Power Electronics, CRC Press, Inc. 2006

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Engineering, Electronics, Power Electronics

Based upon the authors' experience in designing power electronics courses, **SPICE for Power Electronics and Electric Power, Second Edition** integrates a SPICE simulator with a power electronics course at a junior or senior level. This volume assumes no prior knowledge of SPICE and introduces the applications of various SPICE commands through numerous examples of power electronic circuits.

The authors emphasize the techniques for power conversions and for quality output waveforms, rather than accurate modeling of power semiconductor devices. This text enables students to compare the results with those that are obtained in a classroom environment via simple switch models or devices.

Not only a supplement to any standard textbook on power electronics and power systems, this volume can also be used as a textbook on SPICE. It suggests laboratory experiments and design problems, and presents complete laboratory guidelines for each experiment. This book can also be used as a laboratory manual for power electronics, with its design problems serving as assignments for a design-oriented simulation laboratory.

Features

- Integrates SPICE with a junior or senior level power electronics course
- Demonstrates how SPICE can be used to simulate and verify power converter performance
- Applies PSpice to draw and analyze power electronic circuits and study the effects of circuit parameters
- Discusses PSpice features such as Probe, Table, Value, and more
- Provides examples of linear and nonlinear inductors and transformers, as well as power converter circuits
- Includes experiments on principles of operation of static power conversion, pulse width modulation (PWM) for voltage and frequency control, and analysis and design considerations
- Enables observation of the effects of changes in design parameters without actually building a circuit

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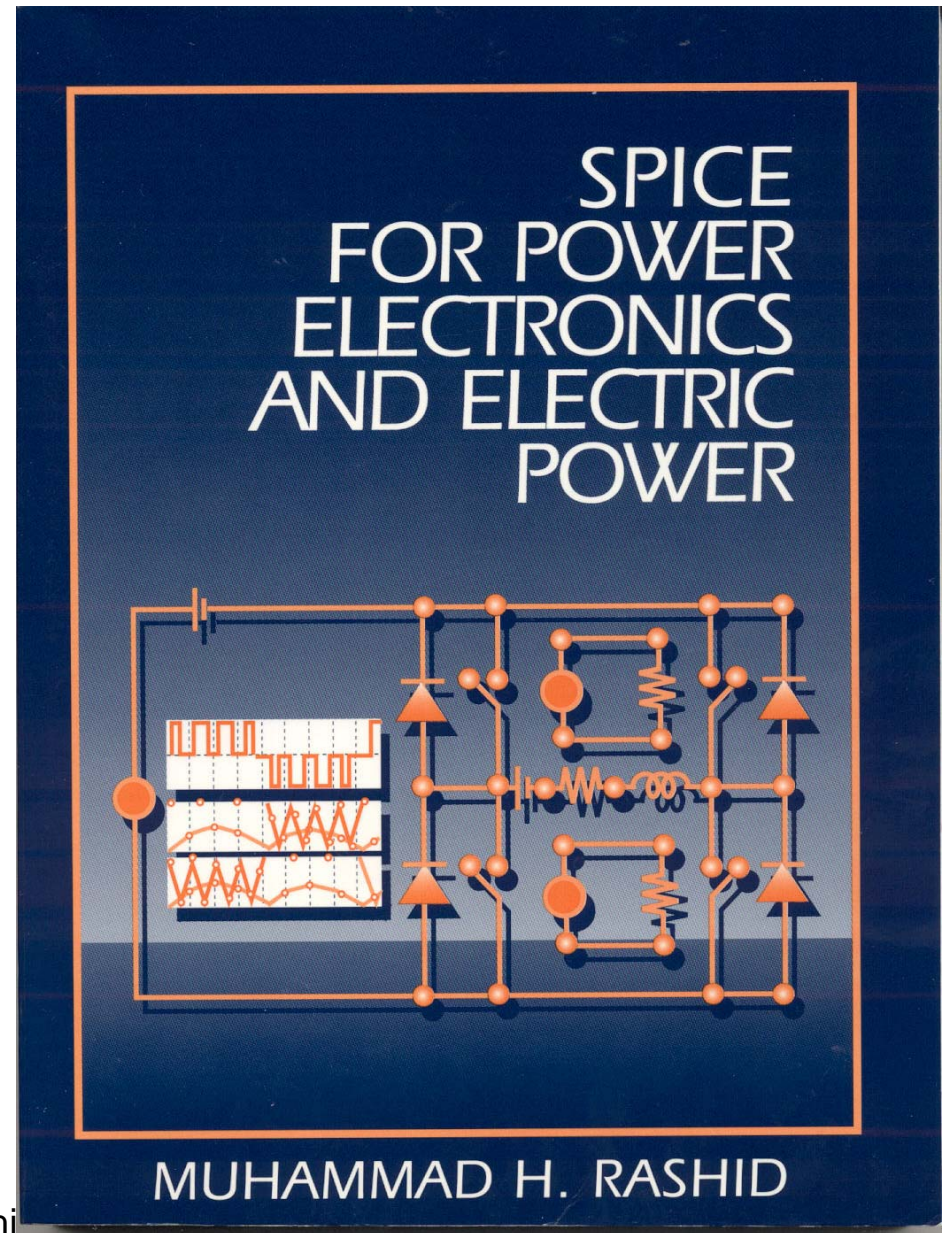
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SPICE For Power Electronics, Prentice-Hall Inc. 1995

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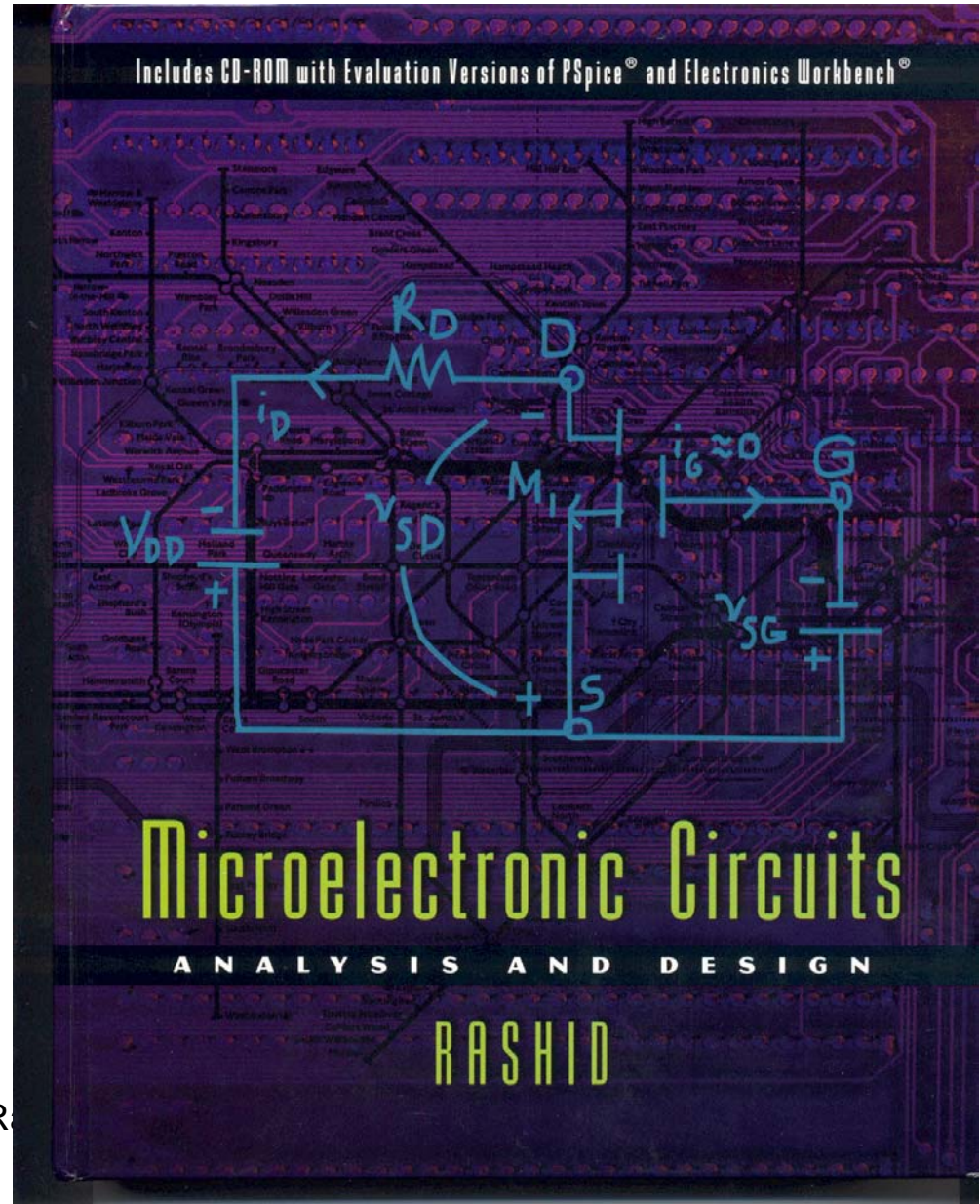
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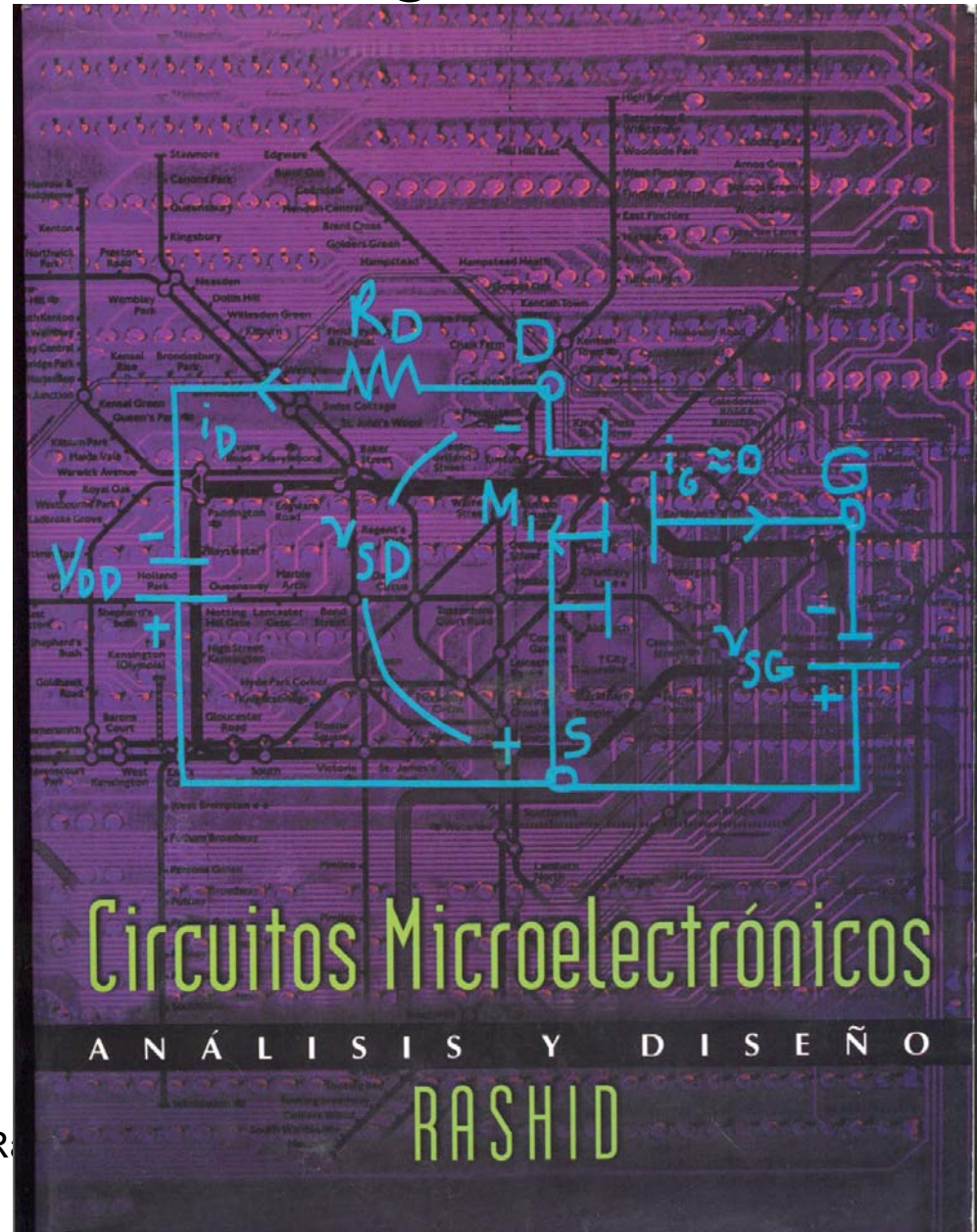
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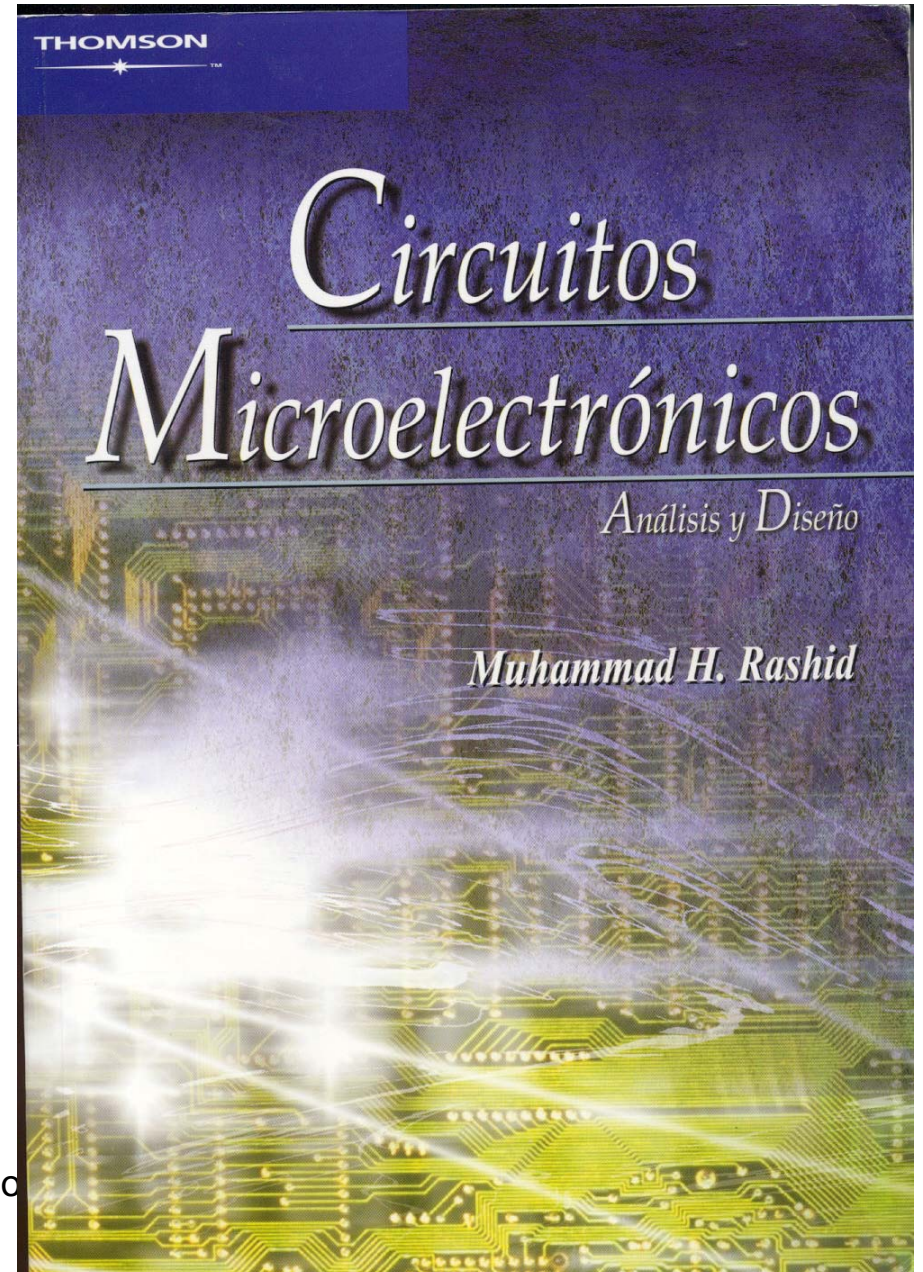
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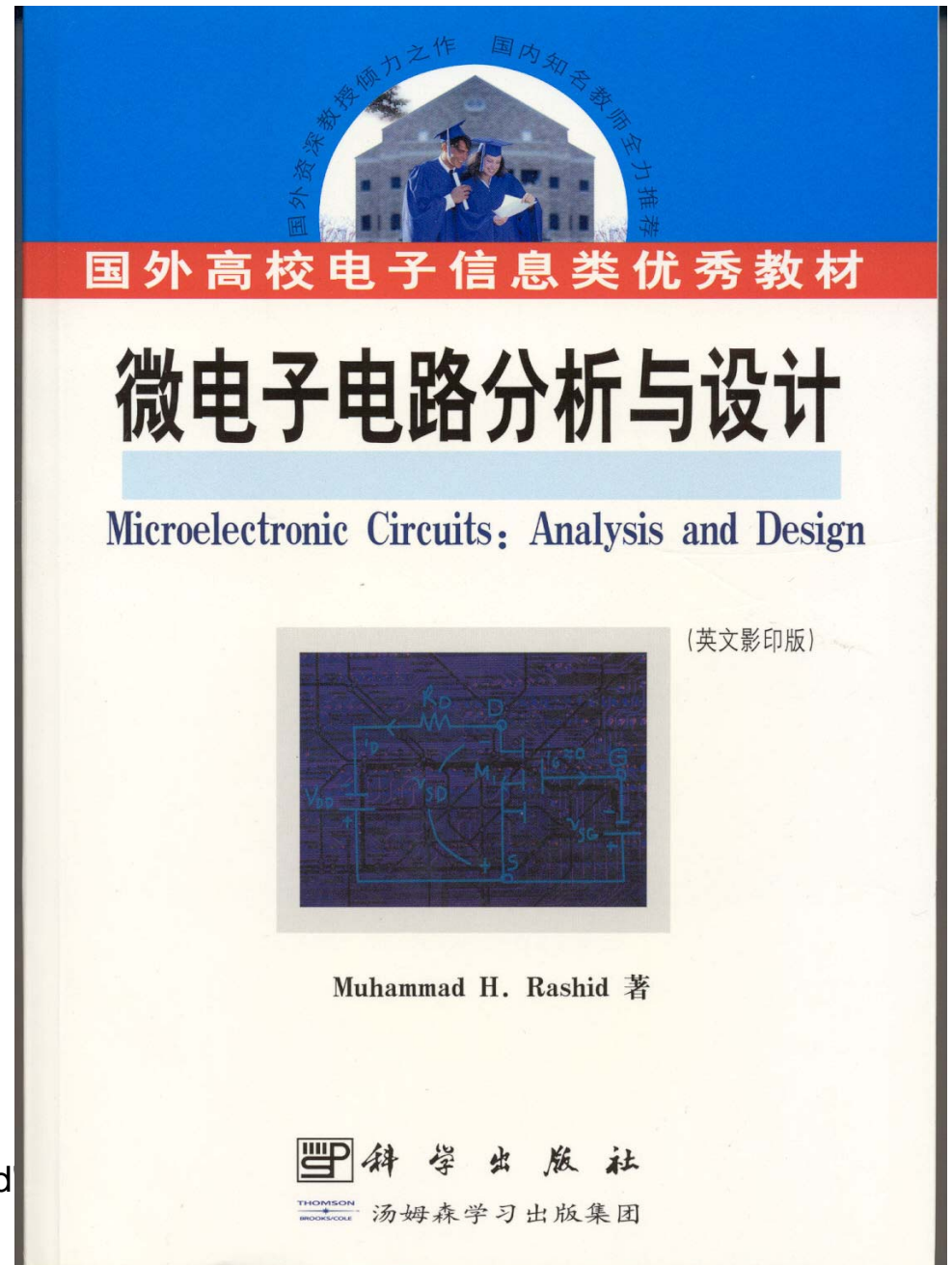
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Muhammad H. Rashid

Fondamenti di elettronica

Fondamenti di elettronica Muhammad H. Rashid

Il testo di Rashid si differenzia dal tradizionale approccio all'insegnamento della disciplina tipico dei manuali più diffusi e consolidati. L'autore, infatti, adotta un approccio top-down allo studio dell'elettronica, piuttosto che il classico approccio bottom-up. In un approccio bottom-up vengono prima studiate le caratteristiche dei dispositivi a semiconduttore e dei circuiti integrati, e in seguito vengono introdotte le applicazioni. Nell'approccio top-down qui usato, si introducono le caratteristiche dei sistemi integrati ideali al fine di consentire la descrizione delle tecniche di analisi e progetto; in seguito vengono studiati i principi di funzionamento e le caratteristiche dei dispositivi e circuiti utilizzati all'interno degli integrati, al fine di evidenziare le imprecisioni e i limiti dei circuiti integrati stessi. Questo approccio ha il vantaggio di consentire al docente di suddividere il corso in due momenti; in un primo tempo introdurre i circuiti di base e le relative tecniche di progettazione, senza entrare nei dettagli sui dispositivi discreti, e in un secondo momento introdurre l'analisi dettagliata dei dispositivi discreti. Il testo, dunque, risponde in maniera particolarmente efficace alle esigenze didattiche poste dall'organizzazione dell'insegnamento nell'ambito dei corsi di laurea di primo livello in Ingegneria.

Muhammad H. Rashid insegna presso la University of West Florida. L'edizione italiana è curata da Pierangelo Terreni, professore ordinario di Elettronica presso la Facoltà di Ingegneria dell'Università di Pisa.

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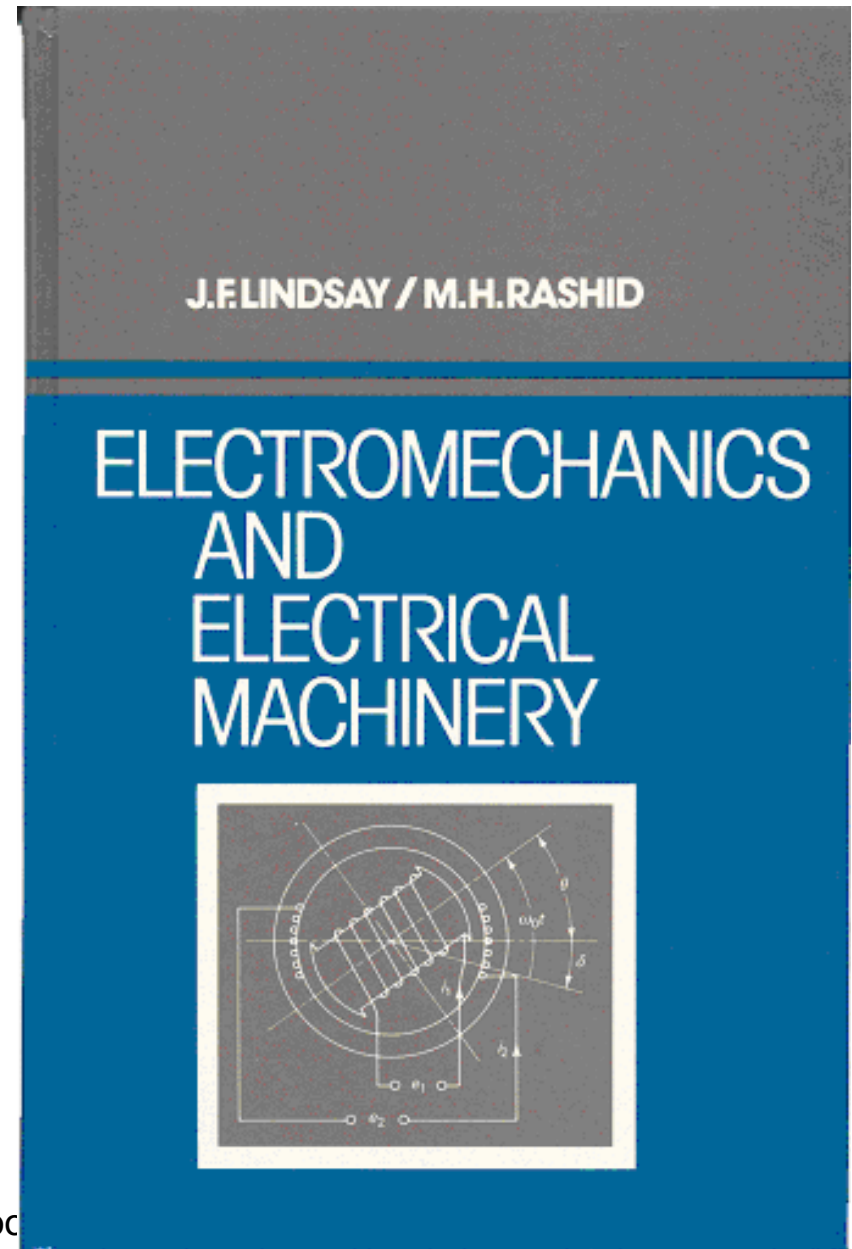
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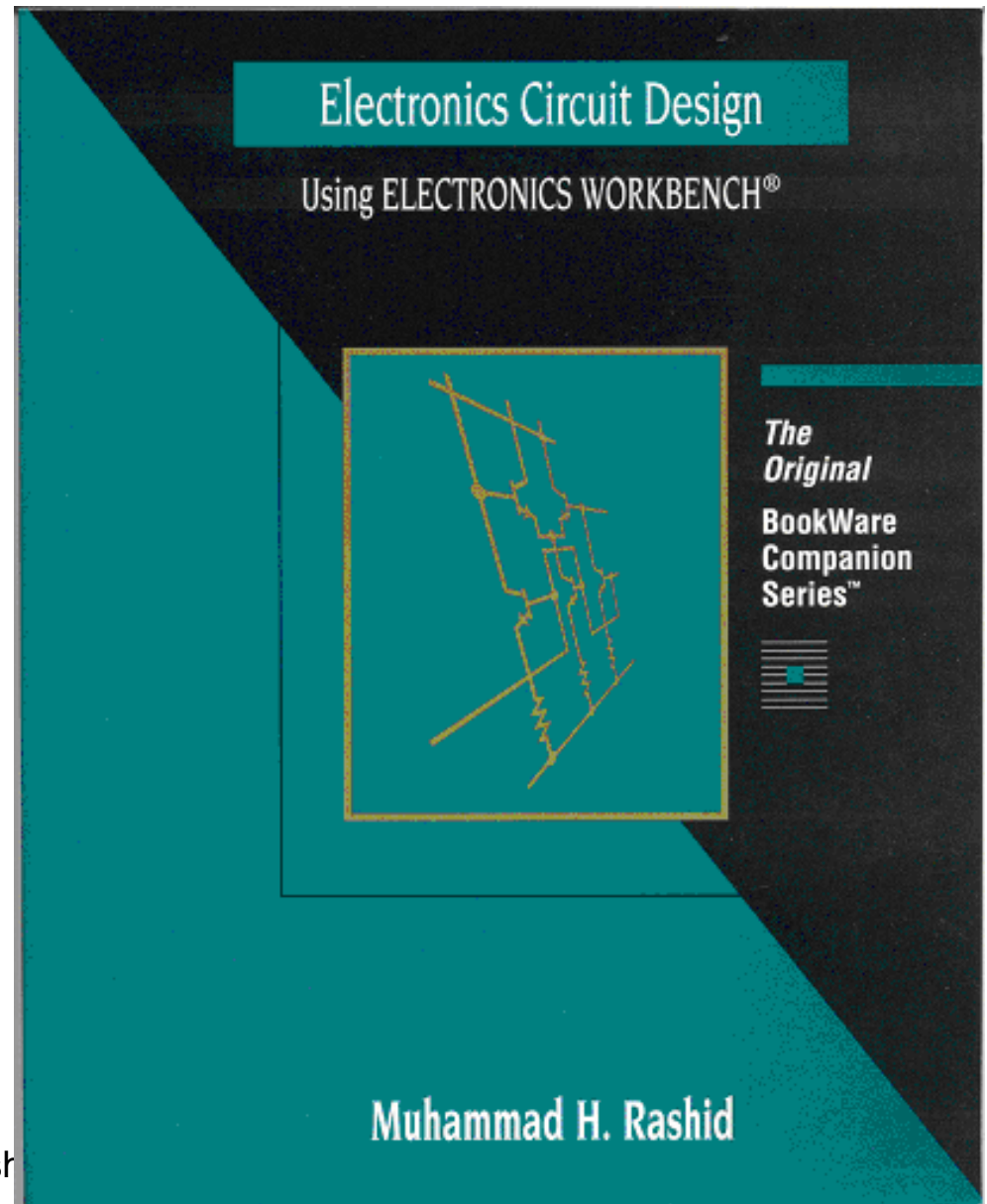
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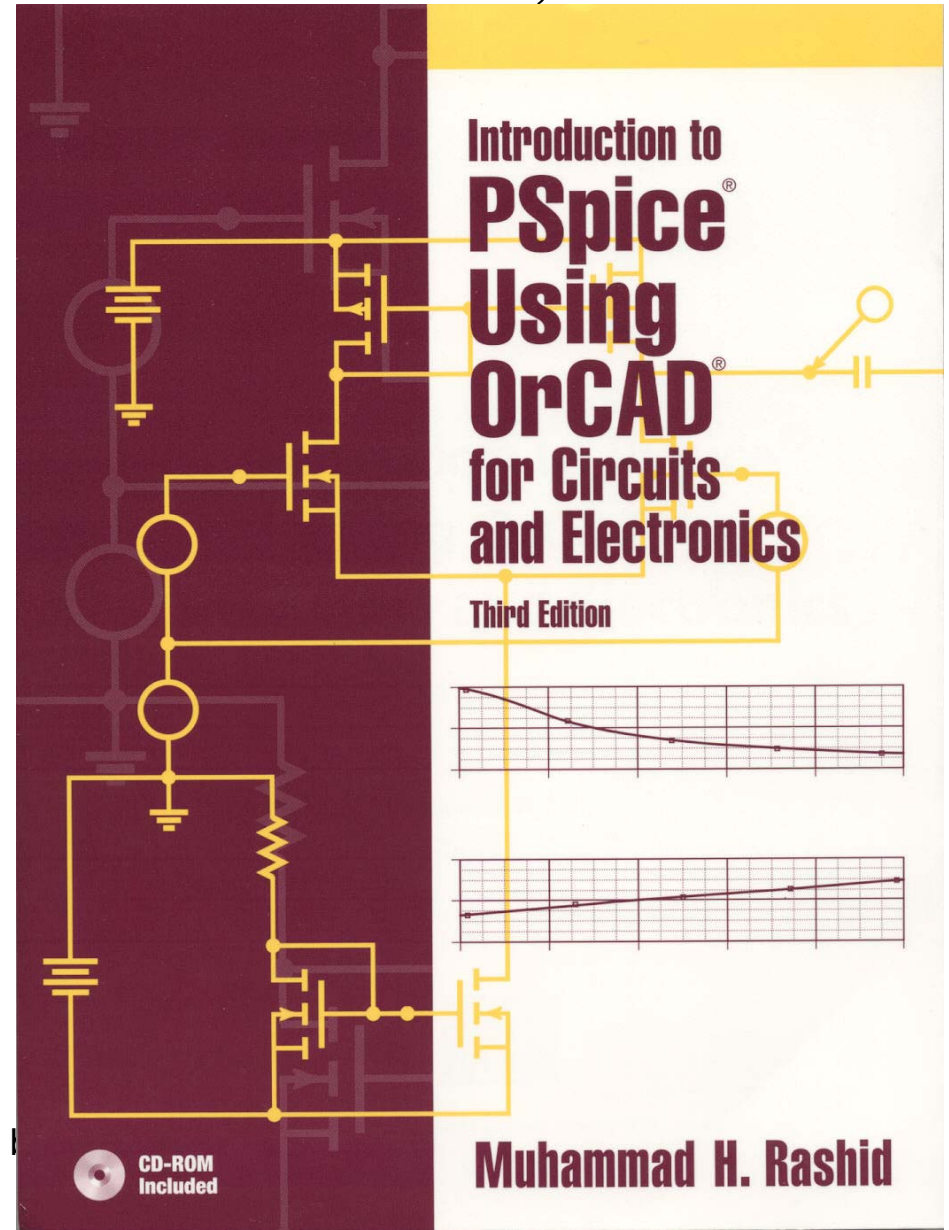
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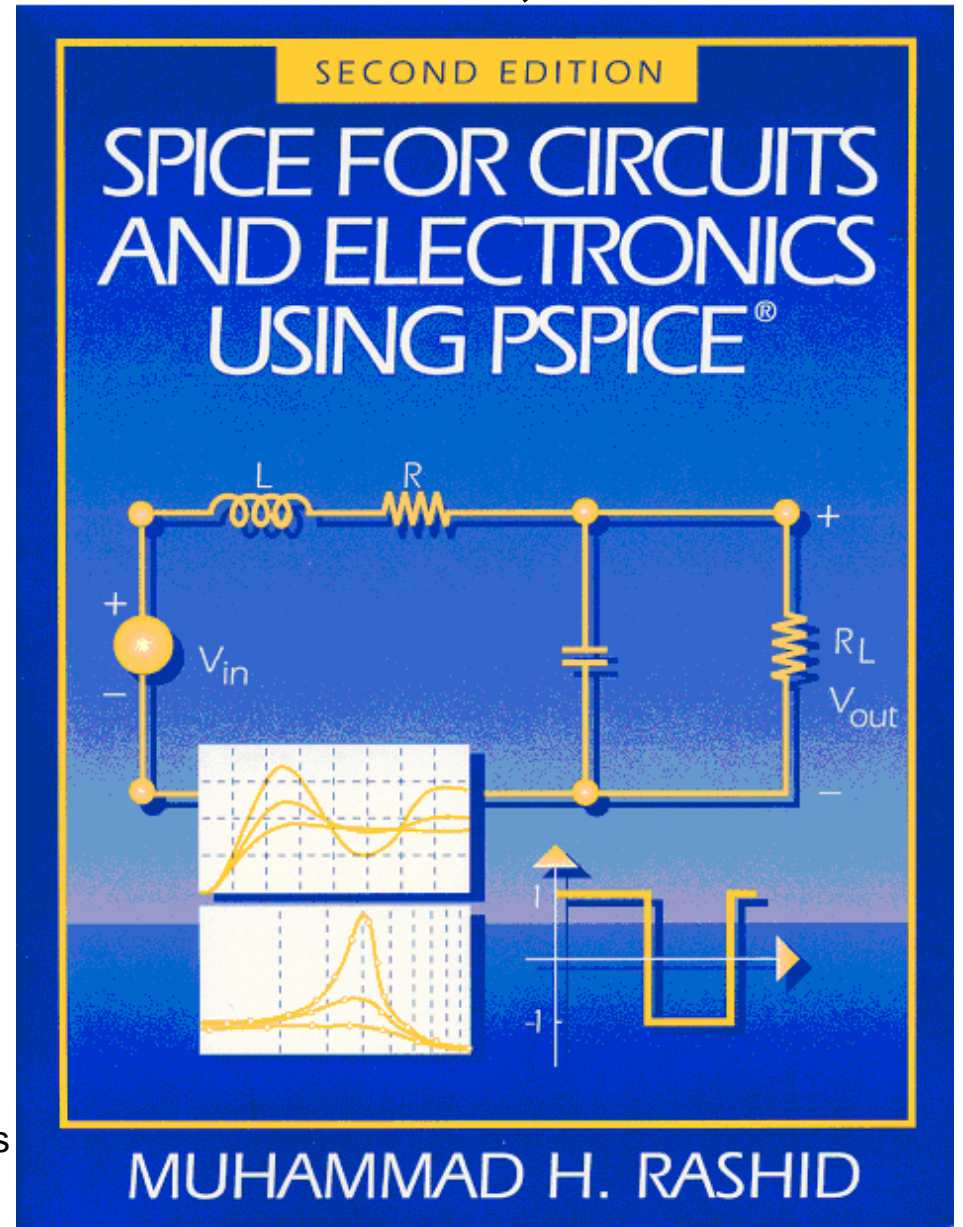
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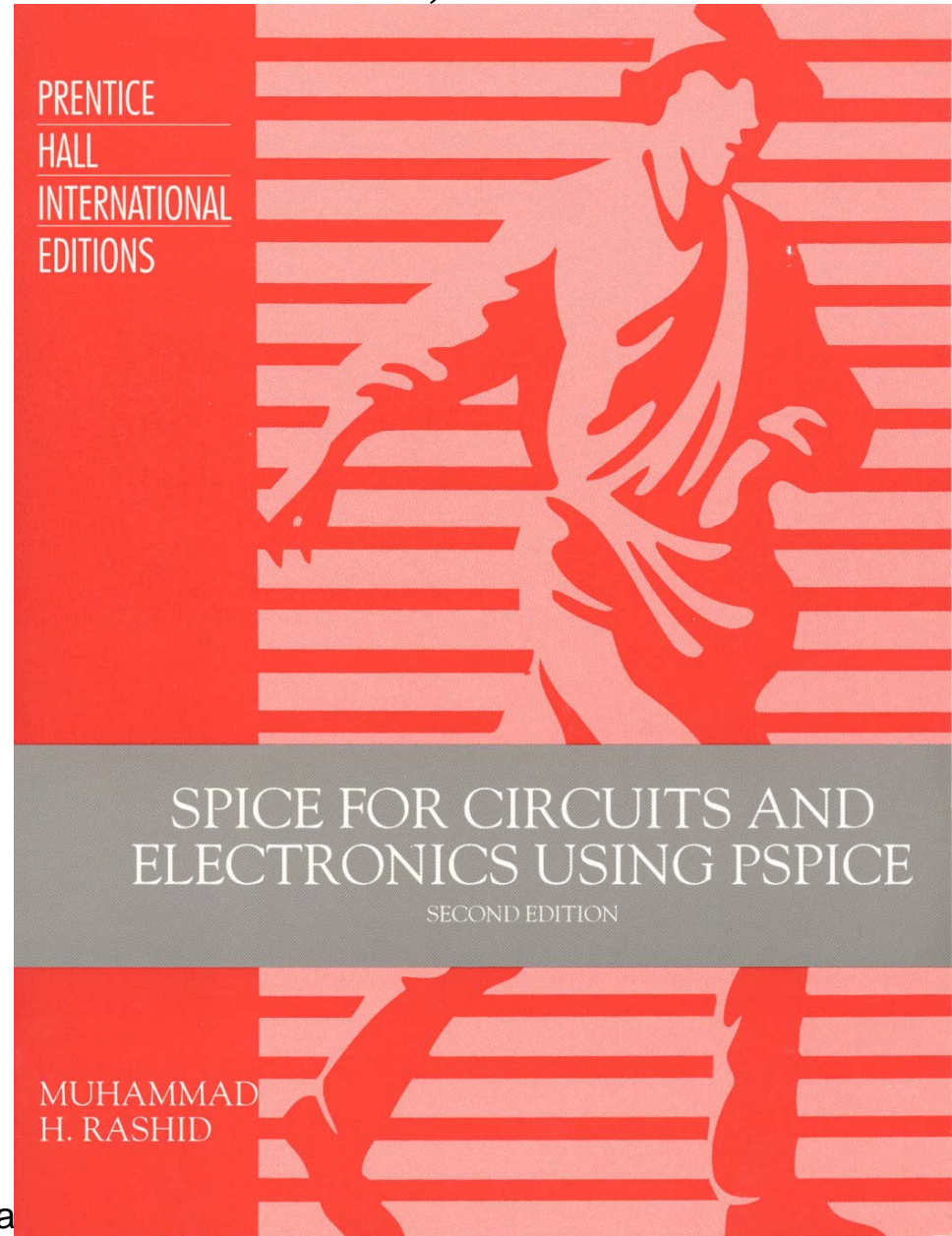


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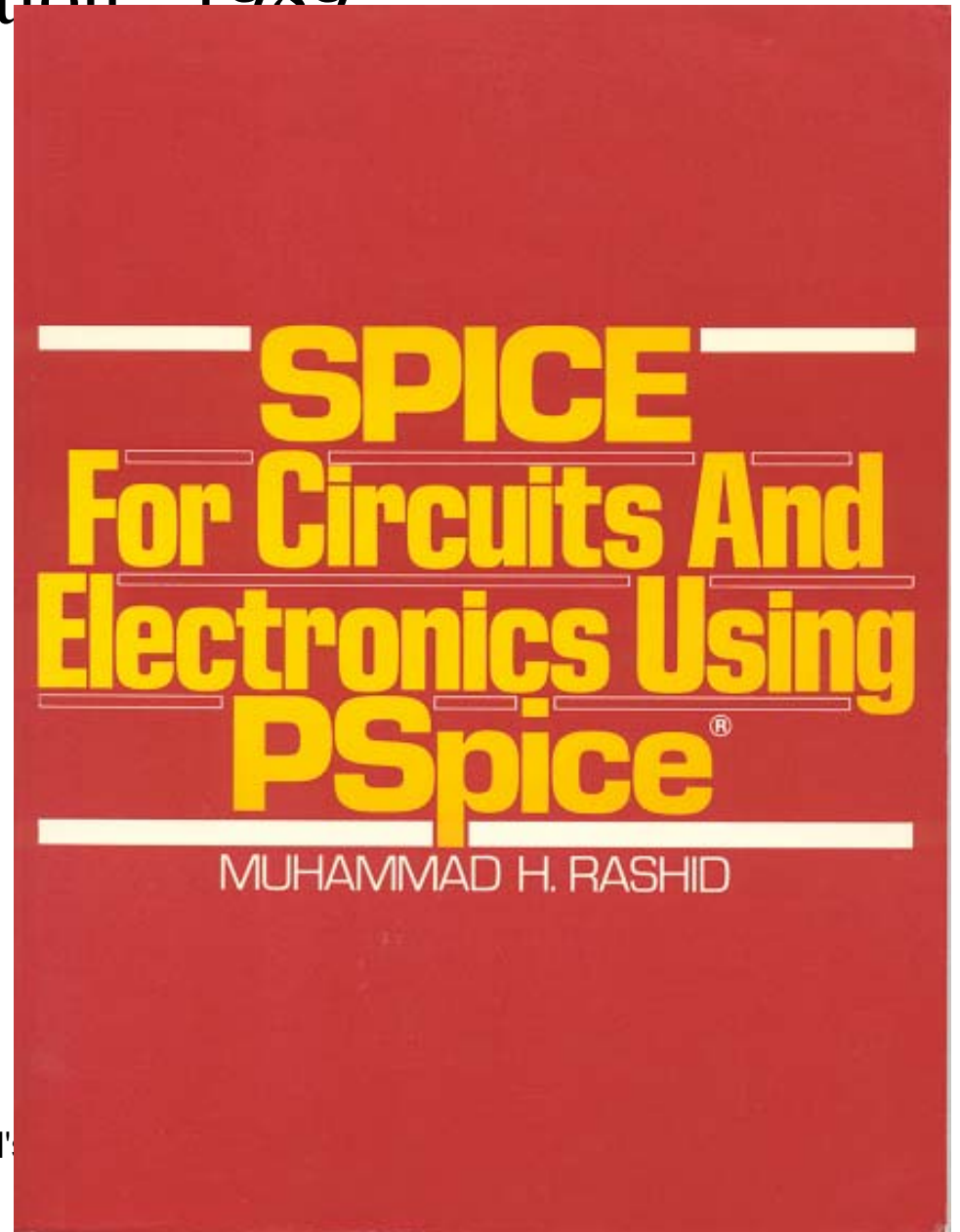
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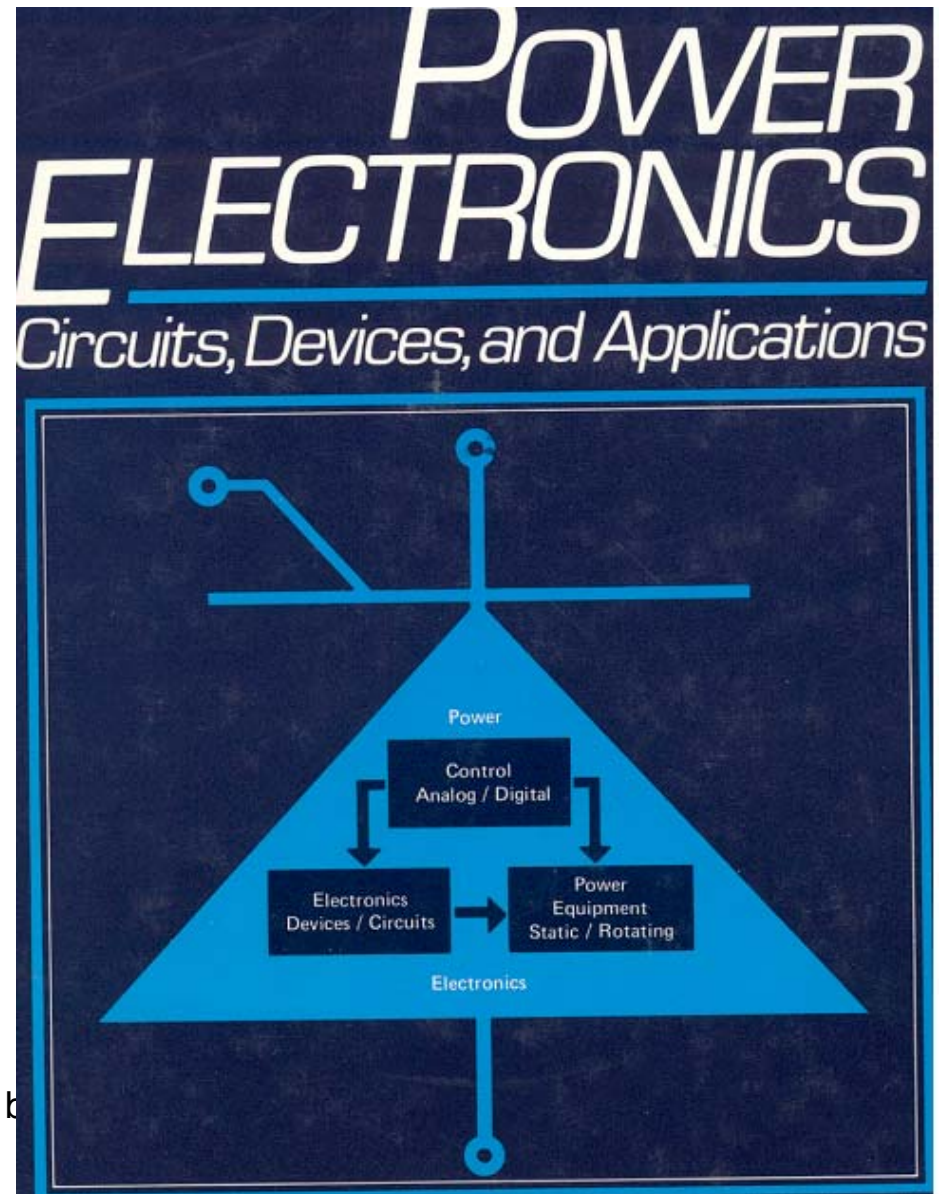
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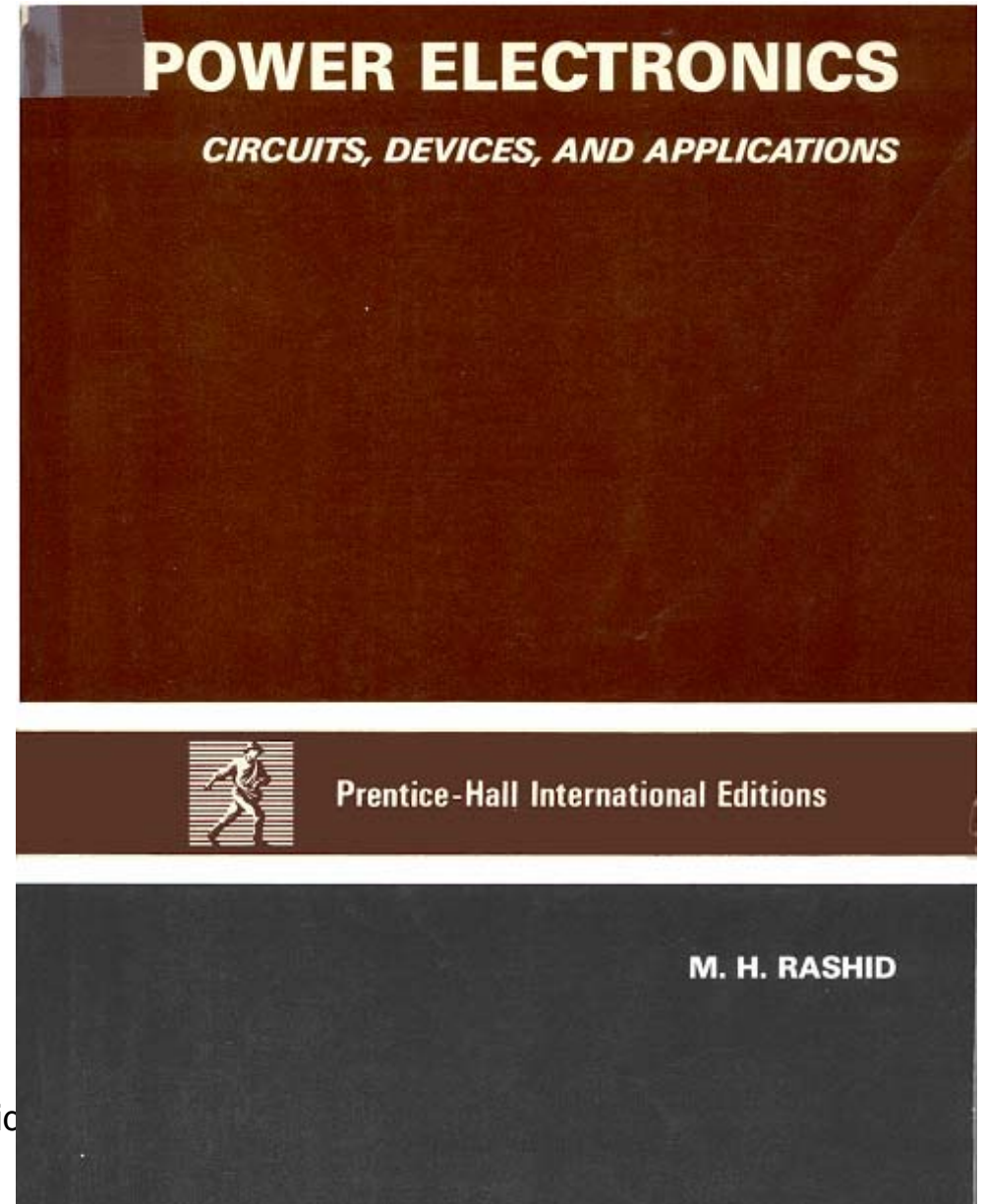
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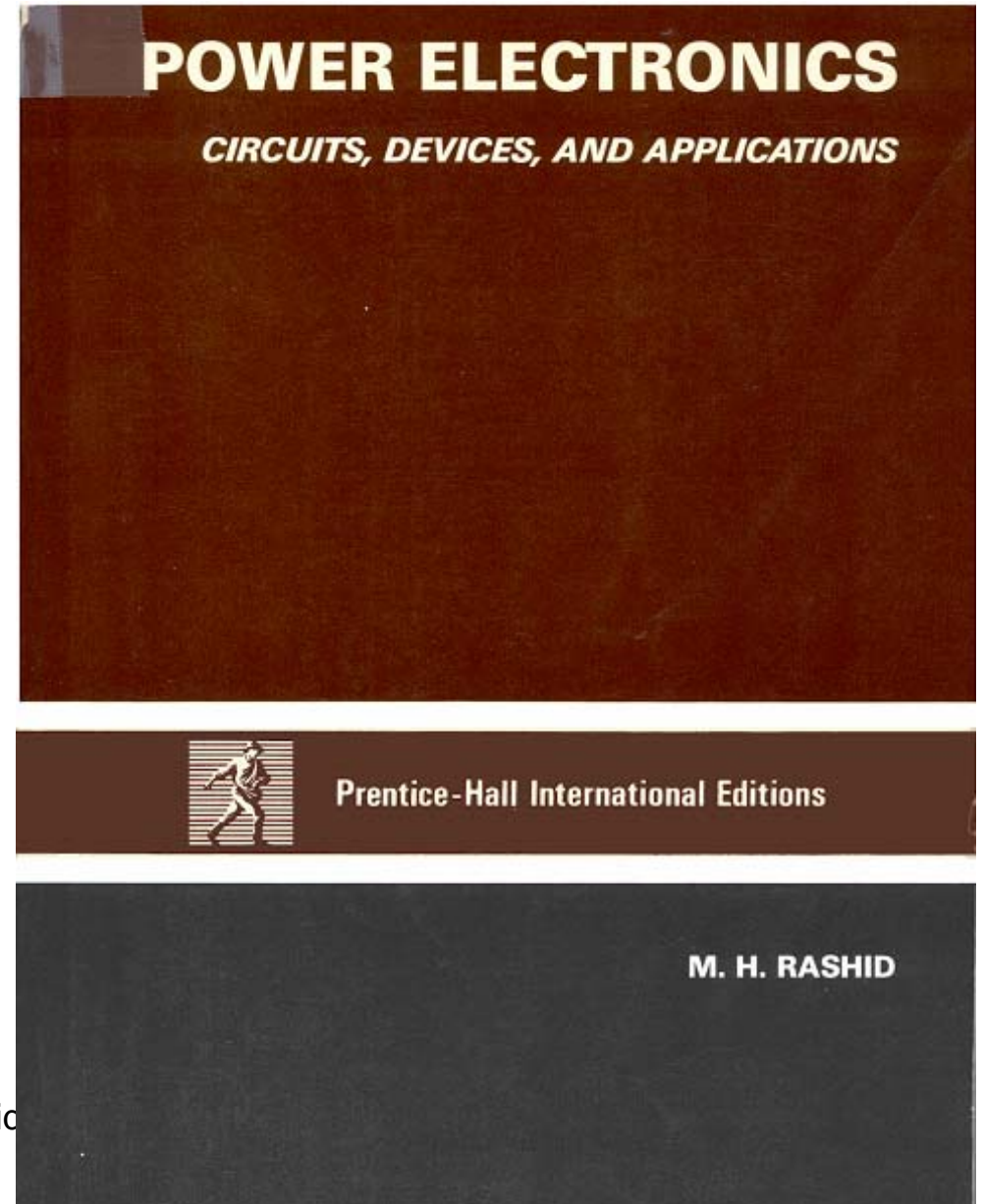
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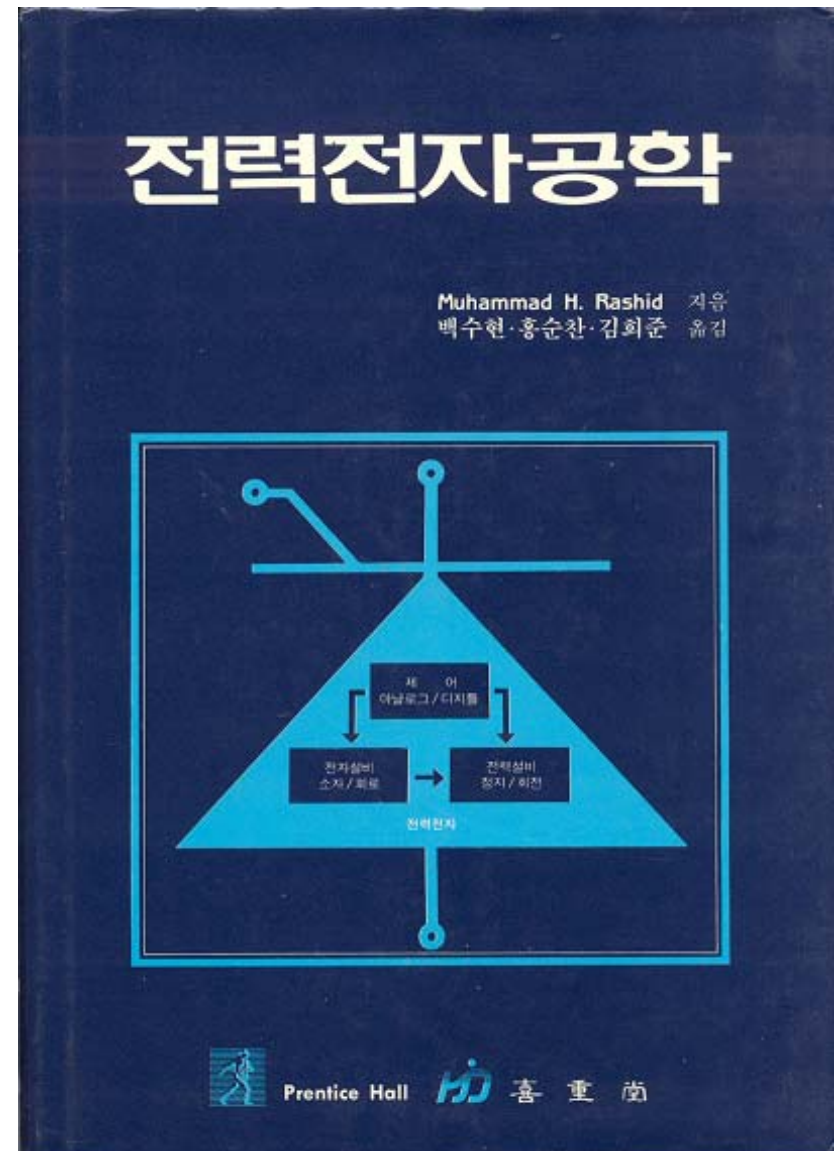
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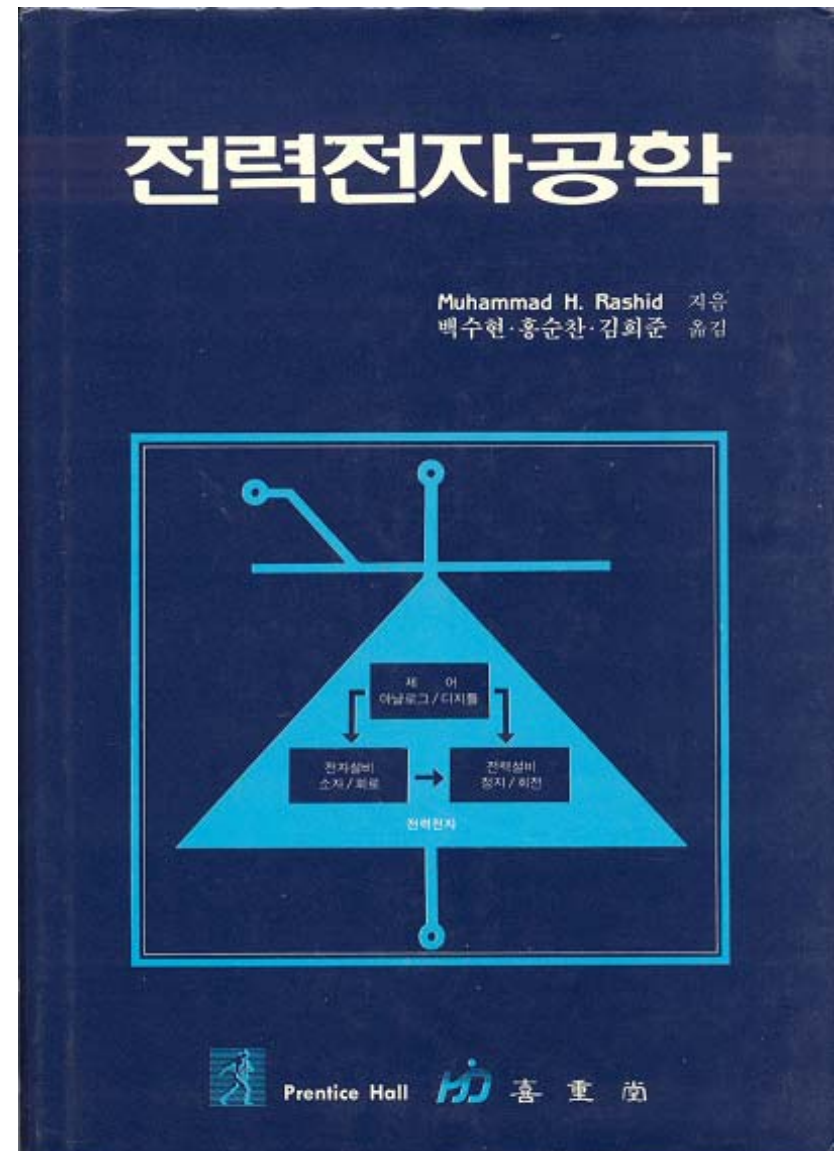
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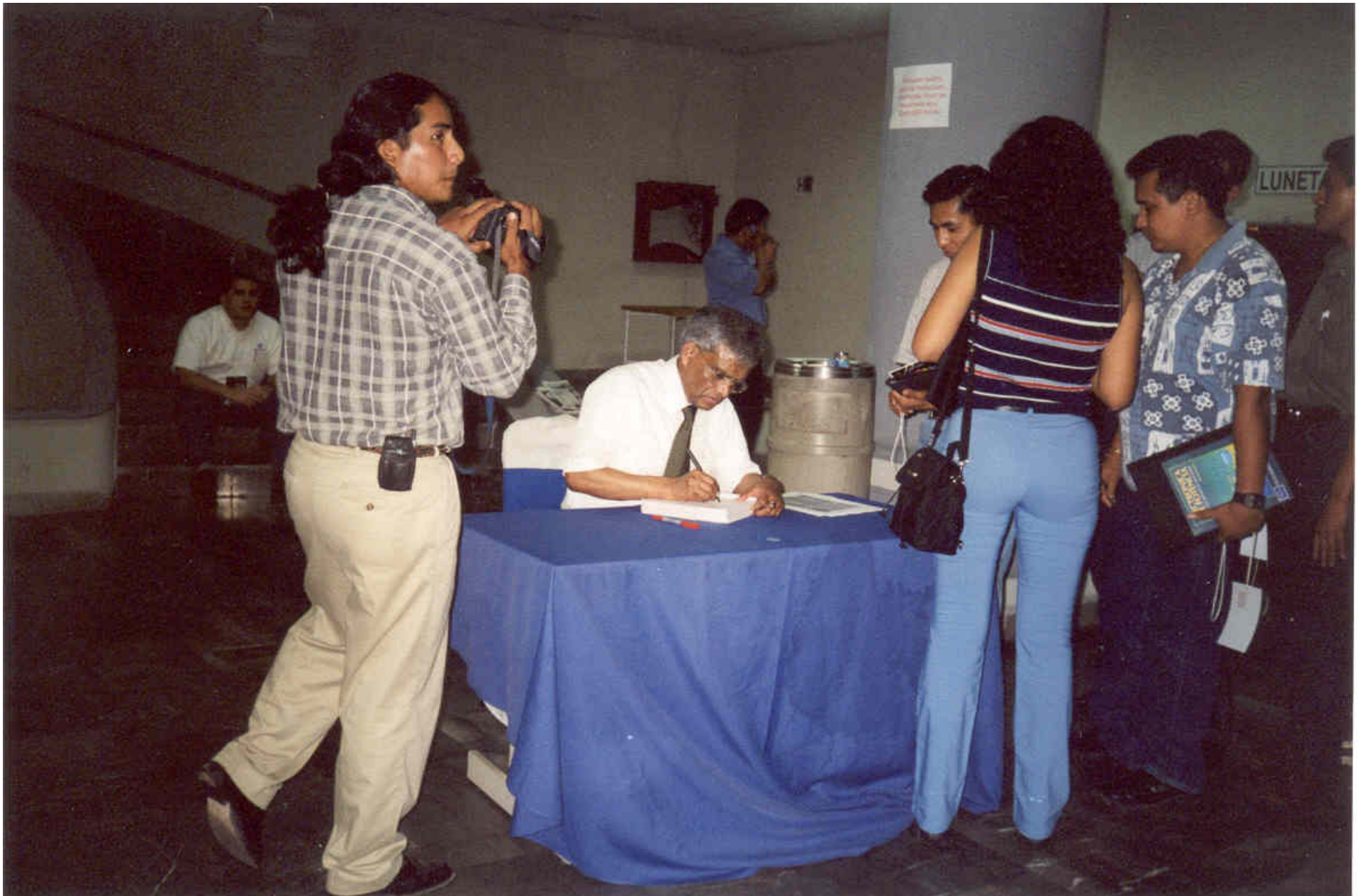
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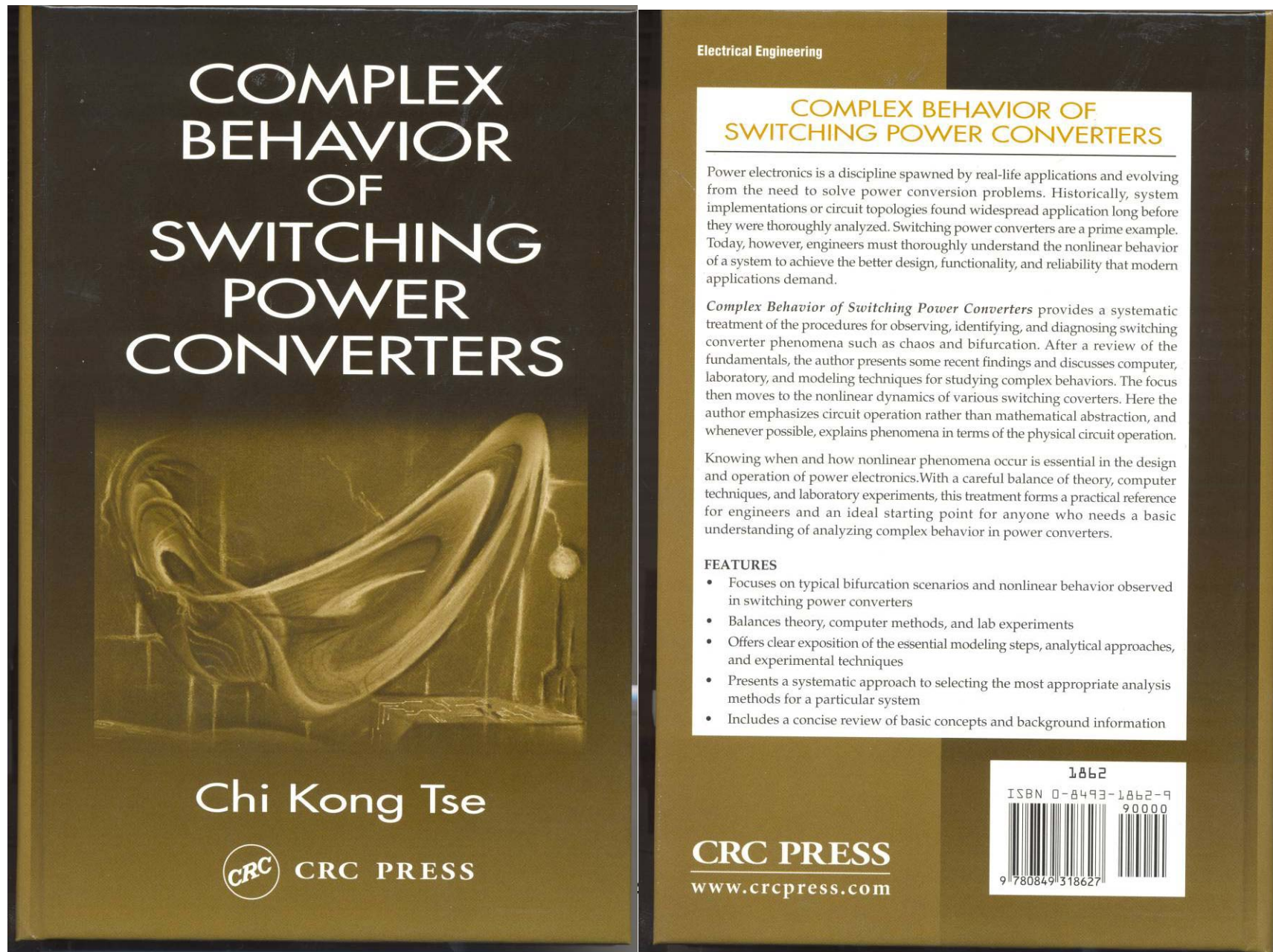
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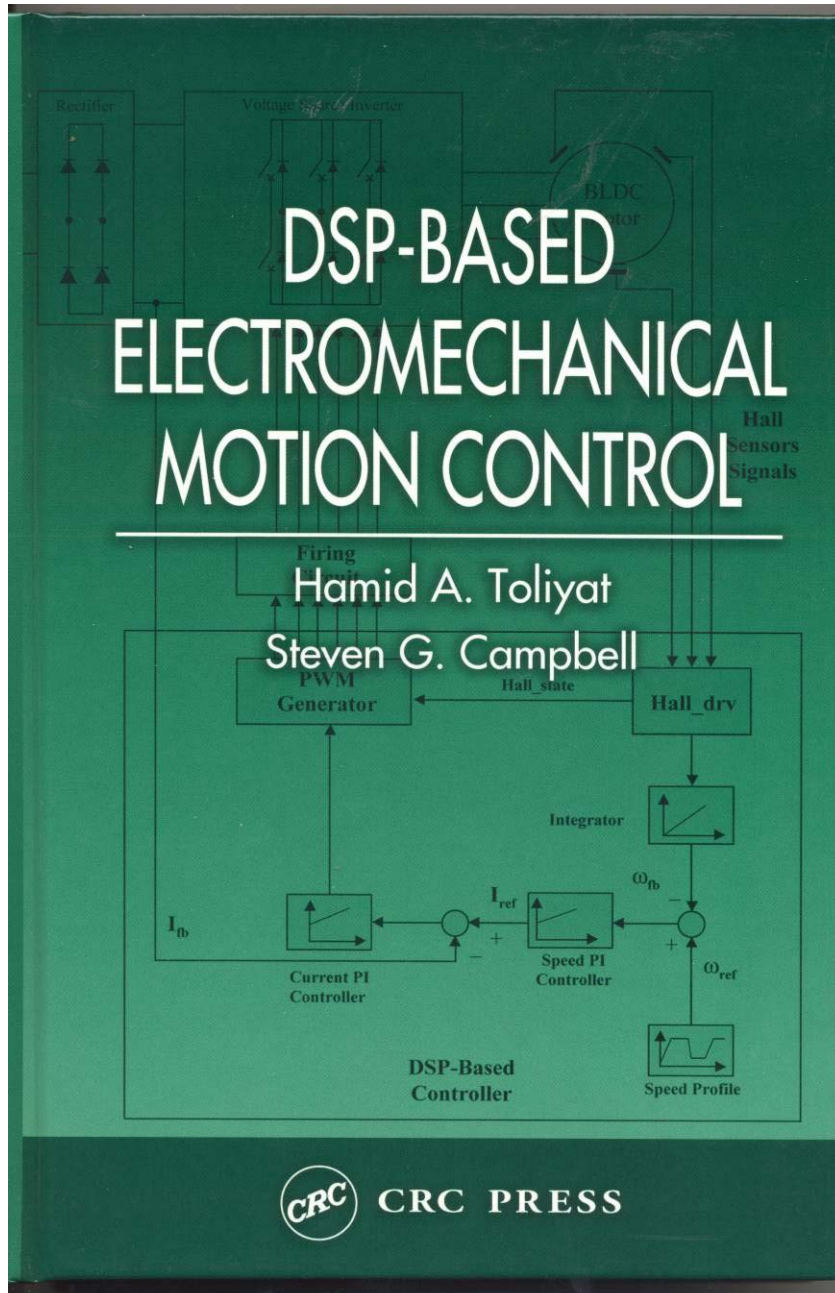
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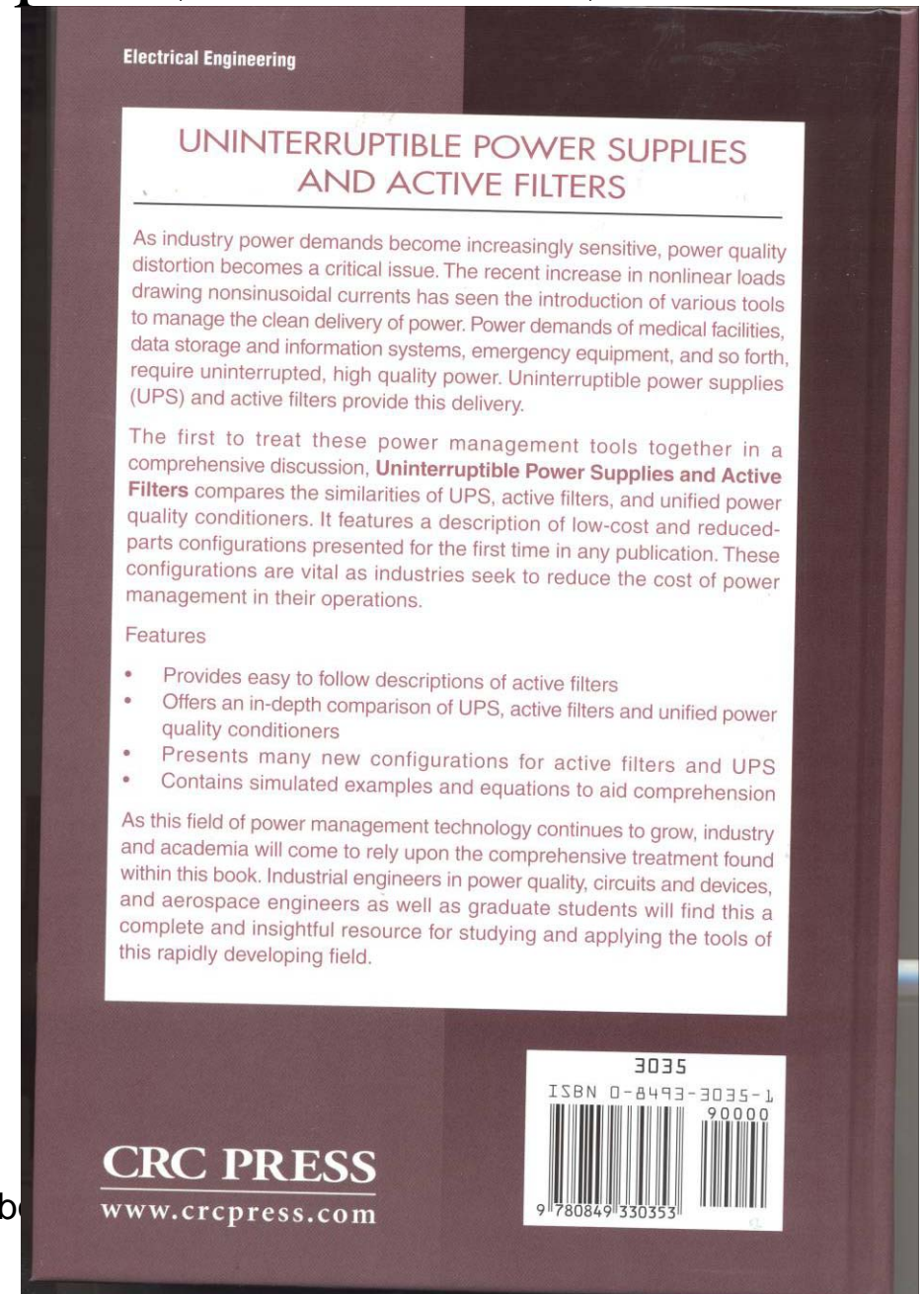
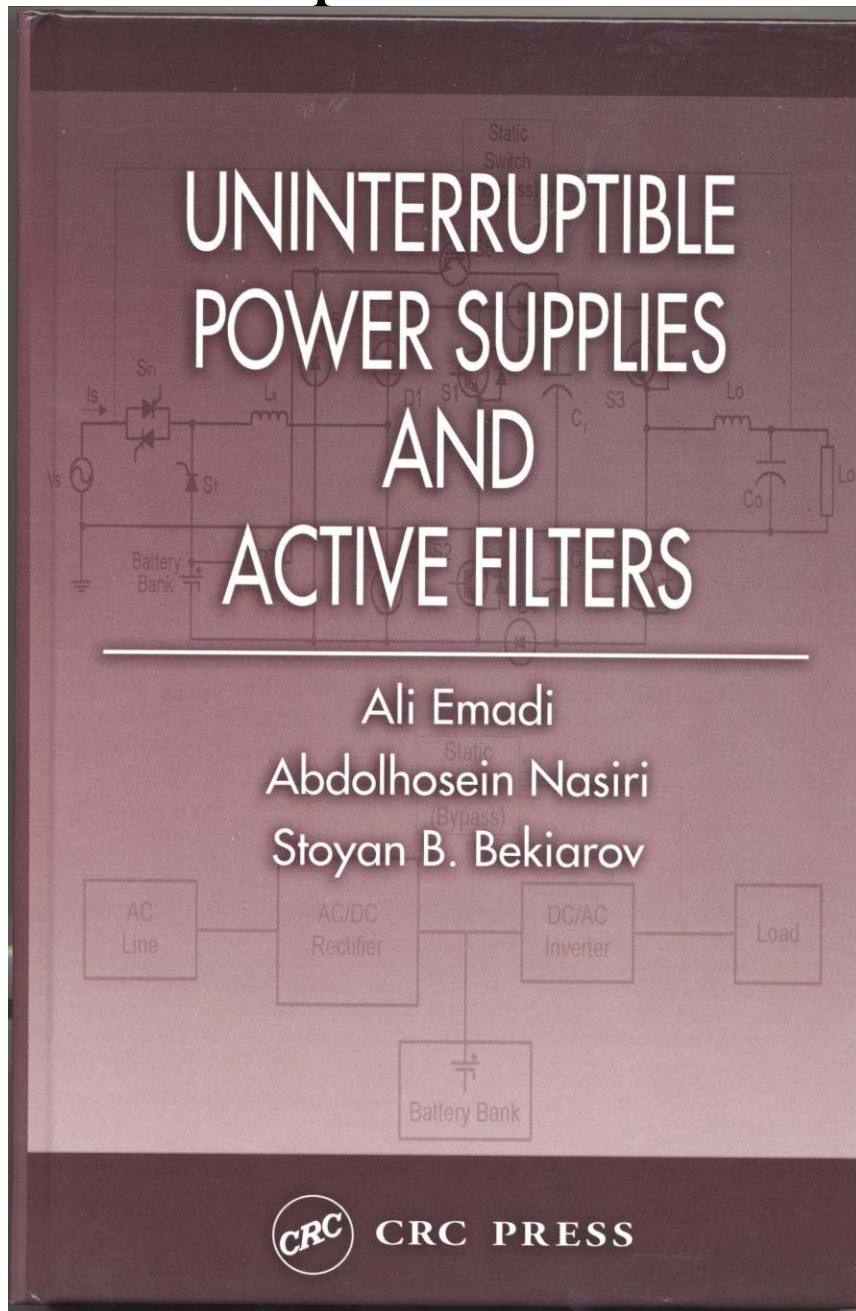
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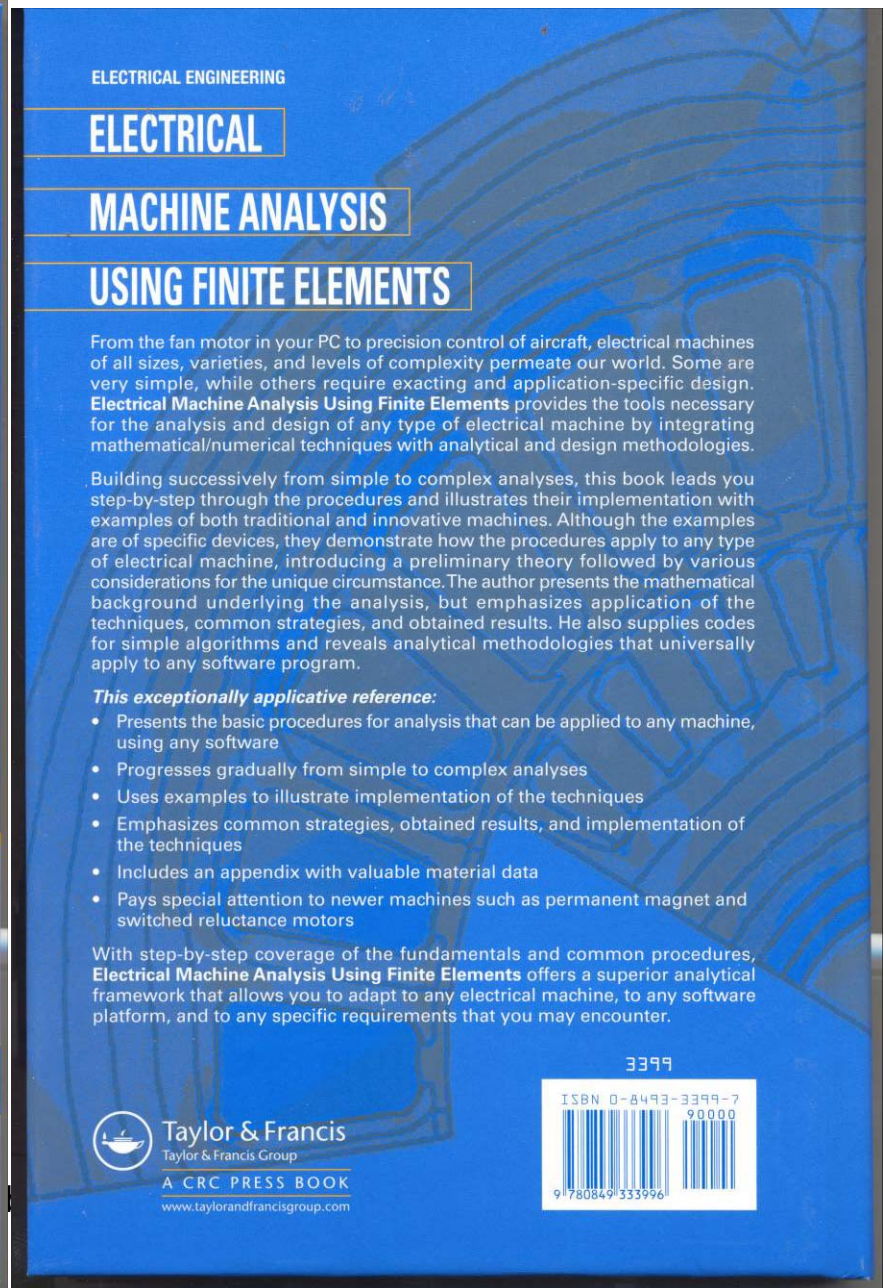
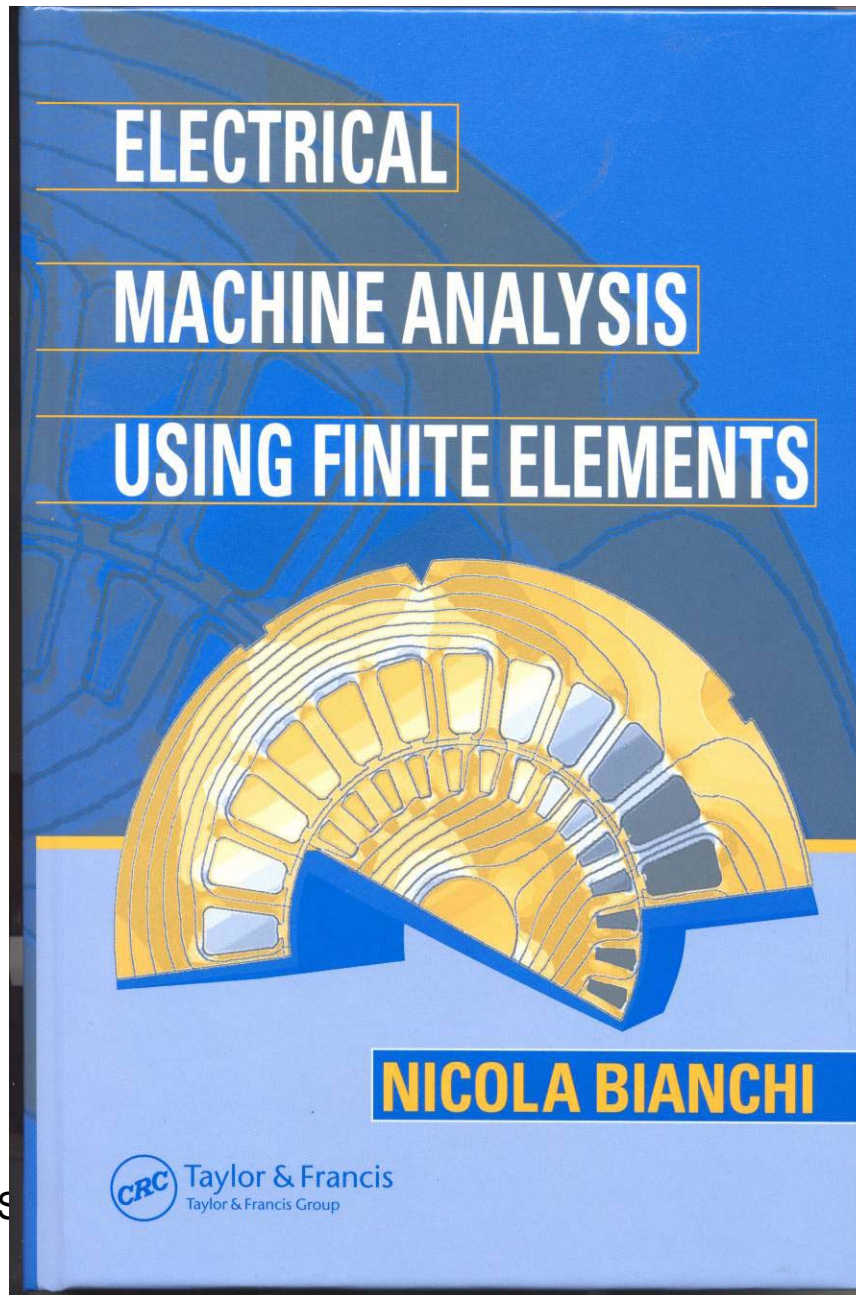
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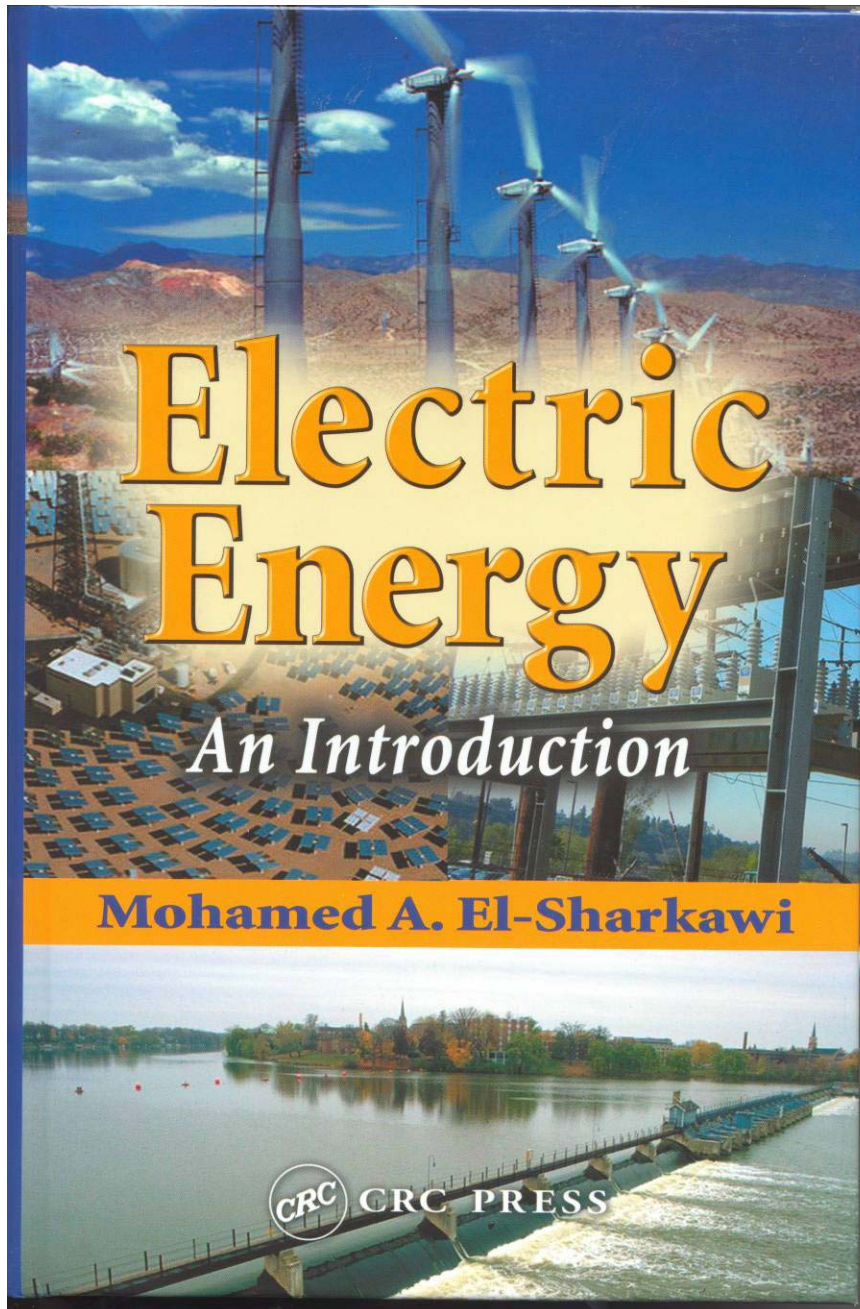
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Electric Energy, CRC Press, 2005



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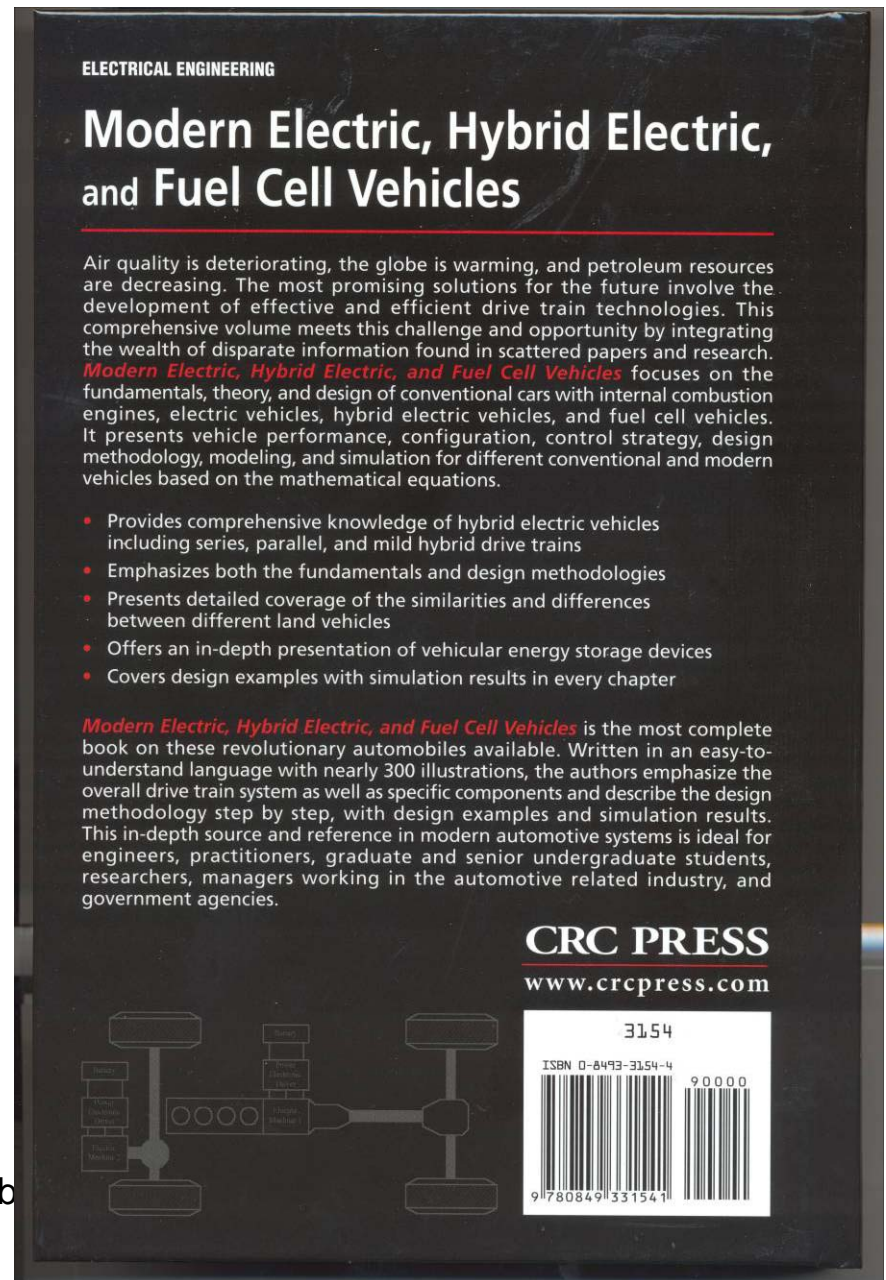
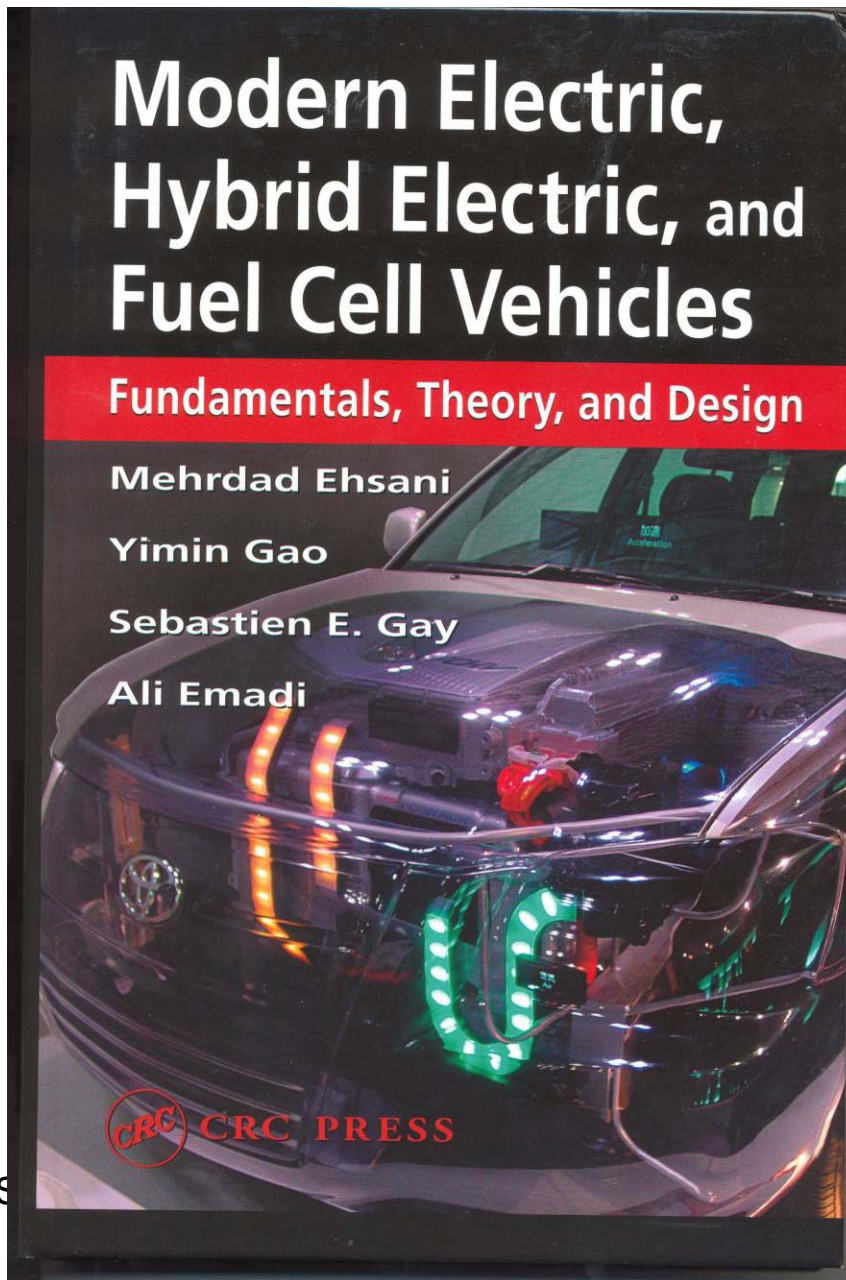
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