

PUBLICATIONS

Books

1. ENERGY; Concerns and Possibilities, Academia Press, 1997, ISBN: 0958716102.
2. Solar Photovoltaic Energy Systems; Design and Use, the New World Publishing, 1998, ISBN: 0646351826.
3. Fundamentals of Electrical and Electronic Design, the New World Publishing, ISBN: 0957707924. Third revised Edition was published in 2003.
4. The Engineering and Economics of Solar Photovoltaic Energy Systems; the New World Publishing, ISBN: 0957707932. First edition was published in 2003.

(As the solar photovoltaic energy is a relatively new field, there are not many books published in this area)

International refereed journal articles

5. F. K. Rault, A. Zahedi, "A probabilistic approach to determine radiative recombination lifetimes in quantum well solar cells." Elsevier Publications: Microelectronics Journal, 2003
6. F. K. Rault, A. Zahedi, "Computational modelling of the reflectivity of AlGaAs/GaAs and SiGe/Si Quantum Well Solar Cells." Elsevier Publications: Solar Energy Materials and Solar Cells Journal, 2003
7. Zahedi A, "Effects of non-technical factors on the electricity cost per kWh Photovoltaic", The Journal of the World Renewable Energy Network, Elsevier Science Ltd. 2002
8. Zahedi A, "A new approach for economic analysis of solar PV hybrid power systems", The Journal of the World Renewable Energy Network, Elsevier Science Ltd. 2002
9. F. K. Rault, A. Zahedi, "Computational Analysis of the Refractive Index of Multiple Quantum Wells for QWSC Applications." Elsevier Publications: Microelectronics Journal, Accepted in October 2002.
10. Zahedi A, Caliao Nolan, "Size Optimization of Photovoltaic /Battery System Based on Energy Balance", The Journal of the World Renewable Energy Network, Elsevier Science Ltd. 2000
11. Zahedi A, "Photovoltaic Hybrid Power Systems for Off-Grid Rural Electrification", The Journal of the World Renewable Energy Network, Elsevier Science Ltd. 2000
12. Zahedi A., "The bright future of photovoltaic energy" The Iranian Journal of Energy, Volume 3, Number 5, February 1999
13. Zahedi, A. "Development of an Electrical Model of a Hybrid Power System for Performance Prediction", International Journal of Renewable Energy, Elsevier Science, Volume/Issue: 15/1-4, pp 531-534, Sep.1998
14. Zahedi, A., Akhtar Kalam, "Development of an Appropriate Model For Transferring Renewable Energy Technology To Developing Countries", International Journal of Renewable Energy, Elsevier Science, Volume/Issue: 15-16/4004, pp 2433-2436, Sep.1998

15. Zahedi, A., Akhtar Kalam, "Education Of Renewable Energy And Environmental Technology At Undergraduate Level Of Engineering; (A Multi-Level, Multi-Media Program)", *International Journal of Renewable Energy*, Elsevier Science, Volume/Issue: 15-16/4004, pp 2437-2440, Sep.1998
16. Zahedi A. and Cosic I., "Power Lines and Health Problems" *The Journal of Australasian Physical and Engineering Science in medicine*, Volume 15, No. 2, April 1998
17. Zahedi A., "Electricity from the Sun, Today's applications of photovoltaic technology" *Technical journal of Electric Power Industry*, Issue 1998, Iran
18. Zahedi A. and Cosic I., "Power lines and Magnetic pollution; How safe are our residential areas against magnetic fields produced by power lines and electric appliances?, Do we need a new safety guidelines for magnetic fields?", *Technical journal of Electric Power Industry*, Issue 11/1997, Iran
19. Zahedi A. "Education of Renewable Energy Technology and Energy Efficiency at Undergraduate level of Electrical Engineering Courses" *Technical journal of Electric Power Industry*, Issue 14/1997, Iran
20. Zahedi A., "Transfer of renewable energy and environmental technology to developing countries" *The Journal of Canadian Solar Industry*, issue August/September 1997
21. Zahedi A. "Solar - battery powered nursing clinic for Australia's remote and isolated areas in WA, SA, QLD, NT and NSW " *International Journal of Renewable Energy; The latest international developments in renewable energy*, published by International Energy Agency (IEA) and Centre for the Analysis and Dissemination of Demonstrated Energy Technology (CADDET) in United Kingdom issue 3/1996.
22. Zahedi A. "Transfer of renewable energy and environmental technology to developing countries" *Solar Progress, The journal of Renewable energy for Australia*, volume 17, number 4, 1996.

This article was recognized by Association of Canadian Solar Industry as an excellent article and was republished in their solar energy journal.

23. Zahedi A. "Enhancing power engineering education through the use of computer aided instruction package " *Technical journal of Electric Power Industry*, Issue 8/1996, Iran

International and refereed conference papers

24. Lade, S. J., Zahedi A, "A Refined Ideal Model for AlGaAs/GaAs Quantum Well Solar Cells", *Proceedings of Australia and New Zealand Solar Energy Society (ANZSES) Conference*, Melbourne, Australia, November 2003
25. Rault, F. K., Zahedi A "Monash University' Ideal 25% Efficient Quantum well Solar Cell" ", *Proceedings of Australia and New Zealand Solar Energy Society (ANZSES) Conference*, Melbourne, Australia, November 2003
26. Zahedi A, "Development of a new computer program for generating universal data on daily sun position to be used by a sun tracking system", *Proceedings of Australia and New Zealand Solar Energy Society (ANZSES) Conference*, Melbourne, Australia, November 2003
27. Trojan, L., McPherson, E., Zahedi A, "Feedback Controlled Sun-Tracking Photovoltaic system", *Proceedings of Australia and New Zealand Solar Energy Society (ANZSES) Conference*, Melbourne, Australia, November 2003
28. Rault, F., Zahedi A. "Mon-Cell Designer: An interactive computer program for Quantum Well Solar designer", *Proceedings of Australia and New*

Zealand Solar Energy Society (ANZSES) Conference, Melbourne, Australia, November 2003

29. F. K. Rault, A. Zahedi, "A new approach based on the MSEO model to determine the refractive index of multiple quantum wells; with the presence of an electric field perpendicular to the well layers as an aid to QWSC designers." IEEE 29th Photovoltaic Specialist Conference (PVSC), New Orleans, USA, May 2002
30. F. K. Rault, A. Zahedi, "Computational analysis of the refractive index of various III-V compounds used to make quantum wells for QWSC applications." World Renewable Energy Congress (WREC) VII, Cologne, Germany, June 2002
31. F. K. Rault, A. Zahedi, "Analysis of the refractive index of AlGaAs/GaAs quantum wells, for QWSC design and applications." PV in Europe: From PV technology to Energy Solutions, Rome, Italy, October 2002
32. F. K. Rault, A. Zahedi, "Operating temperature effects on the refractive index of AlGaAs/GaAs Multiple quantum wells for a Quantum Well Solar Cell." PV in Europe: From PV technology to Energy Solutions, Rome, Italy, October 2002
33. F. K. Rault, A. Zahedi, "A review of growth techniques involved in Solar Cell manufacture." Australasian Universities Power Engineering Conference (AUPEC), Melbourne, Australia, September 2002. F. K. Rault, A. Zahedi, "Effects of design parameters on photo-carrier recombination lifetimes in N-type and P-type alloys intended for QWSC design." Australia and New Zealand Solar Energy Society (ANZSES) Solar Harvest Conference, Newcastle, Australia, November 2002
34. H Askarian, H Kazemi, A. Zahedi, "Constrains reduction of the optimal coordination of over-current relays" Australasian Universities Power Engineering Conference (AUPEC), Melbourne, Australia, September 2002
35. H Kazemi, H Askarian, A. Zahedi, "Impacts of wind turbines on the optimal coordination of over-currents relays" Australasian Universities Power Engineering Conference (AUPEC), Melbourne, Australia, September 2002
36. H Kazemi, A. Zahedi, "Wind and solar energy developments in Iran" Australasian Universities Power Engineering Conference (AUPEC), Melbourne, Australia, September 2002
37. Zahedi A, "Electricity transmission line easement is a safety matter, Can we ignore it?" Proceedings of the IEEE engineering in medicine and biology society, February 19-20, 2001, Monash University.
38. Zahedi A, "A new approach to estimating the size of components in the solar PV systems" Proceedings of the 2001 Solar World Congress, 25 – 30 November 2001, Adelaide, Australia.
39. Zahedi A, Akhtar-Kalam, "Balancing Cost and Performance in a PV/Wind/Battery Hybrid Power System", Proceedings of the AUPEC-2000 Conference, 24-27 September 2000, Queensland, Brisbane at QUT
40. Zahedi A, Akhtar-Kalam, "Important Role of Government in Developing Renewable Energy in Australia", Proceedings of the AUPEC-2000 Conference, 24-27 September 2000, Queensland, Brisbane at QUT
41. Zahedi A, Caliao Nolan, "Statistic Modeling of Radiation and Wind Speed for PV/Wind Hybrid Power System" Proceedings of the SOLAR-2000 Conference, 28 Nov. – 1 Dec. 2000, Queensland, Brisbane at Griffith University
42. Zahedi A, "Solar PV-Powered Health Clinic, Size Optimization, Cost calculation, performance Prediction" Proceedings of the SOLAR-2000 Conference, 28 Nov. – 1 Dec. 2000, Queensland, Brisbane at Griffith University.
43. Zahedi A., I. Cosic "New assessment of health problems associated with electromagnetic fields of power line frequencies" Proceeding of the

Inaugural conference of the Victorian chapter of the IEEE engineering in medicine and biology society, Melbourne, February 22-23, 1999.

44. Zahedi A., "Major issues relating to energy" Proceedings of the 2nd Iranian Energy Congress, May 15-17, 1999.
45. Zahedi A, Made Budiada "Design aspects of a solar PV energy system for remote and isolated area" Proceedings of the 2nd Iranian Energy Congress, May 15-17, 1999
46. Zahedi A., "Renewable energy development and prospects in Australia" Proceedings of the World Renewable Energy Congress, Kuala Lumpur, June 8-11, 1999, Malaysia
47. Zahedi A, Made Budiada "Autonomous hybrid solar/diesel energy system with battery storage for rural electrification in Australia, Reality and vision", Proceedings of the Solar1999 Conference, 1-4 December 1999, Geelong, Victoria, Australia
48. Zahedi A, Richard Gray "Renewable Sources of Energy and Public Awareness", Proceedings of the Solar1999 Conference, 1-4 December 1999, Geelong, Victoria, Australia
49. Zahedi A, Nolan Caliao "Renewable Energy Development in the Philippines", Proceedings of the Solar1999 Conference, 1-4 December 1999, Geelong, Victoria, Australia
50. Zahedi A, Made Budiada "Autonomous hybrid solar/diesel energy system with battery storage for rural electrification in Australia, Reality and vision", Proceedings of the Solar1999 Conference, 1-4 December 1999, Geelong, Victoria, Australia
51. Zahedi A, "An excursion into solar PV energy", Proceedings of the PSC1999 Conference, 1-3 November 1999, Teheran, Iran
52. Zahedi A, Made Budiada "Design of a PV-wind hybrid UPS power system", Proceedings of the 1999 Power and Energy Systems Conference, 8-10 November, Las Vegas Nevada, USA
53. Zahedi A, Akhtar Kalam "Utilities role in developing renewable energy in Australia", Proceedings of the AUPEC-1999 Conference, 26-29 September 1999, Darwin NT, Australia
54. "Zahedi A, Made Budiada "Computer simulation of a power system consisting of load, PV modules and battery bank for the purpose of accurate sizing of the system components and performance prediction", Proceedings of the PVSEC-11 Conference, 20-24 September 1999, Sapporo, Japan
55. Zahedi A., "Australia's prospect of renewable energy" Proceedings of Australasian Universities Power Engineering Conference AUPEC'98, Hobart, Tasmania ., 27-30 September, 1998, Vol. 2, pp671-675
56. Zahedi A., "Barriers hindering the market development of PV technology" Proceedings of the 36th Annual Conference of the Australian and New Zealand Solar Energy Society, Christchurch, NZ, 25-27 November 1998, pp 415-419.
57. Zahedi A., "How promising is the future of the photovoltaic market?" Proceedings of the 36th Annual Conference of the Australian and New Zealand Solar Energy Society, Christchurch, NZ, 25-27 November 1998, pp 420-425.
58. Zahedi A., I Budiada "Optimization of the size of PV array and battery in a hybrid power system for supplying electricity in remote areas" Proceedings of the 36th Annual Conference of the Australian and New Zealand Solar Energy Society, Christchurch, NZ, 25-27 November 1998, pp 476-480.
59. Zahedi A., RJ Tao " Developing a mathematical model which represents magnetic field density around power lines" Proceedings of the 2nd international conference on Bio-electromagnetism, Melbourne, Vic., 15-18 February 1998, pp 163-164.

60. Zahedi A., "Renewable energy education at undergraduate level of engineering schools", *Proceedings of the 2nd ASEAN Renewable Energy conference*, Thailand, 1997
61. Zahedi A., "Development of computer program to predict performance of hybrid power systems", *Proceedings of the 2nd ASEAN Renewable Energy conference*, Thailand, 1997
62. Zahedi A., "Total renewable energy based electricity supply system", *Proceedings of the 2nd ASEAN Renewable Energy conference*, Thailand, 1997
63. Zahedi A., "Combination of renewable energy and energy storage system to provide a reliable power supply for remote and isolated areas", *Proceedings of the International conference on Advances in power system control, operation and management*, APSCOM'97, IEEE and IEE Hong Kong section, 1997
64. Zahedi A. and Tao RJ, "Modeling of electromagnetic fields around high voltage transmission lines" *Proceedings of Physics, Engineering, Radiation, Medicine, PERM-IT'97 conference*, Adelaide 1997
65. Zahedi A., Kwan R. and Choo L., "Development of a computer program to predict the performance of the hybrid power systems", *Proceedings of the 32nd Intersociety Energy Conversion Engineering Conference*, USA, 1997
66. Zahedi A., "Entirely renewable energy based energy supply systems, small scale" *Proceedings of the 32nd Intersociety Energy Conversion Engineering Conference*, USA, 1997
67. Zahedi A., "Solar - battery power supply; A reliable power supply system for nursing clinics in Australia's remote areas", *Proceedings of the 32nd Intersociety Energy Conversion Engineering Conference*, USA, 1997
68. Zahedi A., "Education of renewable energy and environmental technology: Development of a multi-level learning program", *Proceedings of 1997 IEEE International conference on systems, man, and cybernetics*, Orlando, 1997
69. Zahedi A., "Computer aided learning of power system analysis and design under multimedia environment", *Proceedings of 1997 IEEE International conference on systems, man, and cybernetics*, Orlando, 1997
70. Zahedi A. "Use of multimedia environment for flexible delivery and enhance of teaching power engineering subjects", *Proceedings of the 12th International Power System Conference, PSC97*, Teheran Iran
71. Zahedi A. "Teaching renewable energy and environmental technology under multimedia environment in electrical engineering course", *Proceedings of the 12th International Power System Conference, PSC97*, Teheran Iran
72. Zahedi A. "Interaction between renewable source of energy, storage device and load in a mini grid system", *Proceedings of the 12th International Power System Conference, PSC97*, Teheran Iran
73. Zahedi A. Tao RJ. "Development of a numerical model of electromagnetic fields around high voltage transmission lines", *Proceedings of the 12th International Power System Conference, PSC97*, Teheran Iran
74. Zahedi A., "Introducing a renewable energy technology subject in undergraduate engineering curriculum", *Proceeding of Solar'97 conference*, Canberra, 1997
75. Zahedi A., "Development of an electrical model for a solar battery power system", *Proceeding of Solar'97 conference*, Canberra, 1997
76. Zahedi A., "Using multimedia for teaching power system analysis and design" *Proceedings of 9th Annual convention and conference of Australasian Association for Engineering Education*, The University of Balart, Australia, 1997
77. Zahedi A. "Entirely Renewable Energy Based Electricity Supply System (Small Scale & Large Scale)" *Proceedings of the World Renewable Energy Congress IV*, Denver, Colorado, USA, June 1996.

78. Zahedi A. Voumard, P. "Computer based learning of power flow analysis and design, a learning model for undergraduate power engineering classes", *Proceedings of the MME'1996*, University of Melbourne, Australia.
79. Zahedi A. "Power System Analysis and Design using Personal Computer" *Proceedings of the 1996 AUPEC Conference*, University of Melbourne, Australia.
80. Zahedi A. "Performance Analysis of the Solar/Battery Powered Health Clinic for Australia's remote areas". *Proceedings of the 1996 AUPEC Conference*, University of Melbourne, Australia.
81. Zahedi A. "Performance Analysis of an Integrated Renewable Energy and Energy Storage System". *Proceedings of the 11th International Power System Conference, PSC96*, Teheran Iran.
82. Zahedi A. "Power fluctuation compensation in the case of renewable power supply connected to a weak network" *Proceedings of the 11th International Power System Conference, PSC96*, Teheran Iran.
83. Zahedi A. "Renewable Energy-Based Electricity Supply System, A Sustainable Energy Supply for Remote Areas", *Proceedings of the Solar'96*, 22-25 October 1996, Darwin, Australia.
84. Zahedi A. "Investigation of the Performance of the Photovoltaic/Battery Health Clinic for Remote Areas", *Proceedings of the Solar'96*, 22-25 October 1996, Darwin, Australia.
85. Cosic, I Zahedi A., "Low Frequency Magnetic Fields and Health Problems", *Proceedings of the Engineering and Physical Science in Medicine & Health Conference 1996 - EPSMH'96*, Canberra.
86. Zahedi A. "An Interactive Computer Aided Package for Power Engineering Education", *Proceedings of the AAE Conference December 1996*, Sydney.
87. Zahedi, A. "Technical problems in relation to an entirely renewable energy-based electricity supply system", *Proceedings of the International Symposium on Electric Power Engineering, Stockholm Power Tech*, , Sweden, 1995.
88. Zahedi, A. and Voumard, P. "Computer aided instruction of power system analysis and design for electrical engineering courses", *Proceedings of the International Congress of Engineering Deans and Industry Leaders*, Monash University, Melbourne, 1995.
89. Zahedi, A. and Voumard P. "Computer aided instruction in power system analysis for undergraduate power engineering classes" *Proceedings of the Pacific Region Conference on Electrical Engineering Education, PRCEEE conference*, 1995.
90. Zahedi, A. and Voumard, P. "Computer aided instruction of load flow analysis in the undergraduate power engineering classes at Monash University" *Proceedings of the IEEE International Conference on Systems, Man and Cybernetics*, Vancouver, Canada, 1995.
91. Zahedi A. "Hybrid storage system for an integrated renewable energy and energy storage system", *Proceedings of the 10th International Power System Conference, PSC95*, Teheran Iran.
92. Zahedi A. "Incineration plant, An appropriate waste to energy technology for Australia", *Proceedings of the Australasia Universities Power and Control Engineering Conference, AUPEC'95*, western Australia.
93. Zahedi A. "Experiences in integration of research projects into electrical engineering education in Germany", *Proceedings of the Australasia Universities Power and Control Engineering Conference, AUPEC'95*, Western Australia.
94. Zahedi A. "Alternative Sources of Energy in Australia, the Potential Sources for Electricity Generation", *EECON'95*, South Australia.

95. Zahedi A. "Development of an integrated system to improve the performance of grid connected renewable energy", *Proceedings of the EECON'95*, South Australia.
96. Zahedi A. "Research Association, link provider between engineering schools and industry", *Review of Engineering Education*, IEAust. May 1995.
97. Zahedi, A. "Conversion of stand-by-generator facilities to combined heat and power unit" *Proceedings of the IEEE/IAS'94 Conference*, Orange County/USA.
98. Zahedi, A. "Leakage current monitoring of uhv surge arresters in the presence of dry band using recently developed model" *Proceedings of the IEEE/ICPADM'94 Conference*, Brisbane.
99. Zahedi, A. "Waste disposal and energy recovery" Submission to the standing committee on Environment, Recreation and the Arts, Australian Senate in Canberra, 1994.
100. Zahedi, A. "Technical Aspects of Converting stand-by-generator facilities to combined heat and power unit", *Proceedings of the 1994 IEEE International Conference on Systems Man Cybernetic*, Texas/USA.
101. Zahedi, A. "Energy, People, Environment Integrated Renewable Energy and Energy Storage System" *Proceedings of the 1994 IEEE International Conference on Systems Man Cybernetic*, Texas/USA.
102. Zahedi, A. "Investigation of Feasibility of Establishing Waste to Energy Facilities in Australia" 1994 *Proceedings of the 1994 IEEE International Conference on Systems Man Cybernetic*, Texas/USA.
103. Zahedi, A. "Combined Heat and Power from Stand by Facilities", *Proceedings of the IEEE/PES, Athens Power Tech. conference, 1993* Greece.
104. Zahedi, A. "Performance of uhv Surge Arresters in the presence of Dry Bands", *Proceedings of the IEEE/North American Power Symposium*, Oct. 1993, USA.
105. Zahedi, A. "Efficient Energy Generation and Usage" *Proceedings of the IEEE/ISEDEM'93 International Symposium on Electricity Demand and Energy Management*, Singapore.
106. Zahedi, A. "Damages to uhv Surge Arresters due to dry band", *Proceedings of the Australasia Universities Power and Control Engineering Conference*, AUPEC'93, Wollongong.
107. Zahedi, A. "Environmental Acceptable Power Generation - Power People Environment" *Proceedings of the 9th Conference on Electric Power Supply Industry*, CEPsi'92, Hong Kong.
108. Zahedi, A. "Dry band formation and its effect on performance of uhv Surge Arresters", *Proceedings of the Australasia Universities Power and Control Engineering conference*, AUPCEC'92, Brisbane.
109. Zahedi, A. "Dry band formation and its effect on performance of uhv Surge Arresters using new developed model for Surge Arrester" *Proceedings of the 7th International Power System Conference, PSC'92*, Tehran, Iran.
110. Zahedi, A. "Environmental Acceptable Power Generation - Better utilization of Fuel" *Proceedings of the 7th International Power System Conference, PSC'92*, Tehran, Iran.
111. Zahedi, A. "Computer Simulation of Surge Arrester and Design Criteria - Performance Improvement", *Proceedings of the Australasia Universities Power and Control Engineering Conference*, AUPCEC'91, Melbourne.
112. Zahedi, A. "Performance of uhv Metal-Oxide Surge Arrester under highly polluted conditions" *Proceedings of International Symposium on Electricity Demand and Energy Management* Oct. 91, IEEE/ISEDEM Singapore.
113. Zahedi, A. "Specification and testing of uhv Metal-Oxide Surge Arrester for operation in highly polluted conditions", *Proceedings of the Pacific*

Region Conference on Electrical Engineering Education, Dec. 1990, Phillip Island .Vic.

Extract Papers

114. Zahedi A. "Renewable Energy-Based Electricity Supply System, A Sustainable Energy Supply for Remote Areas", Solar Progress the Journal of Renewable Energy in Australia.
115. Zahedi A. "Investigation of the Performance of the Photovoltaic/Battery Health Clinic for Remote Areas", Solar Progress the Journal of Renewable Energy in Australia.
116. Zahedi A. and Cosic I. "Low Frequency Magnetic Fields and Health Problems" Engineering and Physical Science in Medicine & Health Conference 1996 - EPSMH'96, Canberra.

Technical Reports

117. Zahedi A. "Disposal of waste and energy recovery using incineration plants", Monash University, Caulfield Campus. ISSN: 1326 - 5989, ISBN: 0 7326 1017 6.
118. Zahedi A. "Energy from the Sun, Today's Application of Photovoltaic Technology" Monash University, Caulfield Campus. ISSN: 1326 - 5989, ISBN: 0 7326 1020 6.