

# Prof. Dr.-Ing. Sümer Şahin



## CURRICULUM VITAE (1 April 2018)

### PERSONAL DATA

Name: Sümer Şahin

Present Position: Professor of Mechanical and Nuclear Engineering

Nationality: Turkish

Town of origin: Erdemli, Mersin, TÜRKİYE

Birth date and place: 9 June 1942, Kadirli, Osmaniye, TÜRKİYE

Marital Status: Married, 2 children

#### Residence:

ORAN, ANKARA 06450, TÜRKİYE

Phone: +90-312-4906309, Mobil +90-542-6337768

#### Business address:

Bahçeşehir University

Faculty of Engineering and Natural Sciences

Department of Energy Systems Engineering

Beşiktaş, İstanbul, TÜRKİYE

E - Mails: [sumer.sahin@eng.bau.edu.tr](mailto:sumer.sahin@eng.bau.edu.tr); [sumer.sahin@neu.edu.tr](mailto:sumer.sahin@neu.edu.tr); [sumer@gazi.edu.tr](mailto:sumer@gazi.edu.tr); [sumersahin@yahoo.com](mailto:sumersahin@yahoo.com);

[sumersahin@hotmail.com](mailto:sumersahin@hotmail.com); [prof.dr.sumersahin@gmail.com](mailto:prof.dr.sumersahin@gmail.com); [sumer.sahin@atilim.edu.tr](mailto:sumer.sahin@atilim.edu.tr)

<https://neu.edu.tr/wp-content/uploads/2018/01/25/sumer-sahin-eng-cv-24.01.2018.pdf>

<https://neu.edu.tr/academic/faculties/faculty-of-engineering/academic-staff/prof-dr-sumer-sahin/>

<https://neu.edu.tr/akademik/fakulteler/muhendislik-fakultesi/akademik-kadro/prof-dr-sumer-sahin/?lang=tr>

<https://scholar.google.com.tr/citations?user=7YKnrQkAAAJ&hl=en&authuser=1>

<http://w3.gazi.edu.tr/~sumer/index2.htm>

### FOREIGN LANGUAGES

- English(fluent)
- French (fluent)
- German (fluent)

### ACADEMIC DEGREES

- 1981: Promotion to a **Full Professor in Nuclear Engineering**, University of Ege, İzmir, Türkiye
- 1973: **Habilitation (Doçent-Dozent) in Physics**, University of Ankara, Ankara, Türkiye
- 1970: **Doktor-Ingenieur (PhD) in Mechanical Engineering**, University of Stuttgart, Stuttgart, Germany
- 1967: **Diplom-Ingenieur (MS) in Mechanical Engineering**, University of Stuttgart, Stuttgart, Germany

## ACADEMIC POSITIONS

- February 2018-presently: **Adjoint Professor**, Bahçeşehir University, Faculty of Engineering and Natural Sciences, Beşiktaş, İstanbul, TÜRKİYE
- August 2016 – February 2018: **Professor and Dean**, Faculty of Engineering, Near East University, Lefkoşa, Turkish Republic of Northern Cyprus
- December 2009 – July 2016: **Professor and Chairman**, Department of Mechanical Engineering, Faculty of Engineering, ATILIM University, Ankara, Türkiye.
- March 1988 – June 2009: **Professor**, Faculty of Technology, Gazi University, Ankara, Türkiye
- June 1984 - March 1988: **Professor**, Department of Mechanical Engineering, Faculty of Engineering, Erciyes University, Kayseri, Türkiye
- 1983 - 1986: **Professor**, Department of Electrical Engineering, College of Engineering, King Saud University, Riyadh, Saudi Arabia
- 1978 - 1983: **Advanced Research Scientist**, Institut de Génie Atomique, Department of Physics, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland
- 1974 - 1980: **Associate Professor**, Faculty of Engineering Sciences, University of Ege, İzmir, Türkiye.
- 1970 - 1974: **Assistant Professor and after 1973 Associate Professor**, Faculty of Mechanical and Electrical Engineering, Karadeniz Technical University, Trabzon, Türkiye

## FOREIGN EXPERIENCES

- 1960 – 1961: Iserlohn, Germany (Goethe Institute + industrial practice)
- 1961 – 1970: University of Stuttgart, Stuttgart, Germany (BS, MS, PhD in mechanical engineering)
- 1972 – 1973: Radiation Shielding Information Center, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA (Post doctoral NATO fellow)
- 1978 - 1983: Institut de Génie Atomique, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland (Faculty)
- 1983 - 1986: College of Engineering, King Saud University, Riyadh, Saudi Arabia (Professor)
- Summer 1984 and Summer 1985: National Tsing-Hua University, Hsinchu, Republic of China (Visiting Professor)
- Summer 1993: Space Exploration Associates, Cedarville, Ohio 45314, USA (Visiting scientist)
- February 1997: Universität Innsbruck, Institut für theoretische Physik, Austria (Guest professor)
- Summer 2003: CERN, European Nuclear Research Center, Geneva, Switzerland (Visiting scientist)
- Summer 2004: Radiation Shielding Information Center, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA (Visiting scientist)
- Summer 2006: General Atomics, San Diego, CA, USA (Visiting scientist)

## PRINCIPAL COURSES TAUGHT

Nuclear Engineering, Reactor Physics, Modern Physics,  
Heat Transfer, Thermodynamics, Radiation Safety,  
Physical Aspects of the Energy Production, Nuclear Reactor Design,  
Fusion Technology, Heat Pipes

- Advising ~ 20 Master Thesis and ~ 20 Doctoral Dissertations

These courses were taught in the following Universities:

- ATILIM University, Ankara, Türkiye
- Gazi University, Ankara, Türkiye
- Erciyes University, Kayseri, Türkiye
- King Saud University, Riyadh, Saudi Arabia
- Ecole Polytechnique Fédérale de Lausanne, Switzerland
- Faculty of Engineering, University of Ege, İzmir, Türkiye
- Karadeniz Technical University, Trabzon, Türkiye

## PRINCIPAL AREAS OF EXPERTISE

- Neutron Transport Theory
- Nuclear Radiation Shielding
- Thermionic Space Craft Reactors
- Space Craft Nuclear Propulsion
- Fusion Technology
- Fusion Fission (Hybrid) Reactors
- Nuclear Waste Transmutation
- CANDU Reactors
- Accelerator Driven Systems
- Concentrated Solar Power

## LEADING RESPONSIBILITIES

- HONORARY CHAIRMAN, NURER2018, The 6<sup>th</sup> International Conference on Nuclear and Renewable Energy Resources, Jeju, Korea (30 September – 03 October 2018) <http://nurer2018.org/>
- August 2016-January 2018: DEAN, Faculty of Engineering, Near East University, Turkish Republic of NorthernCyprus
- 2016-presently:ACADEMIC MEMBER, ATINER, Athens Institute for Education and Research
- HONORARY CHAIRMAN, **ICENES 2017**, 18<sup>th</sup> International Conference on Emerging Nuclear Energy Systems, Hefei, Anhui, China (24-27 April 2017) <http://icenes2017.org/dct/page/1>
- HONORARY CHAIRMAN, NURER2016, The 5<sup>th</sup> International Conference on Nuclear and Renewable Energy Resources, Hefei, Anhui, China (18-21 September 2016) <http://nurer2016.org.cn/>
- 2015-presently: PRESIDENT of ICENES, International Conference on Emerging Nuclear Energy Systems series
- Dec. 2009 – Oct. 2015: CHAIRMAN, Department of Mechanical Engineering,ATILIM University, Faculty of Engineering
- HONORARY CHAIRMAN, **ICENES 2015**, 17<sup>th</sup> International Conference on Emerging Nuclear Energy Systems, İstanbul, Türkiye (4-8 October 2015) <http://www.icenes2015.org/index.php>
- HONORARY CHAIRMAN, NURER2014, The 4<sup>th</sup> International Conference on Nuclear and Renewable Energy Resources, Antalya, Türkiye (18-23 October 2014) <http://nurer2014.org/>
- 2013-presently: HONORARY EDITORIAL BOARD, International Journal of Hydrogen Energy <http://www.journals.elsevier.com/international-journal-of-hydrogen-energy/editorial-board/>
- HONORARY CHAIRMAN, NURER2012, The III. International Conference on Nuclear and Renewable Energy Resources, İstanbul, Türkiye (20-23<sup>rd</sup> May 2012) <http://www.nurer.org/>
- 2011: GENERAL CHAIRMAN, SET2011, 10<sup>th</sup> International Conference on Sustainable Energy Technologies, İstanbul, Türkiye (4-7<sup>th</sup> September 2011)
- 2009 –October 2015: CHAIRMAN, Department of Mechanical Engineering, Faculty of Engineering, ATILIM University, Ankara, Türkiye
- 2007: CHAIRMAN, **ICENES 2007**, 13<sup>th</sup> International Conference on Emerging Nuclear Energy Systems,İstanbul – Türkiye (3 – 8 June 2007) <http://www.icenes2007.org/>

- 2004–Presently: EDITORIAL BOARD, Journal “Energy Conversion&Management”, <http://www.sciencedirect.com/science/journal/01968904/110>; [http://ac.els-cdn.com/S0196890416000078/1-s2.0-S0196890416000078-main.pdf?\\_tid=22ef3076-c4fa-11e5-bbe7-00000aacb361&acdnat=1453901611\\_0a351ed203cf31db9caf28c365699076](http://ac.els-cdn.com/S0196890416000078/1-s2.0-S0196890416000078-main.pdf?_tid=22ef3076-c4fa-11e5-bbe7-00000aacb361&acdnat=1453901611_0a351ed203cf31db9caf28c365699076)
- 1997: GUEST PROFESSOR, Universität Innsbruck, Institut für theoretische Physik, Innsbruck, Austria
- 1989-1990: DIRECTOR (GRADUATE DEAN), Institute of Science and Technology, Gazi University, Ankara, Türkiye
- Febr. 1987- Jan. 1988: PRESIDENT, Turkish Scientific and Technical Research Council of (TÜBİTAK)ANKARA, Türkiye [http://www.tubitak.gov.tr/tubitak\\_content\\_files//ozgecmis/SumerSahin.pdf](http://www.tubitak.gov.tr/tubitak_content_files//ozgecmis/SumerSahin.pdf)
- 1987-1989: VICE-CHAIRMAN, Intergovernmental Committee on Science and Technology for Development, United Nations, New York, USA
- 1985-1987: DEAN, Faculty of Engineering, Erciyes University, Kayseri, Türkiye
- 1972-1974: CHAIRMAN, Department of Mechanical Engineering, Karadeniz Technical University, Trabzon, Türkiye

### **OTHER RESPONSIBILITIES & COMMUNITY SERVICES**

1987 - 1988: Chairman, Special Commission for the Mainframe Planning of Scientific Research and Technology of Türkiye State Planning Organization, Ankara, Türkiye

1980: Scientific Secretary of the Second International Conference on Emerging Nuclear Energy Systems, Lausanne, Switzerland

### **PROJECTS**

2006–2007: Leader of the project “Utilization of Thorium and Nuclear Waste Actinides as Nuclear Fuel in Advanced Nuclear Reactors”, supported by The Turkish Atomic Energy Authority, Ankara, Türkiye

2003–2004: Leader of the project “Nuclear Fuel Production in Emerging Nuclear Energy Systems”, supported by the research Fund of Gazi University, Ankara, Türkiye

2003–2004: Leader of the project “Utilization of Thorium Using Advanced Nuclear Technologies”, supported by the State Planning Organization of Türkiye, Gazi University, Ankara, Türkiye

2001–2003: Leader of the project “Assessment of Thorium Fuel in Fission Reactors”, supported by the research Fund of Gazi University, Ankara, Türkiye

1995-1999: Leader of the project “Nuclear and Fossil Energy Systems for Space Crafts”, supported by the State Planning Organization of Türkiye (DPT), Gazi University, Ankara, Türkiye

1990-1994: Leader of the project “Fusion Technology”, supported by the State Planning Organization of Türkiye (DPT), Gazi University, Ankara, Türkiye

1979-1983: Chief of the Experimental Project “Fusion - Fission (Hybrid) Reactor (LOTUS)”, Institut de Génie Atomique, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland

### **RESEARCH EXPERIENCE**

2016-Presently: On Fusion Technology, Fusion Fission (Hybrid) Reactors, Actinide Burning, Fusion Propulsion and Generation-IV Reactors, ADS, Near East University, Turkish Republic of Northern Cyprus

2009-2016: On Fusion Technology, Fusion Fission (Hybrid) Reactors, Actinide Burning, Fusion Propulsion and Generation-IV Reactors, ADS, ATILIM University, Ankara, Türkiye

1988-2009: On Fusion Technology, Fusion Fission (Hybrid) Reactors, Actinide Burning, Fusion Propulsion and Space Thermionic Reactors by setting up an effective multigroup neutron physics analysis system, Gazi University, Ankara, Türkiye.

1984-1988: On Fusion - Fission (Hybrid) Reactors by setting up an effective multigroup neutron physics analysis system, Erciyes University, Kayseri, Türkiye.

1983-1986: In the area of Fusion - Fission (Hybrid) Reactors and Radiation Shielding by setting up an effective multigroup neutron physics analysis system, King Saud University, Riyadh, Saudi Arabia

1978-1983: In the area of Fusion - Fission (Hybrid) Reactors and Radiation Shielding by setting up an effective multigroup neutron physics analysis system, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland

1974-1980: In the area of Radiation Shielding and Space Craft Thermionic Reactors by setting up an effective multigroup neutron physics analysis system, University of Ege, İzmir, Türkiye

1972-1973: On Multigroup Analysis of Radiation Shielding Problems of Fast Reactors Radiation Shielding Information Center, Oak Ridge National Laboratory, Oak Ridge, USA

1966-1970: On Multigroup Neutronic Analysis of Thermionic Reactors for Spacecraft Applications, Institute of Nuclear Energy, University of Stuttgart, Stuttgart, Germany

## INVITED TALKS & SEMINARS (FOREIGN)

- 2015: Institute of Technology Bandung, Bandung, Indonesia
- 2015: Pakistan Institute for Engineering and Applied Sciences, Nihore, Pakistan
- 2015: DIRECTORATE OF NUCLEAR POWER ENGINEERING REACTOR, Islamabad, Pakistan
- 2014: The FEDERAL UNIVERSITY OF RIO DE JANEIRO, Brazil
- 2014: Universidade do Minho, Guimarães, Portugal
- 2013: [Universidad Politécnica de Madrid \(UPM\)](#), Madrid, Spain
- 2010: Shanghai Nuclear Engineering Research & Design Company, Shanghai, China
- 2007: Atominstitut der Österreichischen Universitäten, Technische Universität Wien, Vienna, Austria
- 2006: Lawrence Livermore National Laboratory, University of California, Livermore, USA
- 2003: Lawrence Livermore National Laboratory, University of California, Livermore, USA  
University of California, Department of Nuclear Engineering, Berkeley, CA, USA
- 1995: Lawrence Livermore National Laboratory, University of California, Livermore, USA  
University of California, Department of Nuclear Engineering, Berkeley, CA, USA  
Space Power Incorporation, San Jose, CA, USA
- 1993: University of Tehran, Department of Physics, Tehran, Iran
- 1991: University of Wales, College of Cardiff, Cardiff, UK
- 1989: United Horizons Office, Riyadh, Saudi Arabia
- 1985: DENIM, Universidad Politécnica de Madrid, Spain  
McMaster University, Hamilton, Canada  
National Tsing - Hua University, Hsinchu, Republic of China  
Institute of Nuclear Energy Research, Lung - Tan, Republic of China  
Eidgenössisches Institut für Reaktorforschung, Würenlingen, Switzerland
- 1984: University of Petroleum and Minerals, Dhahran, Saudi Arabia  
National Tsing - Hua University, Hsinchu, Republic of China
- 1983: Eidgenössische Technische Hochschule, Zürich, Switzerland  
King Abdul Aziz University, Jeddah, Saudi Arabia
- 1982: Bhabha Atomic Research Centre, Bombay, India  
Reactor Research Centre, Kalpakkam, India  
Vikram Sarabhai Space Centre, Trivandrum, India  
King Abdul Aziz University, Jeddah, Saudi Arabia
- 1981: Department of Mechanical Engineering, Ohio State University, Columbus, OH, USA  
King Abdul Aziz University, Jeddah, Saudi Arabia  
Plasma Physics Laboratory, Princeton University, Princeton, New Jersey, USA
- 1980: Fusion Power Systems Department, Westinghouse Electric Corporation, Pittsburgh, Pennsylvania, U. S. A.
- 1979: Department of Energy, Washington, DC, USA

## THESES

- a) "Berechnung eines thermischen thermionischen Kernreaktors mit abgeflachter Leistungsdichteverteilung", IKE-Bericht, Nr. 6-36d, *MS Thesis*, University of Stuttgart, Germany (1967)
- b) "Zweckmäßige Auslegung von thermischen Vollthermionikreaktoren mit konstanter Emittieraufheizung zur Anwendung in der Raumfahrt", IKE-Bericht, Nr. 6-45, *PhD Thesis*, University of Stuttgart, Germany (1970)
- c) "Comparison of Diffusion and Transport Theory for Fast Reactor Shielding Calculations", Presented to the Faculty of Science, Ankara University, Türkiye, *Habilitation thesis in Turkish* (1973)
- d) "An Attempt to Unveil the Basic Structure of the Neutron Bomb and Evaluate a Protection Against it", University of Ege, Izmir, Türkiye (1981) (*Thesis submitted for being promoted to the full professorship position, in Turkish*)

## PUBLICATIONS IN FOREIGN LANGUAGES

[\*] Registered in Science Citation Index

**Total # of citations in SCI=2514**

**H = 30**

**i10 = 69**

## REFEREED JOURNAL ARTICLES

1. Abstract of the Ph.D. Thesis, *VDI-Zeitschrift*, Vol. 113, p. 191 (1971) (S. Şahin)
2. "Thermische Vollthermionikreaktoren mit konstanter Emittieraufheizung zur Anwendung in der Raumfahrt", *Atomkernenergie*, Vol. 18, pp. 177-188 (1971) (S. Şahin) [\*]
3. "Analytische Behandlung des konstanten thermischen Flussverlaufs für ebene Geometrie", *Atomkernenergie*, Vol. 20, pp. 117-121 (1972) (S. Şahin) [\*]
4. "Comparison of Diffusion and Transport Theory for Fast Reactor Shielding Calculations", *Atomkernenergie*, Vol. 22, pp. 24-35 (1973) (S. Şahin) [\*]
5. "A Comparison of Data Libraries for Thermal Fuel Cell Calculations", *Atomkernenergie*, Vol. 23, pp. 151-152 (1974) (S. Şahin) [\*]
6. "An Investigation of Fuel-Moderator Combinations for Thermal Thermionic Reactors in Space Crafts", *Atomkernenergie*, Vol. 24, pp. 89-94 (1974) (S. Şahin) [\*]
7. "The <sup>240</sup>Pu Content of Commercial Produced Plutonium and the Criticality of Fast Assemblies", *Atomkernenergie*, Vol. 27, pp. 23-26 (1976) (S. Şahin) [\*]
8. Answer to Fleck's Remarks to Şahin's Paper "The <sup>240</sup>Pu Content of Commercial Produced Plutonium and the Criticality of Fast Assemblies", *Atomkernenergie*, Vol. 28, pp. 297-298 (1976) (S. Şahin) [\*]
9. "Neutron Physics Analysis of Thermionic Reactors for Space Crafts with <sup>233</sup>U as fuel and ZrH<sub>1.7</sub> as Moderator", *Atomkernenergie*, Vol. 28, pp. 256-258 (1976) (S. Şahin) [\*]
10. "Neutron Physics Analysis of Thermionic Reactors for Space Crafts with <sup>233</sup>U as Fuel and Beryllium as Moderator", *Annals of Nuclear Energy*, Vol. 3, nos. 9-10, pp. 447-450 (1976) (S. Şahin) [\*]  
<http://www.sciencedirect.com/science/article/pii/0306454976900293>
11. "Solar Energy Thermionic Power Plants for Space Crafts", *Kerntechnik*, Vol. 19, pp. 233-236 (1977) (S. Şahin) [\*]
12. "A 50 kW(el) Solar Energy Thermionic Generator for Space Craft", *Atomkernenergie*, Vol. 31, pp. 203-205 (1978) (S. Şahin) [\*]
13. "The Effects of <sup>240</sup>Pu on Neutron Lifetime in Nuclear Explosives", *Annals of Nuclear Energy*, Vol. 5, no. 2, pp. 55-58 (1978) (S. Şahin) [\*] <http://www.sciencedirect.com/science/article/pii/0306454978901044>

14. "Investigation of the Suitability of the Reflector Drums as Control Mechanism for Thermionic Reactors in Space Crafts with  $^{233}\text{U}$  as Fuel and  $\text{ZrH}_{1.7}$  as Moderator", *Annals of Nuclear Energy*, Vol. 5, nos. 3-4, pp. 107-116 (1978) (S. Şahin, A. Erişen) [\*] <http://www.sciencedirect.com/science/article/pii/0306454978900634>
15. "Investigation of the Suitability of the Diffusion Theory for Simple Shielding Calculations of Fast reactors", *Journal of the Faculty of Engineering*, University of EGE, Vol. 5, pp. 1-29 (1979) (S. Şahin)
16. Addendum to "Answer to Fleck's Remarks to Şahin's Paper", *Atomkernenergie/ Kerntechnik*, Vol. 33, p. 223 (1979) (S. Şahin) [\*]
17. "Solar Energy Power Generators with Hybrid Thermionic Converters", *Atomkernenergie/ Kerntechnik*, Vol. 33, pp. 303-304 (1979) (S. Şahin) [\*]
18. "Reflector Drums as Control Mechanism for Compact Thermionic Space Craft Reactors with  $^{233}\text{U}$  as Fuel", *Nuclear Energy, Journal of the British Nuclear Energy Society*, Vol. 18, pp. 401-408 (1979) (S. Şahin, A. Erişen, S. Selvi, S. Yalçın) [\*]
19. "Advanced Thermionic Generators with Solar Energy for Spatial Applications", *Transactions of the American Nuclear Society Winter Meeting*, Vol. 33, pp. 7-9, San Francisco, California (Nov. 11-16, 1979) (S. Şahin) [\*]
20. "Control Mechanism for Space Craft Thermionic Reactors Leading to Lower Radiation Shielding Mass", *Transactions of the American Nuclear Society Winter Meeting*, Vol. 33, pp. 652-654, San Francisco, California (Nov. 11-16, 1979) (S. Şahin) [\*]
21. "Protection Against Neutron Bomb Radiation", *Transactions of the American Nuclear Society Winter Meeting*, Vol. 33, pp. 677-678, San Francisco, California (Nov. 11-16, 1979) (S. Şahin) [\*]
22. "Limited Protection Against Enhanced Radiation Warhead", *Réunion de Printemps de la Société Suisse de Physique*, Basel (5-6 April 1979) Abstract in *Helvetica Physica Acta*, Vol. 52, p. 394 (1980) (S. Şahin, A. Erişen, S. Yalçın and S. Selvi) [\*]
23. "Reflector Drums as Control Mechanism for Compact Thermionic Space Craft Reactors with  $^{233}\text{U}$  as Fuel", *Réunion de Printemps de la Société Suisse de Physique*, Basel (5-6 April 1979) Abstract in *Helvetica Physica Acta*, Vol. 52, p. 394 (1980) (S. Şahin, A. Erişen, S. Selvi and S. Yalçın) [\*]
24. "Reflector Drums as Control Mechanism for Space Craft Thermionic Reactors with Constant Emitter Heating Containing  $^{233}\text{U}$  as Fuel and Beryllium as Moderator", *Atomkernenergie/Kerntechnik*, Vol. 35, pp. 12-14 (1980) (S. Şahin, S. Selvi) [\*]
25. "Investigation of the Protection Possibilities against Enhanced Radiation Warhead", *Atomkernenergie/Kerntechnik*, Vol. 35, pp. 175-178 (1980) (S. Şahin, A. Erişen, S. Yalçın, S. Selvi) [\*]
26. "Basic Structure of the Fusion-Fission (Hybrid) Reactor Experimental Research Project at Laboratoire de Genie Atomique de l'EPFL", *Atomkernenergie/Kerntechnik*, Vol. 36, pp. 33-35 (1980) (S. Şahin, 5 co-authors) [\*]
27. "Adjoint Weighted Neutron Lifetime in Nuclear Explosives", *Atomkernenergie/ Kerntechnik*, Vol. 36, pp. 141-142 (1980) (S. Şahin, S. Yalçın) [\*]
28. "The Effect of the Spontaneous Fission of  $^{240}\text{Pu}$  on the Energy Release in a Nuclear Explosive", *Nuclear Technology*, Vol. 50, pp. 88-94 (1980) (S. Şahin, J. Ligou) [\*] [http://www.ans.org/pubs/journals/nt/a\\_17072](http://www.ans.org/pubs/journals/nt/a_17072)
29. Reply to the Comments and Supplement to "Protection Possibilities Against Enhanced Radiation Warheads", *Atomkernenergie/Kerntechnik*, Vol. 36, pp. 303-304 (1980) (S. Şahin) [\*]
30. "Nonproliferation", *Nature*, Vol. 287, p. 578 (16 October 1980) (S. Şahin) [\*] DOI:10.1038/287578a0 <http://www.nature.com/nature/journal/v287/n5783/abs/287578a0.html>
31. Reply to the Remarks on the " $^{240}\text{Pu}$  Induced Preignition Problem in a Nuclear Device", *Nuclear Technology*, Vol. 54, pp. 431-432 (1980) (S. Şahin) [\*]
32. "Constant Emitter Heating on Compact Spacecraft Thermionic Reactors with  $^{233}\text{U}$  as Fuel and Beryllium as Moderator", *Atomkernenergie/Kerntechnik*, Vol. 37, pp. 16-19 (1981) (S. Şahin, E. Ertaş) [\*]
33. "Biological Radiation Shielding for a Fast Undercritical Hybrid Assembly", *Atomkernenergie/Kerntechnik*, Vol. 37, pp. 118-122 (1981) (S. Şahin, J. Ligou, M. Caro) [\*]
34. "Neutronic Analysis of Fast Hybrid Thermionic Reactors", *Atomkernenergie/ Kerntechnik*, Vol. 39, no. 1, pp. 41-44 (1981) (S. Şahin) [\*]



35. Book Review - "Status and Prospects of Thermal Breeders and their Effects of Fuel Utilization, IAEA-Vienna (1979)", *Atomkernenergie/Kerntechnik*, Vol. 39, pp. 60 (S. Şahin) (1981)
36. "Flight Performance of a Mars-Earth-Venus Shuttle with Energy Supply from a Solar Energy Advanced Thermionic Generator", *Atomkernenergie/Kerntechnik*, Vol. 39, pp. 177-180 (1981) (S. Şahin) [\*]
37. "Investigation of Lanthanide's as Neutron Multipliers for Hybrid and Fusion Reactor Blankets", *Nuclear Technology/Fusion*, Vol. 2, pp. 224-232 (1982) (S. Şahin) [\*] [http://www.ans.org/pubs/journals/fst/a\\_20752](http://www.ans.org/pubs/journals/fst/a_20752)
38. "A Solar-Thermionic Generator for Space Disposal of Nuclear Wastes", *Atomkernenergie/Kerntechnik*, Vol. 40, no. 3, pp. 155-156 (1982) (S. Şahin) [\*]
39. "A Neutron Physics Analysis for the Experimental Facility LOTUS", *Atomkernenergie/Kerntechnik*, Vol. 41, no. 2, pp. 95-98 (1982) (S. Şahin) [\*]
40. "Addendum to Reply to 'Remarks on the <sup>240</sup>Plutonium Induced Pre-Ignition Problem in a Nuclear Device", *Nuclear Technology*, Vol. 58, p. 354 (1982) (S. Şahin) [\*]
41. Discussion on "A Solar Thermionic Generator for Nuclear Waste Disposal in Space", *Atomkernenergie/Kerntechnik*, Vol. 41, p. 214 (1982) (S. Şahin) [\*]
42. "A Neutronic Analysis of Lanthanide's as Neutron Multipliers for Hybrid and Fusion Blankets", *Transactions of the American Nuclear Society 1980 International Conference*, Vol. 35, pp. 132-133, Washington, DC (17-21 Nov. 1980) (S. Şahin, R. Calinon, G. L. Woodruff) [\*]
43. "Performance Characteristics of a Fast Hybrid Thermionic Blanket", *Transactions of the American Nuclear Society 1980 International Conference*, Vol. 35, pp. 133-135, Washington, DC (17-21 Nov. 1980) (S. Şahin) [\*]
44. "Interplanetary Shuttle Driven by a 10 MW Solar Energy Hybrid Thermionic Generator", *Transactions of the American Nuclear Society 1980 International Conference*, Vol. 35, pp. 176-177, Washington, D. C. (17-21 Nov. 1980) (S. Şahin) [\*]
45. "The program of Co-operation between the King Abdul-Aziz University and the Swiss Federal Institute of Technology in the Field of Nuclear Education and Training", *Second International Conference on Nuclear Technology Transfer*, Buenos Aires, Argentina, *Transactions of the American Nuclear Society*, Vol. 42, pp. 145-146 (Nov. 1-5, 1982) (S. Şahin, J. P. Schneeberger, M. M. O. Jamjoom, S. Abdul-Majid) invited paper [\*]
46. "Neutronic Performance of some Hybrid Blankets with Conventional and Actinide Waste Fuel", *Transactions of the American Nuclear Society 1982 International Conference*, Vol. 43, pp. 207-209, Washington, D. C. (Nov. 1982) (S. Şahin, A. Kumar) [\*]
47. "(D,T)-driven Thermionic Hybrid Blankets with Actinides", *Transactions of the American Nuclear Society 1982 International Conference*, Vol. 43, pp. 217-219, Washington, D. C. (Nov. 1982) (S. Şahin, A. Kumar) [\*]
48. "Preliminary Conceptual Design for Muon Catalyzed (D,T) Hybrid Reactors", *Transactions of the American Nuclear Society 1982 International Conference*, Vol. 43, pp. 215-216, Washington, D. C. (Nov. 1982) (S. Şahin, A. Kumar) [\*]
49. "Assessment Studies of the Biological Effects of the ERW", *Transactions of the American Nuclear Society 1982 International Conference*, Vol. 43, pp. 635-637, Washington, D. C. (Nov. 1982) (S. Şahin, A. Kumar) [\*]
50. "Emerging Nuclear Energy Systems and Nuclear Weapons", *Atomkernenergie/ Kerntechnik*, Vol. 43, pp. 169-174 (1983) (B. Jasani, A. Gsponer, S. Şahin) [\*]
51. "Investigation of Neutronics of some (D,T) Driven Experimental Thorium Hybrid Blankets with Actinide Multipliers", *Journal of Fusion Energy*, Vol. 3, pp. 185-197 (1983) (S. Şahin, A. Kumar) [\*]
52. "Fast Hybrid Thermionic Blankets with Actinide Waste Fuel", *Nuclear Technology/Fusion*, Vol. 5, pp. 374-381 (1984) (S. Şahin, A. Kumar) [\*] [http://www.ans.org/pubs/journals/fst/a\\_23112](http://www.ans.org/pubs/journals/fst/a_23112)
53. "Neutronic Analysis of (Deuterium-Tritium) Driven Experimental Hybrid Blankets", *Fusion Technology*, Vol. 6, pp. 97-108 (1984) (S. Şahin, A. Kumar) [\*] [http://www.ans.org/pubs/journals/fst/a\\_23124](http://www.ans.org/pubs/journals/fst/a_23124)

54. "(Deuterium-Deuterium) Driven Experimental Hybrid Blankets and their Neutronic Analysis", *Fusion Technology*, Vol. 6, pp. 225-239 (1984) (A. Kumar, **S. Şahin**) [\*]  
[http://www.ans.org/pubs/journals/fst/a\\_23154](http://www.ans.org/pubs/journals/fst/a_23154)
55. "The Effects of Spectrum Softening within the ERW on the Biological Dose", *Atomkernenergie/Kerntechnik*, Vol. 45, pp. 117-121 (1984) (**S. Şahin**, A. Kumar) [\*]
56. "Cumulative Yields of Short-Lived Fission Products in Thermal Neutron Fission of  $^{235}\text{U}$ ", *Radiochimica Acta*, Vol. 37, pp. 131-135 (1984) (C. Chung, A. A. Hassan, **S. Şahin**) [\*]  
DOI: <https://doi.org/10.1524/ract.1984.37.3.131> <http://www.degruyter.com/view/j/ract.1984.37.issue-3/ract.1984.37.3.131/ract.1984.37.3.131.xml?format=INT>
57. "Neutronic Investigations of Experimental AYMAN Hybrid Blankets", *Transactions of the American Nuclear Society 1984 International Conference*, Vol. 47, pp. 151-153, Washington, D.C. (Nov. 1984) (**S. Şahin**, T. A. Al-Kusayer, M. Al-Semair, M. Abdul Raof) [\*]
58. "Criticality of Curium Assemblies", *Atomkernenergie/Kerntechnik*, Vol. 46, pp. 45-49 (1985) (**S. Şahin**, R. Calinon) [\*]
59. "Protection Factors of Modern Armored Tanks Against Enhanced Radiation and Fission Nuclear Warheads", *Atomkernenergie/Kerntechnik*, Vol. 46, pp. 278-284 (1985) (**S. Şahin**, A. Gsponer) [\*]
60. "Conceptual Design Studies of a Cylindrical Experimental  $\text{ThO}_2$  Blanket with (D,D) Driver", *Atomkernenergie/Kerntechnik*, Vol. 47, pp. 259-266 (1985) (**S. Şahin**, T. Al-Kusayer) [\*]
61. "Neutronic Performance of (Deuterium-Deuterium) Driven Experimental Thorium Hybrid Blankets", *Transactions of the American Nuclear Society 1985 Annual Meeting*, Vol. 49, pp. 102-104, Boston (June 1985) (**S. Şahin**, T. A. Al-Kusayer, M. Abdul-Raof) [\*]
62. "Yield of Short-Lived Fission Products in  $^{235}\text{U}_{(n,f)}$ ", *Transactions of the American Nuclear Society 1985 Annual Meeting*, Vol. 49, pp. 209-211, Boston (June 1985) (**S. Şahin**, A. A. Hassan, C. Chung) [\*]
63. "Neutronic Analysis of Fusion-Fission (Hybrid) Blankets", *Radiation Effects*, Vol. 92/1-4, pp. 159-162 (1986) (**S. Şahin**, T. A. Al-Kusayer, M. Abdul Raof) [\*]  
<http://www.tandfonline.com/doi/pdf/10.1080/00337578608208311>
64. "Measurement of the Cumulative Fission Yield of  $^{148}\text{Ce}$  in  $^{235}\text{U}$ ", *Radiation Effects*, Vol. 92/1-4, pp. 529-532 (1986) (A. A. Hassan, **S. Şahin**, C. Chung) <http://www.tandfonline.com/doi/abs/10.1080/00337578608207450>
65. "Preliminary Design Studies of a Cylindrical Experimental Hybrid Blanket with (Deuterium-Tritium) Driver", *Fusion Technology*, Vol. 10, pp. 84-99 (1986) (**S. Şahin**, T. A. Al-Kusayer, M. Abdul Raof) [\*]  
[http://www.ans.org/pubs/journals/fst/a\\_24749](http://www.ans.org/pubs/journals/fst/a_24749)
66. " $^{244}\text{Cm}$  as Multiplier and Breeder in a  $\text{ThO}_2$  Hybrid Blanket Driven by a (Deuterium-Tritium) Source", *Fusion Technology*, Vol. 10, pp. 1297-1302 (1986) (**S. Şahin**, T. Al-Kusayer) [\*]  
[http://www.ans.org/pubs/journals/fst/a\\_24909](http://www.ans.org/pubs/journals/fst/a_24909)
67. "Neutronic Parameters of a Cylindrical Hybrid Blanket Driven by a Simulated Line Source", *Fusion Technology*, Vol. 10, pp. 1315-1320 (1986) (**S. Şahin**, M. Abdul Raof) [\*]  
[http://www.ans.org/pubs/journals/fst/a\\_24912](http://www.ans.org/pubs/journals/fst/a_24912)
68. "Fission Power Flattening in Hybrid Blankets Using Mixed Fuel", *Fusion Technology*, Vol. 12, pp. 395-408 (1987) (**S. Şahin**, M. Al-Eshaikh) [\*] [http://www.ans.org/pubs/journals/fst/a\\_25071](http://www.ans.org/pubs/journals/fst/a_25071)
69. "Examination of the Radiation Protection Capability of Different Types of Battle Tanks against Neutron Bomb", *Bulletin of the Technical University of Istanbul*, Vol. 40, pp. 315-354 (**S. Şahin**) (1987)
70. "Comparison of Diffusion and Transport Theory for Fast Neutron Penetration in Iron and Sodium Slabs", *Journal of The Institute of Science and Technology of Gazi University*, Vol. 2, pp. 37-66 (1989) (**S. Şahin**)
71. "Optimization of Fuel and Moderator Distribution in a Space Craft Thermionic Reactor with a Flat Power Density", *Journal of The Institute of Science and Technology of Gazi University*, Vol. 2, pp. 67-88 (1989) (**S. Şahin**)
72. "Reactivity Bonus of Beryllium (n,2n) Reactions in Experimental Reactors", *Journal of The Institute of Science and Technology of Gazi University*, Vol. 2, pp. 89-96 (1989) (**S. Şahin**, S. Yalçın)

73. "Realization of a Flat Fission Power Density in a Hybrid Blanket over Long Operation Periods", *Fusion Technology*, Vol. 15, pp. 37-48 (1989) (S. Şahin, A. Erişen, Y. Çebi) [\*]  
[http://www.ans.org/pubs/journals/fst/a\\_25322](http://www.ans.org/pubs/journals/fst/a_25322)
74. "Power Flattening in a Hybrid Blanket Using Nuclear Waste Actinides", *Kerntechnik*, Vol. 53, pp. 285-290 (1989) (S. Şahin) [\*]
75. "Investigation of the Neutronic Potential of Moderated and Fast (D,T) Hybrid Blankets for Rejuvenation of CANDU Spent Fuel", *Fusion Technology*, Vol. 16, pp. 331-345 (1989) (S. Şahin, H. Yapıcı) [\*]  
[http://www.ans.org/pubs/journals/fst/a\\_29125](http://www.ans.org/pubs/journals/fst/a_29125)
76. "Enrichment of CANDU Spent Fuel in a Fast Hybrid Reactor", *Journal of Sciences and Engineering*, Vol. 5, pp. 855-870 (1989), Erciyes University, Kayseri, Türkiye (S. Şahin, H. Yapıcı, E. Baltacıoğlu)
77. "Comments on Conceptual Design and Neutronics Analysis of a Fusion Reactor Blanket Simulation Facility", *Nuclear Science and Engineering*, Vol. 105, pp. 300-301 (1990) (S. Şahin) [\*]
78. "Power Flattening in a Catalyzed (D,D) Fusion Driven Hybrid Blanket Using Nuclear Waste Actinides", *Nuclear Technology*, Vol. 92, pp. 93-105 (1990) (S. Şahin) [\*] [http://www.ans.org/pubs/journals/nt/a\\_34489](http://www.ans.org/pubs/journals/nt/a_34489)
79. "Strategies for the Promotion of Utilization of Renewable Energy Systems", *Journal of The Faculty of Technical Education*, Vol. 2, pp. 5-10, Gazi University, Ankara (1990) (S. Şahin, E. Ataer, Y. Göğüş)
80. "Potential of a Catalyzed Fusion Driven Hybrid Reactor for the Regeneration of CANDU Spent Fuel", *Fusion Technology*, Vol. 20, pp. 26-39 (1991) (S. Şahin, E. Baltacıoğlu, H. Yapıcı) [\*]  
[http://www.ans.org/pubs/journals/fst/a\\_29640](http://www.ans.org/pubs/journals/fst/a_29640)
81. "A Hybrid Reactor Design Concept Driven by Cold (D,T) Fusion Neutrons and Fueled with Metallic Thorium", *International Journal of Energy-Environment-Economics*, Vol. 1, pp. 167-174 (1991) (S. Şahin, H. Yapıcı, E. Baltacıoğlu, T. A. Al-Kusayer)
82. "Preliminary Design Studies for a (D-D) or (D,T) Driven Cold Fusion-Fission (Hybrid) Reactor with Metallic Uranium", *International Journal of Energy-Environment-Economics*, Vol. 1, no. 4, pp. 325-337 (1991) (S. Şahin, E. Baltacıoğlu, H. Yapıcı)
83. "Numerical Reactor Analysis System at the Faculty of Technical Education of the Gazi University", *Journal of Faculty of Technology*, Vol. 3, no. 2, pp. 5-10 (S. Şahin) (1991)
84. "Assessment of the Neutron Leakage Spectrum of an Enhanced Radiation Warhead for Applications as Peaceful Nuclear Explosives", *Kerntechnik*, Vol. 58, No. 5, pp. 295-298 (1993) (S. Şahin, B. Şarer) [\*]
85. "Neutronic Investigation of IFE Blankets for HYLFE-II and MHD Applications", *Fusion Technology*, Vol. 25, No. 4, pp. 388-397 (1994) (S. Şahin, R. Moir, J. D. Lee, S. Ünal) [\*]  
[http://www.ans.org/pubs/journals/fst/a\\_30245](http://www.ans.org/pubs/journals/fst/a_30245)
86. "Hybrid Thermionic Space Reactors for Power and Propulsion", *Nuclear Technology*, Vol. 107, No. 2, pp. 155-181 (August 1994) (S. Şahin, E. B. Kennel) [\*] [http://www.ans.org/pubs/journals/nt/a\\_34985](http://www.ans.org/pubs/journals/nt/a_34985)
87. "Rejuvenation of LWR Spent Fuel in a Catalyzed Fusion Hybrid Blanket", *Kerntechnik*, Vol. 59, No. 6, pp. 270-277 (Nov. 1994) (S. Şahin, H. Yapıcı, E. Baltacıoğlu) [\*]
88. "Neutronic Investigation of a Power Plant Using Peaceful Nuclear Explosives", *Fusion Technology*, Vol. 26, No. 4, pp. 1311-1325 (December 1994) (S. Şahin, R. Moir, S. Ünal) [\*]  
[http://www.ans.org/pubs/journals/fst/a\\_30316](http://www.ans.org/pubs/journals/fst/a_30316)
89. "Control Through Reflector Drums for a Dual Purpose Space Craft Thermionic Reactor", *Festschrift*, pp. 309-314, Lehrstuhl für Nukleare und Neue Energiesysteme, RUHR-Universität, Bochum, Germany (1994) (S. Şahin, A. Sözen)
90. "Radiation Damage in Liquid-Protected First Wall Materials for IFE-Reactors", *Fusion Technology*, Vol. 30, No. 3, Part 2A, pp. 1027-1035 (1996) (S. Şahin, R. W. Moir, A. Şahinaslan, H. M. Şahin) [\*]
91. "Decrease of the CANDU Spent Nuclear Waste Inventories in Fusion-Fission (Hybrid) Reactors", *International Journal of Energy-Environment-Economics*, Vol. 4, no. 1, pp. 67-97 (1996) (S. Şahin, S. Ünal, H. Yapıcı)
92. "Fusion Breeder With Enhanced Safeguarding Capabilities Against Nuclear Weapon Proliferation", *Energy Conversion and Management*, Vol. 39, No. 9, pp. 899 - 909 (1998) (S. Şahin, H. Yapıcı, E. Baltacıoğlu) [\*]  
DOI: 10.1016/S0196-8904(97)10034-6 <http://www.sciencedirect.com/science/article/pii/S0196890497100346>

93. “Rejuvenation of LWR Spent Fuel in Fusion Blankets”, *Annals of Nuclear Energy*, Vol. 25, no. 16, pp. 1317-1339 (1998) (S. Şahin, H. Yapıcı) [\*] DOI: 10.1016/S0306-4549(98)00018-8  
<http://www.sciencedirect.com/science/article/pii/S0306454998000188>
94. “Evaluation of the Integral Quantities for Incident Fusion Source Neutrons in Infinite Medium”, *Annals of Nuclear Energy*, Vol. 25, No. 18, pp. 1503-1519 (1998) (S. Şahin, H. Yapıcı, V. Özceyhan) [\*]  
<http://www.sciencedirect.com/science/article/pii/S0306454998000048>
95. “Evaluation of the Neutron and Gamma-Ray Heating in the Radiation Shielding and Magnet Coils of the VISTA Spacecraft,” *Fusion Technology*, Vol. 33, pp. 418-434 (1998) (S. Şahin, H. M. Şahin, A. Sözen) [\*]  
[http://www.ans.org/pubs/journals/fst/a\\_41](http://www.ans.org/pubs/journals/fst/a_41)
96. “Neutronic Calculations for a Magnetic Fusion Energy Reactor with Liquid Protection for the First-Wall “, *Fusion Technology*, Vol. 34, No. 2. pp. 95-108 (1998) (S. Şahin, A. Şahinaslan, M. Kaya) [\*]  
[http://www.new.ans.org/pubs/journals/fst/a\\_56](http://www.new.ans.org/pubs/journals/fst/a_56)
97. “Neutronic Analysis of a Thorium Fusion Breeder with Enhanced Protection Against Nuclear Weapon Proliferation,” *Annals of Nuclear Energy*, Vol. 26, no. 1, pp. 13-27 (1998) (S. Şahin, H. Yapıcı) [\*] DOI: 10.1016/S0306-4549(98)00032-2 <http://www.sciencedirect.com/science/article/pii/S0306454998000322>
98. “Radiation Shielding Mass Saving for the Magnet Coils of the Vista Spacecraft,” *Annals of Nuclear Energy*, Vol. 26, no. 6, pp. 509-521 (1998) (S. Şahin, H. M. Şahin) [\*] DOI: 10.1016/S0306-4549(98)00066-8 <http://www.sciencedirect.com/science/article/pii/S0306454998000668>
99. “[Critical neutron heating in the control drums of a dual purpose thermionic space reactor for power and propulsion](#)”, *Annals of Nuclear Energy*, Vol. 26, no. 2, pp. 91-110 (1999) (S. Şahin, A. Sözen) [\*] DOI: 10.1016/S0306-4549(98)00039-5 <http://www.sciencedirect.com/science/article/pii/S0306454998000395>
100. Comments on “Rejuvenation of the CANDU Spent Fuel in (D,T) Driven Hybrid Reactors”, *Fusion Technology*, Vol. 35, No. 4, p. 369 (1999) (S. Şahin) [\*] [http://www.new.ans.org/pubs/journals/fst/v\\_35:4](http://www.new.ans.org/pubs/journals/fst/v_35:4)
101. “Pertinent Integral Data per Fusion Neutron in Infinite Medium”, *The Arabian Journal for Science and Engineering*, Vol. 24, No. 2A, pp. 149-164 (1999) (S. Şahin, H. Yapıcı, V. Özceyhan) [\*]
102. “Investigation of the Reflector Temperatures of a Space Craft Thermionic Reactor”, *Nuclear Engineering and Design*, Vol. 193, Nos. 1-2, 33-43 (1999) (S. Şahin, A. Sözen) [\*] DOI: 10.1016/S0029-5493(99)00091-6 <http://www.sciencedirect.com/science/article/pii/S0029549399000916>
103. “Spent Mixed Oxide Fuel Rejuvenation in Fusion Breeders”, *Fusion Engineering and Design*, Vol. 47, no. 1, pp. 9-23 (1999) (S. Şahin, H. Yapıcı, M. Bayrak) [\*] DOI: 10.1016/S0920-3796(99)00066-6 <http://www.sciencedirect.com/science/article/pii/S0029549399000916>
104. “Neutronic Performance of Proliferation Hardened Thorium Fusion Breeders”, *Fusion Engineering and Design*, Vol. 54, no. 1, pp. 63-77 (2001) (S. Şahin, H. Yapıcı, N. Şahin) [\*] DOI:10.1016/S0920-3796(00)00107-1 <http://www.sciencedirect.com/science/article/pii/S0920379600001071>
105. “Proliferation Hardening and Power Flattening of a Thorium Fusion Breeder with Triple Mixed Oxide Fuel”, *Annals of Nuclear Energy*, Vol. 28, no. 3, pp. 203-233 (2001) (S. Şahin, H. Yapıcı, V. Özceyhan) [\*] DOI: 10.1016/S0306-4549(00)00047-5 <http://www.sciencedirect.com/science/article/pii/S0306454900000475>
106. “Optimization of the Radiation Shielding Mass for the Magnet Coils of the VISTA Spacecraft”, *Annals of Nuclear Energy*, Vol. 28, no. 14, pp. 1413-1429 (2001) (S. Şahin, H. M. Şahin) [\*] DOI: 10.1016/S0306-4549(00)00134-1 <http://www.sciencedirect.com/science/article/pii/S0306454900001341>
107. “Neutron and Gamma Ray Heating in the Grazing Incident Liquid Metal Mirrors for Laser Inertial Fusion Energy Power Plants,” *Annals of Nuclear Energy*, Vol. 29, no. 5, pp. 631-638 (2002) (S. Şahin, A. Şahinaslan) [\*] DOI: 10.1016/S0306-4549(01)00059-7  
<http://www.sciencedirect.com/science/article/pii/S0306454901000597>
108. “Power Flattening and Minor Actinide Burning in a Thorium Fusion Breeder”, *Energy Conversion and Management*, Vol. 43, No. 6, pp.799 – 815 (2002) (S. Şahin, H. M. Şahin, A. Sözen, M. Bayrak) [\*]  
<http://www.sciencedirect.com/science/article/pii/S0196890401000772>
109. “Elimination of the Coil Shielding for MFE-Reactors Through a Liquid-Protected First-Wall”, *The Arabian Journal for Science and Engineering*, Vol. 24, no 2A, pp. 173 - 186 (2002) (S. Şahin, A. Şahinaslan, H. M. Şahin) [\*]

110. "Reduced Shielding Mass For The Vista Spacecraft", *The Arabian Journal for Science and Engineering*, Vol, 24, no 2A, pp. 187 -196 (2002) (S. Şahin, H. M. Şahin, A. Şahinaslan) [\*]
111. "Investigation of the Effects of the Resonance Absorption in a Fusion Breeder Blanket", *Annals of Nuclear Energy*, Vol. 29, no. 14, pp. 1641 – 1660 (2002) (S. Şahin, H. M. Şahin, K Yıldız) [\*] <http://www.sciencedirect.com/science/article/pii/S030645490200004X>
112. "Neutronic Investigation of a Hybrid Version of the ARIES-RS Fusion Reactor", *Annals of Nuclear Energy*, Vol. 30, no. 2, pp. 245 – 259 (2003) (S. Şahin, Ş. Yalçın, H. M. Şahin, M. Übeyli) [\*] DOI: 10.1016/S0306-4549(02)00049-X <http://www.sciencedirect.com/science/article/pii/S030645490200049X>
113. "Neutronics analysis of HYLIFE-II Blanket for Fissile Fuel Breeding in an Inertial Fusion Energy Reactor", *Annals of Nuclear Energy*, Vol. 30, no. 6, pp. 669 – 683 (2003) (S. Şahin, Ş. Yalçın, H. M. Şahin, M. Übeyli) [\*] DOI: 10.1016/S0306-4549(02)00109-3 <http://www.sciencedirect.com/science/article/pii/S0306454902001093>
114. "[Fissile fuel breeding with peaceful nuclear explosives](#)," *Fusion Engineering and Design*, Vol. 65, no.4, pp. 643-656 (2003) [\*] (S. Şahin, Ş. Yalçın, K. Yıldız) DOI: 10.1016/S0920-3796(03)00397-1 <http://www.sciencedirect.com/science/article/pii/S0920379603003971>
115. "An Assessment of Thorium and Spent LWR-Fuel Utilization Potential in CANDU Reactors", *Energy Conversion and Management*, Vol.45, nos. 7-8, pp. 1067 - 1085 (2004) (S. Şahin, H. M. Şahin, M. Alkan, K. Yıldız) [\*] DOI: 10.1016/j.enconman.2003.08.002 <http://www.sciencedirect.com/science/article/pii/S0196890403002103>
116. "LWR Spent Fuel Transmutation in a High Power Density Fusion Reactor", *Annals of Nuclear Energy*, Vol. 31, no. 8, pp. 871-890 (2004) (S. Şahin, M. Übeyli) [\*] DOI: 10.1016/j.anucene.2003.11.003 <http://www.sciencedirect.com/science/article/pii/S0306454903003037>
117. "Modified APEX Reactor as a Fusion Breeder", *Energy Conversion and Management*, Vol. 45, nos. 9-10, pp. 1497-1512 (2004) (S. Şahin, M. Übeyli) [\*] DOI: 10.1016/j.enconman.2003.09.014 <http://www.sciencedirect.com/science/article/pii/S0196890403002656>
118. "Power Flattening in the Fuel Bundle of a CANDU Reactor", *Nuclear Engineering and Design*, Vol. 232, no.1, pp. 7 - 18 (2004) (S. Şahin, K. Yıldız, A. Acır) [\*] DOI: 10.1016/j.nucengdes.2004.04.004 <http://www.sciencedirect.com/science/article/pii/S0029549304001311>
119. "Radiation Shielding Calculations for the VISTA Spacecraft", *Energy Conversion and Management*, Vol. 46, no. 15-16, pp. 2345–2358 (2005) (S. Şahin, H. M. Şahin, A. Acır) [\*] DOI: 10.1016/j.enconman.2004.12.011 <http://www.sciencedirect.com/science/article/pii/S0196890405000208>
120. "Effects of Spectral Shifting in an Inertial Confinement Fusion System", *KERNTECHNIK*, Vol. 70, no. 4, pp. 233 – 242 (2005) (S. Şahin, H. M. Şahin, K. Yıldız, A. Acır) [\*] <http://www.nuclear-engineering-journal.com/directlink.asp?KT100251>
121. "[Radiation damage studies on the first wall of a HYLIFE-II type fusion breeder](#)," *Energy Conversion and Management*, Vol. 46, no. 20, pp. 3185-3201 (2005) (S. Şahin, M. Übeyli) [\*] DOI: 10.1016/j.enconman.2005.03.007 <http://www.sciencedirect.com/science/article/pii/S0196890405000610>
122. "Investigation of CANDU Reactors as a Thorium Burner", *Energy Conversion and Management*, Vol. 47, nos. 13-14, pp. 1661–1675 (2006) (S. Şahin, K. Yıldız, H. M. Şahin, A. Acır) [\*] DOI: 10.1016/j.enconman.2005.10.013 <http://www.sciencedirect.com/science/article/pii/S0196890405002670>
123. "Increased Fuel Burn Up in a CANDU Thorium Reactor Using Weapon Grade Plutonium," *Nuclear Engineering and Design*, Vol. 236, no. 17, pp. 1778 - 1788 (2006) (S. Şahin, K. Yıldız, H. M. Şahin, N. Şahin, A. Acır) [\*] DOI: 10.1016/j.nucengdes.2006.01.014 <http://www.sciencedirect.com/science/article/pii/S0029549306001312>
124. "Editorial", ICENES'2005, 12th International Conference on Emerging Nuclear Energy Systems, August 21–26, 2005, Brussels (Belgium), *Energy Conversion and Management*, Vol. 47, no. 17, pp. 2693 – 2694 (2006) (S. Şahin, H. A. Abderrahim, J. Martinez-Val and R. Moir) [\*] DOI: 10.1016/j.enconman.2006.02.001 <http://www.sciencedirect.com/science/article/pii/S0196890406000422>
125. "Minor Actinide Burning in a CANDU Thorium Reactor", *Kerntechnik*, Vol. 71, nos. 5-6, pp. 247 - 257 (2006) (S. Şahin, K. Yıldız, H. M. Şahin, A. Acır, N. Şahin, T. Altınok) [\*] [http://www.nuclear-engineering-journal.com/web/o\\_archiv.asp?o\\_id=200804221619-119&ausgabe\\_id=2865171712-196&artikel\\_id=2865171712-296&task=03&j=2006&h=05-06&nav\\_id=200911191737513](http://www.nuclear-engineering-journal.com/web/o_archiv.asp?o_id=200804221619-119&ausgabe_id=2865171712-196&artikel_id=2865171712-296&task=03&j=2006&h=05-06&nav_id=200911191737513)

126. "CANDU Reactor as Minor Actinide/Thorium Burner with Uniform Power Density in the Fuel Bundle", *Annals of Nuclear Energy*, Vol. 35, no. 4, pp. 690-703 (2008) (S. Şahin, Ş. Yalçın, K. Yıldız, H. M. Şahin, A. Acır, N. Şahin) [\*] DOI: 10.1016/j.anucene.2007.08.003 <http://www.sciencedirect.com/science/article/pii/S0306454907002046>
127. "ICENES'2007, 13th International Conference on Emerging Nuclear Energy Systems, İstanbul/Türkiye (3<sup>rd</sup> – 8<sup>th</sup> June 2007)," *Energy Conversion and Management*, Vol. 49, no. 7, pp. 1793-1794 (2008) (S. Şahin) [\*] DOI: 10.1016/j.enconman.2007.12.013 <http://www.sciencedirect.com/science/article/pii/S0196890407004256>
128. "21<sup>st</sup> Century's Energy: Hydrogen Energy System", *Energy Conversion and Management*, Vol. 49, no. 7, pp. 1820-1831 (2008) (T. Nejat Veziroğlu, S. Şahin) [\*] DOI:10.1016/j.enconman.2007.08.015 <http://www.sciencedirect.com/science/article/pii/S0196890407004281>
129. "The Fixed Bed Nuclear Reactor Concept", *Energy Conversion and Management*, Vol. 49, no. 7, pp. 1902-1909 (2008) (S. Şahin, F. Sefidvash) [\*] DOI: 10.1016/j.enconman.2007.12.017 <http://www.sciencedirect.com/science/article/pii/S0196890407004396>
130. "A Review on the Potential Use of Austenitic Stainless Steels in Nuclear Fusion Reactors", *Journal of Fusion Energy*, Vol. 27, no. 4, pp. 271 - 277 (2008) (S. Şahin, M. Übeyli) [\*] DOI: 10.1007/s10894-008-9136-3 <http://www.springerlink.com/content/bg8u162115039048/>
131. "Criticality Investigations for the Fixed Bed Nuclear Reactor Using Thorium Fuel Mixed with Plutonium or Minor Actinides", *Annals of Nuclear Energy*, Vol. 36, no. 8, pp. 1032 - 1038 (2009) (S. Şahin, H. M. Şahin, A. Acır, T. A. Al-Kusayer) [\*] DOI:10.1016/j.anucene.2009.06.003 <http://www.sciencedirect.com/science/article/pii/S0306454909001790>
132. "EDITORIAL INTRODUCTION, ICENES'2009, 14<sup>th</sup> International Conference on Emerging Nuclear Energy Systems, 29<sup>th</sup> June–3<sup>rd</sup> July, 2009, Ericeira, Portugal", *Energy Conversion and Management*, Vol. 51, no. 9, pp. 1741-1743 (2010) (J. M. Martínez-Val, S. Şahin) [\*] <http://www.sciencedirect.com/science/article/pii/S0196890410000506>
133. "Criticality and Burn Up Evolutions of the Fixed Bed Nuclear Reactor with Alternative Fuels", *Energy Conversion and Management*, Vol. 51, no. 9, pp. 1781 - 1787 (2010) (S. Şahin, H. M. Şahin, A. Acır) [\*] DOI: 10.1016/j.enconman.2009.12.044 <http://www.sciencedirect.com/science/article/pii/S0196890410000555>
134. "Utilization of TRISO Fuel with Reactor Grade Plutonium in CANDU Reactors", *Nuclear Engineering and Design*, Vol. 240, no. 8, pp. 2066-2074 (2010) (S. Şahin, H. M. Şahin, A. Acır) [\*] DOI:10.1016/j.nucengdes.2010.04.008 <http://www.sciencedirect.com/science/article/pii/S002954931000261X>
135. "Performance Analysis of <sup>233</sup>U for Fixed Bed Nuclear Reactor", *KERNTECHNIK*, Vol. 75, no. 5, pp. 243 – 247(2010) (S. Şahin, A. Acır, H. M. Şahin) [\*] DOI:10.3139/124.110532 <http://www.nuclear-engineering-journal.com/directlink.asp?KT110097>
136. "An Innovative Nuclear Reactor for Electricity and Desalination", *International Journal of Energy Research*, vol. 35, no. 2, pp. 96-102 (2011) (S. Şahin, H. M. Şahin, T. A. Al-Kusayer, F. Sefidvash) [\*] <http://onlinelibrary.wiley.com/doi/10.1002/er.1772/abstract>
137. "Fissile Fuel Breeding and Actinide Transmutation in the LIFE Engine", *Fusion Engineering and Design*, vol. 86, nos. 1-2, pp. 227-237 (2011) (S. Şahin, M. J. Khan, R. Ahmed) [\*] <http://www.sciencedirect.com/science/article/pii/S0920379611000032>
138. "CANDU Reactors with Reactor Grade Plutonium/Thorium Carbide Fuel," *KERNTECHNIK*, vol. 76, no. 4, pp. 268–272 (2011) (S. Şahin, M. J. Khan, R. Ahmed) [\*] [http://www.nuclear-engineering-journal.com/web/o\\_archiv.asp?o\\_id=200804221619-119&ausgabe\\_id=21182685518-202&artikel\\_id=2118268552-13722&task=03&j=2011&h=04&nav\\_id=0](http://www.nuclear-engineering-journal.com/web/o_archiv.asp?o_id=200804221619-119&ausgabe_id=21182685518-202&artikel_id=2118268552-13722&task=03&j=2011&h=04&nav_id=0)
139. "Utilization of Reactor Grade Plutonium as Energy Multiplier in the LIFE Engine", *Fusion Science and Technology*, Vol. 61, no. 1T, pp. 216-221 (January 2012) (S. Şahin, H. M. Şahin, A. Acır) [\*] [http://www.new.ans.org/pubs/journals/fst/a\\_13422](http://www.new.ans.org/pubs/journals/fst/a_13422)
140. "Reduction of Weapon Grade Plutonium Inventories in a Thorium Burner", *Fusion Science and Technology*, Vol. 61, no. 1T, pp. 250-255 (January 2012) (S. Şahin, H. M. Şahin, A. Acır) [\*] [http://www.new.ans.org/pubs/journals/fst/a\\_13428](http://www.new.ans.org/pubs/journals/fst/a_13428)

141. “Comparisons of the Calculations Using Different Codes Implemented in MCNPX Monte Carlo Transport Code for Accelerator Driven System Target”, *Fusion Science and Technology*, Vol. 61, no. 1T, pp. 302-307 (January 2012) (B. Şarer, **S. Şahin**, M. Günay, Y. Çelik) [\*][http://www.new.ans.org/pubs/journals/fst/a\\_13437](http://www.new.ans.org/pubs/journals/fst/a_13437)
142. “Assessment of Criticality and Burnup Behaviour of CANDU Reactors with Nuclear Waste Transuranium Fuel”, *Progress in Nuclear Energy*, Vol. 60, pp. 19-26 (2012) (**S. Şahin**, M. J. Khan, R. Ahmed) [\*] DOI: 10.1016/j.pnucene.2012.04.005 <http://www.sciencedirect.com/science/article/pii/S0149197012000583>
143. “Report on the Special Issue, SET2012, The 10th International Conference on Sustainable Energy Technologies, İstanbul, Türkiye (4-7<sup>th</sup> September 2011),” *Energy Conversion and Management*, Vol. 63, pp. 1-3 (**S. Şahin**) [\*] (Nov. 2012) DOI: 10.1016/j.enconman.2012.03.022 <http://www.sciencedirect.com/science/article/pii/S0196890412001689>
144. “Commercial utilization of weapon grade plutonium as TRISO fuel in conventional CANDU reactors”, *Energy Conversion and Management*, Vol. 63, pp. 17-24 (Nov. 2012) (**S. Şahin**, H. M. Şahin, A. Acır) [\*] DOI:10.1016/j.enconman.2011.12.029 <http://www.sciencedirect.com/science/article/pii/S0196890412001008>
145. “[LIFE Hybrid Reactor as Reactor Grade Plutonium Burner](http://www.sciencedirect.com/science/article/pii/S0196890412001057)”, *Energy Conversion and Management*, Vol. 63, pp. 44-50 (Nov. 2012) (**S. Şahin**, H. M. Şahin, A. Acır) [\*] DOI:10.1016/j.enconman.2011.12.031 <http://www.sciencedirect.com/science/article/pii/S0196890412001057>
146. “EDITOR’S REPORT, IREC 2011, The International Renewable Energy Congress, Hammamet, Tunisia, December 20-22, 2011,” *Energy Conversion and Management*, Vol. 64, pp. 531-532 (2012) (**S. Şahin**) [\*] DOI :10.1016/j.enconman.2012.10.008 <http://www.sciencedirect.com/science/article/pii/S0196890412003901>
147. “Hydrogen Hazard and Mitigation Analysis in PWR containment”, *Annals of Nuclear Energy*, vol 58, pp. 132–140 (2013) [\*] (**S. Şahin**, M. S. Sarwar) DOI:10.1016/j.anucene.2013.03.001 <http://www.sciencedirect.com/science/article/pii/S0306454913001217>
148. “EDITOR’S REPORT on NURER2012, The III. International Conference on Nuclear and Renewable Energy Resources, İstanbul, Türkiye (20-23<sup>rd</sup> May 2012)”, *Energy Conversion and Management*, vol. 72, pp. 1-2 (2013) [\*] (**S. Şahin**) <http://www.sciencedirect.com/science/article/pii/S0196890413001507>
149. “Evaluation of Integral Quantities in an accelerator Driven System Using Different Nuclear Models Implemented in the MCNPX Monte Carlo Transport Code”, *Annals of Nuclear Energy*, vol. 62, pp. 382-389 (2013) [\*] (B. Şarer, **S. Şahin**, Y. Çelik, M. Günay) DOI:10.1016/j.anucene.2013.05.045 <http://www.sciencedirect.com/science/article/pii/S0306454913003022>
150. “EDITORIAL NOTES on the 2012 International Youth Nuclear Congress (IYNC), Charlotte, North Carolina, USA (5–11 August 2012)”, *Energy Conversion and Management*, vol. 74, pp. 556-557 (2013) [\*] (**S. Şahin**) DOI:10.1016/j.enconman.2013.04.001 <http://www.sciencedirect.com/science/article/pii/S019689041300188X>
151. “Neutronic investigations of a Laser Fusion Driven Lithium Cooled Thorium Breeder”, *Progress in Nuclear Energy*, vol. 73, pp.188-196 (2014) [\*] (**S. Şahin**, B. Şarer, Y. Çelik) [doi:10.1016/j.pnucene.2014.02.001](http://www.sciencedirect.com/science/article/pii/S0149197014000298) <http://www.sciencedirect.com/science/article/pii/S0149197014000298>
152. EDITOR’S NOTES on ICENES’2013, 16<sup>TH</sup> INTERNATIONAL CONFERENCE ON EMERGING NUCLEAR ENERGY SYSTEMS, *Progress in Nuclear Energy*, vol.78, pp. 347-348 (2015) [\*] (**S. Şahin**) <http://dx.doi.org/10.1016/j.pnucene.2014.04.013>
153. “Energy multiplication and fissile fuel breeding limits of accelerator-driven systems with uranium and thorium targets,” *International Journal of Hydrogen Energy*, vol. 40/11, pp. 4037-4046 (2015) [\*] (**S. Şahin**, B. Şarer, Y. Çelik) [doi:10.1016/j.ijhydene.2015.01.141](http://www.sciencedirect.com/science/article/pii/S0360319915002335); <http://www.sciencedirect.com/science/article/pii/S0360319915002335>
154. Preface to the special issue on “NURER2014: The 4<sup>th</sup> International Conference on Nuclear and Renewable Energy Resources, 26-29 October 2014, Antalya, Türkiye (Turkey),” *International Journal of Hydrogen Energy*, vol. 40, pp. 15125-15126 (2015) [\*] (**S. Şahin**) <http://dx.doi.org/10.1016/j.ijhydene.2015.07.075>

155. "Influence of Void Fraction on BWR Spent Fuel Direct Recycling Scenario," *International Journal of Hydrogen Energy*, vol. 40, pp. 15172-15178 (A. Waris, Z. Su'ud, H. M. Şahin, E. Kurt, **S. Şahin**) [\*] (2015) doi:10.1016/j.ijhydene.2015.04.135 <http://www.sciencedirect.com/science/article/pii/S0360319915010733>
156. "Preparation of human resources for future nuclear energy using FBNR as the instrument of learning," *Kerntechnik*, vol. 80, no. 5, pp. 498-501. (2015) [\*] (F. Sefidvash, P. Espinoza, V. H. Guerrero, M. Luna, E. Ayala, R. Santos, D. X. Hiep, H. V. Thong, D. T. N. Minh, **S. Şahin**, F. T. van der Laan, C. I. de Oliveira, O. K. Bouhelal, M. Kanoute) DOI:10.3139/124.110532 <http://www.hanser-elibrary.com/doi/abs/10.3139/124.110532>
157. "Experimental evaluation of Surveillance Capsule Assemblies for Life Assessment of CHASNUPP Unit-1 Reactor Pressure Vessel," *Annals of Nuclear Energy*, Vol. 89, pp. 90-98 (March 2016) [\*] (**S. ŞAHİN**, A. Saeed) doi:10.1016/j.anucene.2015.11.019; <http://www.sciencedirect.com/science/article/pii/S0306454915005563>
158. INVESTIGATION OF A GAS TURBINE-MODULAR HELIUM REACTOR USING REACTOR GRADE PLUTONIUM WITH <sup>232</sup>Th AND <sup>238</sup>U, *Progress in Nuclear Energy*, vol. 89, pp. 110-119 (May 2016) [\*] (**S. ŞAHİN**, Ö. EROL, H. M. ŞAHİN) DOI:10.1016/j.pnucene.2016.02.006 <http://www.sciencedirect.com/science/article/pii/S0149197016300282>
159. Editorial, Preface to the special issue on "17th International Conference on Emerging Nuclear Energy Systems (ICENES'2015), 4-8 October 2015, Istanbul, Turkey", *International Journal of Hydrogen Energy*, vol. 41, no. 17, pp. 6981-6983 (2016) [\*] (**S. ŞAHİN**, H. M. ŞAHİN, J. M. MARTINEZ-VAL, Y. WU) <http://www.sciencedirect.com/science/article/pii/S0360319916308175><http://dx.doi.org/10.1016/j.ijhydene.2016.03.008>
160. RADIATION SOURCE TERMS of MYRRHA REACTOR COMPONENTS and EQUIPMENT," *International Journal of Hydrogen Energy*, vol. 41, no. 17, pp. 7213-7220 (2016) [\*] (Y. Çelik, A. Stankovskiy, J. Engelen, G. Van den Eynde, B. Şarer, **S. Şahin**) WOS:000375886400031 doi:10.1016/j.ijhydene.2016.01.119 <http://www.sciencedirect.com/science/article/pii/S0360319915314178>
161. UTILIZATION OF NUCLEAR WASTE PLUTONIUM AND THORIUM MIXED FUEL IN CANDU REACTORS," *International Journal of Energy Research*, vol. 40, no. 14, pp. 1901-1907 (2016) [\*] (**S. Şahin**, B. Şarer, Y. Çelik) <http://onlinelibrary.wiley.com/doi/10.1002/er.3464/epdf> WOS:000387135300003
162. "Reduction of Environmental Impact of Fixed Bed Nuclear Reactor (FBNR) Waste," *Physical Science International Journal*, vol. 10(4), pp. 1-9 (2016) Article no.PSIJ.25287, ISSN: 2348-0130 (F. Sefidvash, E. Amozegar, **S. Şahin**, D. Th. N. Minh, H. V. Thong) DOI : [10.9734/PSIJ/2016/25287](http://dx.doi.org/10.9734/PSIJ/2016/25287)
163. "Candidate Structural Materials for Fusion Energy Reactors," *Journal of New Türkiye; Science and Technology Special Issue*, vol. 89 pp. 727-821 (July-December 2016) ISSN 1300-4174 (**S. Şahin**)
164. "Emergency Planning Zones Estimation for Karachi-2 and Karachi-3 Nuclear Power Plants using Gaussian Puff Model," *Science and Technology of Nuclear Installations* (2016) [\*] (**S. Şahin**, M. Ali) Article ID 8549498, <http://dx.doi.org/10.1155/2016/8549498>
165. REACTIVITY AND KINETIC PARAMETER EVOLUTIONS FOR THE CORE HEIGHT AND BORON CONCENTRATION OF THE FIXED BED NUCLEAR REACTOR," *International Journal of Energy Research*, vol. 42, no. 1, pp. 178-187 (January 2018) [\*] (H. Van Thong, D. Th. N. Minh, **S. Şahin**, T. H. Hoang, F. Sefidvash) <http://onlinelibrary.wiley.com/doi/10.1002/er.3515/epdf>, WOS:000422858300016
166. **PREFACE for the special issue on "Progress in Novel Nuclear Energy Technologies,"** *International Journal of Energy Research*, vol. 42, no. 1, p. 3 (January 2018) [\*] (**S. Şahin**) DOI:10.1002/er.3823
167. "EVALUATION OF THE RADIATION DAMAGE PARAMETERS OF ODS STEEL ALLOYS IN THE FIRST WALL OF DEUTERIUM-TRITIUM FUSION-FISSION (HYBRID) REACTORS," *International Journal of Energy Research*, vol. 42, no. 1, pp. 198-206 (January 2018) [\*] (G. Tuuç, H. M. Şahin, **S. Şahin**) DOI:10.1002/er.3782, WOS:000422858300018



## INTERNATIONAL BOOKS

1. "APSAI: A Computer Code for Plating Fluxes and Absorption Densities Generated by the ANISN code, ORNL - TM - 4273, Oak Ridge National Laboratory, Radiation Shielding Information Center, Oak Ridge, Tennessee (July 1973) Available also from OECD - NEA Data Bank, Paris, France (S. Şahin)
2. "AWNL: A Computer Program to Calculate the Adjoint Weighted Neutron Lifetime", EPFL - LGA, Lausanne (January 1979) Available from OECD - NEA Data Bank and ORNL-RSIC (S. Şahin)
3. *Lecture Notes In Mechanical Engineering; Engineering, Project, and Production Management*, Springer Verlag (2018) (Editor, **S. Şahin**) ISSN 2195-4356, ISSN 2195-4364 (electronic) Lecture Notes in Mechanical Engineering, ISBN 978-3-319-74122-2, ISBN 978-3-319-74123-9 (eBook) <https://doi.org/10.1007/978-3-319-74123-9>, Gewerbstrasse 11, 6330 Cham, Switzerland

## INTERNATIONAL BOOK CHAPTERS

1. “Control Through Reflector Drums for a Dual Purpose Space Craft Thermionic Reactor”, Festschrift, pp. 309-314, Lehrstuhl für Nukleare und Neue Energiesysteme, RUHR-Universität, Bochum, Germany (1994) (**S. Şahin**, A. Sözen)
2. “A Proliferation Resistant Fusion Breeder for Thorium Fuel Cycle”, (S. Şahin, H. Yapıcı, N. Şahin, B. Şarer), Thorium Fuel Utilization: Options and Trends, IAEA-TECDOC-1319, International Atomic Energy Agency, Vienna (Nov. 2002)
3. “Utilization Potential of Thorium in Fusion–Fission (Hybrid) Reactors and Accelerator-Driven Systems”, (**S. Şahin**), *Thorium Energy for the World*, pp. 161-166(J.-P. Revol et al., eds.), Springer International Publishing Switzerland (2016) ISBN 978-3-319-26542-1, DOI 10.1007/978-3-319-26542-1\_25
4. “Utilization Potential of Thorium in CANDU Reactors and in Fusion–Fission (Hybrid) Reactors”, (**S. Şahin**, H. M. Şahin), *Thorium Energy for the World*, pp. 443-444(J.-P. Revol et al., eds.), Springer International Publishing Switzerland (2016) ISBN 978-3-319-26542-1, DOI 10.1007/978-3-319-26542-1\_80
5. *Comprehensive Energy Systems*, Volume 1: Energy Fundamentals, Chapter 122. Nuclear energy (Series Editor: İbrahim Dinçer) Elsevier (2018) (**S. Şahin**, H. M. Şahin) doi:10.1016/B978-0-12-809597-3.00122-X
6. *Comprehensive Energy Systems*, Volume 3: Energy Production, Chapter 330. Fusion energy production (Series Editor: İbrahim Dinçer) Elsevier (2018) (Y. Wu, **S. Şahin**) doi:10.1016/B978-0-12-809597-3.00330-8
7. *Comprehensive Energy Systems*, Volume 3: Energy Production, Chapter 331. Fission energy production (Editor: İbrahim Dinçer) Elsevier, (2018) (**S. Şahin**, Y. Wu) doi:10.1016/B978-0-12-809597-3.00331-X
8. Preface of the Proceedings of “The 8<sup>th</sup> International Conference on Engineering, Project, and Production Management (EPPM2017)”, Amman, Jordan (19-20 September 2017) *Lecture Notes In Mechanical Engineering; Engineering, Project, and Production Management* (Series Editor, **S. Şahin**) Springer Verlag (2018) (**S. Şahin**) DOI: 10.1007/978-3-319-74123-9

## INTERNATIONAL CONFERENCE PAPERS

1. "The Connection between Nuclear Industry and Atomic Weapons", *First Islamic Solidarity Conference on Science and Technology*, University of Riyadh, Saudi Arabia (March 1976) (S. Şahin).
2. "A 1 MW(e) Solar Energy Thermionic Electricity Generator as Primary Energy Source for a Flight to MARS", *International Symposium-I on Solar Energy Fundamentals and Applications*, Faculty of Engineering Sciences, University of EGE, Bornova, Izmir, Türkiye (August 1977) (S. Şahin).
3. "Générateurs Hybrides Thermoioniques avec Energie Solaire pour Applications Spatiales", *1'er Symposium sur la Recherche et le Développement en Energie Solaire en Suisse*; EPF-Lausanne (2.7.1979) (S. Şahin)
4. "Solar Energy Power Generators with Advanced Thermionic Converters for Space Craft Applications", *2nd Miami International Conference on Alternative Energy Sources*, Miami Beach, Florida (10-13 Dec. 1979) *Alternative Energy Sources III*, no. 20, pp. 1253-1266 (1980) (S. Şahin)
5. "Navette Propulsée par l'Energie Solaire entre les Astéroïdes et la Terre", *2'er Symposium sur la Recherche et le Développement en Energie Solaire en Suisse*; EPF-Lausanne (20 Octobre 1980) (S. Şahin).
6. "Improved Fast Hybrid Thermionic Blankets", *5th Miami International Conference on Alternative Energy Sources*, Miami Beach, Florida (13-15 Dec. 1982) *Alternative Energy Sources V*, Part E, pp. 17-26, Elsevier Science Publishers, B. V., Amsterdam (1983) (S. Şahin, A. Kumar)
7. "Improved Thorium Hybrid Blankets", *5th Miami International Conference on Alternative Energy Sources*, Miami Beach, Florida (13-15 Dec. 1982) *Alternative Energy Sources V*, Part E, pp. 27-38, Elsevier Science Publishers, B. V., Amsterdam (1983) (S. Şahin, A. Kumar)
8. "Advanced Fusion Fuel Driven Hybrid Blankets", *5th Miami International Conference on Alternative Energy Sources*, Miami Beach, Florida (13-15 Dec. 1982) *Alternative Energy Sources V*, Part E, pp. 39-46, Elsevier Science Publishers, B. V., Amsterdam (1983) (S. Şahin, A. Kumar)
9. "Actinide Burning Studies Related to Hybrid Reactors", *5th Miami International Conference on Alternative Energy Sources*, Miami Beach, Florida (13-15 Dec. 1982) *Alternative Energy Sources V*, Part E, pp. 47-58, Elsevier Science Publishers, B. V., Amsterdam (1983) (S. Şahin, A. Kumar).
10. "Potential of Muon Catalyzed Cold Fusion-Fission (Hybrid) Reactors", *5th Miami International Conference on Alternative Energy Sources*, Miami Beach, Florida (3-15 Dec. 1982) *Alternative Energy Sources V*, Part E, pp. 59-94, Elsevier Science Publishers, B. V., Amsterdam (1983) (S. Şahin, A. Kumar)
11. "Consequences of the Spectral Shifting in the Neutron Bomb Configuration", *5th Miami International Conference on Alternative Energy Sources*, Miami Beach, Florida (3-15 Dec. 1982) *Alternative Energy Sources V*, Part E, pp. 143-154, Elsevier Science Publishers, B. V., Amsterdam (1983) (S. Şahin, A. Kumar)
12. "Physics of the Fusion-Fission (Hybrid) Reactors", *8th International Summer College on Physics and Contemporary Needs*, Islamabad, Pakistan (23 July-11 August 1983) Invited paper (S. Şahin)
13. "Mainline Fusion-Fission (Hybrid) Reactors", *8th International Summer College on Physics and Contemporary Needs*, Islamabad, Pakistan (23 July-11 August 1983) Invited paper (S. Şahin)
14. "Exotic Fusion-Fission (Hybrid) Reactor Concepts", *8th International Summer College on Physics and Contemporary Needs*, Islamabad, Pakistan (23 July-11 August 1983) Invited paper (S. Şahin)
15. "Advanced Fusion Fuel Driven AYMAN Hybrid Blankets", *6th Miami International Conference on Alternative Energy Sources, Proceedings of Extended Abstracts*, pp. 161-163, Miami Beach, Florida (12-14 December 1983) (S. Şahin, T. A. Al-Kusayer)
16. "(D,T) Driven Thorium Hybrid Blankets", *6th Miami International Conference on Alternative Energy Sources, Proceedings of Extended Abstracts*, pp. 344-347, Miami Beach, Florida (12-14 December 1983) Miami Beach, Florida (S. Şahin, T. A. Al-Kusayer, S. Khan)
17. "Natural Uranium Hybrid Blankets for the AYMAN Project", *6th Miami International Conference on Alternative Energy Sources, Proceedings of Extended Abstracts*, pp. 348-349, Miami Beach, Florida (12-14 December 1983) (S. Şahin, T. A. Al-Kusayer)

18. "Nuclear Waste Actinides as Fissile Fuel in Hybrid Blankets", *6th Miami International Conference on Alternative Energy Sources, Proceedings of the Extended Abstracts*, pp. 350-353, Miami Beach, Florida (12-14 December 1983) (S. Şahin, T. A. Al-Kusayer)
19. "Optimization of the Neutron Multiplier of Experimental AYMANN Hybrid Blankets with ThO<sub>2</sub>", *Proceedings of the Sixth Annual Conference of Canadian Nuclear Society*, pp. 510-518, Ottawa (June 1985) (S. Şahin, T. A. Al-Kusayer, K. S. Al-Malahy, M. Abdul Raof)
20. "Research Activities on Advanced Reactors at the King Saud University", *Transactions of the Third International Conference of Nuclear Technology Transfer, ICONTT-III*, pp. 46-48, Madrid, Spain (1985) (S. Şahin, T. A. Al-Kusayer)
21. "Radiation Shielding Capability of Desert Sand and Asphalt", *Proceedings of the Second Saudi Engineers Conference*, pp. 1602-1625, Dhahran, Saudi Arabia (Nov. 1985) (S. Şahin, T. A. Al-Kusayer)
22. "Safeguard Aspects of <sup>244</sup>Cm as Multiplier in Cylindrical Hybrid Blankets", *Transactions of the American Nuclear Society 1986 Annual Meeting*, Vol. 52, pp. 269-271, Reno, Nevada (June 15-19, 1986) (S. Şahin, T. A. Al-Kusayer)
23. "Multidimensional Analysis of an Experimental Hybrid Blanket Driven by a Simulated Line Source", *Transactions of the American Nuclear Society 1986 Annual Meeting*, Vol. 52, pp. 273-274, Reno, Nevada (June 15-19, 1986) (S. Şahin, M. Abdul Raof)
24. "A Numerical-Graphical Power Flattening Method for Source Driven Fast Fission Blankets", *Proceedings of the 4th Int. Conference on Emerging Nuclear Energy Systems*, pp. 59-62, Madrid, Spain (30 June-4 July 1986) World Scientific Publishing Company (1987) (S. Şahin, M. Al-Eshaikh)
25. "Direct-Fired and Double-Fluided Heat Pump", *XIV IAHS World Congress on Housing, Innovations in Sciences & Technology for the Future*, Berlin, W. Germany (October 13-17, 1987) (S. Şahin, K. Altınışık)
26. "Neutronic Studies on an Experimental Hybrid Blanket in Cylindrical Geometry Using a Movable Target to Simulate a Line Neutron Source", *4th Miami International Symposium on Multi-Phase Transport and Particulate Phenomena*, Miami Beach, Florida, USA, (15-17 December 1986), Proceedings, Vol. 4, pp. 415-432, Hemisphere Publishing Corporation (1988) (S. Şahin)
27. [Summary of the Workshop on Alpha-Particle Diagnostics, Abingdon, United Kingdom, December 9-10, 1986; American Institute of Physics Conference Proceedings: Sixth Topical Conference on Radiofrequency Plasma Heating, Calloway Gardens, Georgia, May 1985](#)(S. Şahin, et al.,)
28. "A Fast Hybrid Blanket with Flat Fission Power over a Long Operational Period", *Transactions American Nuclear Society 1987 Annual Meeting*, Vol. 54, pp. 134-136, Dallas, Texas (1987) (S. Şahin, A. Erişen, Y. Çebi)
29. "Space Craft Thermal Thermionic Reactors with Flat Power Distribution", *Proceedings of the Extended Abstracts of the 8th Miami International Conference on Alternative Energy Sources*, Miami Beach, Florida, USA (14-16 December 1987)
30. "A <sup>244</sup>CmO<sub>2</sub>/Nat.-UO<sub>2</sub> Hybrid Blanket with Flat Fission Power Production", *Transactions of the American Nuclear Society 1988 International Conference*, Vol., 57, pp. 303-305, Washington D. C. (1988) (S. Şahin, A. Erişen, Y. Çebi)
31. "Heat Pump Supported by Heat Pipe Solar Collector", *5th Miami Int. Symposium on Multi-Phase Transport and Particulate Phenomena*, Miami Beach, Florida, (12-14 December 1988), Proceedings, Vol. 2, pp. 503-514, Hemisphere Publishing Corporation (1990) (S. Şahin, A. Y. Uyarel, H. Usta)
32. [Summary of the Aqueous Lithium Salt Blanket Workshop, Toronto, Ontario, Canada, February 6-9, 1989; Summary of the US-Japan Workshop on Evaluation of Impurity Pellet Injection for Alpha Diagnostics, San Diego, California, January 16-17, 1989](#)(S. Şahin, et al.,)
33. "Rejuvenation of CANDU Spent Fuel in a Hybrid Blanket", *Transactions of the American Nuclear Society 1989 Annual Meeting*, Vol. 59, pp. 105-106, Atlanta, Georgia (June 4-8, 1989) (S. Şahin, H. Yapıcı)
34. "HWR Spent Fuel Regeneration with Fusion Neutrons", *Transactions of the American Nuclear Society 1989 International Conference*, Vol. 60, pp. 176-178, San Francisco, California (1989) (S. Şahin, H. Yapıcı, E. Baltacıoğlu)

35. "Preliminary Design Studies on a Cold Fusion-Fission (Hybrid) Reactor, *9th Miami International Congress on Energy and Environment, Proceedings of the Extended Abstracts*, Miami Beach, Florida (Dec. 11-13, 1989) (S. Şahin, H. Yapıcı, E. Baltacıoğlu)
36. "Evaluation of the Main Technical Data of a Cold Fusion-Fission (Hybrid) Reactor Concept", *6th International Conference on Emerging Nuclear Energy Systems*, Monterey, California (June 16-21, 1991)
37. "Neutronic Investigation of a Power Plant Using Peaceful Nuclear Explosives", *American Nuclear Society Embedded Topical Meeting, 11th Topical Meeting on the Technology of Fusion Energy*, Proceedings of the Abstracts, pp. 393-394, New Orleans, Louisiana (June 19-23, 1994) (S. Şahin, R. Moir, S. Ünalın)
38. "Neutronic and Thermohydraulic Design Studies for Thermionic Space Reactors", *Transactions of the American Nuclear Society 1994 Annual Meeting*, Vol. 70, pp. 313-316, New Orleans, Louisiana (June 19-23, 1994) (S. Şahin, E. B. Kennel)
39. "Decrease of Inventory Requirements for Spent Nuclear Fuel with Fusion Neutrons", GLOBAL, International Conference on Evaluation of Emerging Nuclear Fuel Cycle Systems, Palais des Congres, Versailles, France (Sept. 11-14, 1995) (S. Şahin, H. Yapıcı, E. Baltacıoğlu, B. Şarer)
40. "Basic Physical Principles of the Fusion-Fission (Hybrid) Reactors", 10th Turkish National Conference on Thermal Sciences and Technologies with International Participation, Gazi University, Ankara, Türkiye (6-8 September 1995) (S. Şahin)
41. "Integral Data for (D,T) Fusion Neutrons in Infinite Medium", *American Nuclear Society 1996 Annual Meeting Embedded Topical Meeting, Proceedings of the Abstracts of the 12th Topical Meeting on the Technology of Fusion Power*, p.195, Reno, Nevada (June 16-20, 1996) (S. Şahin, H. Yapıcı, S. Ünalın, V. Özceyhan)
42. "Rejuvenation of LWR Spent Fuel in Fusion Blankets", *American Nuclear Society 1996 Annual Meeting Embedded Topical Meeting, Proceedings of the Abstracts of the 12th Topical Meeting on the Technology of Fusion Power*, p. 259, Reno, Nevada (June 16-20, 1996) (S. Şahin, S. Ünalın, H. Yapıcı)
43. "Radiation Damage in Liquid-Protected First Wall Materials for IFE-Reactors", *American Nuclear Society 1996 Annual Meeting Embedded Topical Meeting, Proceedings of the Abstracts of the 12th Topical Meeting on the Technology of Fusion Power*, p. 330, Reno, Nevada (June 16-20, 1996) (S. Şahin, R. W. Moir, A. Şahinaslan, H. M. Şahin)
44. "Calculation of the Neutron Heating in the Reflector Control Drums of a Hybrid Thermionic Space Reactor", *Transactions of the American Nuclear Society/European Nuclear Society 1996 International Conference*, p. 364-365, Washington, D.C. (Nov. 10-15, 1996) (S. Şahin, A. Sözen)
45. "Neutron and Gamma-Ray Heating in the Magnet Coils of the VISTA Spacecraft", *Transactions of the American Nuclear Society 1997 Annual Meeting*, Vol. 76, pp. 137-139, Orlando (June 1-5, 1997) (S. Şahin, H. M. Şahin and A. Sözen)
46. "Radiation Damage in Liquid-Protected First-Wall Materials for MFE-Reactors", *Transactions of the American Nuclear Society 1997 Winter Meeting*, Vol. 77, pp. 158-160, Albuquerque (Nov. 16-20, 1997) (S. Şahin, A. Şahinaslan, M. Kaya, S. Yılmaz)
47. "A Fusion Breeder Fueled with Natural Uranium and Enhanced Safeguarding Capabilities", Global'97, International Conference on Future Nuclear Systems, Vol. 2, pp. 854-859, October, 5-10, 1997, Yokohama, Japan (S. Şahin, T. Altınok, H. Yapıcı, E. Baltacıoğlu, B. Şarer, A. Sözen and S. Yılmaz)
48. Shielding Mass Reduction for the Vista Spacecraft, *Transactions of the American Nuclear Society 1998 Winter Meeting*, Vol. 79, pp. 266 – 269, Washington, D.C. (Nov. 15-19, 1998) (S. Şahin, H. M. Şahin and A. Sözen)
49. "Temperature Field Calculations in the Reflector of a Dual Purpose Thermionic Space Reactor", *Transactions of the American Nuclear Society 1998 Winter Meeting*, Vol. 79, pp. 332 – 334, Washington, D. C. (Nov. 15-19, 1998) (S. Şahin, A. Sözen and H. M. Şahin)
50. "A Proliferation Resistant Fusion Breeder for Thorium Fuel Cycle", Thorium Fuel Utilization: Options and Trends, *Proceedings of IAEA Meeting*, pp. 139-153, Vienna, (28-30 Sept. 1998), IAEA-TECDOC-1319 (Nov. 2002) (S. Şahin, H. Yapıcı, N. Şahin, B. Şarer)

51. "A Fusion Breeder with Flat Power Profile for Spent Fuel Rejuvenation", International Symposium on MOX Fuel Cycle Technologies for Medium and Long-Term Deployment: Experience, Advances, Trends, Vienna, Austria (17-21 May 1999) (S. Şahin, H. Yapıcı, M. Bayrak, B. Şarer)
52. "Proliferation Hardening Of Thorium Fusion Breeders With CANDU Spent Fuel", 6th International Conference on CANDU Fuel, Niagara-on-the-Lake, Ontario, Canada (Sept. 26-29, 1999) (S. Şahin)
53. Elimination of the Coils Shielding for MFE-Reactors Through a Liquid-Protected First-Wall, ICRS-9, *Ninth International Conference on Radiation Shielding, Proc. of ABSTRACTS*, P1-23, Tsukuba, Japan (Oct. 17-22, 1999) (S. Şahin, A. Şahinaslan, H. M. Şahin)
54. "Reduced Shielding Mass for the Vista Spacecraft", *Ninth International Conference on Radiation Shielding, Proc. of ABSTRACTS*, P1-24, Tsukuba, Japan (Oct. 17-22, 1999) (S. Şahin, H. M. Şahin, A. Şahinaslan)
55. "Minor Actinide Burning in a Thorium Fusion Breeder", *Transactions of the American Nuclear Society/European Nuclear Society 2000 International Conference*, Vol. 83, p. 236-239, Washington, D. C. (Nov. 12-16, 2000) (S. Şahin, H. M. Şahin, A. Sözen, M Bayrak)
56. "An Optimization Study for the Radiation Shielding of the Vista Spacecraft", *Transactions of the American Nuclear Society/European Nuclear Society 2000 International Conference*, Vol. 83, p. 505-508, Washington, D.C. (Nov. 12-16, 2000) (S. Şahin, H. M. Şahin)
57. "Influence of the Resonance Treatment on Integral Parameters in a Fusion Breeder Blanket", *Transactions of the American Nuclear Society/European Nuclear Society 2002 Annual Meeting*, Vol. 86, pp. 412 - 414, Hollywood, FL (June 9 – 13, 2002) (S. Şahin, Ş. Yalçın, H. M. Şahin, K. Yıldız, T. Altınok)
58. "Fusion Breeder Option of HYLIFE-II Reactor", *Transactions of the American Nuclear Society 2003 Annual Meeting*, Vol. 88, pp. 533-535, San Diego, California (June 1-5, 2003) (S. Şahin, Ş. Yalçın, H. M. Şahin, M. Übeyli)
59. "Thorium and Spent LWR Mox-Fuel in CANDU Reactors", *Transactions of the American Nuclear Society 2003 Annual Meeting*, Vol. 88, pp. 513-514, San Diego, California (June 1-5, 2003) (S. Şahin, H. M. Şahin, M. Alkan, K. Yıldız)
60. "A Dual Purpose Fusion Reactor Concept with Swirling Flowing Liquid Protective Wall Using Heavy Metal Molten Salt", *Tenth International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-10)*, paper # M00202, Seoul, Korea (October 5-9, 2003) (S. Şahin, H. M. Şahin, M. Übeyli)
61. "Neutronic and Thermo-Hydrodynamic Studies on a Dual Purpose Thermionic Space Craft Reactor for Power and Propulsion", *Tenth International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-10)*, paper # N00301, Seoul, Korea (October 5-9, 2003) (S. Şahin)
62. "Reduction of Nuclear Heating in the Supermagnetic Coils of Vista Space Craft" , *Tenth International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-10)*, paper # N00302, Seoul, Korea (October 5-9, 2003) (S. Şahin, H. M. Şahin, M. Übeyli)
63. "Fissile Fuel Breeding in a Modified Apex Reactor", *Transactions of the American Nuclear Society/European Nuclear Society 2003 International Conference*, Vol. 89, pp. 240-241, New Orleans (16 -20 November 2003) (S. Şahin, M. Übeyli, H. M. Şahin)
64. "Tritium Breeding Potential of Innovative Coolants in a Hybrid Reactor", *Transactions of the American Nuclear Society 2004 Winter Meeting*, Vol.91, pp. 338 – 339, Washington, DC • Omni Shoreham Hotel (November 14-18, 2004) (With, T. Altınok)
65. "Transmutation of Minor Actinides in a High Power Density Fusion Reactor", *Transactions of the American Nuclear Society 2004 Winter Meeting*, Vol.91, pp. 358 – 359, Washington, DC • Omni Shoreham Hotel (November 14-18, 2004) (S. Şahin, M. Übeyli, T. Altınok)
66. "Uniform Nuclear Heat Density in the CANDU Fuel Bundle", *Transactions of the American Nuclear Society 2004 Winter Meeting*, Vol.91, pp. 761 – 762, Washington, DC • Omni Shoreham Hotel (November 14-18, 2004) (S. Şahin, K. Yıldız, A. Acır)
67. "Investigation of Heat Transfer Coefficient During Unsteady state Solidification at Casting Metal-Mold Interface", *Proceedings of IMEC2004 International Mechanical Engineering Conference*, pp. 625 – 642, IMEC04-2063, Kuwait (December 5-8, 2004)(S. Şahin, H. M. Şahin, K. Kocatepe, N. Akar)

68. "Temperature Fields in the Reflectors of a Dual Purpose Thermionic Space Craft Reactor During Thrust Phase", *Proceedings of IMEC2004 International Mechanical Engineering Conference*, pp. 671 – 691, IMEC04-1050, Kuwait (December 5-8, 2004)(S. Şahin)
69. Utilization of New Coolants in a Multi-Functional Reactor, *Transactions of the American Nuclear Society2005 Annual Meeting*, San Diego, California (June 5 - 9, 2005)(S. Şahin, M. Übeyli)
70. Fissile Fuel Breeding in ARIES-RS Fusion Reactor, *Transactions of the American Nuclear Society2005 Annual Meeting*, San Diego, California (June 5 - 9, 2005)(S. Şahin, M. Übeyli, A. Acır)
71. Temperature Fields in the Reflectors of a Dual Purpose Thermionic Space Craft Reactor during Thrust Phase, *Transactions of Space Nuclear Conference 2005*, San Diego, California (June 5 - 9, 2005)(S. Şahin, H.M. Şahin, A. Acır, T. Altınok)
72. Nuclear Heating Considerations in the Supermagnetic Coils of Vista Space Craft, *Proceedings of the Space Nuclear Conference 2005*, pp. 741 – 748, San Diego, California (June 5 - 9, 2005)(S. Şahin, H. M. Şahin, A. Acır, T. Altınok)
73. "Hydrogen Production from Nuclear Energy", International Hydrogen Energy Congress&Exhibition, İstanbul, Türkiye (13 – 15 July 2005) (S. Şahin)
74. "On the Radiation Damage Behavior of Refractory Alloys in a Hybrid Reactor", ICENES 2005 - *Proceedings of the 12<sup>th</sup> International Conference on Emerging Nuclear Energy Systems*, 1000 Bruxelles, Belgium (August 21-26, 2005) B. Verboomen, H. Ait Abderrahim, P. D'hondt (Editors) ISBN 90-7697-110-2 (S. Şahin, M. Übeyli)
75. "Fissile Fuel Breeding in HYLIFE-II Reactor", ICENES 2005 - *Proceedings of the 12<sup>th</sup> International Conference on Emerging Nuclear Energy Systems*, 1000 Bruxelles, Belgium (August 21-26, 2005) B. Verboomen, H. Ait Abderrahim, P. D'hondt (Editors) ISBN 90-7697-110-2 (S. Şahin, M. Übeyli, T. Altınok)
76. "The Effects of Neutron Energy-Group Structures and Resonance Treatment on Integral Parameters in a Fusion Breeder Blanket Fuelling with ThO<sub>2</sub>", ICENES - *Proceedings of the 12<sup>th</sup> International Conference on Emerging Nuclear Energy Systems*, 1000 Bruxelles, Belgium (August 21-26, 2005) B. Verboomen, H. Ait Abderrahim, P. D'hondt (Editors) ISBN 90-7697-110-2 (S. Şahin, H. M. Şahin, K. Yıldız, A. Acır)
77. "Power Flattening in ARIES-RS Hybrid Reactor", *Transactions of the American Nuclear Society2005 Winter Meeting*, Vol. 93, Washington, pp. 357-358, DC • Omni Shoreham Hotel (November 13-17, 2005) (S. Şahin, M. Übeyli)
78. "Neutronic Analysis of a Magnetic Fusion Reactor with Heavy Metal Salt", *Transactions of the American Nuclear Society2006 Annual Meeting*, Vol. 94, pp. 601-602, Reno, Nevada (June 4 – 8, 2006) (S. Şahin, M. Übeyli)
79. "Transmutation of Minor Actinides in a CANDU Thorium Burner", *Proceedings of the 13<sup>th</sup> International Conference on Emerging Nuclear Energy Systems, ICENES 2007*, İstanbul/Türkiye (3 – 8 June 2007) (S. Şahin, Editor) ISBN-978-975-01805-0-7 (S. Şahin, K. Yıldız, H. M. Şahin, A. Acır, N. Şahin, T. Altınok, M. Alkan)
80. "The Fixed Bed Nuclear Reactor Concept", *Proceedings of the 13<sup>th</sup> International Conference on Emerging Nuclear Energy Systems, ICENES 2007*, İstanbul/Türkiye (3 – 8 June 2007) S. Şahin (Editor) ISBN-978-975-01805-0-7 (S. Şahin, F. Sefidvash)
81. "The Fixed Bed Nuclear Reactor for Decentralized Energy Needs", *International Symposium on Peaceful Applications of Nuclear Technologies in the GCC Countries*, Jeddah/Saudi Arabia (3 – 5 November 2008) (S. Şahin, F. Sefidvash)
82. "Radiation Shielding Studies of the Laser Fusion Propelled Vista Space Craft", *First Conference on Radiation Protection Issues in GCC Countries*, Riyad, Saudi Arabia (11-13 May, 2009) (S. Şahin, H. M. Şahin, T. A. Al-Kusayer)
83. "Utilization Potential of LWR Spent Fuel in CANDU Reactors", *34<sup>th</sup> International Summer College on Physics and Contemporary Needs; Energy Systems Design, Safety, Security & Reliability of Engineering Systems*, Islamabad, Pakistan (22 June - 27 June 2009) (invited paper) (S. Şahin)

84. “Burning of Nuclear Waste Actinides in CANDU Reactors”,*34<sup>th</sup> International Summer College on Physics and Contemporary Needs; Energy Systems Design, Safety, Security & Reliability of Engineering Systems*, Islamabad, Pakistan (22 June - 27 June 2009) (invited paper) (S. Şahin)
85. “Criticality Evolution of the Fixed Bed Nuclear Reactor with Alternative Fuels”, *14<sup>th</sup> International Conference on Emerging Nuclear Energy Systems, ICENES 2009*, Ericeira/Portugal (28 June – 3 July 2009)(S. Şahin, H. M. Şahin, A. Acır)
86. “Outstanding Potential of CANDU Reactors for the Transmutation of Minor Actinides” , *Proceedings of GLOBAL 2009, The Nuclear Fuel Cycle: Sustainable Options & Industrial Perspectives*, paper #: 9011, pp. 1847 – 1856, Paris, France (6-11 September, 2009) (S. Şahin, T. A. Al-Kusayer, H. M. Şahin, N. Şahin, A. Acır, K. Yıldız, T. Altınok)
87. “Radiation Damage Studies On Fusion Reactors”, *Physics of Materials under Neutron and Charged Particle Irradiations*, Technical Meeting, IAEA Headquarters, Vienna, Austria(16 to 19 November 2009)
88. “Transmutation of Minor Actinides in CANDU Reactors”, *Proceedings of the 1<sup>st</sup> International Nuclear and Renewable Energy Conference (INREC10)*, Amman, Jordan (March 21-24, 2010) (S. Şahin, H. M. Şahin, A. Acır, T. A. Al-Kusayer)
89. “Fixed Bed Nuclear Reactor For Electricity And Desalination Needs of Middle-East Countries”, *Proceedings of the 1<sup>st</sup> International Nuclear and Renewable Energy Conference (INREC10)*, Amman, Jordan (March 21-24, 2010) (S. Şahin, H. M. Şahin, F. Sefidvash, T. A. Al-Kusayer)
90. “Transmutation and Burn Up of Nuclear Waste Minor Actinides in CANDU Reactors”, *The Second International Conference on Nuclear and Renewable Energy Resources*, Ankara, Türkiye (4-7th July 2010) (S. Şahin, H. M. Şahin, A. Acır, R. Ahmed, M. J. Khan)
91. “Utilization of TRISO fuel in CANDU Reactors for Significantly Extended Burning Levels”, *35<sup>th</sup> International Summer College on Physics and Contemporary Needs; Scientific Computing and Mathematical Modeling*, Islamabad, Pakistan (5th July - 10th July, 2010) (invited paper) (S. Şahin)
92. “A Sustainable New Nuclear Reactor for Emerging Nuclear Countries”, *The 9<sup>th</sup> International Conference on Sustainable Energy Technologies*, Shanghai, China (August 24-27, 2010) (S. Şahin, T. A. Al-Kusayer, F. Sefidvash)(invited paper) (S. Şahin)
93. "Sustainability of Conventional Nuclear Reactors for Clean Energy Production", *10<sup>th</sup> International Conference on Clean Energy - ICCE-2010*, Magosa, North Cyprus (15-17 September 2010) (invited paper) (S. Şahin)
94. “Reduction of Weapon Grade Plutonium Inventories in a Thorium Burner”, *ICENES 2011, 15<sup>th</sup> International Conference on Emerging Nuclear Energy Systems*, San Francisco, California, USA (May 15-19, 2011) (S. Şahin, H. M. Şahin, A. Acır)
95. “Utilization of Reactor Grade Plutonium as Energy Multiplier in the LIFE Engine”, *ICENES 2011, 15<sup>th</sup> International Conference on Emerging Nuclear Energy Systems*, San Francisco, California, USA (May 15-19, 2011)(S. Şahin, H. M. Şahin, A. Acır)
96. “Comparisons of the Calculations Using Different Codes implemented in MCNPX Monte Carlo Transport Code for Accelerator Driven System Target”, *ICENES 2011, 15<sup>th</sup> International Conference on Emerging Nuclear Energy Systems*, San Francisco, California, USA (May 15-19, 2011) (S. Şahin, B. Şarer, M. Günay, Y. Çelik)
97. “Commercial Utilization of Weapon Grade Plutonium as TRISO Fuel in Conventional CANDU Reactors,” *SET2011, The 10th International Conference on Sustainable Energy Technologies*, İstanbul, Türkiye (4-7<sup>th</sup> September 2011) (S. Şahin, H. M. Şahin, A. Acır)
98. “LIFE Hybrid Reactor as Reactor Grade Plutonium Burner,”*SET2011, The 10th International Conference on Sustainable Energy Technologies*, İstanbul, Türkiye (4-7<sup>th</sup> September 2011) (S. Şahin, H. M. Şahin, A. Acır)
99. “General Overview on Nuclear Energy and Renewable Aspects,” *The International Renewable Energy Congress (IREC 2011)*, Hammamet, Tunisia (December 20-22, 2011) (S. Şahin, KEYNOTE SPEAKER)
100. “General Overview on Nuclear Energy and Global Climate Control,” *International Mechanical Engineering Convention (IMEC) of The American Society for Mechanical Engineers (ASME) at The Ghulam Ishaq Khan*



*Institute of Engineering Sciences and Technology (GIKI)*, Topi, Dist. Swabi, NWFP, Pakistan, (April 20-22, 2012) (S. Şahin)

101. “A Dual Purpose Thermionic Space Craft Reactor for Power and Propulsion,” *International Mechanical Engineering Convention (IMEC) of The American Society for Mechanical Engineers (ASME) at The Ghulam Ishaq Khan Institute of Engineering Sciences and Technology (GIKI)*, Topi, Dist. Swabi, NWFP, Pakistan, (April 20-22, 2012) (S. Şahin)
102. “Power Flattening with Weapon Grade Plutonium in PHWRs Using Triso Fuel,” *The III. International Conference on Nuclear and Renewable Energy Resources*, İstanbul, Türkiye (20-23<sup>rd</sup> May 2012) (S. Şahin, H. M. Şahin, A. Acır)
103. “Nuclear Based Hydrogen Production, Coupled with Incineration of Nuclear Waste Transuranium Products,” *International Conference on Hydrogen Production 2012 (ICH2P-2012)*, Renaissance Seoul Hotel, Seoul, Republic of Korea (June 24-27, 2012) (S. Şahin, invited paper)
104. “Impact of Different Physics Models in MCNPX Code on the Neutron and Proton Heating in ADS,” *Transactions of the American Nuclear Society 2012 Annual Meeting*, vol. 106, pp. 28-31, Hyatt Regency Chicago, Illinois, U.S.A. (June 24–28, 2012) (B. Şarer, S. Şahin, M. Günay) [http://www.new.ans.org/meetings/m\\_78](http://www.new.ans.org/meetings/m_78)
105. “Utilization of LWR Nuclear Waste Transuranium/Nat-Uranium Mixed Fuel in CANDU Reactors,” *Transactions of the American Nuclear Society 2012 Annual Meeting*, vol. 106, pp. 185-188, Hyatt Regency Chicago, Illinois, U.S.A. (June 24–28, 2012) (S. Şahin, R. Ahmed, M. J. Khan) [http://www.new.ans.org/meetings/m\\_78](http://www.new.ans.org/meetings/m_78)
106. “Potential of Sustainability and Renewability of Nuclear Technology coupled with Reduced Nuclear Waste for Clean Energy Production,” 2012 International Youth Nuclear Congress (IYNC2012), Charlotte, North Carolina, USA (August 5–11, 2012) (S. Şahin)
107. “Incineration of Transuranium LRW Nuclear Waste in a Laser Fusion-Hybrid Reactor,” 11<sup>th</sup> International Conference on Sustainable Energy Technologies (SET-2012) Vancouver, Canada (September 2-5, 2012) (S. Şahin, invited paper)
108. “Renewable Aspects of Fission and Fusion Nuclear Energy,” EWRES2012, The European Workshop on Renewable Energy Systems, Alanya, Türkiye (September 17-28, 2012) (S. Şahin)
109. “Importance of Research Activities for the Development of Renewable Energies with Emphasis on Solar Energy”, IASS INTERNATIONAL WORKSHOP - *RENEWABLE ENERGY PERSPECTIVES IN LATIN AMERICA IN THE INTERNATIONAL CONTEXT*, POTSDAM, GERMANY (1<sup>st</sup> - 2<sup>nd</sup> October, 2012) (S. Şahin, invited paper) [http://www.iass-potsdam.de/sites/default/files/files/iass\\_renewable\\_energy\\_workshop\\_agenda.pdf](http://www.iass-potsdam.de/sites/default/files/files/iass_renewable_energy_workshop_agenda.pdf)
110. “Status of Higher Education in Nuclear Engineering in Türkiye and Research Activities at the ATILIM University”, 2<sup>nd</sup> *International Engineering Education Conference (IEEC2012) "New Trends and Expectations*, Club Hotel Sera, 07160 Lara, Antalya, TÜRKİYE (October 31 - November 3, 2012) (S. Şahin, E. Bingöl) <http://meuk2012.atilim.edu.tr/>
111. “Thermionic Nuclear and Solar Conversion for Space Vehicles”, *The International Renewable Energy Congress (IREC 2012)*, Sousse, Tunisia (December 19-22, 2012) (S. Şahin, invited paper at plenary) <http://www.irec.cmerp.net/>
112. Hydrogen Hazard and Mitigation Analysis in PWR Containment, *ICENES 2013, 16<sup>th</sup> International Conference on Emerging Nuclear Energy Systems*, Madrid, Spain (May 26-30, 2013) (S. Şahin, M. S. Sarvar) <http://www.icenes2013.org>
113. Thermal and Fast Thermionic Space Craft Reactors for Power and Propulsion, *ICENES 2013, 16<sup>th</sup> International Conference on Emerging Nuclear Energy Systems*, Madrid, Spain (May 26-30, 2013) (S. Şahin) <http://www.icenes2013.org> (invited paper)
114. Neutronic Calculations in Accelerator Driven Systems, 38<sup>th</sup> *International Summer College on Physics and Contemporary Needs; Accelerators, their Applications and New Acceleration*, Islamabad, Pakistan (24<sup>th</sup> June – 29<sup>th</sup> June, 2013) (Y. Çelik, B. Şarer, S. Şahin)
115. “Renewability and Sustainability Aspects of Nuclear Energy,” *The 4<sup>th</sup> International Conference on Advances in Nuclear Science and Engineering (ICANSE2013)*, ASTON HOTEL DENPASAR, BALI, INDONESIA

- (September 16-19, 2013) (S. Şahin, Keynote speaker) (*to be published in Proceedings of American Institute of Physics*)
116. “The Prospect of Nuclear Energy in Türkiye,” *The 4<sup>th</sup> International Conference on Advances in Nuclear Science and Engineering (ICANSE2013)*, Aston Hotel Denpasar, Bali, Indonesia (September 16-19, 2013) (S. Şahin, Invited paper) (*to be published in Proceedings of American Institute of Physics*)
  117. “Utilization Potential of Thorium in CANDU Reactors and in Fusion-Fission (Hybrid) Reactors,” *Thorium Energy Conference - TheEC13*, Geneva – CERN, Switzerland (October 27-31, 2013) (S. Şahin, Invited paper)
  118. “Preliminary Study on Effect of Changing MFR on SUPEL Scenario for PWR Spent Fuel Direct Recycling Scheme,” *2<sup>nd</sup> International Conference on Mechanical, Automotive and Materials Engineering (CMAME 2014)*, Singapore (May 26-28, 2014) (A. Waris, I. K. Aji, S. Pramuditya, H. M. Şahin, S. Şahin)
  119. “General Overview on Nuclear Energy and Technology with Respect to Clean Energy Renewable Aspects,” *International Conference on Clean Energy 2014 (ICCE-2014)*, İstanbul, Türkiye (June 8-12, 2014) (S. Şahin, Invited paper)
  120. “Alternative Fuels for a Laser Fusion-Fission (Hybrid) Reactor,” *Turkish Physical Society 31<sup>st</sup> International Physics Congress*, Bodrum, Türkiye (21-24 July 2014) (S. Şahin, Invited paper)
  121. “Impact of the Utilization Different Nuclear Models implemented in MCNPX Monte Carlo Transport Code on Pertinent Physical and Technical Data in an Accelerator Driven System (ADS) and thorium production limits of ADS,” *39<sup>th</sup> International Nathiagali Summer College on Physics and Contemporary Needs*, Nathiagali, Pakistan (3<sup>rd</sup> – 9<sup>th</sup> August, 2014) (S. Şahin, B. Şarer, Y. Çelik)
  122. “Accelerator-Driven Systems for URANIUM AND THORIUM BREEDING,” *Fourth Nuclear Engineering Week (IV SEN), Federal University of Rio de Janeiro (PEN/COPPE/UFRJ), Rio de Janeiro, Brazil* (August 11-15, 2014) (S. Şahin, B. Şarer, Y. Çelik; Invited paper)
  123. “Thorium Breeding and Actinide Transmutation in a Laser Fusion-Fission (Hybrid) Reactor,” *Fourth Nuclear Engineering Week (IV SEN), Federal University of Rio de Janeiro (PEN/COPPE/UFRJ), Rio de Janeiro, Brazil* (August 11-15, 2014) (S. Şahin; Invited paper)
  124. “Nuclear Performance of Accelerator-Driven Systems with Infinite Uranium and Thorium Material”, *4<sup>th</sup> International Conference on Nuclear and Renewable Energy Resources*, Antalya, Türkiye (26-29 October 2014) (S. Şahin, B. Şarer, Y. Çelik) <http://nurer2014.org/>
  125. “Influence of Void Fraction on BWR Spent Fuel Direct Recycling Scenario” , *4<sup>th</sup> International Conference on Nuclear and Renewable Energy Resources*, Antalya, Türkiye (26-29 October 2014) (A. Waris, Z. Su’ud, H. M. Şahin, E. Kurt, S. Şahin) <http://nurer2014.org/>
  126. “Upper Limits of Accelerator-Driven Systems with Breeder Materials”, *Transactions of the American Nuclear Society 2014 Winter Meeting and 21<sup>st</sup> Topical Meeting on the Technology of Fusion Energy (TOFE)*, vol. 111, pp. 11-13, Anaheim, CA, U.S.A. (November 9-13, 2014) (S. Şahin, B. Şarer, Y. Çelik) [http://www.ans.org/meetings/m\\_137](http://www.ans.org/meetings/m_137)
  127. “A Laser Fusion Thorium Breeding Reactor”, *Transactions of the American Nuclear Society 2014 Winter Meeting and 21<sup>st</sup> Topical Meeting on the Technology of Fusion Energy (TOFE)*, vol. 111, pp. 1309-1311, Anaheim, CA, U.S.A. (November 9-13, 2014) (S. Şahin, B. Şarer, Y. Çelik) [http://www.ans.org/meetings/m\\_137](http://www.ans.org/meetings/m_137)
  128. “Spent Fuel from Fixed Bed Nuclear Reactor, INPRO Consultants’ Meeting on Collaborative Project,” *Wastes from Innovative Types of Reactors and Fuel Cycles (WIRAF)*, Vienna, Austria (24-27 March 2015) (F. Sefidvash, V. Guerrero, E. Ayala, M. Luna, P. Espinoza, C. I. de Oliveira, F. T. van der Laan, D. T. N. Minh, H. V. Thong, S. Şahin, O. K. Bouhelal, M. Kanoute)
  129. “A GENERAL REVIEW OF SPACE NUCLEAR REACTORS,” *7<sup>th</sup> International Conference on Recent Advances in Space Technologies*, İstanbul, Türkiye (16-19 June 2015) (S. Şahin)
  130. “MONTE CARLO CALCULATIONS OF A CANDU REACTOR WITH REACTOR GRADE PLUTONIUM/THORIUM MIXED FUEL,” *ICENES 2015, 17<sup>th</sup> International Conference on Emerging Nuclear Energy Systems*, İstanbul, Türkiye (Oct 4-8, 2015) (S. Şahin, B. Şarer, Y. Çelik) <http://icenes2015.org/index.php>

131. "Comparative Studies On Plutonium Utilization in Small Modular Reactor With Uranium and Thorium Oxide Fuels," *ICENES 2015, 17<sup>th</sup> International Conference on Emerging Nuclear Energy Systems*, İstanbul, Türkiye (Oct 4-8, 2015) (A. Waris, Z. Su'ud, S. Permana, H. M. Şahin, S. Şahin) <http://icenes2015.org/index.php>
132. "General Overview Over Advanced Nuclear Energy Systems," *5<sup>th</sup> INTERNATIONAL CONFERENCE ON ENERGY SYSTEMS - ICES2015*, Bandung, Indonesia (18-20 November 2015) (S. Şahin, Keynote speaker) <http://portal.fi.itb.ac.id/icanse2015/pages/home.php>
133. "Space Nuclear Reactors," *5<sup>th</sup> INTERNATIONAL CONFERENCE ON ENERGY SYSTEMS - ICES2015*, Bandung, West Java, Indonesia (18-20 November 2015) (S. Şahin, Invited paper) <http://portal.fi.itb.ac.id/icanse2015/pages/home.php>
134. "Possible Nuclear Energy Contribution for Rural and Remote Area" *International Conference on Rural Development And Community Empowerment*, Bandung, West Java, Indonesia ITB Campus (Jatinagor), (November 21, 2015) (S. Şahin, Invited paper)
135. "UTILIZATION OF NUCLEAR WASTE ACTINIDES TO FUEL THE FIXED BED NUCLEAR REACTOR," *Technical Meeting on the INPRO Collaborative Project "Waste from Innovative Types of Reactors and Fuel Cycles"* (WIRAF), IAEA Headquarters, Vienna, Austria (8–11 December 2015) (S. Şahin)
136. "Spent Fuel from Fixed Bed Nuclear Reactor," *Technical Meeting on the INPRO Collaborative Project "Waste from Innovative Types of Reactors and Fuel Cycles"* (WIRAF), IAEA Headquarters, Vienna, Austria (8–11 December 2015) (F. Sefidvash, S. Şahin, D. Th. N. Minh)
137. "Selected Problemson Heat Transfer," *International Conference on Advances in Mechanical Engineering (ICAME2016)*, İstanbul, Türkiye (10-13 May 2016) (S. Şahin Invited paper) <http://www.icame2016conference.com/>
138. "MONTE CARLO ANALYSIS OF REACTOR GRADE PLUTONIUM AND THORIUM CANDU REACTORS," The 5<sup>th</sup> International Conference on Nuclear and Renewable Energy Resources (NURER2016), Hefei, Anhui Province, China (18-21 September 2016) (S. Şahin, B. Şarer) <http://nurer2016.org.cn/dct/page/1>
139. "Candidate Structural Materials for Fusion Energy Reactors," International Conference on Science and Technology, Ankara, Türkiye, (3 - 6 October) (S. Şahin Invited paper)
140. "Neutronic design of MYRRHA reactor hall shielding," *13<sup>th</sup> International Conference on Radiation Shielding (ICRS-13) & 19<sup>th</sup> Topical Meeting of the Radiation Protection & Shielding Division of the American Nuclear Society -2016 (RPSD-2016)*, Paris, France (3 - 6 October 2016) (Y. Çelik, A. Stankovskiy, G. Van den Eynde, S. Şahin, B. Şarer)
141. "First Wall Lifetime Extension with Flowing Liquid Zone for Fusion Reactors," *2<sup>nd</sup> International Conference on Fusion for Neutrons and Sub-Critical Nuclear Fission Waste Management and Safety, Frascati Research Center*, Frascati, Rome, Italy (26-28 October 2016) (S. Şahin Invited paper) <http://www.fusione.enea.it/FUNFI2/funfi2.pdf> and Proceedings of the 26<sup>TH</sup> IAEA FUSION ENERGY CONFERENCE, Session P5, p.767 Kyoto, Japan (17–22 October 2016) [https://nucleus.iaea.org/sites/fusionportal/Shared%20Documents/FEC%202016/FEC2016\\_ConfMat\\_Online.pdf](https://nucleus.iaea.org/sites/fusionportal/Shared%20Documents/FEC%202016/FEC2016_ConfMat_Online.pdf)
142. "An innovative SMR, The Fixed Bed Nuclear Reactor (FBNR) for Medium Technology Countries," *International Conference on Science and Technology, Electric Power University, Hanoi, Vietnam* (16 November 2016) (S. Şahin, D. Th. N. Minh, H. V. Thong) (Invited paper) <http://www.epu.edu.vn/en/Default.aspx?BT=23744>
143. "A SAFE, SMALL, MODULAR REACTOR, THE FIXED BED NUCLEAR REACTOR (FBNR)," *18<sup>th</sup> International Conference on Emerging Nuclear Energy Systems (ICENES 2017)*, Hefei, Anhui Province, China (24–27 April 2017) (S. Şahin, B. Şarer, D. Th. N. Minh, H. V. Thong) <http://icenes2017.org/dct/page/1>
144. "MONTE CARLO ANALYSIS OF CANDU REACTORS WITH WEAPON GRADE PLUTONIUM-THORIUM MIXED OXIDE FUEL", *18<sup>th</sup> International Conference on Emerging Nuclear Energy Systems (ICENES 2017)*, Hefei, Anhui Province, China (24–27 April 2017) (S. Şahin, B. Şarer) <http://icenes2017.org/dct/page/1>

145. “ADVANCED FUEL CONCEPTS AND INNOVATIVE REACTORS,” 42<sup>nd</sup> Nathiagali Summer College on Physics and Contemporary Needs, SMR and Innovative Reactor Concepts, Islamabad, Pakistan (17<sup>th</sup>-22<sup>nd</sup> July 2017) (S. Şahin, H. M. Şahin, Ö. Erol) (Invited paper)
146. “Nuclear Transmutation,” 42<sup>nd</sup> Nathiagali Summer College on Physics and Contemporary Needs, SMR and Innovative Reactor Concepts, Islamabad, Pakistan (17<sup>th</sup>-22<sup>nd</sup> July 2017) (S. Şahin) (Invited paper)
147. “ADVANCED FUELS, INNOVATIVE REACTORS AND NUCLEAR TRANSMUTATION,” 7th Asian Physics Symposium (APS 2017), Bandung Institute of Technology (ITB), Indonesia (August 29 – 31, 2017) <http://aps2017.interconf.org/> (S. Şahin, H. M. Şahin) (Keynote speaker)
148. NUCLEAR CODES and DATA PACKAGES, 2<sup>nd</sup> International Conference on Innovative Computing (ICIC), University of Management and Technology, Lahore, Pakistan (14-16 March 2018) (S. Şahin, Keynote speaker, H. M. Şahin)
149. “The energy challenge of Renewables,” IREC2018, The 9<sup>th</sup> International Renewable Energy Congress, Hamammet, Tunisia (20-22 March 2018) (S. Şahin, Keynote speaker)
150. “Nuclear Power Reactors; Safety, Reliability, Transmutation,” 5<sup>th</sup> International Reliability and safety Engineering Conference, Shiraz, Iran (9 to 11<sup>th</sup> of May, 2018) (S. Şahin, Keynote speaker, H. M. Şahin, A. Abbasi)

## REPORTS

4. "MERSIN, Data Library in 49 Energy Groups for Thermal Reactors", on file at IKE, University of Stuttgart, Germany (1968) (S. Şahin)
5. "Outlines of the Fusion - Fission (Hybrid) Reactor Research Project at Laboratoire de Genie Atomique, Status Report," EPFL - LGA, Lausanne, Switzerland (1979) (S. Şahin, M. Caro, R. Früh, J. Ligou, J. P. Schneeberger)
6. "Triennial Research Report", Group of Reactor Physics, EPFL - LGA, Lausanne, Switzerland (Feb. 26, 1981) (S. Şahin, J. Ligou, J. P. Schneeberger)
7. "Status of the Numerical Reactor Analysis System at IGA", College of Engineering, King Abdul-Aziz University, Jeddah, Saudi Arabia (Nov. 30, 1981) (S. Şahin)
8. "Rapport de Sécurité de l'Installation Nucléaire LOTUS", EPFL - IGA, Lausanne, Switzerland, (Mai 1982) (S. Şahin, 8 other co - authors)
9. "CLAW - B, Coupled 30 Neutron, 12 Gamma Ray Group Cross Section with Retrieval Programs for Radiation Transport Calculations", (March 1984) available from RSIC, Oak Ridge National Laboratory, Oak Ridge, Tennessee; also see RSIC - Newsletter, p. 4 (May 1988) (S. Şahin, T. A. Al - Kusayer, A. Drira)
10. "Thermionic Nuclear Thermal Propulsion Bimodal Reactor", Final Report, U. S. Army Space and Strategic Defense Command, Research Contract number DASG60 - 93 - C - 0090, Space Exploration Associates, Cedarville, Ohio, U. S. A. (1993) (S. Şahin)
11. "Fusion Technology", Final Report, DPT 90 K 120 500, Gazi University, Ankara, Türkiye (1995) (S. Şahin)
12. "Radiation Damage in Liquid - Protected First Wall Materials for IFE - Reactors", Report#UCRL - JC - 12549, Lawrence Livermore National Laboratory (August 1996) (S. Şahin, R. W. Moir, A. Şahinaslan, H. M. Şahin)



## Sumer Sahin

Professor of Mechanical and Nuclear Engineering, [Near East University](#), North Cyprus

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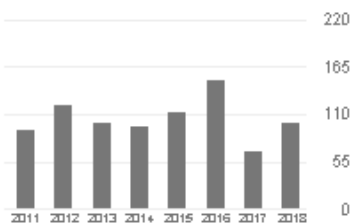
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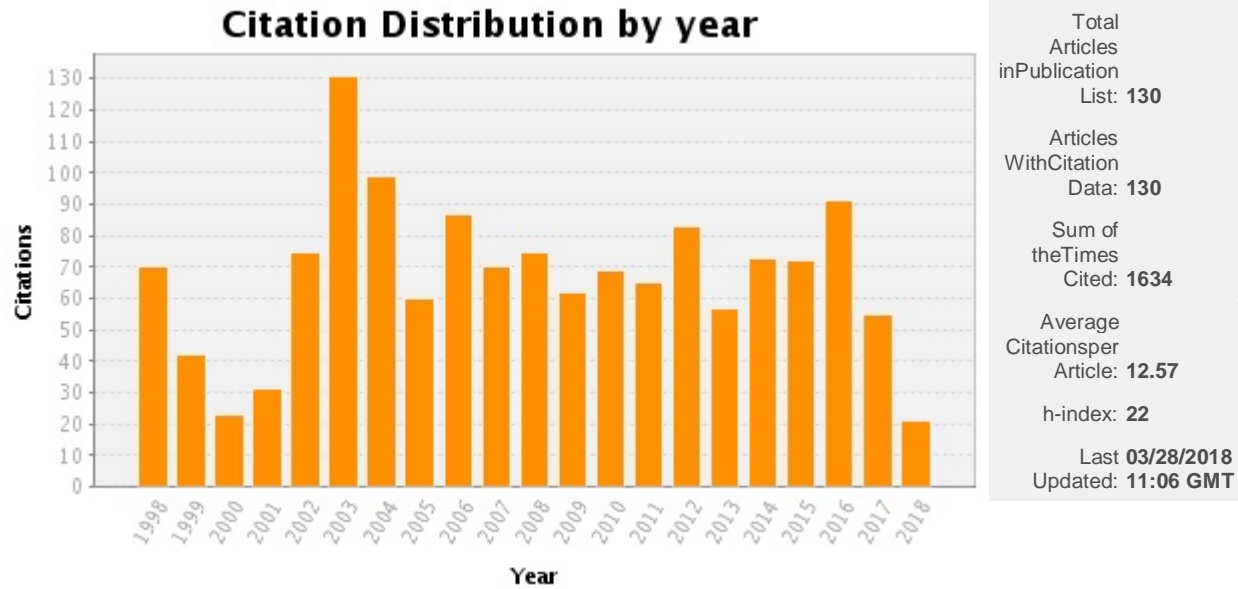
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<a href="#">21st Century's energy: Hydrogen energy system</a> S Ş T. N. Veziroğlu Energy Conversion and Management 49 (7), 1820-1831	284	2008
<a href="#">Preliminary design studies of a cylindrical experimental hybrid blanket with deuterium-tritium driver</a> S Şahin, TA Al-Kusayer, MA Raouf Fusion Technology 10 (1), 84-99	100	1986
<a href="#">Potential of a catalyzed fusion-driven hybrid reactor for the regeneration of CANDU spent fuel</a> S Şahin, E Baltacıoğlu, H Yapici Fusion Technology 20 (1), 26-39	73	1991
<a href="#">Investigation of the neutronic potential of moderated and fast (D, T) hybrid blankets for rejuvenation of CANDU spent fuel</a> S Şahin, H Yapici Fusion Technology 16 (3), 331-346	64	1989
<a href="#">Neutronic analysis of a thorium fusion breeder with enhanced protection against nuclear weapon proliferation</a> S Şahin, H Yapici Annals of Nuclear Energy 26 (1), 13-27	61	1999
<a href="#">Rejuvenation of LWR spent fuel in a catalyzed fusion hybrid blanket</a> S Şahin, H Yapici, E Baltacıoğlu Kemteknik (1987) 59 (6), 270-277	55	1994
<a href="#">Power Flattening in a Catalyzed Deuterium-Deuterium Fusion-Driven Hybrid Blanket Using Nuclear Waste Actinides</a> S Şahin Nuclear Technology 92 (1), 93-105	54 *	1990
<a href="#">Modified APEX reactor as a fusion breeder</a> S Şahin, M Öbeyli Energy conversion and management 45 (9-10), 1497-1512	51	2004
<a href="#">Neutronic performance of proliferation hardened thorium fusion breeders</a> S Şahin, H Yapici, N Sahin Fusion Engineering and Design 54 (1), 63-77	48	2001
<a href="#">Rejuvenation of light water reactor spent fuel in fusion blankets</a> S Şahin, H Yapici Annals of Nuclear Energy 25 (16), 1317-1339	46	1998
<a href="#">CLAW-IV coupled 30 neutrons, 12 gamma-ray group cross sections with retrieval programs</a>	46	1988

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