

## Assoc. Prof. AVNİ AKSOY

### Personal Information

Office Phone: [+90 312 485 3745](tel:+903124853745)

Email: [avniaksoy@ankara.edu.tr](mailto:avniaksoy@ankara.edu.tr)

Web: <https://avesis.ankara.edu.tr/avniaksoy>

### International Researcher IDs

ORCID: 0000-0001-6926-1522

ScopusID: 23479382400

Yoksis Researcher ID: 57387

### Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (YI) (Tezli), Turkey 2006 - 2011

Postgraduate, Pamukkale University, Institute Of Science, Fizik (YI) (Tezli), Turkey 2002 - 2005

Undergraduate, Pamukkale University, Faculty Of Arts And Sciences, Department Of Physics, Turkey 1998 - 2002

### Dissertations

Doctorate, Doğrusal hızlandırıcılarda kararsızlıkların incelenmesi ve optimizasyonu, Ankara University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (YI) (Tezli), 2011

Postgraduate, Atom çekirdeği ve nükleer deformasyon, Pamukkale University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 2005

### Academic Titles / Tasks

Assistant Professor, Ankara University, Hızlandırıcı Teknolojiler Enstitüsü, 2011 - Continues

Research Assistant, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2007 - 2011

### Academic and Administrative Experience

Director of The Institution, Ankara University, Hızlandırıcı Teknolojileri Enstitüsü, 2015 - 2021

Assistant Director of the Institute, Ankara University, Hızlandırıcı Teknolojileri Enstitüsü, 2012 - 2015

### Courses

#### Postgraduate

DEMET DİNAMİĞİNE GİRİŞ, Postgraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016

HIZLANDIRICILARDA RF YAPILAR, Postgraduate, 2016 - 2017

DEMET TEŞHİS YÖNTEMLERİ, Postgraduate, 2016 - 2017

### Supervised Theses

AKSOY A., Düşük pik ve düşük tekrarlı oranlı elektron demetleri için akım ölçüm düzeneğinin geliştirilmesi, Postgraduate, Ö.FARUK(Student), 2021

AKSOY A., TARLA için yüksek güçlü elektron demet durdurucusunun fiziği ve tasarımı, Postgraduate, D.ERENLER(Student), 2019

AKSOY A., Enine demet faz uzayı ölçüm düzeneği tasarımı ve optimizasyonu, Postgraduate, N.ÖZTÜRK(Student), 2019

## Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İzmir Yüksek Teknoloji Enstitüsü, May, 2019

## Articles Published in Other Journals

- I. **Design of Turkish Accelerator and Radiation Laboratory in Ankara (TARLA) facility injector magnets**  
AKSOY A.  
TURKISH JOURNAL OF PHYSICS, vol.41, no.2, pp.171-181, 2017 (ESCI)
- II. **RF POWER SOURCE SYSTEMS FOR TAC IR FEL (TARLA) FACILITY**  
Karlı Ö., AKSOY A., YAVAŞ Ö.  
BALKAN PHYSICS LETTERS, vol.19, pp.262-268, 2011 (Peer-Reviewed Journal)

## Papers Published in Refereed Scientific Meetings

- I. **Update of the RF-Track particle tracking code**  
Aksoy A., Latina A., Malyzhenkov A., Olivares Herrador J.  
14th International Particle Accelerator Conference, Venice, Italy, 7 - 12 May 2023, pp.3462-3465
- II. **Application of beam-based alignment to the CLEAR facility**  
Aksoy A., Latina A., Malyzhenkov A., Corsini R.  
14th International Particle Accelerator Conference, Venice, Italy, 07 May 2023 - 10 May 2024, pp.3166-3169
- III. **The CLEAR user facility: a review of the experimental methods and future plans**  
Korysko P., Aksoy A., Malyzhenkov A., Corsini R.  
International Particle Accelerator Conference, Venice, Italy, 7 - 12 May 2023, pp.876-879
- IV. **TARLA Laboratuvarında Nükleer Rezonans Floresansı İçin Gama Spektroskopi Sistemi ve Diğer Uygulamalar**  
YILMAZ ALAN H., DAPO H., AKSOY A.  
Parçacık Hızlandırıcıları ve Algıçları Yerel Altyapı ve Ar-Ge Çalıştayı, İstanbul, Turkey, 29 November 2020
- V. **Nuclear Applications Proposal at TARLA Facility**  
YILMAZ ALAN H., AKSOY A., DAPO H.  
TURKISH PHYSICAL SOCIETY 36TH INTERNATIONAL PHYSICS CONGRESS, İstanbul, Turkey, 1 - 05 September 2020
- VI. **Progress of microTCA.4 based LLRF system of Tarla**  
Gumus C., Hierholzer M., Schlarb H., Schmidt C., Elcim O., AKSOY A., AYDIN A., KAYA Ç.  
29th International Linear Accelerator Conference, LINAC 2018, Beijing, China, 16 - 21 September 2018, pp.220-222
- VII. **Beam Diagnostics in Injector Section of TARLA FEL Facility**  
KAYA Ç., AKSOY A., KARSLI Ö., KOÇ İ. B., ELÇİM Ö. F., YILDIZ H., YILDIZ ALAN H., KAYA M., UÇAR H., YAVAŞ Ö.  
35th International Physics Congress (TPS 35), BODRUM, Turkey, 4 - 08 September 2019
- VIII. **PERSONAL SAFETY SYSTEM OF THE TARLA**  
YILMAZ ALAN H., AKSOY A., KAYA Ç., KARSLI Ö., KOÇ İ. B., ELÇİM Ö. F., KAYA M., YILDIZ H., UÇAR H.  
TURKISH PHYSICAL SOCIETY 35th INTERNATIONAL PHYSICS CONGRESS, 4 - 08 September 2019

- IX. PSS FOR THE TARLA ACCELERATOR FACILITY**  
YILMAZ ALAN H., AKSOY A., KAYA Ç., Karsli Ö.  
19th International Balkan Workshop on Applied Physics, Romania, 16 - 19 July 2019
- X. Characteristics of the Undulator Magnets and FEL Beams of TARLA Facility**  
Bicer S. C., AKSOY A., YAVAŞ Ö.  
35th International Physics Congress of the Turkish-Physical-Society (TPS), Bodrum, Turkey, 4 - 08 September 2019, vol.2178
- XI. Current status of free electron laser @ tarla**  
AKSOY A., KAYA Ç., Karsli Ö., KOÇ B., Elçim Ö.  
39th International Free-Electron Laser Conference, FEL 2019, Hamburg, Germany, 26 - 30 August 2019, pp.102-105
- XII. Current Status of TARLA Facility**  
KAYA Ç., KARSLI Ö., AKSOY A., KOÇ İ. B., ELÇİM Ö. F., KAYA M., YILDIZ H., YILDIZ ALAN H., YAVAŞ Ö.  
34th International Physics Congress (TPS 34), BODRUM, Turkey, 5 - 09 September 2018
- XIII. EPICS Applications for TARLA**  
AYDIN A., BOZDOĞAN M., KAZANCI E., POLAT E., AKSOY A.  
International Conference on Theoretical and Applied Computer Science and Engineering, Ankara, Turkey, 10 - 11 November 2017, pp.7
- XIV. TARLA (Turkish Accelerator and Radiation Laboratory in Ankara) Control System Architecture**  
KAZANCI E., AYDIN A., BOZDOĞAN M., POLAT E., AKSOY A.  
International Conference on Theoretical and Applied Computer Science and Engineering, Ankara, Turkey, 10 - 11 November 2017, pp.15
- XV. Industrial Control for Big Physics**  
AYDIN A., KAZANCI E., BOZDOĞAN M., AKSOY A.  
International Conference on Theoretical and Applied Computer Science and Engineering, Ankara, Turkey, 10 - 11 November 2017, pp.7
- XVI. Infrastructure for Material Research - Turkish Accelerator and Radiation Laboratory in Ankara (TARLA)**  
AKSOY A.  
13th NANOSCIENCE AND NANOTECHNOLOGY CONFERENCE, Turkey, 22 - 25 October 2017
- XVII. TARLA: THE FIRST FACILITY OF TURKISH ACCELERATOR CENTER (TAC)**  
AKSOY A., AYDIN A., KAYA Ç., YAVAŞ Ö., KETENOĞLU B.  
International Particle Accelerator Conference, IPAC2017, Copenhagen, Denmark, 14 - 19 May 2017, pp.2776-2778
- XVIII. CONTROL AND NETWORK SYSTEMS OF TARLA FACILITY**  
AYDIN A., AKSOY A., BAŞARAN A., GÜZOĞLU E., KAYA Ç., POLAT E., YAVAŞ Ö.  
6th Internationally Participated Congress on Particle Accelerators and Applications, Muğla, Turkey, 29 - 30 August 2016
- XIX. X-band Based FEL proposal**  
AKSOY A.  
CLIC Workshop 2016, Switzerland, 18 - 22 June 2016
- XX. Design optimization of an X-band based FEL**  
AKSOY A., Latina A., Pflingstner J., Schulte D., Nergiz Z.  
7th International Particle Accelerator Conference, IPAC 2016, Busan, South Korea, 8 - 13 May 2016, pp.793-796
- XXI. Accelerator based light source projects of Turkey**  
AKSOY A., Karsli Ö., KAYA Ç., YAVAŞ Ö., KETENOĞLU B., Nergiz Z.  
7th International Particle Accelerator Conference, IPAC 2016, Busan, South Korea, 8 - 13 May 2016, pp.2936-2939
- XXII. Non-Linear Effects in Bunch Compressor of TARLA**  
Yildiz H., AKSOY A., Arıkan P.  
9th International Physics Conference of the Balkan-Physical-Union (BPU), İstanbul, Turkey, 24 - 27 August 2015, vol.1722
- XXIII. THE X-BAND FEL COLLABORATION**

- PFINGSTNER J., ADLI E., AKSOY A., YAVAŞ Ö., BOLAND M., CHARLES T., DOWD R., LeBLANC G., TAN Y. R. E., WOOTTON K. P., et al.  
International Free Electron Laser Conference, FEL2015, Daejeon, South Korea, 23 - 28 August 2015, pp.368-374
- XXIV. **Simulation Studies On Beam Diagnostic For TAC - TARLA Facility**  
AYDIN A., KAYA Ç., AKSOY A., KASAP E.  
9th INTERNATIONAL PHYSICS CONFERENCE OF THE BALKAN PHYSICAL UNION - BPU9, Turkey, 24 - 27 August 2015
- XXV. **Beam dynamics for 6 GeV x-fel design using x-band structure**  
AKSOY A.  
CLIC Workshop 2015, Switzerland, 26 - 30 January 2015
- XXVI. **Injector Options for the Drive Beam**  
AKSOY A.  
CLIC Workshop 2015, Switzerland, 26 - 30 January 2015
- XXVII. **Comparison of bunch compression schemes for the AXXS FEL**  
Charles T., Paganin D., AKSOY A., Boland M., Dowd R., Latina A., Schulte D.  
6th International Particle Accelerator Conference, IPAC 2015, Virginia, United States Of America, 3 - 08 May 2015, pp.1399-1402
- XXVIII. **X-BAND TECHNOLOGY FOR FEL SOURCES**  
D AURIA G., DI MITRI S., SERPICO C., CATALAN LASHERAS N., GRUDIEV A., LATINA A., SCHULTE D., STAPNES S., SYRATCHEV I., AKSOY A., et al.  
International Linear Accelerator Conference, LINAC2014, Geneva, Switzerland, 31 August - 05 September 2014, pp.101-104
- XXIX. **RD OF X-BAND ACCELERATING STRUCTURE FOR COMPACT XFEL AT SINAP**  
FANG W., ZHANG M., TAN J. H., GU Q., ZHAO Z. T., WUENSCH W., GRUDIEV A., LATINA A., SCHULTE D., STAPNES S., et al.  
International Linear Accelerator Conference, LINAC2014, Geneva, Switzerland, 31 August - 05 September 2014, pp.715-718
- XXX. **TH ETURKISH ACCELERATOR AND RADIATION LABORATORY IN ANKARA (TARLA) PROJECT**  
AKSOY A., KARSLI Ö., KAYA Ç., YAVAŞ Ö., ÖZKORUCUKLU S., ARIKAN P.  
International Free Electron Laser Conference, FEL2014, Basel, Switzerland, 25 - 29 August 2014, pp.585-588
- XXXI. **FEL PROPOSAL BASED ON CLIC X-BAND STRUCTURE**  
AKSOY A., YAVAŞ Ö., SCHULTE D., LATINA A., WUENSCH W., GRUDIEV A., SYRATCHEV I., NERGİZ Z., JACEWICZ M., RUBER R., et al.  
International Free Electron Laser Conference, FEL2014, Basel, Switzerland, 25 - 29 August 2014, pp.186-189
- XXXII. **Turkish accelerator center: The status and road map**  
AKSOY A., ÇAKIR O., YILDIZ H., YAVAŞ Ö., AKKUŞ B., ÖZKORUCUKLU S., ŞAHİN YALÇIN L., Nergiz Z., Aksakal H., Algin E.  
5th International Particle Accelerator Conference, IPAC 2014, Dresden, Germany, 15 - 20 June 2014, pp.2921-2923
- XXXIII. **Bunch compression of the low-energy elbe electron beam for super-radiant THz sources**  
Lehnert U., Michel P., Schurig R., AKSOY A., Etushenko P., Krämer J.  
5th International Particle Accelerator Conference, IPAC 2014, Dresden, Germany, 15 - 20 June 2014, pp.1123-1125
- XXXIV. **The status of Turkish synchrotron radiation source machine design**  
Nergiz Z., Aksakal H., AKSOY A., KAYA Ç., Kurtuluş Öztürk Ö.  
5th International Particle Accelerator Conference, IPAC 2014, Dresden, Germany, 15 - 20 June 2014, pp.313-315
- XXXV. **Beam diagnostics of E-gun test stand at TARLA**  
KAYA Ç., AKSOY A., Karsli O., KOÇ B., Kazanci E., Polat C., Karakilic V., KUDAY S., AYDIN A., YILDIZ M., et al.  
5th International Particle Accelerator Conference, IPAC 2014, Dresden, Germany, 15 - 20 June 2014, pp.704-706
- XXXVI. **Final structure & design parameters of TARLA RF system**  
Karsli O., Polat C., KAYA Ç., AKSOY A., KOÇ B., YAVAŞ Ö., Dogan M., ÖZKORUCUKLU S.  
5th International Particle Accelerator Conference, IPAC 2014, Dresden, Germany, 15 - 20 June 2014, pp.2577-2579
- XXXVII. **DESIGN PARAMETERS AND CURRENT STATUS OF THE TARLA PROJECT**

- AKSOY A., KARSLI Ö., KAYA Ç., KAZANCI E., YAVAŞ Ö., ÖZKORUCUKLU S., ARIKAN P.  
International Particle Accelerator Conference, IPAC2014, Dresden, Germany, 15 - 20 June 2014, pp.2918-2920
- XXXVIII. **CURRENT STATUS OF TARLA CONTROL SYSTEM**  
KAZANCI E., AKSOY A., AYDIN A., KAYA Ç., YAVAŞ Ö., ÖZKORUCUKLU S.  
International Particle Accelerator Conference, IPAC2014, Dresden, Germany, 15 - 20 June 2014, pp.3192-3194
- XXXIX. **BUNCH COMPRESSOR DESIGN FOR CLIC DRIVE BEAM**  
AKSOY A., SCHULTE D., ESBERG J.  
International Particle Accelerator Conference, IPAC2014, Dresden, Germany, 15 - 20 June 2014, pp.2924-2926
- XL. **BEAM DIAGNOSTICS OF E-GUN STAND AT TARLA**  
Kaya Ç., Aksoy A., Karşlı Ö., Koç İ. B., Kazancı E., Aydın A., Özkorucuklu S.  
International Particle Accelerator Conference, IPAC2014, Dresden, Germany, 15 - 20 June 2014, pp.704-706
- XLI. **CONCEPTUAL DESIGN OF AN X-FEL FACILITY USING CLIC X-BAND ACCELERATING STRUCTURE**  
AKSOY A., YAVAŞ Ö., SCHULTE D., LATINA A., WUENSCH W., SYRATCHEV I., GRUDIEV A., STAPNES S., NERGİZ Z., DOĞAN M., et al.  
International Particle Accelerator Conference, IPAC2014, Dresden, Germany, 15 - 20 June 2014, pp.2914-2917
- XLII. **Beam Diagnostics E-GUN Test Stand at TARLA**  
KAYA Ç., AKSOY A., AYDIN A., Karakılıç V., Karşlı Ö., Kazancı E., KOÇ İ. B., KUDAY S., Polat E., Şara İ., et al.  
IPAC2014: 5th International Particle Accelerator Conference, Dresden, Germany, 15 - 20 June 2014
- XLIII. **Report from design/parameter CLIC FEL Working Group**  
AKSOY A.  
CLIC Workshop 2014, Switzerland, 3 - 07 February 2014
- XLIV. **Ankara Üniversitesi Hızlandırıcı ve Lazer Tesisi**  
AKSOY A.  
İZMİR YÜKSEK ENERJİ FİZİĞİ ÇALIŞTAYI, Turkey, 11 - 13 September 2013
- XLV. **Drive Beam accelerator studies**  
AKSOY A.  
CLIC Workshop 2013, Switzerland, 28 January - 01 February 2013
- XLVI. **Simulations for CLIC drive beam linac**  
AKSOY A.  
International Workshop on Future Linear Colliders, LCWS 2011, Granada, Spain, 26 - 30 September 2011
- XLVII. **Diagnostic system of TAC IR FEL facility**  
Nergiz Z., AKSOY A., ÖZKORUCUKLU S., CEYLAN S. B., Kaya C.  
10th European Workshop on Beam Diagnostics and Instrumentation for Particle Accelerators, DIPAC 2011, Hamburg, Germany, 16 - 18 May 2011, pp.536-538
- XLVIII. **CLIC Drive Beam Linac**  
AKSOY A.  
International Workshop on Future Linear Colliders LCWS 11, Spain, 26 - 30 September 2011
- XLIX. **The status of TAC IR FEL and bremsstrahlung project**  
AKSOY A., YAVAŞ Ö., Zengin K., ÖZKORUCUKLU S., Tapan I., YILDIZ H., Nergiz Z., Aksakal H., Arikan P.  
1st International Particle Accelerator Conference, IPAC 2010, Kyoto, Japan, 23 - 28 May 2010, pp.2242-2244
- L. **The status of turkish accelerator center project**  
ÖZKORUCUKLU S., YAVAŞ Ö., ÇAKIR O., Ciftci A., Ciftci R., AKSOY A., Ketenoğlu B., Zengin K., AKKUŞ B., Arikan P., et al.  
1st International Particle Accelerator Conference, IPAC 2010, Kyoto, Japan, 23 - 28 May 2010, pp.4419-4421
- LI. **CONCEPTUAL DESIGN OF A THZ FACILITY AT THE ELBE RADIATION SOURCE**  
LEHNERT U., AKSOY A., HELM M., MICHEL P., SCHNEIDER H., SEIDEL W., STEHR D., WINNERL S.  
International Free Electron Laser Conference, FEL2010, Malmö, Sweden, 23 - 27 August 2010, pp.656-659
- LII. **The TAC IR FEL oscillator facility project**  
KETENOĞLU B., AKSOY A., YAVAŞ Ö., Tural M., Karşlı O., ÖZKORUCUKLU S., Arikan P., KASAP E., YILDIZ H., Bilen B., et al.  
31st International Free Electron Laser Conference, FEL 2009, Liverpool, United Kingdom, 23 - 28 August 2009,

pp.580-582

- LIII. **Drive Beam Linac Stability Issues**  
AKSOY A.  
CLIC Workshop 2009, Switzerland, 12 - 16 October 2009
- LIV. **BEAM DYNAMICS SIMULATIONS FOR CLIC DRIVE BEAM ACCELERATOR**  
AKSOY A., YAVAŞ Ö., SCHULTE D.  
Particle Accelerator Conference, PAC09, Vancouver, Canada, 4 - 08 May 2009, pp.3690-3692
- LV. **INJECTOR DESIGN FOR TURKISH ACCELERATOR CENTER FREE ELECTRON LASER FACILITY**  
AKSOY A., YAVAŞ Ö., ÖZKORUCUKLU S., LEHNERT U.  
Particle Accelerator Conference, PAC09, Vancouver, Canada, 4 - 08 May 2009, pp.3687-3689
- LVI. **A first step to Turkish accelerator center (TAC): An infrared free electron laser (IR-FEL) facility**  
Karsli O., AKSOY A., YAVAŞ Ö.  
30th International Free Electron Laser Conference, FEL 2008, Gyeongju, South Korea, 24 - 29 August 2008, pp.39-42
- LVII. **The status of Turkish accelerator complex project**  
AKSOY A., Ciftci A., Karsli O., KETENOĞLU B., YAVAŞ Ö., Sultansoy S.  
11th European Particle Accelerator Conference, EPAC 2008, Genoa, Italy, 23 - 27 June 2008, pp.2788-2790
- LVIII. **The status of TAC Infrared Free Electron Laser (IR-FEL) facility**  
AKSOY A., Karsli O., KETENOĞLU B., YAVAŞ Ö., Çiftçi A., Nergiz Z., KASAP E.  
11th European Particle Accelerator Conference, EPAC 2008, Genoa, Italy, 23 - 27 June 2008, pp.61-63

## Metrics

Publication: 75

Citation (WoS): 40

Citation (Scopus): 144

H-Index (WoS): 4

H-Index (Scopus): 7