Assoc. Prof. SERHAT TOZBURUN

Personal Information

Email: serhat.tozburun@deu.edu.tr
Other Email: serhat.tozburun@ibg.edu.tr
Web: https://avesis.deu.edu.tr/serhat.tozburun

International Researcher IDs
ScholarID: fenS-CMAAAAJ
ORCID: 0000-0002-4397-4011
Publons / Web Of Science ResearcherID: HJJ-0862-2023
Yoksis Researcher ID: 242597

Biography

Serhat Tozburun is principal investigator at Izmir Biomedicine and Genome Center Biophotonics and Optical Imaging Laboratory and faculty member at Dokuz Eylul University Izmir International Biomedicine and Genome Institute, Turkey. Dr. Tozburun received his B.S. degree in Physics from Middle East Technical University in 2005 and M.S. degree in Physics from Koç University in 2007. He received a Ph.D. degree in optical science and engineering from the University of North Carolina, Charlotte, NC, USA, in 2012. He has been awarded a 2012 Optics and Photonics Scholarship by SPIE for his potential contributions to the fields of optics, photonics, or related field, a 2016 Eser Tumen Outstanding Achievement Award by Fevzi Akkaya scientific activities support fund, a 2018 Young Scientist Award Program Grantee by Turkish Academy of Science, and a 2020 Young Scientist Awards Program Grantee by Science Academy.

Education Information

Doctorate, The University of North Carolina at Charlotte, Liberal Arts and Science, Physics and Optical Science, United States Of America 2007 - 2012
Postgraduate, Koc University, Institute Of Scıence, Fizik (Yl) (Tezli), Turkey 2005 - 2007
Undergraduate, Middle East Technical University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 2000 - 2005

Foreign Languages

English, C2 Mastery

Certificates, Courses and Trainings

Vocational Training, DEÜ DENEY HAYVANLARI KULLANIM SERTİFİKASI, Dokuz Eylul University, 2015

Dissertations

Doctorate, Optical stimulation of the prostate nerves: A potential diagnostic technique, University Of North Carolina, Optik Ve Biyomedikal Optik Mühendisliği, 2012
Postgraduate, Experimental investigation of pulsed, eye-safe, solid-state lasers in the near infrared, Koc University, Fen

Bilimleri Enstitüsü, Fizik (Yl) (Tezli), 2007

Research Areas

bioPhotonic, Biomedical Image Processing, Biophysics and Medical Physics

Academic Titles / Tasks

Associate Professor, Dokuz Eylul University, İzmir Uluslararası Biyotıp ve Genom Enstitüsü, Genom Bilimleri Ve Moleküler Biyoteknoloji Anabilim Dalı, 2015 - Continues
Research Assistant, Harvard University, Medıcal School, Dermatology, 2012 - 2015
Research Assistant, The University of North Carolina at Charlotte, Lıberal Arts And Scıences, Physıcs And Optıcal Scıence, 2008 - 2012
Instructor, The University of North Carolina at Charlotte, Lıberal Arts And Scıences, Physıcs And Optıcal Scıence, 2007 - 2008

Academic and Administrative Experience

Head of Department, Dokuz Eylul University, İzmir Uluslararası Biyotıp ve Genom Enstitüsü, 2022 - Continues

Courses

Doctorate
Advances in Optical Coherence Tomography, Doctorate, 2022 - 2023, 2021 - 2022
TRANSLATIONAL PERSPECTIVES IN CANCER SURGERY AND LOCOREGIONAL THERAPY, Doctorate, 2021 - 2022
Fundamentals of Biophotonics, Doctorate, 2020 - 2021, 2018 - 2019, 2017 - 2018, 2016 - 2017
Postgraduate
Lasers in Biomedicine, Postgraduate, 2021 - 2022, 2020 - 2021
Principles and Techniques of Imaging, Postgraduate, 2022 - 2023, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

Supervised Theses

TOZBURUN S., TOZBURUN S., A portable electrochemical biosensor for highly sensitive automated-quantitative analysis of analytes, Postgraduate, F.KURUL(Student), 2024
TOZBURUN S., A modular scan head for optical coherence tomography guided laser nerve stimulation, Postgraduate, H.GÖKKAN(Student), 2024
TOZBURUN S., Development of an endoscopic capsule that provides well-confined and angle-controlled photo-thermal esophageal mucosa ablation, Doctorate, M.TÜRKER(Student), 2023
TOZBURUN S., Vagus sinirinin optik uyarımı, Postgraduate, O.YETİŞ(Student), 2021

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Low frequency neuromuscular electrical stimulation applied to the bulbospongiosus muscle prolongs the ejaculation latency in a rat model**
Cizmeci S., Ongun S., Sarac A., SEL E. K., Tozburun S., Durmus N.

International Journal of Impotence Research, vol.36, no.3, pp.261-264, 2024 (SCI-Expanded)

II. **An endoscopic approach providing near-infrared laser-induced coagulation with accurate depth limits**
Turker-Burhan M., Ellidokuz E. B., Bagriyanik H. A., Tozburun S.
Journal of Biophotonics, vol.17, no.4, 2024 (SCI-Expanded)

III. **Monte-Carlo method based simulations for photothermal mucosa coagulation with accurate depth limits**
Türker Burhan M., Tozburun S.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.30, no.7, pp.2605-2616, 2022 (SCI-Expanded)

IV. **Guide mapping for effective superficial photothermal coagulation of the esophagus using computer simulations with ex vivo sheep model validation study**
Turker Burhan M., Ersoy N., Bagriyanik H. A., Tozburun S.
LASERS IN SURGERY AND MEDICINE, vol.54, no.8, pp.1116-1129, 2022 (SCI-Expanded)

V. **A 1060 nm stretched-pulse mode-locked wavelength-swept laser source providing an A-scan rate of 20 MHz**
Akkaya I., Tozburun S.
OPTIK, vol.266, 2022 (SCI-Expanded)

VI. **Vagus nerve bundle stimulation using 1505-nm laser irradiation in an in-vivo rat model**
Yetis O., GÜNER Ö., AKKAYA İ., Guneli E., Bagriyanik A., Tozburun S.
JOURNAL OF BIOPHOTONICS, vol.15, no.1, 2022 (SCI-Expanded)

VII. **Superficial photothermal laser ablation of ex vivo sheep esophagus using a cone-shaped optical fiber tip**
TOZBURUN S.
JOURNAL OF BIOPHOTONICS, vol.13, no.6, 2020 (SCI-Expanded)

VIII. **Phase-stable Doppler OCT at 19 MHz using a stretched-pulse mode-locked laser**
TOZBURUN S., Blatter C., Siddiqui M., Meijer E. F. J., Vakoc B. J.
BIOMEDICAL OPTICS EXPRESS, vol.9, no.3, pp.952-961, 2018 (SCI-Expanded)

IX. **High-speed optical coherence tomography by circular interferometric ranging**
Siddiqui M., Nam A. S., TOZBURUN S., Lippok N., Blatter C., Vakoc B. J.
NATURE PHOTONICS, vol.12, no.2, pp.111-116, 2018 (SCI-Expanded)

X. **In-chip microstructures and photonic devices fabricated by nonlinear laser lithography deep inside silicon**
TOKEL O., Turnali A., Makey G., ELAHI P., Colakoglu T., Ergecen E., Yavuz O., Hubner R., Borra M. Z., Pavlov I., et al.
NATURE PHOTONICS, vol.11, no.10, pp.639-646, 2017 (SCI-Expanded)

XI. **Compensation of spectral and RF errors in swept-source OCT for high extinction complex demodulation**
Siddiqui M., TOZBURUN S., Zhang E. Z., Vakoc B. J.
OPTICS EXPRESS, vol.23, no.5, pp.5508-5520, 2015 (SCI-Expanded)

XII. **Infrared Laser Nerve Stimulation as a Potential Diagnostic Method for Intra-Operative Identification and Preservation of the Prostate Cavernous Nerves**
TOZBURUN S., Lagoda G. A., Burnett A. L., Fried N. M.
IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, vol.20, no.2, 2014 (SCI-Expanded)

XIII. **A rapid, dispersion-based wavelength-stepped and wavelength-swept laser for optical coherence tomography**
TOZBURUN S., Siddiqui M., Vakoc B. J.
OPTICS EXPRESS, vol.22, no.3, pp.3414-3424, 2014 (SCI-Expanded)

XIV. **Continuous-wave Infrared Subsurface Optical Stimulation of the Rat Prostate Cavernous Nerves Using a 1490-nm Diode Laser**
TOZBURUN S., Stahl C. D., Hutchens T. C., Lagoda G. A., Burnett A. L., Fried N. M.
UROLOGY, vol.82, no.4, pp.969-973, 2013 (SCI-Expanded)

XV. **Temperature-controlled optical stimulation of the rat prostate cavernous nerves**
TOZBURUN S., Hutchens T. C., McClain M. A., Lagoda G. A., Burnett A. L., Fried N. M.
JOURNAL OF BIOMEDICAL OPTICS, vol.18, no.6, 2013 (SCI-Expanded)

XVI. **Subsurface near-infrared laser stimulation of the periprostatic cavernous nerves**
TOZBURUN S., Lagoda G. A., Burnett A. L., Fried N. M.
JOURNAL OF BIOPHOTONICS, vol.5, no.10, pp.793-800, 2012 (SCI-Expanded)

XVII. **Continuous-Wave Laser Stimulation of the Rat Prostate Cavernous Nerves Using a Compact and Inexpensive All Single Mode Optical Fiber System**
TOZBURUN S., Lagoda G. A., Burnett A. L., Fried N. M.
JOURNAL OF ENDOUROLOGY, vol.25, no.11, pp.1727-1731, 2011 (SCI-Expanded)

XVIII. **Continuous-wave infrared optical nerve stimulation for potential diagnostic applications**
TOZBURUN S., Cilip C. M., Lagoda G. A., Burnett A. L., Fried N. M.
JOURNAL OF BIOMEDICAL OPTICS, vol.15, no.5, 2010 (SCI-Expanded)

XIX. **A Compact Laparoscopic Probe for Optical Stimulation of the Prostate Nerves**
TOZBURUN S., Mayeh M., Lagoda G. A., Farahi F., Burnett A. L., Fried N. M.
IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, vol.16, no.4, pp.941-945, 2010 (SCI-Expanded)

Articles Published in Other Journals

I. **Lazer Gücü ve Işın Taramasının Kombinasyonu ile Isısal Doku Terapisinin Bilgisayar Simülasyonları**
TOZBURUN S.
Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.21, no.61, pp.299-309, 2019 (Peer-Reviewed Journal)

Papers Published in Refereed Scientific Meetings

I. **A classifier for dynamic thermal imaging**
Tosun E., Dinc O. F., Arli B., Tozburun S.
Translational Biophotonics: Diagnostics and Therapeutics III 2023, Munich, Germany, 25 - 29 June 2023, vol.12627

II. **Optimization study of parameters for laser-induced thermal treatment of the esophageal mucosal layer**
Törker-Burhan M., Ersoy N., BAĞRIYANIK H. A., Tozburun S.
Translational Biophotonics: Diagnostics and Therapeutics III 2023, Munich, Germany, 25 - 29 June 2023, vol.12627

III. **An endoscopic approach to limit the depth of laser-induced thermal injury**
Turker-Burhan M., Tozburun S.
Translational Biophotonics: Diagnostics and Therapeutics III 2023, Munich, Germany, 25 - 29 June 2023, vol.12627

IV. **An AI-based algorithmic system that predicts missing A-scans in cross-sectional retinal images**
Dinc O. F., Arli B., Tozburun S.
Optical Coherence Imaging Techniques and Imaging in Scattering Media V 2023, Munich, Germany, 25 - 29 June 2023, vol.12632

V. **A system using SPML laser in measuring the depth-resolved thermal change**
Gokkan H., Guralp E., Tozburun S.
Optical Coherence Imaging Techniques and Imaging in Scattering Media V 2023, Munich, Germany, 25 - 29 June 2023, vol.12632

VI. **Predicting dark-field images of H&E-stained esophageal specimens**
Arlia B., Dinc O. F., Turker M. B., Tozburun S.
Advances in Microscopic Imaging IV 2023, Munich, Germany, 28 June 2023, vol.12630

VII. **A customized scope head for OCT-guided laser stimulation of the vagus nerve**
Gökkan H., TOZBURUN S.

SPIE Photonics West, San-Francisco, Costa Rica, 28 January - 02 February 2022, vol.11950

VIII. **An endoscopy capsule for well-confined and angle-controlled photothermal mucosa ablation**
Burhan M. T., Tozburun S.
Conference on Optical Interactions with Tissue and Cells XXXIII and Advanced Photonics in Urology at SPIE BIOS Conference, San-Francisco, Costa Rica, 22 January - 28 February 2022, vol.11958

IX. **A stretched-pulse mode-locked (SPML) wavelength-swept laser source at 1.06 mu m**
Akkaya I., Tozburun S.
Conference on Laser Resonators, Microresonators, and Beam Control XXIV at SPIE LASE Conference, ELECTR NETWORK, 22 January - 28 February 2022, vol.11987

X. **An 18.6 MHz wavelength-swept laser source based on stretched-pulse mode-locking at 1290 nm**
AKKAYA İ., TOZBURUN S.
European Conference on Biomedical Optics, Munich, Germany, 20 - 24 June 2021

XI. **Arterial pressure responses of a rat to laser stimulation of the vagus nerve using infrared irradiation in continuous-wave mode**
YETİŞ O., AKKAYA İ., GÜNER Ö., GÜNELİ M. E., TOZBURUN S.
European Conference on Biomedical Optics, Munich, Germany, 20 - 24 June 2021

XII. **Ex-vivo Model Experimental and Simulation Results Suggesting Effective and Superficial Mucosal Photothermal Ablation at 1505 nm**
Burhan M. T., Bagriyanik A., Tozburun S.
European Conferences on Biomedical Optics - Translational Biophotonics - Diagnostics and Therapeutics, ELECTR NETWORK, 20 - 25 June 2021, vol.11919

XIII. **Monte-Carlo based simulations of photothermal response of nerve tissue for laser wavelengths of 1455 nm, 1490 nm, 1550 nm**
Burhan M. T., TOZBURUN S.
Symposium on Optical Interactions with Tissue and Cells XXXI held at SPIE BiOS Conference, San-Francisco, Costa Rica, 1 - 02 February 2020, vol.11238

XIV. **A stretched-pulse mode-locked laser source at a central wavelength of 1275 nm**
Akkaya I., Caki O., TOZBURUN S.
Conference on Laser Resonators, Microresonators, and Beam Control XXII, San-Francisco, Costa Rica, 3 - 06 February 2020, vol.11266

XV. **Automatic classification of melanocytic skin tumors based on hyperparameters optimized by cross-validation using support vector machines**
Gokkan O., TOZBURUN S.
Conference on Photonics in Dermatology and Plastic Surgery, San-Francisco, Costa Rica, 1 - 02 February 2020, vol.11211

XVI. **A pilot study: Infrared laser stimulation of the rat vagus nerves**
Yetis O., Akkaya I., ÇELİK A., Koc B., Guneli M. E., TOZBURUN S.
Symposium on Optical Interactions with Tissue and Cells XXXI held at SPIE BiOS Conference, San-Francisco, Costa Rica, 1 - 02 February 2020, vol.11238

XVII. **A WEB BASED DECISION SUPPORT TOOL FOR GASTROINTESTINAL SUBMUCOSAL TUMORS**
LEBLEBİCİ A., BENGİ G., ACAR E., TOZBURUN S., SOYTÜRK M., ELLİDOKUZ E. B.
THE 12TH INTERNATIONAL SYMPOSIUM ON HEALTH INFORMATICS AND BIOINFORMATICS, 17 - 19 October 2019

XVIII. **Simulations for modeling the photothermal response of nerve tissue**
Turker M., TOZBURUN S.
Conference on Medical Laser Applications and Laser-Tissue Interactions IX, Munich, Germany, 23 - 24 June 2019, vol.11079

XIX. **Simultaneous high-speed and long-range imaging with optically subsampled OCT (Conference Presentation)**
Siddiqui M., TOZBURUN S., Vakoc B. J.
Conference on Optical Coherence Tomography and Coherence Domain Optical Methods in Biomedicine XX, San-Francisco, Costa Rica, 15 - 17 February 2016, vol.9697

XX. **Angiographic imaging using an 18.9 MHz swept-wavelength laser that is phase-locked to the data acquisition clock and resonant scanners (Conference Presentation)**
TOZBURUN S., Blatter C., Siddiqui M., Nam A. S., Vakoc B. J.
Conference on Optical Coherence Tomography and Coherence Domain Optical Methods in Biomedicine XX, San-Francisco, Costa Rica, 15 - 17 February 2016, vol.9697

XXI. **A 15-MHz wavelength-stepped laser based on intracavity pulse stretching and compression for optical coherence tomography**
TOZBURUN S., Siddiqui M., Vakoc B. J.
Conference on Lasers and Electro-Optics (CLEO), San-Jose, Costa Rica, 8 - 13 June 2014

XXII. **Comparison of Three Pulsed Infrared Lasers for Optical Stimulation of the Rat Prostate Cavernous Nerves**
Stahl C. S. D., TOZBURUN S., Hutchens T. C., Lagoda G. A., Burnett A. L., Keller M. D., Fried N. M.
Conference on Photonic Therapeutics and Diagnostics IX, San-Francisco, Costa Rica, 2 - 07 February 2013, vol.8565

XXIII. **Subsurface Optical Stimulation of Rat Prostate Cavernous Nerves using a Continuous Wave, Single Mode, 1490 nm Diode Laser**
TOZBURUN S., Stahl C. S. D., Hutchens T. C., Lagoda G. A., Burnett A. L., Fried N. M.
Conference on Photonic Therapeutics and Diagnostics IX, San-Francisco, Costa Rica, 2 - 07 February 2013, vol.8565

XXIV. **Temperature-Controlled Optical Stimulation of the Rat Prostate Cavernous Nerves**
TOZBURUN S., Lagoda G. A., McLain M. A., Burnett A. L., Fried N. M.
Conference on Photonic Therapeutics and Diagnostics IX, San-Francisco, Costa Rica, 2 - 07 February 2013, vol.8565

XXV. **Subsurface Optical Stimulation of the Rat Prostate Nerves Using Continuous-wave Near-Infrared Laser Radiation**
TOZBURUN S., Lagoda G. A., Burnett A. L., Fried N. M.
Conference on Photonic Therapeutics and Diagnostics VIII, San-Francisco, Costa Rica, 21 - 24 January 2012, vol.8207

XXVI. **Continuous-wave vs. Pulsed Infrared Laser Stimulation of the Rat Prostate Cavernous Nerves**
TOZBURUN S., Cilip C. M., Lagoda G. A., Burnett A. L., Fried N. M.
Conference on Photonic Therapeutics and Diagnostics VII, San-Francisco, Costa Rica, 22 - 24 January 2011, vol.7883

XXVII. **Fiber Beam Shaping for Optical Nerve Stimulation**
TOZBURUN S., Lagoda G. A., Burnett A. L., Farahi F., Fried N. M.
IEEE Photonics Conference (PHO), Darlington, United Kingdom, 9 - 13 October 2011, pp.493-494

XXVIII. **Continuous-wave Optical Stimulation of the Rat Prostate Nerves using an All-single-mode 1455 nm Diode Laser and Fiber System**
TOZBURUN S., Lagoda G. A., Burnett A. L., Fried N. M.
Conference on Photonic Therapeutics and Diagnostics VII, San-Francisco, Costa Rica, 22 - 24 January 2011, vol.7883

XXIX. **Incorporation of Fiber Optic Beam Shaping into a Laparoscopic Probe for Laser Stimulation of the Cavernous Nerves**
TOZBURUN S., Lagoda G. A., Mayeh M., Burnett A. L., Farahi F., Fried N. M.
Conference on Photonic Therapeutics and Diagnostics VI, San-Francisco, Costa Rica, 23 - 25 January 2010, vol.7548

XXX. **Gaussian versus Flat-top Spatial Beam Profiles for Optical Stimulation of the Prostate Nerves**
TOZBURUN S., Lagoda G. A., Burnett A. L., Fried N. M.
Conference on Photonic Therapeutics and Diagnostics VI, San-Francisco, Costa Rica, 23 - 25 January 2010, vol.7548

XXXI. **Design of a Compact Laparoscopic Probe for Optical Stimulation of the Cavernous Nerves**
TOZBURUN S., Fried N. M.

Conference on Photonic Therapeutics and Diagnostics V, San-Jose, Costa Rica, 24 - 26 January 2009, vol.7161

Supported Projects

Tozburun S., TUBITAK Project, Development of a Hybrid System to Automatically Examine the Clinical Status of Aortic Ballooning in Computed Tomography Images, 2023 - 2025
Tozburun S., Bağrıyanık H. A., Güneli M. E., TUBITAK Project, An endoscope Cap Producing Precise Photothermal Coagulation Depth and Allowing Positioning (i.e., navigation), 2022 - 2025
Tozburun S., Bağrıyanık H. A., Güneli M. E., Karaçalı B., Ellidokuz H., Öztürk Y., Kiray M., TUBITAK Project, An endoscope Cap Producing Precise Photothermal Coagulation Depth and Allowing Positioning (i.e., navigation), 2021 - 2024
Tozburun S., Project Supported by Other Private Institutions, Yeni nesil bir teknik olan optik sinir uyarımının vagus sinirine uygulanabilirliğinin değerlendirilmesi, 2020 - 2022
Tozburun S., H2020 Project, Well-Confined Mucosal LasEr Ablation with a Negative Pressure Based Endoscopy Capsule, 2019 - 2021
Tozburun S., Bağrıyanık H. A., Güneli M. E., TUBITAK Project, Development of a New Generation Apparatus Providing Limited Photothermal Ablation, 2018 - 2021
Tozburun S., TÜBA Project, Biyomedikal Tomografik Görüntülemede Kullanılabilecek Bir Optik A-çizgisi Sinyal Jeneratörünün Geliştirilmesi, 2018 - 2020
Tozburun S., Pekkan K., TUBITAK Project, Development of Optical-Domain Subsampling based Optical Coherence Tomography using a wavelength stepped laser with two phase modulators and chromatic dispersion, 2017 - 2020
Tozburun S., İlday F. Ö., TUBITAK Project, All fiber optics, 20-MHz wavelength-swept laser for Optical Coherence Tomography, 2017 - 2020
Tozburun S., TUBITAK Project, ENABLE: ENdoscopic mucosa Ablation device for Barrett s esophagus using infrared Lasers, 2016 - 2017

Patent

Tozburun S., SYSTEM AND METHOD USING SURFACE SCANNING PATTERN/PROTOCOL BASED ON MODIFIED ELECTRICAL WAVES TO PRODUCE A WIDE AND DYNAMIC TIME INTERVAL BETWEEN SCANS, Patent, CHAPTER G Physics, The Invention Registration Number: 2021 01197 , Standard Registration, 2022
Tozburun S., Türker Burhan M., Ellidokuz E. B., NEGATIVE PRESSURE BASED IMAGING AND THERAPEUTIC APPARATUS AND SYSTEM FOR WELL-CONFINED ABNORMAL MUCOSAL TISSUE ABLATION AND WORKING METHOD OF THE SYSTEM, Patent, CHAPTER G Physics, The Invention Recourse Number: PCT/TR2022/05113 , Standard Registration, 2022, 2021
Tozburun S., Akkaya İ., Method and System Using Optical Phase Modulation and Optical Phase Demodulation and Spectral Filtering to Generate an Optical Pulse Train, Patent, CHAPTER G Physics, The Invention Registration Number: 2020 13928 , Standard Registration, 2020, 2021, 2022
Vakoc B., Siddiqui M., Tozburun S., System, apparatus and method utilizing optical dispersion for fourier-domain optical coherence tomography, Patent, CHAPTER H Electricity, The Invention Registration Number: US9668652B2 , Standard Registration, 2017, 2021
Fried N. M., Tozburun S., Continuous-wave optical stimulation of nerve tissue, Patent, CHAPTER G Physics, The Invention Recourse Number: US20130166001A1 , Standard Registration, 2012

Memberships / Tasks in Scientific Organizations

American Society for Laser Medicine and Surgery, Member, 2022 - Continues, United States Of America

Peer Reviews in Scientific Publications

OPTICS LETTERS, Journal Indexed in SCI-E, June 2024
OPTICS LETTERS, Journal Indexed in SCI-E, May 2024
OPTICS LETTERS, Journal Indexed in SCI-E, March 2024
OPTICS LETTERS, Journal Indexed in SCI-E, January 2024
OPTICS EXPRESS, Journal Indexed in SCI-E, January 2023
MEASUREMENT: JOURNAL OF THE INTERNATIONAL MEASUREMENT CONFEDERATION, Journal Indexed in SCI-E, October 2022
OPTICS EXPRESS, Journal Indexed in SCI-E, August 2022
OPTICS AND LASER TECHNOLOGY, Journal Indexed in SCI-E, February 2021
OPTICS EXPRESS, Journal Indexed in SCI-E, October 2019
BIOMEDICAL OPTICS EXPRESS, Journal Indexed in SCI-E, May 2019
OPTICS EXPRESS, Journal Indexed in SCI-E, August 2018
APPLIED OPTICS, Journal Indexed in SCI-E, March 2018
APPLIED OPTICS, Journal Indexed in SCI-E, January 2017
BIOMEDICAL OPTICS EXPRESS, Journal Indexed in SCI-E, August 2016
OPTICS EXPRESS, Journal Indexed in SCI-E, April 2016
OPTICS EXPRESS, Journal Indexed in SCI-E, March 2016
OPTICS LETTERS, Journal Indexed in SCI-E, January 2015
OPTICS EXPRESS, Journal Indexed in SCI-E, November 2014
BIOMEDICAL OPTICS EXPRESS, Journal Indexed in SCI-E, September 2014
OPTICS EXPRESS, Journal Indexed in SCI-E, June 2014

Scientific Project Refereeing

R&D Project of Group B, January 2024
R&D Project of Group B, January 2024
Other International Funding Programs, October 2023
TUBITAK Project, 3501 - National Young Researcher Career Development Program, September 2023
TUBITAK Project, 1501 - Industry R & D Projects Support Program, August 2023
R&D Project of Group B, August 2023
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, May 2016

Metrics

Publication: 52
Citation (WoS): 352
Citation (Scopus): 467
H-Index (WoS): 11
H-Index (Scopus): 11

Congress and Symposium Activities

European Conferences on Biomedical Optics, Attendee, Munich, Germany, 2023
The European Conferences on Biomedical Optics - ECBO, Attendee, Munich, Germany, 2023
The European Conferences on Biomedical Optics - ECBO, Attendee, Munich, Germany, 2023
The European Conferences on Biomedical Optics - ECBO, Attendee, Munich, Germany, 2023

The European Conferences on Biomedical Optics - ECBO, Attendee, Munich, Germany, 2023
Optica Biophotonics Congress: Optics in the Life Sciences, Invited Speaker, Vancouver, Canada, 2023
IZPHOTECH, Invited Speaker, İzmir, Turkey, 2022
9. Condensed Matter Physics, Invited Speaker, İzmir, Turkey, 2022
SPIE Photonics West, Attendee, California, United States Of America, 2022
SPIE Photonics West, Attendee, California, United States Of America, 2022
SPIE Photonics West, Attendee, California, United States Of America, 2022
European Conferences on Biomedical Optics, Session Moderator, Munich, Germany, 2021
European Conferences on Biomedical Optics, Session Moderator, Munich, Germany, 2021
European Conferences on Biomedical Optics, Session Moderator, Munich, Germany, 2021
SPIE Photonics West, Attendee, California, United States Of America, 2020
SPIE Photonics West, Attendee, California, United States Of America, 2020
SPIE Photonics West, Attendee, California, United States Of America, 2020
SPIE Photonics West, Attendee, California, United States Of America, 2020
European Conference on Biomedical Optics, Attendee, Munich, Germany, 2019
SPIE Photonics West, Attendee, California, United States Of America, 2016
CLEO:2014 - Laser Science to Photonic Applications, Attendee, California, United States Of America, 2014
SPIE Photonics West, Attendee, California, United States Of America, 2014
SPIE Photonics West, Attendee, California, United States Of America, 2013
SPIE Photonics West, Attendee, California, United States Of America, 2013
SPIE Photonics West, Attendee, California, United States Of America, 2012
International Conference on Information Photonics and Optical Communications, Attendee, California, United States Of America, 2011
SPIE Photonics West, Attendee, California, United States Of America, 2011
SPIE Photonics West, Attendee, California, United States Of America, 2011
SPIE Photonics West, Attendee, California, United States Of America, 2010
SPIE Photonics West, Attendee, California, United States Of America, 2010
SPIE Photonics West, Attendee, California, United States Of America, 2009

Invited Talks

Complex Optics and Modelocking: Synergies on the Horizon, Workshop, Ruhr-University Bochum, Germany, November 2024
Future Healthcare Istanbul, Conference, Acibadem Mehmet Ali Aydinlar University, Turkey, October 2024
Some Biomedical Applications of Laser and Fiber Technologies, Workshop, TMMOB Fizik Müh. Odası / Optik ve Fotonik Teknolojileri Sektör Buluşması, Turkey, November 2023
Some Applications of AI On Biomedical Optics, Conference, BIOTürkiye, Turkey, September 2023
Guide Mapping and Endoscopy Cap Approaches for Well-Confined Mucosal Laser Coagulation, Conference, 2023 Optica Biophotonics Congress: Optics in the Life Sciences, Canada, April 2023
Peripheral Nerve Stimulation Using Near-Infrared Laser Irradiation, Seminar, Bogazici University, Turkey, March 2023
Photothermal Coagulation of the Superficial Layer of the Esophagus, Workshop, İzmir Yüksek Teknoloji Enstitüsü, Turkey, October 2022
9. Condensed Matter Physics, Workshop, İzmir Yüksek Teknoloji Enstitüsü, Turkey, May 2022
The stretched-pulse mode-locked laser technology for Optical Coherence Tomography, Conference, İzmir Demokrasi Üniversitesi - 2nd International Congress of Updates in Biomedical Engineering, Turkey, September 2020
Decision support systems based on artificial intelligence in colonoscopy, Conference, International Symposium on Health Informatics and Bioinformatics (HIBIT), Turkey, October 2019
Is the Camera-like Deployment of Optical Coherence Tomography Possible?, Workshop, İhsan Doğramacı Bilkent Üniversitesi - 20. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Turkey, September 2018
Optical Frequency Domain Imaging - OFDI, Conference, 26. Ulusal Patoloji ve 7. Ulusal Sitopatoloji Kongresi, Turkey,

November 2016

Scholarships

MSCA Individual Fellowship, European Commission, 2019 - 2021
Doktora Eğitim Bursu, University, 2007 - 2012

Awards

Tozburun S., Genç Bilim İnsanları , Bilim Akademisi, May 2020
Tozburun S., Üstün Başarılı Genç Bilim İnsanı Ödülleri, Türkiye Bilimler Akademisi, December 2018
Tozburun S., Mükemmeliyet Mührü, Avrupa Komisyonu, April 2017
Tozburun S., FABED Eser Tümen Üstün Başarı Ödülü, Feyvi Akkaya Bilimsel Etkinlikleri Destekleme Fonu, June 2016
Tozburun S., SPEI Scholarship in Optics and Photonics, Spıe—The International Society For Optical Engineering, January 2012

Entrepreneurship Activities

Anonymous, Healysense Bilgi ve Medikal Teknolojileri Araştırma Geliştirme Danışmanlık Sanayi Ticaret Anonim Şirketi, 21 December 2022, Founder Owner