# Ergin Atalar, Ph.D.

CURRICULUM VITAE

## Personal Information


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| **Address:** | Bilkent University<br>Department of Electrical and Electronics Engineering<br>Bilkent Ankara 06800<br>Turkiye |
| **Contact Information Tel:** | +90 312 290 3272 **E-mail:** ergin.atalar@umram.bilkent.edu.tr |
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| **Citizenship:** | **Turkiye** and **USA** |


## Short Biosketch

I am an **Electrical and Electronics Engineering Professor** at **Bilkent University**, Turkiye. I was on sabbatical at the National Heart, Lung and Blood Institute, NIH at Bethesda, Maryland in 2024-2025 academic year. I spent almost half of my academic career at **Johns Hopkins University**. While I was at Hopkins, I became known for my contributions to the cardiovascular and interventional MRI fields. I was a PI of several NIH R01 grants. My patented inventions resulted in the formation of **ClearPoint Neuro, Inc**. (formerly Surgi-Vision Inc.). I left Hopkins after receiving my tenure position.

After returning to Turkiye in 2005, I switched my research focus to magnetic resonance engineering and the safety of MRI as enabling technologies of MRI interventions. I have received three major grants to form **UMRAM, the national magnetic resonance research center**. I am currently an active member of the center.

I supervised many young scientists who became faculty members in top universities, such as **Xiaoming Yang** (Professor of Radiology at the University of Washington, USA), **Jean-Michel Serfaty** (Professor of Radiology at CHU Nantes, France), **Harald H. Quick** (Professor and Managing Director, Erwin L. Hahn Institute for Magnetic Resonance Imaging, Germany), **Yigitcan Eryaman** (Associate Professor at University of Minnesota), **Alireza Sadeghi-Tarakameh** (Assistant Professor at University of Minnesota), **Emre Kopanoglu** (Lecturer at the Cardiff University, UK), **Esra Abaci Turk** (Assistant Professor at the Childrens Hospital, Boston, USA), and **Akbar Alipour** (Assistant Professor at Mount Sinai School of Medicine, USA).

I authored 132 peer-reviewed journal papers. My **h-index is 73,** according to Google Scholar, with more than **18000 citations** (h-index=48 and 7000+ citations according to Scopus) as of November 2026. I hold **54 US patents**. I am a **fellow of the International Society of Magnetic Resonance in Medicine**. I am a member of **the National Academy of Inventors, USA**. I have received the **Science Award** from the Scientific and Technological Research Council of Turkiye. I am a member of the **Academia Europaea** and **Science Academy**, Turkiye.

## Education

**Ph. D.** 1991, Department of Electrical and Electronics Engineering, *Project title: Motion Artifact Reduction Techniques in Magnetic Resonance Imaging,* Bilkent University, Ankara, Turkiye

**M. S.** 1987, Department of Electrical and Electronics Engineering, *Project title: An Iterative Backprojection Algorithm for Electrical Impedance Imaging Using Finite Element Method,* Middle East Technical University, Ankara, Turkiye

**B. S.** 1985, Department of Electrical and Electronics Engineering, Bogazici University, Istanbul, Turkiye

## Employment History

**Bilkent University, Ankara, Turkiye**

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| **2004-** | Professor, Department of Electrical and Electronics Engineering |
| **2009-2023** | Director, National Magnetic Resonance Research Center (UMRAM) |
| **2005-2011** | Vice Chair, Department of Electrical and Electronics Engineering |
| **2002-2004** | Visiting Professor, Department of Electrical and Electronics Engineering |
| **1996-1998** | Visiting Assistant Professor, Department of Electrical and Electronics Engineering |
| **1988-1991** | Instructor, Department of Electrical and Electronics Engineering |
| **1986-1988** | Research Assistant, Department of Electrical and Electronics Engineering |

**National Heart, Lung and Blood Institute, NIH, Bethesda, Maryland**

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| **Sep 2024-June 2025** | Scientist (on Sabbatical) |

**Johns Hopkins University, Baltimore, Maryland**

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| **2005-2015** | Adjunct Professor, Department of Radiology and Radiological Sciences |
| **2004-2005** | Professor, Department of Radiology and Radiological Sciences |
| **2003-2005** | Joint Appointment, Department of Electrical and Computer Engineering |
| **1998-2004** | Associate Professor, Department of Radiology and Radiological Sciences |
| **1998-2005** | Joint Appointment, Department of Biomedical Engineering |
| **1994-1998** | Assistant Professor, Department of Radiology and Radiological Sciences |
| **1993-1994** | Instructor, Department of Radiology and Radiological Sciences |
| **1991-1993** | Postdoctoral Fellow, Department of Biomedical Engineering Johns Hopkins University, Baltimore, Maryland |

**Industry**

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| **1998-** | Founder ClearPoint Neuro, Inc. (formerly known as MRI Interventions, Inc and SurgiVision Inc.), Columbia, Maryland |
| **2007-2015** | Founder, Troyka Med AS, Ankara, Turkiye |
| **1981-1986** | Engineer PETAS, Ankara, Turkiye |

## Awards

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| **2024** | Distinguished Teacher Award, Bilkent University |
| **2023** | Technology Award, Elginkan Foundation |
| **2015** | Member, National Academy of Inventors (Johns Hopkins University Chapter) |
| **2013** | Member, Academia Europaea |
| **2012** | Member, Science Academy, Turkiye |
| **2011** | Fellow, ISMRM |
| **2006** | Science Award, TUBITAK |
| **2001** | Melvin Judkins Young Investigator Award, American Heart Association<br>*X. Yang, E. Atalar, D. Lim J. M. Serfaty, D. Wang, A. Kumar, L. Cheng, In vivo MR imaging of catheter-based vascular gene transfer* |
| **2000** | Melvin Judkins Young Investigator Award, American Heart Association<br>*M. Serfaty, X. Yang, H. H. Quick, P. Aksit, E. Atalar, MR-guided coronary artery intervention* |
| **1999** | Samuel A. Levine Young Investigator Award, American Heart Association<br>*A. Shunk, J. A. C. Lima, C. Rochitte, E. Atalar, Transesophageal MRI of Thoracic Aorta in Vivo in Patients with and without Atherosclerosis* |
| **1995** | Frank T. McClure Fellow |

## Professional Service

### Editorial Service

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| **2021-** | **Deputy Editor,** *Magnetic Resonance in Medicine* |
| **2015-2021** | **Editorial Board,** *Magnetic Resonance in Medicine* (three terms) |
| **2022-** | **Editorial Board,** *Magnetic Resonance Materials in Physics, Biology and Medicine* (MAGMA) |

### Society Memberships

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| **2026-** | **Senior Member,** European Society for Magnetic Resonance in Medicine and Biology (ESMRMB). |
| **1988-** | **Member,** International Society for Magnetic Resonance in Medicine (ISMRM). MR Engineering study group. |
| **1981-** | **Life Senior Member,** Institute of Electrical and Electronics Engineers (IEEE). Engineering in Medicine and Biology Society and Microwave Theory and Technology Society. |

### Society Service

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| **2019-2020** | **Member,** Study Group Review Committee, International Society for Magnetic Resonance in Medicine (ISMRM). |
| **2018-2021** | **Member,** Annual Meeting Program Committee, ISMRM. |
| **2015-2016** | **Member,** Workshop and Study Group Review Committee, ISMRM. |
| **2014-2017** | **Chair,** Interventional MR Study Group, ISMRM. Vice Chair 2014-2015, Chair 2015-2016, Past Chair 2016-2017. |
| **2006-2010** | **Member,** Safety Committee, ISMRM. Four consecutive terms. |

### Grant Review Panels

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| **2019-2025** | **Panel Member,** European Research Council. Advanced Grant panel LS7 (2019, 2021, 2023, 2025). |
| **2020-2025** | **Remote Referee,** European Research Council. Advanced Grant (2020), Consolidator Grant (2022, 2023) and Synergy Grant (2024, 2025). |
| **1998-2005** | **Reviewer,** National Institutes of Health, USA. Study section ZRG1 SBIB-J. |
| **2000-2001** | **Reviewer,** National Science Foundation, USA. |
| **2022-2025** | **Reviewer,** Netherlands Organisation for Scientific Research (NWO), Open Technology Programme. |
| **2019-2020** | **Reviewer,** Russian Science Foundation. |
| **2021** | **Reviewer,** FLAG-ERA Joint Transnational Call. |
| **2006-** | **Reviewer,** TUBITAK research project panels, Turkiye. |
| **2008-2011** | **Reviewer,** Turkish Academy of Sciences (TUBA), GEBIP young scientist award. |
| **2022-2025** | **Jury Member,** Science Academy, Turkiye. BAGEP young scientist award, electrical and electronics engineering (2022, 2024, 2025). |
| **2023-2024** | **Reviewer,** Health Institutes of Turkiye (TUSEB), science awards. |

### Journal Refereeing

Magnetic Resonance in Medicine, Journal of Magnetic Resonance Imaging, Magnetic Resonance Materials in Physics, Biology and Medicine (MAGMA), NMR in Biomedicine, Journal of Magnetic Resonance, Concepts in Magnetic Resonance Part B: Magnetic Resonance Engineering, IEEE Transactions on Medical Imaging, IEEE Transactions on Biomedical Engineering, IEEE Transactions on Microwave Theory and Techniques, IEEE Transactions on Antennas and Propagation, IEEE Transactions on Biomedical Circuits and Systems, IEEE Transactions on Engineering in Health and Medicine, IEEE Sensors Journal, IEEE Letters on Electromagnetic Compatibility Practice and Applications, American Journal of Neuroradiology, Annals of Biomedical Engineering, Investigative Radiology, Journal of Magnetism and Magnetic Materials, Medical Physics, BioMedical Engineering OnLine and Scientific Reports.

## Research Funding

### Current

**2023-2027** TUBITAK 1004 23AG005 Project Title: *High Performance Digital Receiver for MRI with Optical Communication* (Project 10 of the platform project *İnsan Fonksiyonunu Tehdit Eden Zorluklara Karşı Nöroteknolojik Çözümler Platformu*), **Principal Investigator of Project 10 and Leader of the Bilkent University Component**, Coordinator: Can Yucesoy, Bilkent Funding: 12 000 000TL

**2025-2027** TUBITAK BIDEB 2247B**,** Project Title: *A Massive Gradient Array for Magnetic Resonance Imaging: More is Different*, **Principal Investigator,** 1 500 000 TL.

**2026-2029** TUBITAK 1001 125E832, Project Title: *Eddy Current Compensation with Gradient Arrays in Magnetic Resonance Imaging*, **Principal Investigator,** 3 086 148 TL.

### Past

**2023-2026** European Commission, HORIZON-CSA**,** Project Title: *Twinning of Magnetic Resonance Imaging Research Institutes*, Acronym: MRTwins, **Coordinator,** 1 500 000 Euros, Bilkent Budget: 750 000 Euros.

**2023-2025** TUBITAK 1001 123E024 Project Title: *Manyetik Rezonans Görüntüleme Cihazları Için Gradyan Dizisi Ve Rf Verici Dizisi Sürme Yetenekli Spektrometrenin Tasarımı Ve Gerçekleştirilmesi*, **Principal Investigator** 1 200 000TL

**2021-2023** TUBITAK 1001 121E128 Project Title: *Design and Implementation of a Set of Z-Gradient Array and an Active-Shield Array for Magnetic Resonance Imaging*, **Co-Investigator,** PI: Manoucher Takrimi**,** 1 200 000TL

**2021-2023** TUBITAK JPCOFUND 121N028 The EU Joint Programme - Neurodegenerative Disease Research (JPND) Project, Title: *Spinocerebellar ataxias: Advanced imaging with ultra-high field MRI*, **Principal Investigator of Work Package 5,** PI: Tony Stoecker, Bilkent funding: 1 200 000TL.

**2019-2022** TUBITAK 1001 119E116 Project Title: *Manyetik Rezonans Goruntuleme Cihazlari icin Dairesel Radyo-Frekans Sargi Dizilerinin Analizi, Tasarimi ve Yapimi* **Principal Investigator** 696,300TL

**2019-2021** ASELSAN Project Title: *MR Goruntuleme Sistemi Gelistirme Projesi* **Principal Investigator** 350,000USD

**2018-2021** TUBITAK 1001 117E817 Project Title: *Beyin Manyetik Rezonans Elastografisinin Guvenligi ve Optimizasyonu* **Principal Investigator** 341,181TL

**2017-2020** Strateji ve Butce Baskanligi Project Title: *Preklinik Goruntuleme Yaridimi ile Asi Test ve Gelistirme* **Principal Investigator** 9,400,000TL

**2017-2022** ASELSAN, (supported by TUBITAK TEYDEB) Project Title: *Cok Kanalli Gradyan Bobin Dizisi Tasarimi, Sinyal Ureteci ve Kontrol Karti Gelistirilmesi ve Prototip Uretimi* **Principal Investigator** 1,100,000TL

**2017-2018** TUBITAK 1000 Project Title: *Bilkent Universitesi Ar-Ge Strateji Belgesi (Sinir Bilimleri)* **Principal Investigator** 0TL

**2017-2020** TUBITAK 1001 (116E270) Project Title: *Manyetik Rezonans Goruntuleme Cihazi İçin Ozellestirilmis E-Sinifi Sayisal Radyo Frekans Yukselteci Dizisi* **Principal Investigator** 360,000TL

**2015-2016** ASELSAN Project Title: *36 Kanalli RF Bobin Dizisi Tasarimi, Gelistirilmesi ve Prototip Uretimi* **Principal Investigator** 500,000TL

**2014-2016** SANTEZ Project Title: *Implant Uyumlu MR Cihazi (Implant Compatible MR Scanner)* **Principal Investigator** 621,000TL

**2014-2017** TUBITAK 1001 (114E186) Project Title: *Etkin Ayristirma Yontemi Kullanarak Sifir Eko Zamanli Manyetik Rezonans Goruntulemesi (Zero Echo Time Magnetic Resonance Imaging Using Active Decoupling Technique)* **Principal Investigator** 390,000TL

**2013-2015** TR Ministry of Development Project Title: *Ulusal Manyetik Rezonans Arastirma Merkezi Faz II (National Magnetic Resonance Research Center (UMRAM) Phase II)* **Principal Investigator** 5,100,000TL

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| **2013-2016** | TUBITAK 1001 (103S959) Project Title: *Ailesel El Titremesi (Essential Tremor-ETM)'nin Genetik, Yapisal ve Islevsel Temellerinin Arastirilmasi* **Consultant** Principal Investigator: Tayfun Ozcelik, 360,000TL |
| **2013-2016** | TUBITAK 1001 (102K069) Project Title: *Insan Beyninin Yapisal Ve Islevsel Mimarisinin Genetik Kokenli Merkezi Sinir Sistemi Bozukluklari Incelenerek Arastirilmasi* **Consultant** Principal Investigator: Tolga Cukur, 360,000TL |
| **2013-2016** | TUBITAK 3501 (113E187) Project Title: *Manyetik Rezonans Goruntuleme Altinda Hizli Ve Guvenilir Ozgul Sogurma Orani Ve Isi lerinin Gelistirimesi* **Consultant** Principal Investigator: Tahir Malas, 360,000TL |
| **2013-2016** | TUBITAK 3501 (114E167) Project Title: *Kanser Goruntuleme Icin Manyetik Parcacik Goruntuleme: Bolgesel Difuzyon Algilama* **Consultant** Principal Investigator: Emine Ulku Saritas, 360,000TL |
| **2013-2016** | TUBITAK 3501 (114E546) Project Title: *Kategori Hedefli Dogal Görsel Taramanin Insan Beyninde Görsel Temsillere ve Islevsel Baglantilara Etkisi* **Consultant** Principal Investigator: Tolga Cukur, 360,000TL |
| **2013-2016** | TUBITAK 3501 (113S001) Project Title: *Dejeneratif Resesif Ataksilerin Nozolojisi ve Molekoler Tanisi* **Co-Investigator** Principal Investigator: Haluk Topaloglu, 360,000TL |
| **2012-2016** | TUBITAK 1001 (112E555) Project Title: *Dogrusal Olmayan Graydanlar Manyetik Alanin Manyetik Rezonans Goruntulemesindeki Uygulamalari (Applications of Nonlinear Gradient Fields in Magnetic Resonance Imaging)* **Principal Investigator** 385,000TL |
| **2010-2013** | TUBITAK 1001 (109E226) Project Title: *Verici Sargi Dizilimi Ile Manyetik Rezonans Goruntulemesi Sirasinda Olusan Ozgul Sogurma Hizinin Azaltilmasi* **Principal Investigator** 385,000TL |
| **2010-2013** | TUBITAK TEYDEB Project Title: *Endoservikal Manyetik Rezonans Goruntuleme* **Principal Investigator** 300,000TL |
| **2010-2013** | TUBITAK 1001 Project Title: *Femtosaniye Nanobiyofotonik icin Ileri Fiber Cozumleri* **Consultant** Principal Investigator: Omer Ilday, 262,794TL |
| **2009-2010** | University of Minnesota, A Collaborative Project Project Title: *Producing Miniaturized RF Signal Fiber Optic Transmission System for 7 Tesla MRI Scanners* **Principal Investigator** 30,000USD |
| **2009-2012** | TUBITAK 1001 Project Title: *Baglamin Gorsel Algiya Etkileriyle Ilgili Olarak Insan Korteksindeki Sinirsel Etkinliklerin ve Islevsel Baglantilarin Incelenmesi* **Consultant** Principal Investigator: Huseyin Boyaci, 385,000TL |
| **2009-2012** | TUBITAK 1001 Project Title: *Insanlarda Gelisimsel Sinir Sistemi Hastaliklarina Neden Olan Mutasyonlarin Gorsel ve Motor Sisteminin Yapisal ve Islevsel Organizasyonuna Etkilerinin Arastirilmasi* **Consultant** Principal Investigator: Emre Ozgen, 395,700TL |
| **2008-2011** | TUBITAK 1001 Project Title: *Girisimsel MRG de Kateterlerin Yerinin Otomatik Olarak Belirlenebilmesi Icin Yeni Bir Tumlesik Mikro Optoelektronik Sistem* **Consultant** Principal Investigator: Arda Deniz Yalcinkaya, 422,580TL |
| **2007-2011** | SANTEZ Project Title: *Manyetik Rezonans Uyumlu Elektrofizyoloji Araclari* **Principal Investigator** 800,000TL |
| **2007-2011** | TUBITAK 1001 Project Title: *Manyetik Rezonans Goruntulemesi Yonteminin Hastalara Takilan Uyarici Elektronik Cihazlar Uzerindeki Etkilerinin Incelenmesi* **Principal Investigator** 360,000TL |
| **2007-2009** | TUBITAK TEYDEB Project Title: *Manyetik Rezonans Goruntuleme Uyumlu Elektrofizyoloji Araclari* **Principal Investigator** 400,000TL |
| **2007-2009** | DPT Project Title: *Girisimsel ve Tanisal Manyetik Rezonans Arastirma Merkezi* **Principal Investigator** 6,490,000TL |
| **2004-2006** | FP6 MRIG-CT-2004-506262 Project Title: *Magnetic Resonance Imaging Compatible Cardiac Pacemakers and Implantable Cardioverter-Defibrilators* **Principal Investigator** 80,000EUR |
| **2003-2008** | NIH R01 Project Title: *Imaging Cardiac Regeneration with Mesenchyma Stem Cell* **Co-Investigator** Principal Investigator: Dara Kraichman, 1,300,000USD |
| **2002-2005** | NIH R21 Project Title: *Mesenchymal Stem Cell and Ventricular Remodeling* **Co-Investigator** Principal Investigator: Joshua M. Hare, 60,000USD |

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| **2001-2004** | NIH R01 Project Title: *Digital optical imaging of vascular gene expression* **Co-Investigator** Principal Investigator: Xiaoming Yang, 1,000,000USD |
| **2001-2004** | US Army Project Title: *Endo-urethral MRI guided Prostate Ablation* **Principal Investigator** 225,000USD |
| **2001-2005** | NIH R01 Project Title: *Intravascular MRI-Enhanced Vascular Gene Transfer* **Co-Investigator** Principal Investigator: Xiaoming Yang, 1,300,000USD |
| **2001-2006** | NIH R01 Project Title: *Innovative MRI Research Technology* **Co-Investigator** Principal Investigator: Paul A. Bottomley, 2,000,000USD |
| **2001-2004** | NSF PER Project Title: *Supplement to Center for Medical Robotics and Computer-Assisted Interventional Systems and Technology* **Principal Investigator** 309,678USD |
| **1999-2000** | Gatewood Fellowship Project Title: *High Resolution Endouretral MRI of the Female Urethra and Urethral support tissues with patological correlation* **Co-Investigator** Principal Investigator: Harpreet Pannu, 10,000USD |
| **1999-2001** | CIRREF Project Title: *IVMRI guided vascular interventions* **Co-Investigator** Principal Investigator: Xiaoming Yang, 25,000USD |
| **1999-2004** | NIH R01 Project Title: *Harmonic Phase MRI for Ultrafast Cardiac Strain Imaging* **Co-Investigator** Principal Investigator: Jerry Prince, 1,500,000USD |
| **1998-1999** | Whitaker Foundation, Biomedical Engineering Transitional Grant Project Title: *High Resolution Imaging and Spectroscopy of Atherosclerotic Plaques using Intravascular MRI* **Principal Investigator** 65,000USD |
| **1998-2000** | SurgiVision Inc., Research Grant Project Title: *Development of MR Probes* **Principal Investigator** 392,528USD |
| **1998-2003** | NIH R01 Project Title: *Intravascular Magnetic Resonance: Towards Clinical Interventions* **Principal Investigator** 813,354USD |
| **1998-2008** | NSF Engineering Research Center Project Title: *Center for Medical Robotics and Computer-Assisted Interventional Systems and Technology* **Co-Investigator** Principal Investigator: Russel Taylor, 6,000,000USD |
| **1997-2005** | NIH R01 HL057483 Project Title: *MR-guided Coronary Balloon Angioplasty* **Principal Investigator** 1,900,000USD |
| **1995-1998** | Whitaker Foundation, Biomedical Engineering Research Grant Project Title: *High Resolution Imaging and Spectroscopy of Atherosclerotic Plaques using Intravascular MRI* **Principal Investigator** 179,941USD |
| **1995-1999** | NIH, SCOR is ischemic heart disease Project Title: *Project 6: Metabolic Characterization of Reperfused Dysfunction Myocardium by NMR* **Co-Investigator** Principal Investigator: Lewis Becker, 5,969,014USD |
| **1995-2000** | NIH R01 Project Title: *Dynamic 3D tagged MRI of the Cardiac Cycle in Ischemia* **Co-Investigator** Principal Investigator: Elliot R. McVeigh, 1,595,464USD |
| **1994-1996** | US Army, Innovative developmental and exploratory award Project Title: *In-vivo microscopic MR imaging of breast lesions* **Co-Principal Investigator** Principal Investigator: Elias A. Zerhouni, 149,948USD |

## Peer-Reviewed Journal Publications

**132.** Alipour, A., Acikel, V., Gokyar, S., Algin, O., Oto, C., Balchandani, P., Demir, H. V., and Atalar, E., ***Receive-Only Coupled Wireless Radiofrequency Probe for Endocavity MR Imaging Using a pTx System***, in Magnetic Resonance in Medicine, Early view. doi: 10.1002/mrm.70648.

**131.** Kopanoglu, E., Atalar, E., Constable, R.T., ***SAR-Efficient Sub-Volume Imaging Using Nonlinear Gradient Magnetic Fields*** in *Journal of Imaging* **2026**, 12(6): 261. doi: 10.3390/jimaging12060261

**130.** Ozkara, D., Yazici, I., Mahmoudalilou, E. M., Brunheim, S., DelaBarre, L, Stoecker, T., Eryaman, Y., and Atalar, E., ***EM Simulation Model of a Clinically-Used RF Head Coil at 7 T***, in Magnetic Resonance in Medicine, Early view. doi: 10.1002/mrm.70244.

**129.** Takrimi, M. and Atalar, E., ***Eddy Current Compensation for Gradient Array Coils with Explicit Eddy Loss Constraints on the Cryostat: An Electromagnetic Approach***, in IEEE Transactions on Medical Imaging, Early view. doi: 10.1109/TMI.2025.3575201.

**128.** NOTABLE ARTICLE Kazemivalipour E, Atalar E. ***Enhancing fine-tuning efficiency and design optimization of an eight-channel 3T transmit array via equivalent circuit modeling and Eigenmode analysis.*** in *Med Phys*. **2025;** 1-15**.** **Doi: 10.1002/mp.17612**

**127.** Babaloo R., and Atalar, E., ***Minimizing Electric Fields and Increasing Peripheral Nerve Stimulation Thresholds Using a Body Gradient Array Coil*** in *Magnetic Resonance in Medicine* **2024, 92(3): 1290-1305. doi: 10.1002/mrm.30109**

**126.** Takrimi, M. and Atalar, E., ***Minimization of Eddy Power Loss in the Cryostat for a Z-Gradient Array Coil Driven by an Arbitrary Pulse Sequence: An Electromagnetic Approach*** in *Magnetic Resonance in Medicine* **2024**, 91(3), 1225:1238. Doi: 10.1002/mrm.29921

**125.** Kazemivalipour, E., Sadeghi-Tarakameh, A., Keil, B., Eryaman,Y., Atalar E., Golestanirad, L., ***Effect of field strength on RF power deposition near conductive leads: A simulation study of SAR in DBS lead models during MRI at 1.5 T—10.5 T*** in PLOS One **2023**, e0280655.

**124.** Takrimi, M. and Atalar, E., ***A z-gradient array coil with a dedicated active-shielded array coil for MRI*** in *Magnetic Resonance in Medicine* **2022**, 88 (6), 2718-2731.

**123.** Babaloo, R. and Atalar, E., ***Nonlinear Droop Compensation for Current Waveforms in MRI Gradient Systems*** in *Magnetic Resonance in Medicine* **2022**, 88: 973-985.

**122.** Sadeghi-Tarakameh, A., Jungst, S., Lanagan, M., DelaBarre, L., Wu, X., Adriany, G., Metzger, G.J., Moortele, P.F.V.d., Ugurbil, K., Atalar, E. and Eryaman, Y., ***A nine-channel transmit/receive array for spine imaging at 10.5 T: Introduction to a nonuniform dielectric substrate antenna*** in *Magnetic Resonance in Medicine* **2022**, 87: 2074-2088.

**121.** Sadeghi-Tarakameh, A., Zulkarnain, N.I.H., He, X., Atalar, E., Harel, N. and Eryaman, Y., ***A Workflow for Predicting Temperature Increase at the Electrical Contacts of Deep Brain Stimulation Electrodes Undergoing MRI*** in *Magnetic Resonance in Medicine* **2022**, 88(5):2311-2325. doi: 10.1002/mrm.29375.

**120.** Ariyurek, C., Tasdelen, B., Ider, Y.Z. and Atalar, E., ***SNR Weighting for Shear Wave Speed Reconstruction in Tomoelastography*** in *NMR* **2021**, 34: e4413.

**119.** EDITOR'S PICK Kazemivalipour, E., Sadeghi-Tarakameh, A. and Atalar, E., ***Eigenmode analysis of the scattering matrix for the design of MRI transmit array coils*** in *Magnetic Resonance in Medicine* **2021**, 85: 1727-1741.

**118.** Kazemivalipour, E., Bhusal, B., Vu, J., Lin, S., Nguyen, B.T., Kirsch, J., Nowac, E., Pilitsis, J., Rosenow, J., Atalar, E. and Golestanirad, L., ***Vertical open-bore MRI scanners generate significantly less RF heating around implanted leads: A study of deep brain stimulation implants in 1.2 T OASIS scanners versus 1.5 T horizontal systems*** in *Magnetic Resonance in Medicine* **2021**, 8: 1560-1572.

**117.** Sadeghi-Tarakameh, A., Kazemivalipour, E., Gundogdu, U., Erdogan, S. and Atalar, E., ***Accelerating the Co-Simulation Method for the Design of Transmit Array Coils for MRI*** in *Magnetic Resonance Materials in Physics, Biology and Medicine* **2021**, 34: 165-178.

**116.** Tasdelen, B., Sadeghi-Tarakameh, A., Yilmaz, U. and Atalar, E., ***Analysis and Mitigation of Noise in Simultaneous Transmission and Reception in MRI*** in *Magn Reson Med* **2021**, 8: 1746-1758.

**115.** Acikel, V., Silemek, B. and Atalar, E., ***Wireless control of induced radiofrequency currents in active implantable medical devices during MRI*** in *Magnetic Resonance in Medicine* **2020**, 83: 2370-2381.

**114.** Golestanirad, L., Kazemivalipour, E., Lampman, D., Habara, H., Atalar, E., Rosenow, J., Pilitsis, J. and Kirsch, J., ***RF heating of deep brain stimulation implants in open-bore vertical MRI systems: A simulation study with realistic device configurations*** in *Magnetic Resonance in Medicin* **2020**, 83: 2284-2292.

**113.** EDITOR'S PICK Oezen, A.C., Silemek, B., Lottner, T., Atalar, E. and Bock, M., ***MR safety watchdog for active catheters: Wireless impedance control with real-time feedback*** in *Magnetic Resonance in Medicine* **2020**, 84: 1048-1060.

**112.** Sadeghi-Tarakameh, A., DelaBarre, L., Torrado-Carvajal, R.L.L.a., Du, X., Grant, A., Adriany, G., Metzger, G.J., Moortele, a.P.F.V.d., Ugurbil, K., Atalar, E. and Eryaman, Y., ***In vivo human head MRI at 10.5T: A radiofrequency safety study and preliminary imaging results*** in *Magnetic Resonance in Medicine* **2020**, 84: 484-496.

**111.** Sadeghi-Tarakameh, A., Adriany, G., Metzger, G.J., Lagore, R.L., Jungst, S., DelaBarre, L., Moortele, P.F.V.d., Ugurbil, K., Atalar, E. and Eryaman, Y., ***Improving radiofrequency power and specific absorption rate***

***management with bumped transmit elements in ultra-high field MRI*** in *Magnetic Resonance in Medicine* **2020**, 84: 3485-3493.

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**38.** Ocali, O. and Atalar, E., *High Resolution Magnetic Resonance Imaging of the Rabbit Aorta using a Loopless Catheter Antenna*, SMR 1996 Forth Annual Meeting, New York, NY, 1996

**37.** Ocali, O. and Atalar, E., *Importance of Radiation Loss on Noise of MR Imaging Surface Coils, RSNA*, Chicago, IL, 1996

**36.** Ocali, O. and Atalar, E., *Determination of an Upper Bound for Signal-to-Noise ratio in MR Experiments for Objects for Finite Volume*, RSNA, Chicago, IL, 1996

**35.** Reeder, S.B., Atalar, E., Bolster, B.D. and McVeigh, E.M., *Echo Delay Estimation in Echo Planar Reference Scans: Implications for Artifact Reduction*, SMR 1996 Forth Annual Meeting, New York, NY, 1996

**34.** Atalar, E., Zerhouni, E.A. and Pasricha, P.J., *Ultra-high Resolution Imaging of Esophageal Wall using a Quadrature Detector Placed within Gut*, SMR 1996 Forth Annual Meeting, New York, NY, 1996

**33.** Atalar, E. and Ocali, O., *Cylindrical Encoding Methods for Intravascular MR Imaging with a Loopless Catheter Antenna*, RSNA, Chicago, IL, 1996

**32.** Bluemke, D.A., Zerhouni, E.A., Mosher, T.J. and Atalar, E., *Aortic Vasculopathy: Evaluation with Breath-Hold Segmented k-space Acquisition*, RSNA, Chicago, IL, 1996

**31.** Correia, L.C.L., Atalar, E., Kelemen, M.D., Hutchins, G.M., Gertenblith, G., Zerhouni, E.A. and Lima, J.A.C., *Intravascular Quantification of Human Atherosclerotic Burden: Magnetic Resonance Imaging versus Ultrasound*, American College of Cardiology, 45th Annual Scientific Session, 1996

**30.** Correia, L.C.L., Atalar, E., Kelemen, M.D., Hutchins, G.M., Fleg, J.L., Gerstenblith, G., Zerhouni, E.A. and Lima, J.A.C., *Intraplaque Lipid-Accumulation determined by Intravascular Magnetic-Resonance-Imaging*, Circulation, 1996

**29.** Correia, L., Atalar, E., Kelemen, M., Ocali, O., Hutchins, G., Fleg, J.L., Gerstenblith, G., Zerhouni, E.A. and Lima, J.A.C., *Human Atherosclerotic Burden and Plaque Composition Evaluation By in vitro Intravascular Magnetic Resonance Imaging*, SMR 1996 Forth Annual Meeting, New York, NY, 1996

**28.** Atalar, E. and Zerhouni, E.A., *A Phased Array Coil for In-vivo Microscopic MR Imaging of Breast Lesions*, SMR 1995 Third Annual Meeting, Nice, France, 1995

**27.** Atalar, E., Bottomley, P.A. and Zerhouni, E.A., *A Flexible Catheter Coil for Imaging and Spectroscopy of Atherosclerotic Plaques*, SMR 1995 Third Annual Meeting, Nice, France, 1995

**26.** Atalar, E., Bottomley, P.A. and Zerhouni, E.A., *Microscopic MR Imaging and Spectroscopy of Arterial Wall Using an Intravascular Probe*, RSNA' 95, Chicago, IL, 1995

**25.** Bolster, B.D., Atalar, E., McVeigh, E.R. and Zerhouni, E.A., *Theoretical Limits for MR Measurement of Wavespeed Velocities Using the One-dimensional NMR Technique*, SMR 1995 Third Annual Meeting, Nice, France, 1995

**24.** Bottomley, P.A., Atalar, E. and Weiss, R.G., *Human Cardiac High-Energy Metabolite Concentrations by 1D CSI*, SMR 1995 Third Annual Meeting, Nice, France, 1995

**23.** Lima, J.A.C., Judd, R.M., Olivieri, C.L., Schulman, S.P., Atalar, E. and Zerhouni, E.A., *Myocardial perfusion by contrast-enhanced ultrafast MRI relates to myocardial damage in patients with acute myocardial infarction*, SMR 1994 Second Annual Meeting, San Francisco, CA, 1994

**22.** Lima, J.A.C., Judd, R., Schulman, S., Atalar, E., Lugo-Olivieri, C.H. and Zerhouni, E.A., *Capillary Damage within Human Infarcts Assessed by Contrast-Enhanced MRI Indexes Greater Myocardial Dysfunction and Greater Myocardial Loss*, Circulation, 1994

**21.** Lima, J.A.C., Judd, R.M., Lugo-Olivieri, C.H., Schulman, S.P., Atalar, E., Gerstenblith, G. and Zerhouni, E.A., *Myocardial Perfusion Pattern By Contrast-Enhanced MRI in the Acute Post-Infarct Period Can Predict Myocardial Necrosis and Eventual Extent of Scar Formation in Humans*, Circulation, 1994

**20.** Tang, C., Atalar, E. and McVeigh, E.R., *Multiphase multislice myocardial tagging in a single breath-hold using echo planar imaging*, SMR 1994 first annual meeting, Dallas TX, 1994

**19.** Atalar, E. and McVeigh, E., *Minimization of dead-times in MRI pulse sequences for imaging oblique planes*, SMR 1994 first annual meeting, Dallas, TX, 1994

**18.** Atalar, E. and McVeigh, E.R., *Minimization of TE for velocity-encoded or flow compensated pulse sequences in imaging oblique planes*, SMR 1994 second annual meeting, San Francisco, CA, 1994

**17.** Atalar, E., Croisille, P., Tang, C., McVeigh, E.R. and Zerhouni, E.A., *High resolution imaging of brain with multishot echo planar imaging*, RSNA'94, Chicago, IL, 1994

**16.** Croisille, P., Lugo-Olivieri, C.H., E. Poon, M.G., Moore, C., Afework, Y., Atalar, E., McVeigh, E.R. and Zerhouni, E.A., *Segmentation of tagged myocardial images: black blood versus white blood techniques*, SMR 1994 second annual meeting, San Francisco, CA, 1994

**15.** Haberman, J.J., Lugo-Olivieri, C.H., Lima, J.A.C., Guttman, M.A., Atalar, E. and Zerhouni, E.A., *The integrated cardiac MR examination*, American Roentgen Ray Society 1994 annual meeting, New Orleans, LA, 1994

**14.** Judd, R.B., Atalar, E., Reeder, S.B., McVeigh, E.R. and Zerhouni, E.A., *Breath-hold steady-state spoiled GRASS versus IRFLASH techniques in assessment of myocardial perfusion*, 79th scientific assembly of the Radiological Society of North America. Radiology, 1993

**13.** Judd, R., Lima, J., Bazille, A., Schulman, S., Atalar, E., McVeigh, E., Weiss, J. and Zerhouni, E., *Increased extracellular volume in patients with infarcted, reperfused myocardium by contrast MRI*, Circulation, 1993

**12.** McVeigh, E.R., Atalar, E. and Zerhouni, E.A., *Cardiac tagging with breath-hold CINE MRI*, Journal of Magnetic Resonance Imaging, SMRI 1993 annual meeting printed program, San Francisco, CA, 1993

**11.** Atalar, E. and McVeigh, E.R., *MR image reconstruction using data interpolation in time for the segmented k-space data acquisition method*, Journal of Magnetic Resonance Imaging, SMRI 1993 annual meeting printed program, San Francisco, CA, 1993

**10.** Atalar, E. and McVeigh, E.R., *A Simple spatial-spectral excitation pulse based on the DANTE sequence*, SMRM 11th annual meeting, book of abstracts, New York, NY, 1993

**9.** Atalar, E., McVeigh, E.R. and Zerhouni, E.A., *Coronary Blood Flow Imaging Using Presaturation Segmented k-Space Data Acquisition*, SMRM eleventh annual meeting, book of abstracts, New York, NY, 1993

**8.** Judd, R.B., Atalar, E., Reeder, S.B., McVeigh, E.R. and Zerhouni, E.A., *A pulse sequence with increased dynamic range and linear signal intensity for myocardial perfusion studies*, SMRM eleventh annual meeting, book of abstracts, New York, NY, 1993

**7.** Atalar, E. and McVeigh, E.R., *Optimum tag thickness for measuring position by MRI*, SMRM eleventh annual meeting, book of abstracts, Berlin, Germany, 1992

**6.** Atalar, E. and Onural, L., *Method for suppression of the motion artifacts due to expansion/shrinkage and translation of the body*, Journal of Magnetic Resonance Imaging, SMRI 1991 annual meeting printed program, Chicago, IL, 1991

**5.** Atalar, E. and McVeigh, E.R., *Optimization of MR imaging tagging patterns for the measurement of strain in the myocardium*, Radiology, RSNA'91 scientific program, Chicago, IL, 1991

**4.** Atalar, E. and Onural, L., *An iterative image reconstruction method for respiratory artifact reduction in MRI of chest*, Book of abstracts European Congress of NMR in Medicine and Biology, Strasbourg, France, 1990

**3.** Atalar, E. and Onural, L., *A new fast magnetic resonance imaging method: double angle steady-state*, Proceedings of 30th year of Middle East Technical University symposium, Ankara, Turkiye, 1989

**2.** Atalar, E. and Ider, Y.Z., *Electrical impedance imaging using the iterative backprojection technique*, Proceedings of second national congress of electrical engineering, Ankara, Turkiye, 1987

**1.** Ider, Y.Z., Altan, C., Atalar, E. and Gencer, N.G., *Electrical impedance imaging system applicable to objects of arbitrary but known boundary*, Proceedings of the ninth annual conference of the IEEE Engineering in Medicine and Biology Society, Boston, MA, 1987

## Supervised Ph.D. Theses

1. **Reza Babaloo,** Ph.D. Thesis: Technical innovations in gradient array systems for MRI application, Bilkent University, 2023. (Current position: Postdoctoral fellow at Western University, ON, Canada)
2. **Ariyurek, Cemre,** Ph.D. Thesis: Frequency Response Analysis and Reconstruction Weighting Schemes for MR Elastography, Bilkent University, 2020 (Current position: Instructor at the Childrens Hospital, Boston, USA)
3. **Kazemivalipour, Ehsan,** Ph.D. Thesis: *Innovative Designs of RF Transmit Array Coils and RF Heating Analysis of Patients with Implanted DBS,* Bilkent University, 2020 (Current position: Instructor at MGH Radiology, Harvard Medical School, USA)
4. **Sadeghi-Tarakameh, Alireza,** Ph.D. Thesis: *Novel Techniques and Innovative Design for the RF Chain of Magnetic Resonance Imaging Scanners,* Bilkent University, 2020 (Current position: Assistant Professor at University of Minnesota, USA)
5. **Ertan, Koray N.,** Ph.D. Thesis: *Design and Applications of a z-Gradient Array in Magnetic Resonance Imaging,* Bilkent University, 2019. (Current position: Research Scientist, Department of Radiology, Stanford University, USA)

6. **Kerse, M. Can,** Ph.D. Thesis: *Ablation Cooled Material Removal With Bursts of Ultrafast Pulses,* Bilkent University, 2016. (Role: Co-advisor. Primary advisor is F. Omer Ilday). (Current position: Technical Lead, Meteksan Savunma, Turkiye)
7. **Acikel, Volkan,** Ph.D. Thesis: *Analysis of Current Induction on Thin Conductors Inside the Body During MRI Scan, Bilkent University, 2014.* (Current position: Head RF and Microwave Design Engineer at ASELSAN, Turkiye)
8. **Turk, Esra A.,** Ph.D. Thesis: *Novel Methods and Analysis of B0 and B1 Gradients in Magnetic Resonance Imaging,* Bilkent University, 2013 (Current position: Assistant Professor at the Childrens Hospital, Boston, USA)
9. **Kopanoglu, Emre,** Ph.D. Thesis: *Novel Techniques Regarding Specific Absorption Rate and Field of View Reducing in Magnetic Resonance Imaging,* Bilkent University, 2012 (Current position: Lecturer at the Cardiff University, UK)
10. **Eryaman, Yigitcan,** Ph.D. Thesis: *Novel SAR Reduction Methods for Magnetic Resonance Imaging,* Bilkent University, 2011 (Current position: Associate Professor with tenure at University of Minnesota, USA)
11. **Celik, Haydar,** Ph.D. Thesis: *Novel Magnetic Resonance Technologies for Image-Guided Interventions,* Bilkent University, 2010 (Current position: Director, Global Regulatory Affairs at Bristol-Myers Squibb, USA)
12. **Susil, Robert C.,** Ph.D. Thesis: *Interventional MRI: Targeting, Monitoring, and Assessment of Minimally Invasive Therapies,* Johns Hopkins University, 2003. (Deceased)
13. **Yeung, Christopher J.,** Ph.D. Thesis: *RF Heating Due to Metallic Devices in MRI,* Johns Hopkins University, 2002 (Current Position: The pastoral associate to the Western Vicar for the Archdiocese of Baltimore, USA)
14. **Bolster, Bradley.D.,** Ph.D. Thesis: *Rapid Determination of Local Vascular Tissue Material Properties using Magnetic Resonance Imaging,* Johns Hopkins University, 2000 (Current Position: Sr. Staff Scientist at Siemens Healthcare, Utah, USA)

## Supervised M.S. Theses

1. **Ege Aydin**, 2025 M.S. Thesis, Scalable and compact eGaN based gradient and RF transmit/receive systems for MRI, Bilkent University, 2025.
2. **Muhammed Ali Khan,** 2025 M.S. Thesis, Development of a multi-channel optical communication system for MRI gradient, RF-transmit and RF-receive array chains using FPGAs, Bilkent University, 2025.
3. **Mehmet Emin Ozturk,** 2025 M.S. Thesis, Spectrometer frameworks for gradient arrays, Bilkent University, 2025.
4. **Elnaz Mahmoudi,** M.S. Thesis, Optimized RF safety monitoring for cerebellar imaging at 7T, Bilkent University, 2024.
5. **Eskandarian, Laleh**, M.S. Thesis, (CoSupervised together with Kader Karli Oguz) Structural connectivity alters in pediatric systemic lupus erythematosus prior to neuropsychiatric manifestations, Bilkent University, 2022
6. **Arghiani, Ziba,** M.S. Thesis, Driving mutually coupled coils using an array of class-E amplifiers, Bilkent University, 2022
7. **Arslan, Abdullah E.**, M.S. Thesis, A 600W on-coil Class-E RF power amplifier array with dynamic phase control for 3T MRI, Bilkent University, 2022
8. **Tasdelen, B.,** M.S. Thesis: *Dynamic Decoupling and Noise Analysis for Simultaneous Transmission and Reception in MRI and MPI,* Bilkent University, 2020
9. **Ashfaq, Bismillah N.,** M.S. Thesis: *A Gate Modulated Digitally Controlled Modified Class-E Amplifier for On-Coil Application in MRI,* Bilkent University, 2018
10. **Tu Zahra, Fatima,** M.S. Thesis: *Highly Efficient 300 W Modified Class-E RF Amplifiers for 64 MHz Transmit Array System,* Bilkent University, 2017
11. **Poni, Redi,** M.S. Thesis: *A Digitally Controlled Class-E Amplifier for MRI,* Bilkent University, 2016
12. **Sadeghi-Tarakameh, Alireza,** M.S. Thesis: *Design of a Birdcage-Like Radio Frequency Transmit Array Coil for the Magnetic Resonance Imaging Using Equivalent Circuit Model,* Bilkent University, 2016
13. **Salim, Maryam,** M.S. Thesis: *Full-Duplex MRI for Zero TE Imaging,* Bilkent University, 2016
14. **Taraghinia, Soheil,** M.S. Thesis: *A z-Gradient Coil Array System for Magnetic Resonance Imaging,* Bilkent University, 2016
15. **Ariyurek, Cemre,** M.S. Thesis: *Modes of Shear Waves In Magnetic Resonance Elastography,* Bilkent University, 2014
16. **Ozen, Ali C.,** M.S. Thesis: *A Method of Decoupling of Radio-frequency Coils in Magnetic Resonance Imaging: Application to MRI with Ultra-short Echo-time and Concurrent Excitation and Acquisition,* Bilkent University, 2013
17. **Acikel, Volkan,** M.S. Thesis: *Modeling of Radio Frequency Induced Currents on Lead Wires During MR Imaging Using a Modified Transmission Line Method (MoTLiM),* Bilkent University, 2010

18. **Kerse, M. Can,** M.S. Thesis: *Imitation of Radiofrequency Ablation with Fiber Delivered Laser System for Magnetic Resonance Guided Treatment of Atrial Ablation,* Bilkent University, 2010
19. **Viskusenko, V. Nikolay,** M.S. Thesis: *Endoluminal MR Coils for Interventional Procedures,* 2010
20. **Bayindir, Haldun O.,** M.S. Thesis: *A Novel VERSE Optimal RF Pulse Design Method for Parallel Transmission in Magnetic Resonance Imaging,* Bilkent University, 2009
21. **Abaci, Esra.,** M.S. Thesis: *Analysis of the Electromagnetic Field Inside the Gradient Coils and Investigation of the Nerve and Cardiac Stimulation Risk for the Patients during MRI,* Bilkent University, 2008
22. **Aydogdu, Elif,** M.S. Thesis: (CoSupervised together with Abdullah Atalar) Variable Capacitor Based *Mechanical Energy to Electrical Energy Converter,* Bilkent University, 2007
23. **Ermeydan, Ahmet,** M.S. Thesis: *MRI Compatible Implantable Devices,* Bilkent University, 2007
24. **Eryaman, Yigitcan,** M.S. Thesis: *Design and Implementation of Internal MRI Coils Using Ultimate Intrinsic SNR, Bilkent University, 2007*
25. **Irak, Halise,** M.S. Thesis: *Modeling RF Heating of Active Implatable Medical Devices During MRI using Safety Index,* Bilkent University, 2007
26. **Afacan, Onur,** M.S. Thesis: *Piezoelectric Power Generation Using the Vibration of Heart,* Bilkent University, 2006
27. **Celik, Haydar,** M.S. Thesis: *Novel RF Coil Technologies for MRI,* Bilkent University, 2006
28. **Tasci, T. Onur,** M.S. Thesis: *Focused RF Ablation using Magnetic Fluids,* Bilkent University, 2006
29. **Ferhanoglu, Onur,** M.S. Thesis: *Safety of Metallic Implants in Magnetic Resonance Imaging,* Bilkent University, 2005
30. **Memis, O. Gokalp,** M.S. Thesis: *Miniaturized Fiber Optic Transmission System for Magnetic Resonance Imaging Signals,* Bilkent University, 2005
31. **Shah, Vashali C.,** M.S. Thesis: *Thermal Mapping Techniques using MRI,* Johns Hopkins University, 2002
32. **Yung, Andrew C.H.,** M.S. Thesis: *Development and Applications of Intraluminal Coils for MRI,* Johns Hopkins University, 2002
33. **Abdel-Hafez, Imad A.,** M.S. Thesis: *Ultimate Intrinsic SNR in Magnetic Resonance Imaging by Optimization the EM Field Generated by Internal Coils,* Bilkent University, 2000
34. **Aksit, Pelin,** M.S. Thesis: *Multiple FOV MR Flouroscopy,* Johns Hopkins University, 2000
35. **Lee, Joanna S.,** M.S. Thesis: *Post-Processing for the Real-Time Visualization of the Intravascular MR Images, Johns Hopkins University, 1999*

## Current Research Group Members

### Research Associates

**Erkan Dorken**, 2020-

### Postdoctoral Fellows

**Sadeq Al-Sharafi**, 2023-

### Graduate Students

**Abdullah Erkam Arslan**, 2022 Ph.D. Student
**Ege Aydin**, 2025 Ph.D. Student
**Dora Özkara**, 2024 M.S. Student
**Awais Awan**, 2026 M.S. Student (co-advised with Abdullah Atalar)
**Aleyna Şener**, 2026 M.S. Student
**Metin Can Isik**, 2026 M.S. Student, Bogazici University (co-advised with Cengizhan Ozturk)

### Engineer Candidates

**Eren Polat**, 2026
**Cem Palabiyik**, 2026
**Ege Avci**, 2026
**Emre Tezcan**, 2026
**Helin Sude Agachanli**, 2026
**Arda Cakir**, 2026

## Past Research Group Members

### Postdoctoral Fellows

**Mehdi Ghasemzadeh**, 2023-2025 (current position: Postdoctoral Fellow at Bilkent University, Ankara)
**Reza Babaloo**, 2023-2024 (Current position: Postdoctoral Fellow at Western University, ON, Canada)
**Ehsan Kazemivalipour**, 2020-2021 (Current position: Instructor at MGH Radiology, Harvard Medical School, USA)
**Akbar Alipour**, 2017-2017 (Current position: Assistant Professor at Mount Sinai School of Medicine, USA)
**Yusuf Oner**, 2001-2002 (Current position: Professor of Radiology at Gazi University, Turkiye)
**Jean Michel Serfaty**, 1998-2000 (Current position: Professor of Radiology at CHU Nantes, France)
**Xiaming Yang**, 1997-1998 (Current position: Professor of Radiology at University of Washington, USA)
**Ogan Ocali**, 1995-1997 (Deceased. Formed startup companies in USA and Turkiye)

### Engineers

**Metin Can Isik**, 2022-2026 (Current position: ASELSAN-UGES, Turkiye)

## Staff

### Research Associates

**Manoucher Takrimi**, 2019-2025

### Engineers

**Fatma Gul Uyar**, 2022-2025
**Civan Serhat Cevik** (Eng. Candidate), 2023-2024
**Ayfer Akbaba** (Eng. Candidate), 2023-2024
**Mehmet Demir**, 2022-2022
**Nurbanu Alparslan**, 2021-2022
**Mert Bozkurt**, 2019-2021
**Ahmet Fatih Yaprak**, 2019-2020
**Muhammed Said Aldemir**, 2019-2021
**Ozan Koray Esen**, 2018-2018
**Gamze Zeynep Bilici**, 2018-2019
**Erhan Erkoseoglu**, 2018-2019
**Ozan Emir**, 2017-2018
**Ugur Yilmaz**, 2017-2020
**Soheil Taraghinia**, 2017-2021
**Berk Silemek**, 2013-2018
**Umut Gundogdu**, 2012-2019
**Taner Demir**, 2009-2016
**Burak Akin**, 2008-2012
**Di Qian**, 2004-2005
**Parag V Karmarkar**, 2003-2005
**Ananda Kumar**, 2001-2003
**Harald Quick**, 2000-2000