

Ergin Atalar, Ph. D. *Curriculum Vitae*

Personal Information

Address: Bilkent University
Department of Electrical and Electronics Engineering
Bilkent Ankara 06800
Turkiye

Contact Information Tel: +90 312 290 3272 E-mail: ergin.ataral@umram.bilkent.edu.tr

Web Page: <http://ErginAtalarLab.bilkent.edu.tr/>

Short Biosketch

I am an **Electrical and Electronics Engineering Professor** at **Bilkent University**, Turkiye. 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. During my entire career at Hopkins, my salary was fully supported by research grants. I was a PI of several NIH R01 grants. My patented inventions resulted in the formation of **ClearPoint Neuro, Inc.** (formerly Surgi-Vision Inc.). The company's products have enabled over 6000 MRI-guided brain surgeries as of 2024. 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**. There are 15 faculty members in the center with more than 100 researchers. All research activities in the center are externally supported.

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), **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 more than 120 peer-reviewed journal papers. My **h-index is 70**, according to Google Scholar, with more than **16400 citations** (h-index=46 and 6500+ citations according to Scopus) as of February 2024. I hold **54 US patents**. I am a **fellow of the International Society of Magnetic Resonance in Medicine** and **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

- + 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

Johns Hopkins University

- + 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

- + 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

- + 2024 Distinguished Teacher Award, Bilkent University
- + 2023 Technology Award, Elginkan Foundation
- + 2016 Fellow, National Academy of Inventors
- + 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
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
J. 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
K.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

Current Research Group Members

Research Associates

1. **Erkan Dorken**, 2020-
2. **Manouchehr Takrimi**, 2019-

Postdoctoral Fellows

3. **Mehdi Ghasemzadeh**, 2023-
4. **Reza Babaloo**, 2023-
5. **Sadeq Ashrafi**, 2023-

Engineers

6. **Metin Can Isik**, 2022-
7. **Fatma Gul Uyar**, 2022-
8. **Civan Serhat Cevik (Candidate)**, 2023-
9. **Ayfer Akbaba (Candidate)**, 2023-

Graduate Students

10. **Abdullah Erkam Arslan**, 2022 Ph.D. Student
11. **Elnaz Mahmoudi**, 2021 M.S. Student
12. **Muhammed Ali Khan**, 2022 M.S. Student
13. **Mehmet Emin Ozturk**, 2022 M.S. Student
14. **Omer Faruk Unal**, 2022 M.S. Student
15. **Ege Aydin**, 2023 M.S. Student

Past Research Group Members

Postdoctoral Fellows

1. **Ehsan Kazemivalipour**, 2020-2021 (Current position: Postdoctoral Fellow at the Matinos Center of MGH, USA)
2. **Akbar Alipour**, 2017-2017 (Current position: Assistant Professor at Mount Sinai School of Medicine, USA)
3. **Yusuf Oner**, 2001-2002 (Current position: Professor of Radiology at Gazi University, Turkiye)
4. **Jean Michel Serfaty**, 1998-2000 (Current position: Professor of Radiology at CHU Nantes, France)
5. **Xiaming Yang**, 1997-1998 (Current position: Professor of Radiology at University of Washington, USA)
6. **Ogan Ocali**, 1995-1997 (Current position: Deceased. Formed startup companies in USA and Turkiye)

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 Bilkent University)
2. **Ariyurek, Cemre**, Ph.D. Thesis: Frequency Response Analysis and Reconstruction Weighting Schemes for MR Elastography, Bilkent University, 2020 (Current position: Postdoctoral fellow 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: Postdoctoral Fellow at the Matinos Center of MGH, USA)

4. **Sadeghi-Tarakameh, Alireza**, Ph.D. Thesis: *Novel Techniques and Innovative DDesign for the RF Chain of Magnetic Resonance Imaging Scanners*, Bilkent University, 2020 (Current position: Postdoctoral Fellow at University of Minnesota, USA)
5. **Ertan, Koray N.**, Ph.D. Thesis: *Design and Applications of a z-Gradient Array in Magneric Resonance Imaging*, Bilkent University, 2019. (Current position: Postdoctoral Fellow at the 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: Senior System and Design Engineer, Meteksan Savunma, Turkiye)
7. **Acikel, Volkan**, Ph.D. Thesis: *Analysis of Current Induction on Thin Conductors Inside the Body During MRI Scan*, Bilkent University, 2015. (Current position: Senior Design Engineering 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 Absorbtion 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: Clinical Researcher at Promaxo Inc, USA)
12. **Susil, Robert C.**, Ph.D. Thesis: *Interventional MRI: Targeting, Monitoring, and Assessment of Minimally Invasive Therapies*, Johns Hopkins University, 2003. (Current position: Deceased)
13. **Yeung, Chistopher 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. **Eskandarian, Laleh**, M.S. Thesis, (CoSupervised together with Kader Karli Oguz) Structural connectivity alters in pediatriac systemic lupus erythematosus prior to neuropsychiatric manifestations, Bilkent University, 2022
2. **Arghiani, Ziba**, M.S. Thesis, Driving mutually coupled coils using an array of class-E amplifiers, Bilkent University, 2022
3. **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
4. **Tasdelen, B.**, M.S. Thesis: *Dynamic Decoupling and Noise Analysis for Simultaneous Transmission and Reception in MRI and MPI*, Bilkent University, 2020
5. **Ashfaq, Bismillah N.**, M.S. Thesis: *A Gate Modulated Digitally Controlled Modified Class-E Amplifier for On-Coil Application in MRI*, Bilkent University, 2018
6. **Tu Zahra, Fatima**, M.S. Thesis: *Highly Efficient 300 W Modified Class-E RF Amplifiers for 64 MHz Transmit Array System*, Bilkent University, 2017
7. **Poni, Redi**, M.S. Thesis: *A Digitally Controlled Class-E Amplifier for MRI*, Bilkent University, 2016
8. **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
9. **Salim, Maryam**, M.S. Thesis: *Full-Duplex MRI for Zero TE Imaging*, Bilkent University, 2016
10. **Taraghinia, Soheil**, M.S. Thesis: *A z-Gradient Coil Array System for Magnetic Resonance Imaging*, Bilkent University, 2016
11. **Ariyurek, Cemre**, M.S. Thesis: *Modes of Shear Waves In Magnetic Resonance Elastography*, Bilkent University, 2014

12. **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
13. **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
14. **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
15. **Viskusenko, V. Nikolay**, M.S. Thesis: *Endoluminal MR Coils for Interventional Procedures*, 2010
16. **Bayindir, Haldun O.**, M.S. Thesis: *A Novel VERSE Optimal RF Pulse Design Method for Parallel Transmission in Magnetic Resonance Imaging*, Bilkent University, 2009
17. **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
18. **Aydogdu, Elif**, M.S. Thesis: *Variable Capacitor Based Mechanical Energy to Electrical Energy Converter*, Bilkent University, 2007
19. **Ermeýdan, Ahmet**, M.S. Thesis: *MRI Compatible Implantable Devices*, Bilkent University, 2007
20. **Eryaman, Yigitcan**, M.S. Thesis: *Optimization of Internal MRI Coils*, Bilkent University, 2007
21. **Irak, Halise**, M.S. Thesis: *Modeling RF Heating of Active Implatable Medical Devices During MRI using Safety Index*, Bilkent University, 2007
22. **Afacan, Onur**, M.S. Thesis: *Piezoelectric Power Generation Using the Vibration of Heart*, Bilkent University, 2006
23. **Celik, Haydar**, M.S. Thesis: *Novel RF Coil Technologies for MRI*, Bilkent University, 2006
24. **Tasci, T. Onur**, M.S. Thesis: *Focused RF Ablation using Magnetic Fluids*, Bilkent University, 2006
25. **Ferhanoglu, Onur**, M.S. Thesis: *Safety of Metallic Implants in Magnetic Resonance Imaging*, Bilkent University, 2005
26. **Memis, O. Gokalp**, M.S. Thesis: *Miniaturized Fiber Optic Transmission System for Magnetic Resonance Imaging Signals*, Bilkent University, 2005
27. **Shah, Vashali C.**, M.S. Thesis: *Thermal Mapping Techniques using MRI*, Johns Hopkins University, 2002
28. **Yung, Andrew C.H.**, M.S. Thesis: *Development and Applications of Intraluminal Coils for MRI*, Johns Hopkins University, 2002
29. **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
30. **Aksit, Pelin**, M.S. Thesis: *Multiple FOV MR Flouroscopy*, Johns Hopkins University, 2000
31. **Lee, Joanna S.**, M.S. Thesis: *Post-Processing for the Real-Time Visualization of the Intravascular MR Images*, Johns Hopkins University, 1999

Engineers

1. **Mehmet Demir**, 2022-2022
2. **Nurbanu Alparslan**, 2021-2022
3. **Mert Bozkurt**, 2019-2021
4. **Ahmet Fatih Yaprak**, 2019-2020
5. **Muhammed Said Aldemir**, 2019-2021
6. **Ozan Koray Esen**, 2018-2018
7. **Gamze Zeynep Bilici**, 2018-2019
8. **Erhan Erkoseoglu**, 2018-2019
9. **Ozan Emir**, 2017-2018
10. **Ugur Yilmaz**, 2017-2020
11. **Soheil Taraghinia**, 2017-2021
12. **Berk Silemek**, 2013-2018
13. **Umut Gundogdu**, 2012-2019
14. **Taner Demir**, 2009-2016
15. **Burak Akin**, 2008-2012

16. **Di Qian**, 2004-2005
17. **Parag V Karmarkar**, 2003-2005
18. **Ananda Kumar**, 2001-2003
19. **Harald Quick**, 2000-2000

Research Funding: Current

- + 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.
- + 2023-2026 TUBITAK 1004 23AG005 Project Title: İnsan Fonksiyonunu Tehdit Eden Zorluklara Karşı Nöroteknolojik Çözümler Platformu, **Leader of Bilkent University Component**, Coordinator: Can Yucesoy, Bilkent Funding: 12 000 000TL
- + 2023-2025 TUBITAK 1001 123E024 Project Title: Manyetik Rezonans Görüntüleme Cihazları İçin Gradyan Dizisi Ve Rf Verici Dizisi Sürme Yetenekli Spektrometrenin Tasarımı Ve Gerçekleştirilmesi, **Principal Investigator** 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.
- + 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

Research Funding: Past

- + 2019-2022 TUBITAK 1001 119E116 Project Title: *Manyetik Rezonans Görüntüleme Cihazları için Dairesel Radyo-Frekans Sargı Dizilerinin Analizi, Tasarımı ve Yapımı* **Principal Investigator** 696,300TL
- + 2019-2021 ASELSAN Project Title: *MR Görüntüleme Sistemi Geliştirme Projesi* **Principal Investigator** 350,000USD
- + 2018-2021 TUBITAK 1001 117E817 Project Title: *Beyin Manyetik Rezonans Elastografisinin Güvenliği ve Optimizasyonu* **Principal Investigator** 341,181TL
- + 2017-2020 Strateji ve Bütçe Başkanlığı Project Title: *Preklinik Görüntüleme Yardımı ile Asi Test ve Geliştirme* **Principal Investigator** 9,400,000TL
- + 2017-2022 ASELSAN, (supported by TUBITAK TEYDEB) Project Title: *Çok Kanallı Gradyan Bobin Dizisi Tasarımı, Sinyal Üretici ve Kontrol Kartı Geliştirilmesi ve Prototip Üretimi* **Principal Investigator** 1,100,000TL
- + 2017-2018 TUBITAK 1000 Project Title: *Bilkent Üniversitesi Ar-Ge Strateji Belgesi (Sinir Bilimleri)* **Principal Investigator** 0TL
- + 2017-2020 TUBITAK 1001 (116E270) Project Title: *Manyetik Rezonans Görüntüleme Cihazı İçin Özelleştirilmiş E-Sinifli Sayısal Radyo Frekans Yükselteci Dizisi* **Principal Investigator** 360,000TL
- + 2015-2016 ASELSAN Project Title: *36 Kanallı RF Bobin Dizisi Tasarımı, Geliştirilmesi ve Prototip Üretimi* **Principal Investigator** 500,000TL
- + 2014-2016 SANTEZ Project Title: *Implant Uyumlu MR Cihazı (Implant Compatible MR Scanner)* **Principal Investigator** 621,000TL
- + 2014-2017 TUBITAK 1001 (114E186) Project Title: *Etkin Ayırıştırma Yöntemi Kullanarak Sifir Eko Zamanlı Manyetik Rezonans Görüntülemesi (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 Araştırma Merkezi Faz II (National Magnetic Resonance Research Center (UMRAM) Phase II)* **Principal Investigator** 5,100,000TL
- + 2013-2016 TUBITAK 1001 (103S959) Project Title: *Ailesel El Titremesi (Essential Tremor-ETM)'nin Genetik, Yapısal ve İşlevsel Temellerinin Araştırılması* **Consultant** Principal Investigator: Tayfun Özcelik, 360,000TL

- + 2013-2016 TUBITAK 1001 (102K069) Project Title: *Insan Beyninin Yapısal Ve İşlevsel Mimarisinin Genetik Kökenli Merkezi Sinir Sistemi Bozuklukları İncelenerek Araştırılması* **Consultant** Principal Investigator: Tolga Cukur, 360,000TL
- + 2013-2016 TUBITAK 3501 (113E187) Project Title: *Manyetik Rezonans Görüntüleme Altında Hızlı Ve Güvenilir Özgül Sığurma Oranı Ve İsi lerinin Geliştirilmesi* **Consultant** Principal Investigator: Tahir Malas, 360,000TL
- + 2013-2016 TUBITAK 3501 (114E167) Project Title: *Kanser Görüntüleme İcin Manyetik Parçacık Görüntüleme: Bolgesel Difüzyon Algılama* **Consultant** Principal Investigator: Emine Ulku Saritas, 360,000TL
- + 2013-2016 TUBITAK 3501 (114E546) Project Title: *Kategori Hedefli Doğal GÃ¶rnel Taramanın İnsan Beyninde GÃ¶rnel Temsillere ve İşlevsel Bağlantılara 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 Alanın Manyetik Rezonans Görüntülemesindeki Uygulamaları (Applications of Nonlinear Gradient Fields in Magnetic Resonance Imaging)* **Principal Investigator** 385,000TL
- + 2010-2013 TUBITAK 1001 (109E226) Project Title: *Verici Sargı Dizilimi İle Manyetik Rezonans Görüntülemesi Sirasında Olusan Özgül Sığurma Hızının Azaltılması* **Principal Investigator** 385,000TL
- + 2010-2013 TUBITAK TEYDEB Project Title: *Endoservikal Manyetik Rezonans Görüntüleme* **Principal Investigator** 300,000TL
- + 2010-2013 TUBITAK 1001 Project Title: *Femtosaniye Nanobiyofotonik İcin İleri Fiber Çözümleri* **Consultant** Principal Investigator: Omer İlday, 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 Algıya Etkileriyle İlgili Olarak İnsan Korteksindeki Sinirsel Etkinliklerin ve İşlevsel Bağlantıların İncelenmesi* **Consultant** Principal Investigator: Huseyin Boyacı, 385,000TL
- + 2009-2012 TUBITAK 1001 Project Title: *İnsanlarda Gelişimsel Sinir Sistemi Hastalıklarına Neden Olan Mutasyonların Gorsel ve Motor Sisteminin Yapısal ve İşlevsel Organizasyonuna Etkilerinin Araştırılması* **Consultant** Principal Investigator: Emre Ozgen, 395,700TL
- + 2008-2011 TUBITAK 1001 Project Title: *Girisimsel MRG de Kateterlerin Yerinin Otomatik Olarak Belirlenebilmesi İcin Yeni Bir Tümlsik Mikro Optoelektronik Sistem* **Consultant** Principal Investigator: Arda Deniz Yalcinkaya, 422,580TL + 2007-2009 DPT Project Title: *Girisimsel ve Tanısal Manyetik Rezonans Arastırma Merkezi* **Principal Investigator** 6,490,000TL
- + 2007-2011 SANTEZ Project Title: *Manyetik Rezonans Uyumlu Elektrofizyoloji Araçları* **Principal Investigator** 800,000TL
- + 2007-2011 TUBITAK 1001 Project Title: *Manyetik Rezonans Görüntülemesi Yönteminin Hastalara Takılan Uyarıcı Elektronik Cihazlar Üzerindeki Etkilerinin İncelenmesi* **Principal Investigator** 360,000TL
- + 2007-2009 TUBITAK TEYDEB Project Title: *Manyetik Rezonans Görüntüleme Uyumlu Elektrofizyoloji Araçları* **Principal Investigator** 400,000TL
- + 2004-2006 FP6 MRIG-CT-2004-506262 Project Title: *Magnetic Resonance Imaging Compatible Cardiac Pacemakers and Implantable Cardioverter-Defibrillators* **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
- + 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 Endouretal MRI of the Female Urethra and Urethral support tissues with pathological 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 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

US Patents

- 54. Atalar, E., Kazemivalipour, Eigenmode transmit array coil for magnetic resonance imaging, US patent no: 11740301, 29 Aug 2023 Assigned to Bilkent University
- 53. Atalar, E., Ertan, K.N. and Taraghinia, S., A Gradient Array System for MRI and Application on Diffusion Weighted Imaging, US patent no: 11287498, 29 Mar 2022 Assigned to Bilkent University
- 52. Filci, F.E., Dogan, A., Cansiz, G., Demirel, A., Acikel, V., Sen, B. and Atalar, E., Multi-Channel Integrated MRI Transmitter System for Magnetic Resonance Imaging Device, US patent no: 11131731, 28 Sep 2021 Assigned to ASELSAN
- 51. Atalar, E., Taraghinia, S., Ertan, N.K. and Tasdelen, B., Spatiotemporal magnetic field monitoring with hall effect sensors during the MRI scan, US patent no: 10641858, 5 May 2020
- 50. Atalar, E. and Poni, R., Magnetic resonance imaging scanner with coil serving as inductor of power amplifier, US patent no: 10641847, 5 May 2020
- 49. Atalar, E., Taraghinia, S. and Ertan, N.K., Gradient magnetic field generation module using plurality of coils so as to generate gradient magnetic field, US patent no: 10578691, 3 Mar 2020
- 48. Atalar, E., Ertan, N.K. and Taraghinia, S., Multi-Purpose Gradient Array for Magnetic Resonance Imaging, US patent no: 10571537, 25 Feb 2020
- 47. Whitcomb, L.L., Krieger, A., Susil, R.C., Fichtinger, G., Atalar, E. and lordachita, I.I., Apparatus for insertion of a medical device within a body during a medical imaging process, US patent no: 9968280, 15 Aug 2018 Assigned to The Johns Hopkins University

46. Ozen, A.C. and Atalar, E., Magnetic resonance apparatus and data acquisition method with decoupling between transmit and receive coils, US patent no: 9625551, 18 Apr 2017
45. Fichtinger, G., Atalar, E., Whitcomb, L.L., Susil, R.C., Krieger, A. and Tanacs, A., Apparatus for insertion of a medical device during a medical imaging process, US patent no: 9588195, 7 Mar 2017 Assigned to The Johns Hopkins University
44. Halperin, H.H., Berger, R.D., Atalar, E., McVeigh, E.R., Lardo, A.C., Calkins, H. and Lima, J.A.C., System and method for magnetic-resonance-guided electrophysiologic and ablation procedures, US patent no: 9301705, 5 Apr 2016 Assigned to Johns Hopkins University
43. Atalar, E., Susil, R., Lardo, A. and Halperin, H.H., MRI compatible medical leads, US patent no: 9242090, 26 Jan 2016 Assigned to MRI Interventions Inc. and Greatbatch Ltd.
42. Aksit, P., Sathyanarayana, S., Solaiyappan, M. and Atalar, E., System and method for image-based interventional device tracking and scan plane guidance, US patent no: 9002433, 7 Apr 2015 Assigned to General Electric Company (Schenectady, NY) and John Hopkins University School of Medicine (Baltimore, MD)
41. Kopanoglu, E. and Atalar, E., Method and apparatus for reduction of specific absorption rate (SAR) in magnetic resonance data acquisition, US patent no: 8928320, 6 Jan 2015 Assigned to
40. Celik, H. and Atalar, E., Magnetic resonance method and apparatus to separate depiction of a tracked item from surrounding anatomy of a patient, using a transmit array system, US patent no: 8798713, 5 Aug 2014 Assigned to
39. Fichtinger, G., Atalar, E., Whitcomb, L.L., Susil, R.C., Krieger, A. and Tanacs, A., Apparatus for insertion of a medical device during a medical imaging process, US patent no: 8706186, 22 Apr 2014 Assigned to The Johns Hopkins University
38. Atalar, E., Allen, J., Bottomley, P.A., Eldelstein, W. and Karmarkar, P., MRI-safe high impedance lead systems, US patent no: 8688226, 1 Apr 2014 Assigned to Boston Scientific Neuromodulation Corporation (Valencia, CA) and MRI Interventions Inc (Memphis, TN)
37. Atalar, E. and Ferhanoglu, O., Electrical lead for an electronic device such as an implantable device, US patent no: 8649842, 11 Feb 2014 Assigned to Boston Scientific Neuromodulation Corporation (Valencia,CA) and MRI Interventions Inc (Memphis, TN)
36. Atalar, E. and Visksenko, N.V., Magnetic resonance RF coil assembly for imaging of the cervical region, US patent no: 8554303, 8 Oct 2013
35. Whitcomb, L.L., Krieger, A., Susil, R.C., Fichtinger, G., Atalar, E. and lordachita, I.I., Apparatus for insertion of a medical device within a body during a medical imaging process, US patent no: 8521257, 27 Aug 2013 Assigned to The Johns Hopkins University
34. Atalar, E., Allen, J., Bottomley, P., Eldelstein, W. and Karmarkar, P.V., MRI-safe high impedance lead systems, US patent no: 8433421, 30 Apr 2013 Assigned to Boston Scientific Neuromodulation Corporation (Valencia, CA) and MRI Interventions, Inc. (Memphis, TN)
33. Atalar, E. and Ferhanoglu, O., Electrical Lead for An Electronic Device Such As Implantable Device, US patent no: 8380277, 19 Feb 2013 Assigned to MRI Interventions, Inc and Boston Scientific Neuromodulation
32. Eryaman, Y. and Atalar, E., Magnetic Resonance Method and Apparatus For Reducing RF Heating In Patients, US patent no: 8319496, 27 Nov 2012
31. Karmarkar, P.V. and Atalar, E., Active MRI intramyocardial injeciton catheter with deflectable distal section, US patent no: 8260399, 4/ 9/2012 Assigned to Johns Hopkins University
30. Fichtinger, G., Atalar, E., Whitcomb, L.L., Susil, R.C., Tanacs, A. and Krieger, A., Apparatus for Insertion of a Medical Device During a Medical Imaging Process, US patent no: 8244327, 14 Aug 2012 Assigned to Johns Hopkins University
29. Halperin, H.R., Berger, R.D., Atalar, E., McVeigh, E.R., Lardo, A., Calkins, H. and Lima, J., System and Method For Magnetic-Resonance-Guided Electrophysiology and Ablation Procedures, US patent no: 8099151, 17 Jan 2012 Assigned to Johns Hopkins University

28. Atalar, E., Allen, J., Bottomley, P., Eldelstein, W. and Karmarkar, P.V., MRI-safe high impedance lead systems, US patent no: 8055351, 8 Nov 2011 Assigned to Boston Scientific Neuromodulation Corporation (Valencia, CA) and MRI Interventions, Inc. (Memphis, TN)
27. Atalar, E. and Ferhanoglu, O., Electrical lead for an electronic device such as an implantable device, US patent no: 7957783, 7 Jun 2011 Assigned to Boston Scientific Neuromodulation Corporation (Valencia, CA) and Surgivision, Inc. (Memphis, TN)
26. Tulley, S., Lardo, A.C., Karmarkar, P., McVeigh, E., Halperin, H.R., McNamara, C.E., Bottomley, P.A., Atalar, E. and Yang, X., Magnetic resonance imaging probe, US patent no: 7848788, 07 Dec 2010 Assigned to The Johns Hopkins University (Baltimore, MD, US) and SurgiVision, Inc. (Marietta, GA, US)
25. Susil, R.C., Susil, G., Atalar, E., Atalar, E., Lardo, A.C., Halperin, H.R., Berger, R.D., Calkins, H. and Bottomley, P., Systems and methods for magnetic-resonance-guided interventional procedures, US patent no: 7844319, 30 Nov 2010
24. Halperin, H.R., Berger, R.D., Atalar, E., McVeigh, E.R., Lardo, A., and Calkins, H. and Lima, J., MRI-guided therapy methods and related systems, US patent no: 7822460, 26 Oct 2010 Assigned to Surgi-Vision, Inc. (Memphis, TN, US)
23. Kumar, A., Atalar, E. and Ocali, O., Biopsy and sampling needle antennas for magnetic resonance imaging-guided biopsies, US patent no: 7778682, 17 Aug 2010 Assigned to Johns Hopkins University (Baltimore, MD, US)
22. Karmarkar, P.V. and Atalar, E., Active MRI intramyocardial injection catheter with a deflectable distal section, US patent no: 7725161, 25 May 2010 Assigned to John Hopkins University
21. Atalar, E., Quick, H.H. and Karmarkar, P., Evaluating the urethra and the periurethral tissues, US patent no: 7599729, 06 Nov 2009 Assigned to The Johns Hopkins University (Baltimore, MD, US) and SurgiVision, Inc. (Memphis, TN, US)
20. Atalar, E. and Ferhanoglu, O., Electrical lead for an electronic device such as an implantable device, US patent no: 7561906, 14 Jul 2009 Assigned to Boston Scientific Neuromodulation Corporation (Valencia, CA, US) and SurgiVision, Inc. (Memphis, TN, US)
19. Yang, X., Atalar, E. and Yeung, C., Device, systems and methods for localized heating of a vessel and/or in combination with MR/NMR imaging of the vessel and surrounding tissue, US patent no: 7422568, 09 Sep 2008 Assigned to The Johns Hopkins University (Baltimore, MD, US)
18. Halperin, H.R., Berger, R.D., Atalar, E., McVeigh, E.R., Lardo, A.C., Calkins, H. and Lima, J., Brain therapy, US patent no: 7412276, 12 Aug 2008 Assigned to Johns Hopkins University School of Medicine (Baltimore, MD, US)
17. Kumar, A., Atalar, E. and Ocali, O., Biopsy and sampling needle antennas for magnetic resonance imaging-guided biopsies, US patent no: 7236816, 26 Jun 2007 Assigned to Johns Hopkins University (Baltimore, MD, US)
16. Halperin, H.R., Berger, R.D., Atalar, E., McVeigh, E.R., Lardo, A., Calkins, H. and Lima, J., System and method for magnetic-resonance-guided electrophysiologic and ablation procedures, US patent no: 7155271, 26 Dec 2006 Assigned to
15. Paliwal, V., El-Sharkawy, A.M. and Atalar, E., Steady state free precession based magnetic resonance thermometry, US patent no: 7078903, 18 Jul 2006 Assigned to Johns Hopkins University (Baltimore, MD, US)
14. Atalar, E., Quick, H.H. and Karmarkar, P., Systems and methods for evaluating the urethra and the periurethral tissues, US patent no: 6898454, 24 May 2005 Assigned to The Johns Hopkins University (Baltimore, MD, US) and Surgi-Vision, Inc. (Marietta, GA, US)
13. Aksit, P., Derbyshire, A.J. and Atalar, E., System and method of real-time multiple field-of-view imaging, US patent no: 6778689, 17 Aug 2004 Assigned to General Electric Company (Milwaukee, WI)
12. Halperin, H.R., Berger, R.D., Atalar, E., McVeigh, E.R., Lardo, A., Calkins, H. and Lima, J., Magnetic-resonance-guided imaging, electrophysiology, and ablation, US patent no: 6701176, 02 Mar 2004 Assigned to Johns Hopkins University School of Medicine (Baltimore, MD)

11. Lardo, A.C., Yang, X., Atalar, E., Karmarkar, P., McVeigh, E.R., Halperin, H.R., McNamara, C.E. and Bottomley, P.A., Magnetic resonance imaging guidewire probe, US patent no: 6675033, 06 Jan 2004 Assigned to Johns Hopkins University School of Medicine (Baltimore, MD) and Surgi-Vision, Inc. (Chelmsford, MA)
10. Atalar, E., Bottomley, P.A., Karmarkar, P., Lardo, A.C. and Zerhouni, E., Apparatus, systems, and methods for in vivo magnetic resonance imaging, US patent no: 6628980, 30 Sep 2003 Assigned to Surgi-Vision, Inc. (Chelmsford, MA)
9. Atalar, E., Bottomley, P.A., Zerhouni, E., Halperin, H., McVeigh, E. and Lardo, A.C., Methods for in vivo magnetic resonance imaging, US patent no: 6549800, 15 Apr 2003 Assigned to Johns Hopkins University School of Medicine (Baltimore, MD)
8. Lima, J.A.C., Shunk, K.A. and Atalar, E., Transesophageal magnetic resonance analysis method and apparatus, US patent no: 6408202, 18 Jun 2002 Assigned to The Johns Hopkins University (Baltimore, MD)
7. Atalar, E. and Ocali, O., Enhanced safety coaxial cables, US patent no: 6284971, 04 Sep 2001 Assigned to Johns Hopkins University School of Medicine (Baltimore, MD)
6. Atalar, E., Lestio, J.C., Jr, H.K.C., Carkhuff, B.G. and Bottomley, P.A., Miniature magnetic resonance catheter coils and related methods, US patent no: 6263229, 17 Jul 2001 Assigned to Johns Hopkins University School of Medicine (Baltimore, MD)
5. Reeder, S.B., Atalar, E., Faranesh, A.Z. and McVeigh, E.R., Magnetic resonance imaging method and apparatus and method of calibrating the same, US patent no: 6188219, 13 Feb 2001 Assigned to The Johns Hopkins University (Baltimore, MD)
4. Atalar, E. and Ocali, O., Method of magnetic resonance analysis employing cylindrical coordinates and an associated apparatus, US patent no: 6031375, 29 Feb 2000 Assigned to The Johns Hopkins University (Baltimore, MD)
3. Ocali, O. and Atalar, E., Method of magnetic resonance imaging and spectroscopic analysis and associated apparatus employing a loopless antenna, US patent no: 5928145, 27 Jul 1999 Assigned to The Johns Hopkins University (Baltimore, MD)
2. Atalar, E., Bottomley, P.A. and Zerhouni, E.A., Method of internal magnetic resonance imaging and spectroscopic analysis and associated apparatus, US patent no: 5699801, 23 Dec 1997 Assigned to The Johns Hopkins University (Baltimore, MD)
1. Atalar, E. and McVeigh, E.R., Method of minimizing dead-periods in magnetic resonance imaging pulse sequences and associated apparatus, US patent no: 5512825, 30 Apr 1996 Assigned to The Johns Hopkins University (Baltimore, MD)

Peer-Reviewed Journal Publications

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**, Accepted
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](https://doi.org/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. 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 Medicine* **2020**, 83: 2284-2292.
 113. 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.
 110. Ertan, K., Taraghinia, S. and Atalar, E., *Driving mutually coupled gradient array coils in magnetic resonance imaging* in *Magnetic Resonance in Medicine* **2019**, 82: 1187-1198.
 109. Kazemivalipour, E., Keil, B., Vali, A., Rajan, S., Elahi, B., Atalar, E., Wald, L.L., Rosenow, J., Pilitsis, J. and Golestanirad, L., *Reconfigurable MRI technology for low-SAR imaging of deep brain stimulation at 3T: Application in bilateral leads, fully-implanted systems, and surgically modified lead trajectories* in *Neuroimage* **2019**, 199: 18-29.
 108. Alipour, A., Gokyar, S., Algin, O., Atalar, E. and Demir, H.V., *An inductively coupled ultra-thin, flexible and passive RF resonator for MRI marking and guiding purposes: clinical feasibility* in *Magnetic Resonance in Medicine* **2018**, 80: 361-370.
 107. Ertan, K., Taraghinia, S., Sadeghi-Tarakameh, A. and Atalar, E., *A Z-Gradient Array for Simultaneous Multi-Slice Excitation with a Single Band RF pulse* in *Magnetic Resonance in Medicine* **2018**, 80: 400-412.
 106. Gokyar, S., Alipour, A., Unal, E., Atalar, E. and Demir, H.V., *Wireless deep-subwavelength metamaterial enabling sub-mm resolution magnetic resonance imaging* in *Sensors and Actuators A* **2018**, 274: 211-219.
 105. Ozen, A.C., Atalar, E., Korvink, J.G. and Bock, M., *In vivo MRI with Concurrent Excitation and Acquisition using Automated Active Analog Cancellation* in *Scientific Reports* **2018**, 8: 10631.

104. Silemek, B., Acikel, V., Oto, C., Alipour, A., Aykut, Z.G., Algin, O. and Atalar, E., ***A Temperature Sensor Implant for Active Implantable Medical Devices for In Vivo Subacute Heating Tests Under MRI*** in *Magnetic Resonance in Medicine* **2018**, 79: 2824-2832.
103. Ertan, K. and Atalar, E., ***Simultaneous use of linear and nonlinear gradients for B1+ inhomogeneity correction*** in *NMR in Biomedicine* **2017**, 30: e3742.
102. Gokyar, S., Alipour, A., Unal, E., Atalar, E. and Demir, H.V., ***Magnetic Resonance Imaging Assisted by Wireless Passive Implantable Fiducial e-Markers*** in *IEEE Access* **2017**, 5: 19693-19702.
101. Acikel, V., Uslubas, A. and Atalar, E., ***Modeling of electrodes and implantable pulse generator cases for the analysis of implant tip heating under MR imaging***. in *Med Phys* **2015**, 42: 3922.
100. Ozen, A.C., Bock, M. and Atalar, E., ***Active Decoupling of RF Coils Using a Transmit Array System*** in *Magnetic Resonance Materials in Physics, Biology and Medicine* **2015**, 28: 565-576.
99. Turk, E.A., Ider, Y.Z., Ergun, A.S. and Atalar, E., ***Approximate Fourier domain expression for Bloch-Siegert shift*** in *Magnetic Resonance in Medicine* **2015**, 73: 117-125.
98. Tekdas, D.A., Ruslan Garifullin, , Berna Senturk, , Zorlu, Y., Gundogdu, U., Atalar, E., Tekinay, A.B., Chernonosov, A.A., Yerli, Y., Dumoulin, F., Guler, M.O., Ahsen, V. and Gurek, A.G., ***Design of a Gd-DOTA-phthalocyanine conjugate combining MRI contrast imaging and photosensitization properties as a potential molecular theranostic***. in *Photochem Photobiol* **2014**, 90: 1376-1386.
97. Celik, H., Mahcicek, D.I., Senel, O.K., Wright, G.A. and Atalar, E., ***Tracking the position and rotational orientation of a catheter using a transmit array system***. in *IEEE Trans Med Imaging* **2013**, 32: 809-817.
96. Eryaman, Y., Turk, E.A., Oto, C., Algin, O. and Atalar, E., ***Reduction of the radiofrequency heating of metallic devices using a dual-drive birdcage coil***. in *Magn Reson Med* **2013**, 69: 845-857.
95. Kopanoglu, E., Yilmaz, U., Gokhalk, Y. and Atalar, E., ***Specific absorption rate reduction using nonlinear gradient fields*** in *Magnetic Resonance in Medicine* **2013**, 70: 537-546.
94. Celik, H. and Atalar, E., ***Reverse polarized inductive coupling to transmit and receive radiofrequency coil arrays***. in *Magn Reson Med* **2012**, 67: 446-456.
93. Turk, E.A., Kopanoglu, E., Guney, S., Bugdayci, K.E., Ider, Y.Z., Erturk, V.B. and Atalar, E., ***A simple analytical expression for the gradient induced potential on active implants during MRI***. in *IEEE Trans Biomed Eng* **2012**, 59: 2845-2851.
92. Acikel, V. and Atalar, E., ***Modeling of radio-frequency induced currents on lead wires during MR imaging using a modified transmission line method*** in *Medical Physics* **2011**, 38: 6623-6632.
91. Barak, T., Kwan, K.Y., Louvi, A., Demirbilek, V., Saygi, S., Tuysuz, B., Choi, M., Boyaci, H., Doerschner, K., Zhu, Y., Kaymakcalan, H., Yilmaz, S., Bakircioglu, M., Caglayan, A.O., Ozturk, A.K., Yasuno, K., Brunken, W.J., Atalar, E., Yalcinkaya, C., Dincer, A., Bronen, R.A., Mane, S., Ozcelik, T., Lifton, R.P., Sestan, N., Bilguvar, K. and Gunel, M., ***Recessive LAMC3 mutations cause malformations of occipital cortical development*** in *Nature Genetics* **2011**, 43: 590-594.
90. Eryaman, Y., Akin, B. and Atalar, E., ***Reduction of implant RF heating through modification of transmit coil electric field***. in *Magn Reson Med* **2011**, 65: 1305-1313.
89. Eryaman, Y., Hersek, S. and Atalar, E., ***Comments on Ensuring safety of implanted devices under MRI using reversed polarization***. in *Magn Reson Med* **2011**, 66: 1515-1516.
88. Gulsuner, S., Tekinay, A.B., Doerschner, K., Boyaci, H., Bilguvar, K., Unal, H., Ors, A., Onat, O.E., Atalar, E., Basak, A.N., Topaloglu, H., Kansu, T., Tan, M., Tan, U., Gunel, M. and Ozcelik, T., ***Homozygosity mapping and targeted genomic sequencing reveal the gene responsible for cerebellar hypoplasia and quadrupedal locomotion in a consanguineous kindred***. in *Genome Res* **2011**, 21: 1995-2003.
87. Kopanoglu, E., Erturk, V.B. and Atalar, E., ***Analytic expressions for the ultimate intrinsic signal-to-noise ratio and ultimate intrinsic specific absorption rate in MRI***. in *Magn Reson Med* **2011**, 66: 846-858.
86. Sulek, S., Mammadov, B., Mahcicek, D.I., Sozeri, H., Atalar, E., Tekinay, A.B. and Guler, M.O., ***Peptide Functionalized Superparamagnetic Iron Oxide Nanoparticles as MRI Contrast Agents*** in *Journal of Materials Chemistry* **2011**, 21: 15157-15161.
85. Ahsen, O.O., Yilmaz, U., Aksoy, M.D., Ertas, G. and Atalar, E., ***Heating of magnetic fluid systems driven by circularly polarized magnetic field*** in *Journal of Magnetism and Magnetic Materials* **2010**, 322: 3053-3059.

84. Qian, D., El-Sharkawy, A.M.M., Atalar, E. and Bottomley, P.A., *Interventional MRI: tapering improves the distal sensitivity of the loopless antenna*. in *Magn Reson Med* **2010**, 63: 797-802.
83. Eryaman, Y., Oner, Y. and Atalar, E., *Design of internal MRI coils using ultimate intrinsic SNR*. in *MAGMA* **2009**, 22: 221-228.
82. Tasci, T.O., Vargel, I., Arat, A., Guzel, E., Korkusuz, P. and Atalar, E., *Focused RF hyperthermia using magnetic fluids*. in *Med Phys* **2009**, 36: 1906-1912.
81. Brushett, C., Qiu, B., Atalar, E. and Yang, X., *High-resolution MRI of deep-seated atherosclerotic arteries using motexafin gadolinium* in *Journal of Magnetic Resonance Imaging* **2008**, 27: 246-250.
80. Memis, O.G., Eryaman, Y., Aytur, O. and Atalar, E., *Miniaturized fiber-optic transmission system for MRI signals*. in *Magn Reson Med* **2008**, 59: 165-173.
79. Qiu, B., Gao, F., Karmarkar, P., Atalar, E. and Yang, X., *Intracoronary MR imaging using a 0.014-inch MR imaging-guidewire: toward MRI-guided coronary interventions*. in *J Magn Reson Imaging* **2008**, 28: 515-518.
78. Tasci, T.O., Atalar, E., Demirok, U.K. and Suzer, S., *Electrical circuit modeling of surface structures for X-ray photoelectron spectroscopic measurements* in *Surface Science* **2008**, 602: 365-368.
77. Akca, I.B., Ferhanoglu, O., Yeung, C.J., Guney, S., Tasci, T.O. and Atalar, E., *Measuring local RF heating in MRI: Simulating perfusion in a perfusionless phantom*. in *J Magn Reson Imaging* **2007**, 26: 1228-1235.
76. Celik, H., Uluturk, A., Tali, T. and Atalar, E., *A catheter tracking method using reverse polarization for MR-guided interventions*. in *Magn Reson Med* **2007**, 58: 1224-1231.
75. Sathyanarayana, S., Aksit, P., Arepally, A., Karmarkar, P.V., Solaiyappan, M. and Atalar, E., *Tracking planar orientations of active MRI needles*. in *J Magn Reson Imaging* **2007**, 26: 386-391.
74. Arepally, A., Karmarkar, P.V., Qian, D., Barnett, B. and Atalar, E., *Evaluation of MR/fluoroscopy-guided portosystemic shunt creation in a swine model*. in *J Vasc Interv Radiol* **2006**, 17: 1165-1173.
73. Arepally, A., Karmarkar, P.V., Weiss, C. and Atalar, E., *Percutaneous MR imaging-guided transvascular access of mesenteric venous system: study in swine model*. in *Radiology* **2006**, 238: 113-118.
72. Chowning, S.L., Susil, R.C., Krieger, A., Fichtinger, G., Whitcomb, L.L. and Atalar, E., *A preliminary analysis and model of prostate injection distributions*. in *Prostate* **2006**, 66: 344-357.
71. El-Sharkawy, A.M.M., Sotiriadis, P.P., Bottomley, P.A. and Atalar, E., *Absolute Temperature Monitoring Using RF Radiometry in the MRI Scanner*. in *IEEE Trans Circuits Syst I Regul Pap* **2006**, 53: 2396-2404.
70. El-Sharkawy, A.M., Schar, M., Bottomley, P.A. and Atalar, E., *Monitoring and correcting spatio-temporal variations of the MR scanner's static magnetic field*. in *MAGMA* **2006**, 19: 223-236.
69. Raval, A.N., Karmarkar, P.V., Guttman, M.A., Ozturk, C., Desilva, R., Aviles, R.J., Wright, V.J., Schenke, W.H., Atalar, E., McVeigh, E.R. and Lederman, R.J., *Real-time MRI guided atrial septal puncture and balloon septostomy in swine*. in *Catheter Cardiovasc Interv* **2006**, 67: 637-643.
68. Raval, A.N., Karmarkar, P.V., Guttman, M.A., Ozturk, C., Sampath, S., DeSilva, R., Aviles, R.J., Xu, M., Wright, V.J., Schenke, W.H., Kocaturk, O., Dick, A.J., Raman, V.K., Atalar, E., McVeigh, E.R. and Lederman, R.J., *Real-time magnetic resonance imaging-guided endovascular recanalization of chronic total arterial occlusion in a swine model*. in *Circulation* **2006**, 113: 1101-1107.
67. Susil, R.C., Menard, C., Krieger, A., Coleman, J.A., Camphausen, K., Choyke, P., Fichtinger, G., Whitcomb, L.L., Coleman, C.N. and Atalar, E., *Transrectal prostate biopsy and fiducial marker placement in a standard 1.5T magnetic resonance imaging scanner*. in *J Urol* **2006**, 175: 113-120.
66. Yang, X. and Atalar, E., *MRI-guided gene therapy*. in *FEBS Lett* **2006**, 580: 2958-2961.
65. Arepally, A., Karmarkar, P.V., Weiss, C., Rodriguez, E.R., Lederman, R.J. and Atalar, E., *Magnetic resonance image-guided trans-septal puncture in a swine heart*. in *J Magn Reson Imaging* **2005**, 21: 463-467.
64. Atalar, E., *Radiofrequency safety for interventional MRI procedures*. in *Acad Radiol* **2005**, 12: 1149-1157.
63. Atalar, E. and Menard, C., *MR-guided interventions for prostate cancer*. in *Magn Reson Imaging Clin N Am* **2005**, 13: 491-504.
62. Krieger, A., Susil, R.C., Menard, C., Coleman, J.A., Fichtinger, G., Atalar, E. and Whitcomb, L.L., *Design of a novel MRI compatible manipulator for image guided prostate interventions*. in *IEEE Trans Biomed Eng* **2005**, 52: 306-313.
61. Mernard, C., Susil, R.C., Choyke, P., Coleman, J., Grubb, R., Gharib, A., Krieger, A., Guion, P., Thomasson, D., Ullman,

- K., Gupta, S., Espina, V., Liotta, L., Petricoin, E., Fichtinger, G., Whitcomb, L.L., Atalar, E., Coleman, C.N. and Camphausen, K., ***An interventional magnetic resonance imaging technique for the molecular characterization of intraprostatic dynamic contrast enhancement.*** in *Mol Imaging* **2005**, 4: 63-66.
60. Qiu, B., El-Sharkawy, A.M., Paliwal, V., Karmarkar, P., Gao, F., Atalar, E. and Yang, X., ***Simultaneous radiofrequency (RF) heating and magnetic resonance (MR) thermal mapping using an intravascular MR imaging/RF heating system.*** in *Magn Reson Med* **2005**, 54: 226-230.
59. Qiu, B., Karmarkar, P., Brushett, C., Gao, F., Kon, R., Kar, S., Atalar, E. and Yang, X., ***Development of a 0.014-inch magnetic resonance imaging guidewire.*** in *Magn Reson Med* **2005**, 53: 986-990.
58. Raman, V.K., Karmarkar, P.V., Guttman, M.A., Dick, A.J., Peters, D.C., Ozturk, C., Pessanha, B.S.S., Thompson, R.B., Raval, A.N., DeSilva, R., Aviles, R.J., Atalar, E., McVeigh, E.R. and Lederman, R.J., ***Real-time magnetic resonance-guided endovascular repair of experimental abdominal aortic aneurysm in swine.*** in *J Am Coll Cardiol* **2005**, 45: 2069-2077.
57. Celik, H., Eryaman, Y., Altintas, A., Abdel-Hafez, I.A. and Atalar, E., ***Evaluation of internal MRI coils using ultimate intrinsic SNR.*** in *Magn Reson Med* **2004**, 52: 640-649.
56. Karmarkar, P., Kraitchman, D., Izbudak, I., Hofmann, L., Amado, L., Fritzges, D., Young, R., Pittenger, M., Bulte, J. and Atalar, E., ***MR-trackable intramyocardial injection catheter*** in *Magnetic Resonance in Medicine* **2004**, 51: 1163-1172.
55. Paliwal, V., El-Sharkawy, A.M., Du, X., Yang, X. and Atalar, E., ***SSFP-based MR thermometry.*** in *Magn Reson Med* **2004**, 52: 704-708.
54. Susil, R.C., Camphausen, K., Choyke, P., McVeigh, E.R., Gustafson, G.S., Ning, H., Miller, R.W., Atalar, E., Coleman, C.N. and Menard, C., ***System for prostate brachytherapy and biopsy in a standard 1.5 T MRI scanner.*** in *Magn Reson Med* **2004**, 52: 683-687.
53. Tsekos, N.V., Atalar, E., Li, D., Omary, R.A., Serfaty, J.M. and Woodard, P.K., ***Magnetic resonance imaging-guided coronary interventions.*** in *J Magn Reson Imaging* **2004**, 19: 734-749.
52. Kraitchman, D.L., Heldman, A.W., Atalar, E., Amado, L.C., Martin, B.J., Pittenger, M.F., Hare, J.M. and Bulte, J.W.M., ***In vivo magnetic resonance imaging of mesenchymal stem cells in myocardial infarction.*** in *Circulation* **2003**, 107: 2290-2293.
51. Sampath, S., Derbyshire, J.A., Atalar, E., Osman, N.F. and Prince, J.L., ***Real-time imaging of two-dimensional cardiac strain using a harmonic phase magnetic resonance imaging (HARP-MRI) pulse sequence.*** in *Magn Reson Med* **2003**, 50: 154-163.
50. Serfaty, J.M., Yang, X., Foo, T.K., Kumar, A., Derbyshire, A. and Atalar, E., ***MRI-guided coronary catheterization and PTCA: A feasibility study on a dog model.*** in *Magn Reson Med* **2003**, 49: 258-263.
49. Susil, R.C., Krieger, A., Derbyshire, J.A., Tanacs, A., Whitcomb, L.L., Fichtinger, G. and Atalar, E., ***System for MR image-guided prostate interventions: canine study.*** in *Radiology* **2003**, 228: 886-894.
48. Susil, R.C., Yeung, C.J. and Atalar, E., ***Intravascular extended sensitivity (IVES) MRI antennas.*** in *Magn Reson Med* **2003**, 50: 383-390.
47. Yung, A.C., Oner, A.Y., Serfaty, J.M., Feneley, M., Yang, X. and Atalar, E., ***Phased-array MRI of canine prostate using endorectal and endourethral coils.*** in *Magn Reson Med* **2003**, 49: 710-715.
46. Aksit, P., Derbyshire, J.A., Serfaty, J.M. and Atalar, E., ***Multiple field of view MR fluoroscopy.*** in *Magn Reson Med* **2002**, 47: 53-60.
45. Qiu, B., Yeung, C.J., Du, X., Atalar, E. and Yang, X., ***Development of an intravascular heating source using an MR imaging guidewire.*** in *J Magn Reson Imaging* **2002**, 16: 716-720.
44. Susil, R.C., Yeung, C.J., Halperin, H.R., Lardo, A.C. and Atalar, E., ***Multifunctional interventional devices for MRI: a combined electrophysiology/MRI catheter.*** in *Magn Reson Med* **2002**, 47: 594-600.
43. Yang, X., Yeung, C.J., Ji, H., Serfaty, J.M. and Atalar, E., ***Thermal effect of intravascular MR imaging using an MR imaging-guidewire: an in vivo laboratory and histopathological evaluation.*** in *Med Sci Monit* **2002**, 8: MT113--MT117.
42. Yeung, C.J., Susil, R.C. and Atalar, E., ***RF heating due to conductive wires during MRI depends on the phase distribution of the transmit field.*** in *Magn Reson Med* **2002**, 48: 1096-1098.

41. Yeung, C.J., Susil, R.C. and Atalar, E., ***RF safety of wires in interventional MRI: using a safety index.*** in *Magn Reson Med* **2002**, 47: 187-193.
40. Fichtinger, G., Krieger, A., Susil, R., Tanacs, A., Whitcomb, L. and Atalar, E., ***Transrectal Prostate Biopsy Inside Closed MRI Scanner with Remote Actuation, under Real-Time Image Guidance*** in **2002**, 2488: 91-98.
39. Bolster, B.D., Serfaty, J.M. and Atalar, E., ***In vivo measurement of pulsewave velocity in small vessels using intravascular MR.*** in *Magn Reson Med* **2001**, 45: 53-60.
38. Osman, N.F., Sampath, S., Atalar, E. and Prince, J.L., ***Imaging longitudinal cardiac strain on short-axis images using strain-encoded MRI.*** in *Magn Reson Med* **2001**, 46: 324-334.
37. Quick, H.H., Serfaty, J.M., Pannu, H.K., Genadry, R., Yeung, C.J. and Atalar, E., ***Endourethral MRI.*** in *Magn Reson Med* **2001**, 45: 138-146.
36. Shunk, K.A., Atalar, E. and Lima, J.A., ***Possibilities of transesophageal MRI for assessment of aortic disease: a review.*** in *Int J Cardiovasc Imaging* **2001**, 17: 179-185.
35. Shunk, K.A., Garot, J., Atalar, E. and Lima, J.A., ***Transesophageal magnetic resonance imaging of the aortic arch and descending thoracic aorta in patients with aortic atherosclerosis.*** in *J Am Coll Cardiol* **2001**, 37: 2031-2035.
34. Yang, X., Atalar, E., Li, D., Serfaty, J.M., Wang, D., Kumar, A. and Cheng, L., ***Magnetic resonance imaging permits in vivo monitoring of catheter-based vascular gene delivery.*** in *Circulation* **2001**, 104: 1588-1590.
33. Yeung, C.J. and Atalar, E., ***A Green's function approach to local rf heating in interventional MRI.*** in *Med Phys* **2001**, 28: 826-832.
32. Bottomley, P.A., Atalar, E., Lee, R.F., Shunk, K.A. and Lardo, A., ***Cardiovascular MRI probes for the outside in and for the inside out.*** in *MAGMA* **2000**, 11: 49-51.
31. Serfaty, J.M., Yang, X., Aksit, P., Quick, H.H., Solaiyappan, M. and Atalar, E., ***Toward MRI-guided coronary catheterization: visualization of guiding catheters, guidewires, and anatomy in real time.*** in *J Magn Reson Imaging* **2000**, 12: 590-594.
30. Serfaty, J.M., Atalar, E., Declerck, J., Karmakar, P., Quick, H.H., Shunk, K.A., Heldman, A.W. and Yang, X., ***Real-time projection MR angiography: feasibility study.*** in *Radiology* **2000**, 217: 290-295.
29. Yang, X. and Atalar, E., ***Intravascular MR imaging-guided balloon angioplasty with an MR imaging guide wire: feasibility study in rabbits.*** in *Radiology* **2000**, 217: 501-506.
28. Yeung, C.J. and Atalar, E., ***RF transmit power limit for the barewire loopless catheter antenna.*** in *J Magn Reson Imaging* **2000**, 12: 86-91.
27. Artemov, D., Revelon, G., Atalar, E., Bluemke, D.A., Bhujwala, Z.M. and Zerhouni, E.A., ***Switchable multicoil array for MR micro-imaging of breast lesions.*** in *Magn Reson Med* **1999**, 41: 569-574.
26. Bolster, B.D. and Atalar, E., ***Minimizing dead-periods in flow-encoded or -compensated pulse sequences while imaging in oblique planes.*** in *J Magn Reson Imaging* **1999**, 10: 183-192.
25. Reeder, S.B., Faranesh, A.Z., Atalar, E. and McVeigh, E.R., ***A novel object-independent balanced reference scan for echo-planar imaging.*** in *J Magn Reson Imaging* **1999**, 9: 847-852.
24. Reeder, S.B., Atalar, E., Faranesh, A.Z. and McVeigh, E.R., ***Multi-echo segmented k-space imaging: an optimized hybrid sequence for ultrafast cardiac imaging.*** in *Magn Reson Med* **1999**, 41: 375-385.
23. Reeder, S.B., Atalar, E., Faranesh, A.Z. and McVeigh, E.R., ***Referenceless interleaved echo-planar imaging.*** in *Magn Reson Med* **1999**, 41: 87-94.
22. Shunk, K.A., Lima, J.A., Heldman, A.W. and Atalar, E., ***Transesophageal magnetic resonance imaging.*** in *Magn Reson Med* **1999**, 41: 722-726.
21. Yang, X., Atalar, E. and Zerhouni, E.A., ***Intravascular MR imaging and intravascular MR-guided interventions.*** in *Int J Cardiovasc Intervent* **1999**, 2: 85-96.
20. Atalar, E., Kraitman, D.L., Carkhuff, B., Lesho, J., Ocali, O., Solaiyappan, M., Guttman, M.A. and Charles, H.K., ***Catheter-tracking FOV MR fluoroscopy.*** in *Magn Reson Med* **1998**, 40: 865-872.
19. Bolster, B.D., Atalar, E., Hardy, C.J. and McVeigh, E.R., ***Accuracy of arterial pulse-wave velocity measurement using MR.*** in *J Magn Reson Imaging* **1998**, 8: 878-888.
18. Boxerman, J.L., Mosher, T.J., McVeigh, E.R., Atalar, E., Lima, J.A. and Bluemke, D.A., ***Advanced MR imaging techniques for evaluation of the heart and great vessels.*** in *Radiographics* **1998**, 18: 543-564.

17. Croisille, P., Guttman, M.A., Atalar, E., McVeigh, E.R. and Zerhouni, E.A., **Precision of myocardial contour estimation from tagged MR images with a black-blood technique.** in *Acad Radiol* **1998**, 5: 93-100.
16. Ocali, O. and Atalar, E., **Ultimate intrinsic signal-to-noise ratio in MRI.** in *Magn Reson Med* **1998**, 39: 462-473.
15. Yang, X., Bolster, B.D., Kraitchman, D.L. and Atalar, E., **Intravascular MR-monitored balloon angioplasty: an in vivo feasibility study.** in *J Vasc Interv Radiol* **1998**, 9: 953-959.
14. Bluemke, D.A., Boxerman, J.L., Atalar, E. and McVeigh, E.R., **Segmented K-space cine breath-hold cardiovascular MR imaging: Part 1. Principles and technique.** in *AJR Am J Roentgenol* **1997**, 169: 395-400.
13. Constantinides, C.D., Atalar, E. and McVeigh, E.R., **Signal-to-noise measurements in magnitude images from NMR phased arrays.** in *Magn Reson Med* **1997**, 38: 852-857.
12. Correia, L.C., Atalar, E., Kelemen, M.D., Ocali, O., Hutchins, G.M., Fleg, J.L., Gerstenblith, G., Zerhouni, E.A. and Lima, J.A., **Intravascular magnetic resonance imaging of aortic atherosclerotic plaque composition.** in *Arterioscler Thromb Vasc Biol* **1997**, 17: 3626-3632.
11. Ocali, O. and Atalar, E., **Intravascular magnetic resonance imaging using a loopless catheter antenna.** in *Magn Reson Med* **1997**, 37: 112-118.
10. Reeder, S.B., Atalar, E., Bolster, B.D. and McVeigh, E.R., **Quantification and reduction of ghosting artifacts in interleaved echo-planar imaging.** in *Magn Reson Med* **1997**, 38: 429-439.
9. Atalar, E., Bottomley, P.A., Ocali, O., Correia, L.C., Kelemen, M.D., Lima, J.A. and Zerhouni, E.A., **High resolution intravascular MRI and MRS by using a catheter receiver coil.** in *Magn Reson Med* **1996**, 36: 596-605.
8. Bottomley, P.A., Atalar, E. and Weiss, R.G., **Human cardiac high-energy phosphate metabolite concentrations by 1D-resolved NMR spectroscopy.** in *Magn Reson Med* **1996**, 35: 664-670.
7. Judd, R.M., Reeder, S.B., Atalar, E., McVeigh, E.R. and Zerhouni, E.A., **A magnetization-driven gradient echo pulse sequence for the study of myocardial perfusion.** in *Magn Reson Med* **1995**, 34: 276-282.
6. Lima, J.A., Judd, R.M., Bazille, A., Schulman, S.P., Atalar, E. and Zerhouni, E.A., **Regional heterogeneity of human myocardial infarcts demonstrated by contrast-enhanced MRI. Potential mechanisms.** in *Circulation* **1995**, 92: 1117-1125.
5. Atalar, E. and McVeigh, E.R., **Minimization of dead-periods in MRI pulse sequences for imaging oblique planes.** in *Magn Reson Med* **1994**, 32: 773-777.
4. Atalar, E. and McVeigh, E.R., **Optimization of tag thickness for measuring position with magnetic resonance imaging.** in *IEEE Trans Med Imaging* **1994**, 13: 152-160.
3. McVeigh, E.R. and Atalar, E., **Cardiac tagging with breath-hold cine MRI.** in *Magn Reson Med* **1992**, 28: 318-327.
2. Atalar, E. and Onural, L., **A respiratory motion artifact reduction method in magnetic resonance imaging of the chest.** in *IEEE Trans Med Imaging* **1991**, 10: 11-24.
1. Ider, Y.Z., Gencer, N.G., Atalar, E. and Tosun, H., **Electrical impedance tomography of translationally uniform cylindrical objects with general cross-sectional boundaries.** in *IEEE Trans Med Imaging* **1990**, 9: 49-59.

Book Chapters

7. Silemek, B., Acikel, V. and Atalar, E., **RF Safety of Active Implantable Medical Devices** in *Safety and Biological Effects in MRI*, Wiley eMagRes Books (Print: ISBN: 978-1-118-82130-5 Feb **2021**, eBook ISBN: 978-1-118-82128-2 Nov 2020.)
6. Algin, O., Ozen, A.C. and Atalar, E., **Manyetik Rezonans Goruntulemenin Fizigi** in *Temel Radyoloji Gunes Tip Kitabevi* **2015**
5. Acikel, V. and Atalar, E., **Intravascular magnetic resonance imaging (MRI)** in *Biomedical Imaging* Woodhead Publishing **2014**
4. Atalar, E., **Catheter Coils** in *Encyclopedia of Magnetic Resonance* John Wiley: Chichester **2011**
3. Atalar, E., **Internal coils in CMR** in *Cardiovascular Magnetic Resonance* Martin Dunitz, London UK **2003**
2. Atalar, E., **Magnetic Resonance Imaging of Vulnerable Plaque** in *Cardiovascular Plaque Rupture* Marcel Dekker, NY **2002**
1. McVeigh, E.R. and Atalar, E., **Balancing Contrast, Resolution, and Signal-to-Noise Ratio in Magnetic Resonance Imaging** in *The Physics of MRI* American Association of Physics in Medicine, Woodbury, NY **1992**

Conference Presentations

322. Ozturk, M. E., Babaloo, R., Atalar, E., Saritas, E. U., Pulse Sequence Design for Gradient Arrays in MRI, ISMRM, Singapore, 2024
321. Babaloo, R., Atalar, E., Head Only Z-gradient Array Coil: 2-layer and 3-layer Designs Comparison, ISMRM, Singapore, 2024
320. Takrimi, M., Atalar, E., Calculation of Eddy Power Losses Within the Cryostat Generated by Arbitrary Pulse Sequences and Gradient Coils, ISMRM, Singapore, 2024
319. Tasdelen, B., Utkur, M., Alpman, A., Top, C. B., Atalar, E., Saritas, E. U., Vector Modulator Based Active Compensation of Direct Feedthrough in Magnetic Particle Imaging, IWMPPI, Flüeli-Ranft, Switzerland, 2024
318. Ozaslan, A. A., Babaloo, R., Atalar, E., Saritas, E. U., Minimizing Induced Electric Fields in Human Head-Size MPI Systems, IWMPPI, Flüeli-Ranft, Switzerland, 2024
317. Takrimi, M. and Atalar, E., *A Novel Method To Estimate And Control The Eddy Power Loss Within The Cryostat: A Co-Simulation Approach To Tune Z-Gradient Array Coil*, ISMRM, Toronto, 2023
316. Babaloo, R., Takrimi, M. and Atalar, E., *Minimum Electric Field Gradient Array Body Coil With Adjustable Regions Of Linearity*, ISMRM, Toronto, 2023
315. Aydin, E., Babaloo, R. and Atalar, E., *Thermal Model In Feedforward Control Of The Gradient Array System In MRI*, ISMRM, Toronto, 2023
314. Takrimi, M. and Atalar, E., *Multiple-Imaging Volumes Using Tunable Active-Shield Z-Gradient Array*, ISMRM, London, 2022
313. Babaloo, R., Takrimi, M. and Atalar, E., *Increasing Peripheral Nerve Stimulation Thresholds Using a Gradient Array Coil*, ISMRM, London, 2022
312. Babaloo, R., Aydin, E. and Atalar, E., *Adaptive Feedforward Control of Gradient Currents Using Gradient Heating Prediction*, ISMRM, London, 2022
311. Kazemivalipour, E., Sadeghi-Tarakameh, A., Keil, B., Eryaman, Y., Atalar, E. and Golestanirad, L., *Demystifying the effect of field strength on RF heating of conductive leads: A simulation study of SAR in DBS lead models during MRI at 1.5 T - 10.5 T*, ISMRM, Virtual, 2021
310. Kazemivalipour, E., Bonmassar, G., Golestanirad, L. and Atalar, E., *Design of transmit array coils by minimizing the modal reflected power values and increasing B1+ Efficiency*, ISMRM, Virtual, 2021
309. Takrimi, M. and Atalar, E., *MRI Hybrid Gradient Coil Equipped with a Programmable Z-Array and Conventional X- and Y-Elements*, ISMRM, Virtual, 2021
308. Taraghinia, S., Acikel, V., Babaloo, R. and Atalar, E., *Design and Implementation of High Switching Frequency Gradient Power Amplifier Using eGaN Devices*, ISMRM, Virtual, 2021
307. Tasdelen, B., Utkur, M., Atalar, E. and Saritas, E.U., *Vector Modulator Based Automated Active Compensation of Direct Feedthrough in Magnetic Particle Imaging*, ISMRM, Online, Vancouver, CA, 2021
306. Atalar, E., *A transmit array system for conventional whole-body MRI scanners*, METANANO, Online, 2021
305. Babaloo, R., Taraghinia, S. and Atalar, E., *Droop compensation of gradient current waveforms in gradient array systems*, ISMRM, Virtual, 2021
304. Bhusal, B., Kazemivalipour, E., Vu, J., Lin, S., Nguyen, B.T., Kirsch, J., Nowac, E., Pilitsis, J., Rosenow, J., Atalar, E. and Golestanirad, L., *Open-bore vertical MRI scanners generate significantly lower RF heating around DBS implants: A Simulation study with experimental validation*, ISMRM, Virtual, 2021
303. Kazemivalipour, E., Sadeghi-Tarakameh, A. and Atalar, E., *Design of transmit array coils for MRI by minimizing the modal reflection coefficients*, ISMRM, Virtual, 2020
302. Kazemivalipour, E., Sadeghi-Tarakameh, A., Yilmaz, U. and Atalar, E., *Design of an 8-channel transmit array coil using the equivalent circuit model of the manufactured structure*, ISMRM, Virtual, 2020
301. Kazemivalipour, E., Vu, J., Lin, S., Bhusal, B., Nguyen, B.T., Kirsch, J., Elani, B., Rosenow, J., Atalar, E. and Golestanirad, L., *RF heating of deep brain stimulation implants during MRI in 1.2T vertical scanners versus 1.5T horizontal systems: A simulation study with realistic lead configurations*, The 42nd Annual International Conferences of the IEEE Engineering in Medicine and Biology Society (EMBC), Virtual, 2020

300. Sadeghi-Tarakameh, A., Harel, N., Atalar, E. and Eryaman, Y., *A Temperature Prediction Workflow for DBS Electrodes Undergoing MRI*, ISMRM, 2020, 2020
299. Sadeghi-Tarakameh, A., Jungst, S., Wu, X., Lanagan, M., Adriany, G., Metzger, G.J., Moortele, P.V.d., Ugurbil, K., Atalar, E., Nelson, F. and Eryaman, Y., *Imaging The Spine At 10.5 T*, Multiple Sclerosis Journal, Virtual, 2020
298. Takrimi, M. and Atalar, E., *A Programmable Set of Z-Gradient Array and Active-Shield Array for Magnetic Resonance Imaging*, ISMRM, Virtual, 2020
297. Aldemir, S., Zahra, F.t., Poni, R. and Atalar, E., *Optimizing Efficiency of Coupled Class-E RF Amplifiers for a Transmit Array System in 1.5T*, ISMRM, Virtual, 2020
296. Tasdelen, B., Sadeghi-Tarakameh, A., Yilmaz, U. and Atalar, E., *Noise Analysis for Simultaneous Transmission and Reception Enabled MRI Scanner*, ISMRM, Virtual, 2020
295. Tasdelen, B., Yagiz, E., Utkur, M., Cagil, A.R., Top, C.B., Atalar, E. and Saritas, E.U., *Vector Modulator Based Active Compensation of Direct Feedthrough*, International Journal on Magnetic Particle Imaging, Virtual, 2020
294. Ariyurek, C., Ider, Y.Z. and Atalar, E., *Improving the SNR and Correcting the Bias in Elastograms in Helmholtz Inversion for MR Elastography*, ISMRM, Virtual, 2020
293. Babaloo, R., Taraghinia, S., Acikel, V., Takrimi, M. and Atalar, E., *Digital Feedback Design for Mutual Coupling Compensation in Gradient Array System*, ISMRM, Virtual, 2020
292. Kazemivalipour, E., Sadeghi-Tarakameh, A., Gundogdu, U. and Atalar, E., *Design of multi-row multi-channel degenerate birdcage array coil based on minimum total reflection for the single-channel and circularly polarized modes of excitation*, ISMRM, Montreal, Canada, 2019
291. Kazemivalipour, E., Sadeghi-Tarakameh, A. and Atalar, E., *Optimization of the degenerate birdcage transmit array coil for minimum coupling*, ISMRM, Montreal, Canada, 2019
290. Kazemivalipour, E., Atalar, E., Val, A., Keili, B., Pilitsis, J. and Golestanirad, L., *Reconfigurable coil technology significantly reduces the SAR at the tips of bilateral deep brain simulation leads during MRI at 3T: A realistic case study of isolated leads and fully-implanted systems*, ISMRM, Montreal, Canada, 2019
289. Ozen, A.C., Silemek, B., Lottner, T., Atalar, E. and B, M., *MR Safety Watchdog for Safe Active Catheters: Wireless Impedance Controller with Real-time Feedback*, ISMRM, Montreal, Canada, 2019
288. Sadeghi-Tarakameh, A., Jungst, S., Wu, X., Lanagan, M., Adriany, G., Metzger, G., Moortele, P.F.V.d., Ugurbil, K., Atalar, E. and Eryaman, Y., *A New Coil Element for Highly-Dense Transmit Arrays : An Introduction to Non-Uniform Dielectric Substrate (NODES) Antenna*, ISMRM, Montreal, Canada, 2019
287. Sadeghi-Tarakameh, A., Torrado-Carvajal, A., Lagore, R.L., Moen, S., Wu, X., Adriany, G., Metzger, G., Delabarre, L., Ugurbil, K., Atalar, E. and Eryaman, Y., *Toward Human Head Imaging at 10.5T Using an Eight-Channel Transmit/Receive Array of Bumped Fractionated Dipoles*, ISMRM, Montreal, Canada, 2019
286. Sadeghi-Tarakameh, A., Ulus, X.W.a.F. and Atalar, E., *Ultimate Intrinsic Specific Absorption Rate Efficiency*, ISMRM, Montreal, Canada, 2019
285. Acikel, V., Dogan, A., Filci, F.E., Cansiz, G. and Atalar, E., *High Resolution PWM Generation for High Frequency Switching Gradient Amplifier Control*, ISMRM, Montreal, Canada, 2019
284. Tasdelen, B., Sadeghi-Tarakameh, A., Yilmaz, U. and Atalar, E., *Dynamic Decoupling for Simultaneous Transmission and Acquisition in MRI*, ISMRM, Montreal, Canada, 2019
283. Ariyurek, C., Tasdelen, B., Sadeghi-Tarakameh, A., Ider, Y.Z. and Atalar, E., *Analysis and Maximization of SNR in MR Elastography Inversion*, ISMRM, Montreal, Canada, 2019
282. Ertan, K., Taraghinia, S. and Atalar, E., *Dynamic Optimization of Gradient Field Performance Using a Z-Gradient Array*, ISMRM, Montreal, Canada, 2019
281. Kazemivalipour, E., Sadeghi-Tarakameh, A., Yilmaz, U., Acikel, V., Sen, B. and Atalar, E., *A 12-Channel Degenerate Birdcage Body Transmit Array Coil for 1.5T MRI Scanners*, ISMRM, Paris, France, 2018
280. Sadeghi-Tarakameh, A., Kazemivalipour, E., Demir, T., Gundogdu, U. and Atalar, E., *Accelerating the Co-Simulation Method for Fast Design of Transmit Array Coils: An Example Study on a Degenerate Birdcage Coil*, ISMRM, Paris, France, 2018
279. Sadeghi-Tarakameh, A., Torrado-Carvajal, A., Ariyurek, C., Atalar, E., Adriany, G.J., Lagore, R.L., Delabarre, L., Grant, A., Moortele, P.F.V.d., Ugurbil, K. and Eryaman, Y., *Optimizing the Topography of Transmit Coils for SAR Management*, ISMRM, Paris, France, 2018

278. Silemek, B., Acikel, V., Yilmaz, U. and Atalar, E., *Wireless MR-Compatibility Control of Active Implantable Medical Devices*, ISMRM, Paris, France, 2018
277. Ariyurek, C., Tasdelen, B., Barnhill, E., Ergun, A.S., Ider, Y.Z. and Atalar, E., *Usage of Octahedral Shear Strain Weights in the Inversion of Multifrequency MR Elastography*, ISMRM, Paris, France, 2018
276. Ashfaq, B.N., Zahra, F.T., Silemek, B., Yilmaz, U. and Atalar, E., *A Gate Modulated Digitally Controlled Modified Class-E Amplifier for On-Coil Applications in 1.5 T MRI*, ISMRM, Paris, France, 2018
275. Zahra, F.T., Ashfaq, B.N., Silemek, B., Yilmaz, U., Poni, R. and Atalar, E., *300 W Modified Class-E RF Amplifiers for 64 MHz Transmit Array System*, ISMRM, Paris, France, 2018
274. Ertan, K., Taraghinia, S. and Atalar, E., *Driving Mutually Coupled Coils in Gradient Array Systems in Magnetic Resonance Imaging*, ISMRM, Paris, France, 2018
273. Ertan, K., Taraghinia, S., Saritas, E.U. and Atalar, E., *Local Optimization of Diffusion Encoding Gradients Using a Z-Gradient Array for Echo Time Reduction in DWI*, ISMRM, Paris, France, 2018
272. Ozdemir, S. and Atalar, E., *Sifir Eko Zamanli Goruntuleme Icin Tam Cift Yonlu MRG Kullanimi*, TMRD, Ankara, Turkiye, 2017
271. Ozen, A.C., Korvink, J., Atalar, E. and Bock, M., *In vivo MRI with Concurrent Excitation and Acquisition using Dynamic Analog Cancellation with Real-time Feedback*, ISMRM, Honolulu, Hawaii, 2017
270. Sadeghi-Tarakameh, A., Kazemivalipour, E., Demir, T., Gundogdu, U. and Atalar, E., *Design of a Degenerate Birdcage Radiofrequency Transmit Array Coil for the Magnetic Resonance Imaging Using Equivalent Circuit Model*, ESMRMB, Barcelona, Spain, 2017
269. Silemek, B., Yilmaz, U. and Atalar, E., *Kateter Takibi Icin Gercek Zamanli ve Cok Kanalli Manyetik Rezonans Goruntuleme Sistemi*, TMRD, Ankara, Turkiye, 2017
268. Taraghinia, S., Ertan, K. and Atalar, E., *Minimum Current Ripple in the Gradient Array System by Applying Optimum-Phase Pulse-Width Modulation Pattern*, ISMRM, Honolulu, Hawaii, 2017
267. Taraghinia, S., Ertan, K., Yardim, A.B. and Atalar, E., *Efficient Ripple Current Reduction in Gradient Array System Using Optimized Phase Control Signals with One Stage LC Filter*, ESMRMB, Barcelona, Spain, 2017
266. Ariyurek, C., Ozdemir, S., Tasdelen, B., Ergun, A.S., Ider, Y.Z. and Atalar, E., *Beyin MR Elastografisinde Uyari Frekansi SecSecimi Doku Sertlik Haritasinin Gericatmasinda Etkisi*, TMRD, Ankara, Turkiye, 2017
265. Ariyurek, C., Ozdemir, S., Tasdelen, B., Ergun, A.S., Ider, Y.Z. and rg, , *Use of Shear Wave Mode Data in Elasticity Inversion in MR Elastography*, ESMRMB, Barcelona, Spain, 2017
264. Zahra, F.T., Silemek, B., Poni, R., Ashfaq, B.N. and Atalar, E., *A Highly Efficient 250 W Digitally Controlled Supply-Modulated Modified Class-E Amplifier for on-Coil Implementation in 1.5T MRI*, ESMRMB, Barcelona, Spain, 2017
263. Atalar, E., *Peripheral Nerve Stimulation, Implants & Devices: Safe Use & Considerations for MRI*, ISMRM, Honolulu, Hawaii, 2017
262. Ertan, K., Taraghinia, S., Takmaz, A., Dogan, S., Ozdemir, S. and Atalar, E., *Spatiotemporal Magnetic Field Monitoring with Hall Effect Sensors*, ISMRM, Honolulu, Hawaii, 2017
261. Ertan, K., Taraghinia, S., Sadeghi-Tarakameh, A. and Atalar, E., *Tek Bantli RF Dalga Ile Coklu Kesit Secimi*, TMRD, Ankara, Turkiye, 2017
260. Filci, F., Dogan, A., Cansiz, G., Sen, B., Acikel, V. and Atalar, E., *Prototype Hardware of FPGA Controlled Multi-Channel All-Digital RF Transmitter for Parallel Magnetic Resonance Imaging*, ISMRM, Honolulu, Hawaii, 2017
259. Filci, F.E., Dogan, A., Cansiz, G., Acikel, V., Sen, B. and Atalar, E., *Manyetik Rezonans Goruntuleme Icin Cok Kanali Tam Sayisal RF Verici Dizisi Tasarimi ve Prototip Donanim*, TMRD, Ankara, Turkiye, 2017
258. Ozen, A.C., Korvink, J., Atalar, E. and Bock, M., *In vivo Concurrent Excitation and Acquisition MRI with Self-referenced Active Decoupling*, ISMRM, Singapore, 2016
257. Poni, R., Silemek, B., Gundogdu, U., Demir, T., Ertan, N.K. and Atalar, E., *Modified Class E Amplifiers Used For Two Channel Digital RF Transmit Array System With Integrated Coil*, ISMRM, Singapore, 2016
256. Salim, M., Ozen, A.C., Bock, M. and Atalar, E., *Detection of MR Signal during RF excitation Using Full Duplex Radio System*, ISMRM, Singapore, 2016
255. Salim, M., Ozen, A.C., Bock, M. and Atalar, E., *Full-dublex MRI for zero TE imaging*, ESMRMB, Vienna, AT, 2016

254. Silemek, B., Algin, O., Oto, C. and Atalar, E., *Subacute In-vivo RF Heating of an Active Medical Implantable Device Under MRI Using Temperature Sensor Implant*, ISMRM, Singapore, 2016
253. Ariyurek, C., Ozdemir, S., Ergun, A.S., Ider, Y.Z. and Atalar, E., *Experimental Validation of High Shear Wave Displacement at Mode Frequencies in MR Elastography*, ISMRM, Singapore, 2016
252. Atalar, E., *Peripheral Nerve Stimulation, Implants & Devices: Safe Use & Considerations for MRI*, ISMRM, Singapore, 2016
251. Ertan, K., Taraghinia, S., Sadeghi-Tarakameh, A. and Atalar, E., *A Z-gradient array for spatially oscillating magnetic fields in multi-slice excitation*, ESMRMB, Vienna, AT, 2016
250. Ozen, A.C., Bock, M. and Atalar, E., *Active Decoupling of RF Coils: Application to 3D MRI with Concurrent Excitation and Acquisition*, ISMRM, Toronto, Canada, 2015
249. Ozen, A.C., Bock, M. and Atalar, E., *Active Decoupling of RF Coils Using a Transmit Array System*, ESMRMB, Edinburgh, UK, 2015
248. Poni, R., Demir, T. and Atalar, E., *A Digital Power Amplifier for 1.5 T*, ISMRM, Toronto, Canada, 2015
247. Silemek, B., Acikel, V. and Atalar, E., *Temperature Sensor Implant for Analysis of RF Safety of Active Implantable Medical Devices Under MRI*, ISMRM, Toronto, Canada, 2015
246. Taraghinia, S., Ertan, K. and Atalar, E., *Feasibility of Z Gradient Array For Variable Volume Of Interest*, ESMRMB, Edinburgh, UK, 2015
245. Ertan, K. and Atalar, E., *Simultaneously Driven Linear and Nonlinear Gradients as Independent kspace Variables for RF Excitation Experimental Validation*, ESMRMB, Edinburgh, UK, 2015
244. Acikel, V. and Atalar, E., *A Novel Method for MRI Safe Lead Design*, ISMRM, Milan, Italy, 2014
243. Ariyurek, C., Ider, Y.Z., Gurler, N., Ozdemir, S., Emek, A., Ergun, A.S. and Atalar, E., *Modes of Shear Waves in Brain MR Elastography*, ISMRM, Milan, Italy, 2014
242. Atalar, E., *Special Safety Requirements for EP Procedures*, ISMRM, Milan, Italy, 2014
241. Demir, T., Ali Ozen, E.K. and Atalar, E., *Cylindrical Encoding in MRI*, ISMRM, Milan, Italy, 2014
240. Ertan, K. and Atalar, E., *Simultaneous Use of Linear and Nonlinear Gradients as Independent K-Space Variables for RF Excitation*, ISMRM, Milan, Italy, 2014
239. Kopanoglu, E., Atalar, E. and Constable, R., *Reduced-FOV Imaging with Excitation Using Nonlinear Gradient Magnetic Fields (ENiGMA)*, ISMRM, Salt Lake City, Utah, 2013
238. Ozen, A. and Atalar, E., *Decoupling of Tx/Rx Coils Using a Tx-Array System: Application to UTE and CEA*, ISMRM, Salt Lake City, Utah, 2013
237. Acikel, V. and Atalar, E., *Circuit Model for Implant Electrode and Lead-Electrode Impedance Matching*, ISMRM, Salt Lake City, Utah, 2013
236. Acikel, V., Ulutan, O., Ozen, A., Akin, B., Eryaman, Y. and Atalar, E., *A Novel MRI Based Electrical Properties Measurement Technique*, ISMRM, Salt Lake City, Utah, 2013
235. Turk, E., Ider, Y., Ergun, A., Demir, T. and Atalar, E., *Shear Wave Imaging by Using B1 Gradients*, ISMRM, Salt Lake City, Utah, 2013
234. Turk, E., Ider, Y., Ergun, A. and Atalar, E., *Fourier Domain Approximation for Bloch Siegert Shift*, ISMRM, Salt Lake City, Utah, 2013
233. Kopanoglu, E., Gokhalk, Y., Yilmaz, U., Acikel, V. and Atalar, E., *Decreasing SAR of a multi-dimensional central brightening inhomogeneity correction pulse using nonlinear gradient fields and VERSE*, ISMRM, Melbourne, Australia, 2012
232. Kopanoglu, E., Yilmaz, U., Akin, B., Acikel, V. and Atalar, E., *Localizing the excitation to reduce scan time using nonlinear gradient fields*, ISMRM, Melbourne, Australia, 2012
231. Kopanoglu, E., Yilmaz, U., Akin, B., Acikel, V. and Atalar, E., *Manyetik rezonansla goruntulemede dogrusal olmayan gradyan manyetik alanlar kullanilarak goruntuleme suresinin dusurulmesi*, Turk Manyetik Rezonans Dernegi 17. Yillik Toplantisi, Istanbul, Turkiye, 2012
230. Kopanoglu, E., Yilmaz, U., Gokhalk, Y., Acikel, V. and Atalar, E., *Dogrusal olmayan gradyan manyetik alanlar kullanilarak cok boyutlu uyari sinyallerinin Ozgul Sogurum Hizinin dusurulmesi*, Turk Manyetik Rezonans Dernegi 17. Yillik Toplantisi, Istanbul, Turkiye, 2012

229. Mahcicek, I.D., Bayindir, H.O., Demir, T. and Atalar, E., *VERSE Optimized Multi-Channel Transmission*, ISMRM, Melbourne, Australia, 2012
228. Ozen, A.C., Ertan, N.K. and Atalar, E., *Detection of MR Signal during RF Excitation using a Transmit Array System*, ISMRM, Melbourne, Australia, 2012
227. Ozen, A. and Atalar, E., *Verici Dizisi Kullanilarak Manyetik Rezonans Sinyalinin RF Uyarimi Sirasinda Saptanmasi*, Turk Manyetik Rezonans Dernegi 17. Yillik Toplantisi, Istanbul, Turkiye, 2012
226. Acikel, V., Uslubas, A. and Atalar, E., *Effect of Implantable Pulse Generator (IPG) Cases on Implant Tip Heating*, ESMRMB, Lisbon, Portugal, 2012
225. Acikel, V. and Atalar, E., *Analysis of EMF Related Heating of Implant Lead Tip by Modified Transmission Line Theory(MoTLiM)*, EMF Health Risk Research: Lessons Learned and Recommendations for the Future, Ascona, Switzerland, 2012
224. Acikel, V., Uslubas, A. and Atalar, E., *Implant Darbe Uretgec Kiliflarinin MR Cekimi Sirasinda Olusan Isinma Uzerindeki Etkisi*, Turk Manyetik Rezonans Dernegi 17. Yillik Toplantisi, Istanbul, Turkiye, 2012
223. Turk, E.A., Ider, Y.Z. and Atalar, E., *Analysis of B1 mapping by Bloch Siegert Shift*, ISMRM, Melbourne, Australia, 2012
222. Turk, E.A., Ider, Y.Z. and Atalar, E., *Bloch-Siegert Faz Kaymasini Kullanan B1 Haritalama Tekniginin Analizi*, Turk Manyetik Rezonans Dernegi 17. Yillik Toplantisi, Istanbul, Turkiye, 2012
221. Yilmaz, U., Pan, L. and Atalar, E., *Interactive Real Time Inductively Coupled Catheter Coil Tracking Using a Transmit Array System*, ISMRM, Melbourne, Australia, 2012
220. Yilmaz, U., Pan, L. and Atalar, E., *Verici dizisi kullanilarak MRG'de interaktif es zamanli enduktif kuplajli radyo frekans sargi kateter takibi*, Turk Manyetik Rezonans Dernegi 17. Yillik Toplantisi, Istanbul, Turkiye, 2012
219. Demir, T., Turk, E.A. and Atalar, E., *Mode Matrix Transceiver Surface Coil*, ISMRM, Melbourne, Australia, 2012
218. Demir, T., Atalar, E. and A.Turk, E., *Mod-matrisi iletici-alici yuzeysel sargi tasarimi*, Turk Manyetik Rezonans Dernegi 17. Yillik Toplantisi, Istanbul, Turkiye, 2012
217. Kerse, C., Ilbey, E., Ilday, O.F. and Atalar, E., *MRG kilavuzlugunda atrial fibrilasyon ablasyonu icin radyofrekans benzeri lezyonlar olusturan lazer sistemi*, Turk Magnetic Rezonans Dernegi 16. Yillik Toplantisi, 2011
216. Kopanoglu, E., Akin, B., Erturk, V.B. and Atalar, E., *Dogrusal olmayan gradyanlar kullanarak ozgul sogurum hizinin dusurulmesi*, Turk Magnetic Rezonans Dernegi 16. Yillik Toplantisi, 2011
215. Kopanoglu, E., Akin, B., Erturk, V.B. and Atalar, E., *SAR Reduction using Non-Linear Gradients*, ISMRM, Quebec, CA, 2011
214. Kopanoglu, E., Erturk, V.B. and Atalar, E., *Reducing SAR using nonlinear gradient fields: B1 inhomogeneity correction with multi-dimensional excitation pulses*, ESMRMB, Leipzig, Germany, 2011
213. Mahcicek, D.I., Demir, T., Bayindir, H.O. and Atalar, E., *Cok Kanalli Iletim Sistemleri Icin VERSE Optimize Radio Frekans Dalgalari Ve Sekans Dizayni*, Turk Magnetic Rezonans Dernegi 16. Yillik Toplantisi, 2011
212. Ozen, A.C., Akin, B. and Atalar, E., *Fantomların Dielektrik Ozelliklerinin Belirlenmesi icin Pratik bir Olcum Teknigi ve Baglanti Duzenegi*, Turk Magnetic Rezonans Dernegi 16. Yillik Toplantisi, 2011
211. Acikel, V. and Atalar, E., *Degistirilmis Iletim Hatlari Modelinin (MoTLiM) Deneysel Olarak Dogrulanmasi*, Turk Magnetic Rezonans Dernegi 16. Yillik Toplantisi, 2011
210. Algin, O., Akin, B., Arslan, H. and Atalar, E., *Morphological Assessment of Patients with Obstructive Sleep Apnea*, ESMRMB, Leipzig, Germany, 2011
209. Turk, E.A., Bugdayci, E., Ider, Y.Z. and Atalar, E., *Demonstration of Nerve Stimulation due to Induced Current on an Implant Lead during MRI*, RSNA, 2011
208. Turk, E.A., Ider, Y.Z., Koymen, H., Ergun, A.S. and Atalar, E., *MR uyumlu Odaklanmis Ultrason Teshis ve Tedavi yonteminde Odak Bolgesinin Tespiti ile ilgili calismalar*, Turk Magnetic Rezonans Dernegi 16. Yillik Toplantisi, 2011
207. Celik, H., Mahcicek, D.I. and Atalar, E., *Tracking Rotational Orientation of Catheter Using Transmit Array System*, ISMRM, Quebec, CA, 2011
206. Demir, T., Yilmaz, O. and Atalar, E., *MRI Optik Sisteminde Dogrusallik Bozulmasi Telafisi ile Dinamik Calisma Alani Genisletilmesi*, Turk Magnetic Rezonans Dernegi 16. Yillik Toplantisi, 2011
205. Demir, T., DeLaBarre, L., Akin, B., Adriany, G., Ugurbil, K. and Atalar, E., *Optical Transmission System for High Field Systems*, ISMRM, Quebec, CA, 2011

204. Eryaman, Y. and Atalar, E., *Improving RF Safety in MRI by Modifying the Electric Field Distribution*, XXX URSI General Assembly of Scientific Semposium of International Union of Radio Science, 2011
203. Eryaman, Y., Hersek, S. and Atalar, E., *Manyetik Rezonans Goruntulemede Ters Kutuplu Uyarimin Implant Isinma Problemi Uzerindeki Etkisi*, Turk Magnetic Rezonans Dernegi 16. Yillik Toplantisi, 2011
202. Eryaman, Y., Akin, B., Oto, C., Algin, O. and Atalar, E., *Reduction of RF Heating of Metallic Devices by Using a Two-Channel Transmit Array System: Application to Arbitrary Lead Geometries*, ISMRM, Quebec, CA, 2011
201. Kerse, C., Oktem, B., Ilday, F.O. and Atalar, E., *Imitation of Radiofrequency ablation scars with laser system for MR guided ablation of Atrial Fibrillation*, ISMRM, Stockholm, Sweeden, 2010
200. Kopanoglu, E., Yilmaz, A.F., Demir, T., Erturk, V.B. and Atalar, E., *A New Class of Encoding Techniques using a Transmit Array: Illustration with Cylindrical Encoding*, ISMRM, Stockholm, Sweden, 2010
199. Acikel, V., Akin, B., Mahcicek, I.D. and Atalar, E., *Prediction of Implant Tip Heating Using Modified Transmission Line Method (MoTLiM) under MRI*, ISMRM, Stockholm, Sweeden, 2010
198. Turk, E.A., Kopanoglu, E., Eryaman, Y., Erturk, V.B. and Atalar, E., *Experimental and Theoretical Analysis of the Induced Voltage along Implant Leads due to Gradient Fields*, ISMRM, Stockholm, Sweden, 2010
197. Turk, E.A., Kopanoglu, E., Eryaman, Y., Erturk, V.B. and Atalar, E., *Gradyan sargilarin implant kablosu uzerinde indukledigi voltajin deneysel ve teorik analizi*, Turk Manyetik Rezonans Dernegi 15inci toplantisi, Antalya, Turkiye, 2010
196. Viskusenko, N.V., Kopanoglu, E., Jezioranski, J., Foltz, W., Algin, O. and Atalar, E., *Two Channel Interventional Cervix Coil for High Dose Rate Brachytherapy*, ISMRM, Stockholm, Sweeden, 2010
195. Viskusenko, N.V., Algin, O., Kopanoglu, E., Jezioranski, J., Foltz, W. and Atalar, M.M.v.E., *Yukse Doz Hizli Brakiterapi Icin Endoservikal Manyetik Rezonans Goruntuleme Probu*, Turk Manyetik Rezonans Dernegi 15inci toplantisi, Antalya, Turkiye, 2010
194. Celik, H., Mahcicek, I.D. and Atalar, E., *Catheter Tracking Using Transmit Array System*, ISMRM, Stockholm, Sweeden, 2010
193. Celik, H., Gulnerman, D.M., Akin, B. and Atalar, E., *Inductively Coupled Birdcage Coil*, ISMRM, Stockholm, Sweeden, 2010
192. Celik, H., Sengezer, N., Akin, B., Gulnerman, D.M., Insal, B.C., Kerse, C. and Atalar, E., *Safe Deep Brain Stimulator MR Imaging Experiments Using Fiber Optic Current Monitoring Feedback System*, ISMRM, Stockholm, Sweeden, 2010
191. Eryaman, Y., Acikel, V., Turk, E.A., Viskusenko, N.V. and Atalar, E., *Effect Of Linear Phase Electric Field Variation On Implant Lead Heating*, ISMRM, Stockholm Sweden, 2010
190. Eryaman, Y., Demir, T. and Atalar, E., *Reduction of RF Heating of Metallic Devices Using Transmit Array*, ISMRM, Stockholm, Sweden, 2010
189. Eryaman, Y., Algin, O. and Atalar, E., *Manyetik Rezonans Goruntulemede Radyo Frekans'a Bagli Metal Isinmalarinin Azaltilmasi*, Turk Manyetik Rezonans Dernegi 15inci toplantisi, Antalya, Turkiye, 2010
188. Kopanoglu, E., Erturk, V.B. and Atalar, E., *A Closed-Form Expression for Ultimate Intrinsic Signal-to-Noise Ratio in MRI*, ISMRM, Honolulu, Hawaii, 2009
187. Kopanoglu, E., Erturk, V.B. and Atalar, E., *A closed form expression for radial dependence of the ultimate intrinsic signal-to-noise ratio in MRI*, ESMRMB, Antalya, Turkiye, 2009
186. Acikel, V. and Atalar, E., *Modeling of RF Induced Implant Lead Current for MRI*, ISMRM, Honolulu, Hawaii, 2009
185. Acikel, V. and Atalar, E., *Modified transmission line model for calculating induced current on coated implant wires*, ESMRMB, Antalya, Turkiye, 2009
184. Akin, B., Eryaman, Y. and Atalar, E., *A method for phantom conductivity and permittivity measurements*, ESMRMB, Antalya, Turkiye, 2009
183. Atalar, E., *MR guided Interventions on Prostate*, ESMRMB, Antalya, Turkiye, 2009
182. Bayindir, H.O., Eryaman, Y., Tunc, C.A. and Atalar, E., *SAR Reduction in Parallel Transmission by Allowing Spatial Phase Variation*, ISMRM, Honolulu, Hawaii, 2009
181. Celik, H., Insal, B., Acikel, V., Akin, B., Olcum, S., Erturk, I.O. and Atalar, E., *Safe MRI Setup for Deep Brain Stimulator: In-vivo Experiment*, ISMRM, Honolulu, Hawaii, 2009

180. Celik, H., Insal, B., Acikel, V., Akin, B., Olcum, S., Erturk, O. and Atalar, E., *Safe MRI setup for deep brain stimulator: in vivo experiment*, ESMRMB, Antalya, Turkiye, 2009
179. Eryaman, Y., Celik, H., Akin, B. and Atalar, E., *Reduction of Implant RF Heating by Modification of Electric Field Distribution*, ISMRM, Honolulu, Hawaii, 2009
178. Eryaman, Y., Tunc, C.A., Moortele, P.F.v.d., Ugurbil, K. and Atalar, E., *Average SAR Constrained Local RF Shimming*, ISMRM, Honolulu, Hawaii, 2009
177. Eryaman, Y., Tunc, C.A. and Atalar, E., *Minimum SAR for RF Shimming by Allowing Spatial Phase Variation*, ISMRM, Honolulu, Hawaii, 2009
176. Eryaman, Y. and Atalar, E., *Optimum field calculations for reduction of implant RF heating*, ESMRMB, Antalya, ESMRMB, 2009
175. Kopanoglu, E., Acikel, V., Erturk, V.B. and Atalar, E., *Kafes Antenlerde Performansin Nihai Icel Sinyal Gurultu Orani Kullanarak Degerlendirilmesi*, 3uncu Turk Manyetik Rezonans Dernegi Kongresi, Ankara, Turkiye, 2008
174. Abaci, E., Kopanoglu, E., Erturk, V.B. and Atalar, E., *Simple Analytical Equation of the Induced E-Field*, ISMRM, 2008
173. Abaci, E., Kopanoglu, E., Erturk, V.B. and Atalar, E., *Sonsuz Uzunluktaki Gradyan Sargilarin Vucut Modelinin Icinde ve Disinda Olusan Manyetik ve Elektrik Alan Denklemlerinin Basitlestirilmesi*, 3uncu Turk Manyetik Rezonans Dernegi Kongresi, Ankara, Turkiye, 2008
172. Celik, H., Guttman, M.A., Kocaturk, O., Saikus, C., Ratnayak, K., Faranesh, A., Derbyshire, A., Lederman, R. and Atalar, E., *Reverse Polarization Method for Catheter Tracking: Phased Array Coil Studies and Real-Time TSENSE Implementations*, ISMRM, Toronto, CA, 2008
171. Eryaman, Y., Oner, Y. and Atalar, E., *Optimization of Internal MRI Coils Using Ultimate Intrinsic SNR*, ISMRM, Toronto, CA, 2008
170. Tasci, T.O., Vargel, I., Arat, A., Guzel, E., Korkusuz, P. and Atalar, E., *Novel Magnetic Fluid Hyperthermia System Leading to the Focused Heating of Tumors*, World Conference on Interventional Oncology and Society for Thermal Medicine Joint Annual Meeting, Washington, DC, 2007
169. Tasci, T.O., Vargel, I., Arat, A., Guzel, E., Korkusuz, P. and Atalar, E., *Gradient Coils for the Focused RF Ablation with Magnetic Fluids*, ISMRM, Berlin, Germany, 2007
168. Irak, H. and Atalar, E., *RF heating model of active implants during MRI examinations*, ISMRM, 2007
167. Karmarkar, P., Qian, D., Atalar, E., Barnett, B. and Arepally, A., *MRI-Guided Transvenous Pancreatic Injections*, ISMRM, Seattle, WA, 2006
166. Krieger, A., Fichtinger, G., Metzger, G., Atalar, E. and Whitcomb, L.L., *A Hybrid Method for 6-DOF Tracking of MRI-Compatible Robotic Interventional Devices*, IEEE International Conference on Robotics and Automation, Orlando, FL, 2006
165. Krieger, A., Iordachita, I., Metzger, G., Guion, P., Atalar, E., Fichtinger, G. and Whitcomb, L.L., *Accuracy of hybrid tracking for a novel MR-guided transrectal prostate interventional device*, iMRI, Leipzig, Germany, 2006
164. Sathyanarayana, S., Aksit, P., Arepally, A., Karmarkar, P., Solaiyappan, M. and Atalar, E., *Tracking Planar Orientations of Active Interventional Devices for Realtime Image Guided Procedures*, ISMRM, Seattle, WA, 2006
163. Akca, I., Tasci, T.O., Ferhanoglu, O., Bacanli, D., Yeung, C. and Atalar, E., *Measuring Local RF Heating in MRI: Simulating Perfusion in a Perfusionless Phantom*, ISMRM, 2006
162. Arepally, A., Karmarkar, P.J., Qian, D. and Atalar, E., *MRI-guided transvenous pancreatic injections*, iMRI, Leipzig, Germany, 2006
161. Arepally, A., Karmakar, P., Qian, D., Barnett, B., Lawler, L., Weiss, C. and Atalar, E., *Percutaneous MR Guided Creation of a Mesocaval Shunt*, iMRI, Leipzig, Germany, 2006
160. Celik, H., Uluturk, A., Eryaman, Y., Tali, T. and Atalar, E., *A Novel Catheter Tracking Method Using Reversed Polarization*, ISMRM, Seattle, WA, 2006
159. Celik, H., Quick, H.H. and Atalar, E., *Wireless active catheter tracking method using reversed polarization of phased array coils for MR-guided interventions*, iMRI, Leipzig, Germany, 2006
158. Celik, H., Quick, H.H., Zenge, M.O. and Atalar, E., *Wireless Active Catheter Tracking Method Using Reversed Polarization: Implementation of 12-Channels Phased Array Coil*, ESMRMB, Warsaw, Poland, 2006

157. El-Sharkawy, A., Sotiriadis, P., Bottomley, P. and Atalar, E., *Accurate Absolute Thermal Monitoring With RF Radiometry*, ISMRM, Seattle, WA, 2006
156. Karmarkar, P.V., Raval, A.N., Guttman, M.A., Ozturk, C., Xu, M., Schenke, W., Wright, V., McVeigh, E., Atalar, E. and Lederman, R.J., *MRI-Guided Percutaneous Chronic Total Occlusion Recanalization*, ISMRM, Miami, FL, 2005
155. Menard, C., Susil, R.C., Coleman, J., Grubb, R., Choyke, P., Guion, P., Krieger, A., Coleman, C., Atalar, E. and Camphausen, K., *Integrating Diagnostic And Interventional MRI For The Molecular Characterization Of Prostate Cancer*, ASCO, Orland, Florida, 2005
154. Qian, D., Karmarkar, P. and Atalar, E., *Loopless antenna with improved distal sensitivity and tapered whip insulation*, ISMRM, Miami, FL, 2005
153. Qiu, B., El-Sharkawy, A., Paliwal, V., Karmarkar, P., Gao, F., Atalar, E. and Yang, X., *Development of Intravascular MR-imaging/RF-Heating/Temperature-Monitoring System for Thermal Enhancement of Vascular Gene Therapy*, ISMRM, Miami, FL, 2005
152. Tasci, T.O. and Atalar, E., *Optimization of MRI Contrast Agents for Magnetic Fluid Hyperthermia Considering the Human Safety Limits*, ISMRM, Miami, FL, 2005
151. Tasci, O., Demirok, U.K., Atalar, E. and Suzer, S., *Determination of Equivalent Circuits of Surface Structures for XPS Analysis*, AVS, Boston, MA, 2005
150. Arepally, A., Karmarkar, P., Qian, D., Barnett, B., Lawler, L., Weiss, C. and Atalar, E., *MR Guided Transcaval Creation of Mesocaval Shunt*, ISMRM, Miami, FL, 2005
149. Arepally, A., Karmarkar, P.V., Weiss, C., Rodriguez, R. and Atalar, E., *Magnetic Resonance Image-Guided Transseptal Puncture in a Swine Heart*, ISMRM, Miami, FL, 2005
148. Celik, H., Eryaman, Y., Altintas, A., Erturk, V. and Atalar, E., *Microstrip Based MR Birdcage Coil for 1.5 T*, APS/URSI, Washington, DC, 2005
147. Celik, H. and Atalar, E., *A Novel Catheter Tracking Method Using Reversed Polarization*, ESMRMB, Basel, Switzerland, 2005
146. El-Sharkawy, A., Sotiriadis, P., Qiu, B. and Atalar, E., *Absolute Thermal Mapping Using the MR Scanner*, ISMRM, Miami, FL, 2005
145. Eryaman, Y., Celik, H., Altintas, A. and Atalar, E., *Novel Strip-Conductor Internal MRI Coils*, APS/URSI, Washington, DC, 2005
144. Grubb, R.I., Susil, R., Krieger, A., Guion, P., Metzger, G., Ullman, K., Smith, S., Camphausen, K., Singh, A., Linehen, W.M., Coleman, C.N., Atalar, E., Choyke, P., Menard, C. and Coleman, J.A., *Biological MRI-guided Transrectal Prostate Biopsy*, American Urological Association, San Antonio, Texas, 2005
143. Karmarkar, P., Raval, A.N., Silva, R.d., Ozturk, C., Aviles, R.J., Guttman, M., McVeigh, E.R., Atalar, E. and Lederman, R.J., *Percutaneous MRI Guided Mitral Annuloplasty: Preliminary Results*, ISMRM, Osaka, Japan, 2004
142. Menard, C., Susil, R.C., Choyke, P., Coleman, J., Grubb, R., Krieger, A., Gharib, A., Guion, P., Thomasson, D., Capala, J., Gupta, S., Fichtinger, G., Whitcomb, L., Coleman, C.N., Camphausen, K. and Atalar, E., *Integrating Diagnostic And Interventional Mri For The Molecular Characterization Of Prostate Cancer*, iMRI, Boston, MA, 2004
141. Metzger, G., Krieger, A., Guion, P., Ferhanoglu, O., Choyke, P., Menard, C. and Atalar, E., *Predicting true SAR limits for in vivo imaging in MR guided prostate procedures*, iMRI, Boston, MA, 2004
140. Qiu, B., Karmarkar, P., Brushett, C., Gao, F., Kon, R., Kar, S., Atalar, E. and Yang, X., *Development Of A Clinical-Sized, 0.014-Inch Magnetic Resonance Imaging-Guidewire*, ISMRM, Osaka, Japan, 2004
139. Qiu, B., El-Sharkawy, A., Paliwal, V., Karmarkar, P., Gao, F., Atalar, E. and Yang, X., *Simultaneous RF Heating and MR Thermal Mapping Using An Intravascular MR-Imaging/RF-Heating System*, iMRI, Boston, MA, 2004
138. Raval, A.N., Karmarkar, P.V., Atalar, E., Guttman, M.A., McVeigh, E.R. and Lederman, R.J., *Interactive Real-Time Magnetic Resonance-Guided Atrial Septal Puncture and Altral Balloon Septostomy are Feasible in Swine*, AHA Scientific Sessions, New Orleans, LA, 2004
137. A. Krieger, R.C.S., *A Novel MRI Compatible Manipulator for Prostate Interventions*, ISMRM, Osaka, Japan, 2004

136. Susil, R.C., Menard, C., Krieger, A., Coleman, J.A., Camphausen, K., Choyke, P., Ullman, K., Smith, S., Fichtinger, G., Whitcomb, L.L., Coleman, C.N. and Atalar, E., *Transrectal Prostate Biopsy and Fiducial Marker Placement in a Standard 1.5T MRI Scanner*, ISMRM, Osaka, Japan, 2004
135. Susil, R.C., Chowning, S.L., Krieger, A., Fichtinger, G., Whitcomb, L.L. and Atalar, E., *MRI Guidance and Monitoring of Injected Therapeutic Agents*, ISMRM, Osaka, Japan, 2004
134. Susil, R.C., Coleman, J.A., Krieger, A., Camphausen, K., Coleman, C.N., Linehan, W.M., Fichtinger, G., Whitcomb, L.L., Atalar, E. and Menard, C., *Technique and accuracy of a clinical system for transrectal intraprostatic needle placement in a standard 1.5T MRI scanner*, Journal of Urology, 2004
133. Arepally, A., Weiss, C.R., Karmarkar, P. and Atalar, E., *MR Guided transseptal punctures in a swine heart*, iMRI, Boston, MA, 2004
132. Arepally, A., Weiss, C.R., P. Karmarkar, and Atalar, E., *MR Guided punctures of the superior mesenteric vein*, iMRI, Boston, MA, 2004
131. Weiss, C.R., Karmarkar, P., Arepally, A. and Atalar, E., *Real Time MR Guided Meso-Caval Puncture: Towards the Development of a Percutaneous MR Guided Mesocaval Shunt*, ISMRM, Osaka, Japan, 2004
130. Weiss, C., Arepally, A., Karmarkar, P. and Atalar, E., *Real-time MR-guided Meso-Caval Puncture: Towards the Development of a Percutaneous MR-guided Mesocaval Shunt*, RSNA, Chicago, IL, 2004
129. Bulte, J., Kostura, L., Mackay, A., Karmarkar, P., Izbudak, I., Atalar, E., Fritzges, D., Rodriguez, R., Young, R.G., Marcelino, M., Pittenger, M. and Kraitchman, D., *Feridex-Labeled Mesenchymal Stem Cells: Cellular Differentiation and MR Assessment in a Canine Myocardial Infarction Model*, International Contrast Agent Symposium, also published as extended abstract Academic Radiology, San Diego, CA, 2004
128. Coleman, J.A., Susil, R.C., Krieger, A., Choyke, P.L., Wise, B., Thomasson, D., Gharib, A., Whitcomb, L.L., Fichtinger, G., Linehan, W.M., Coleman, C.N., Camphausen, K., Atalar, E. and Menard, C., *MRI guided prostate biopsy with biological image acquisition and targeting in a standard 1.5T scanner*, Journal of Urology, 2004
127. El-Sharkawy, A. and Atalar, E., *Measurement of Field Variations Associated With Magnet Temperature Changes*, ISMRM, Osaka, Japan, 2004
126. El-Sharkawy, A., Krieger, A., Guion, P., Metzger, G., Li, G., Choyke, P., Whitcomb, L., Menard, C. and Atalar, E., *A System for Prostate Image Guided Interventions in a 3T MRI Scanner*, iMRI, Boston, MA, 2004
125. Ferhanoglu, O., Tasci, T.O., M, A.M., I-Sharkawy, , Altintas, A. and E. Atalar, , *Investigating RF heating of pacemakers in MRI using a safety index*, ISMRM, Osaka, Japan, 2004
124. Karmarkar, P.V., Atalar, E., Hofmann, L. and Kraitchman, D.L., *An Active MRI Intramyocardial Injection Catheter*, ISMRM, Toronto, ON, 2003
123. Kraitchman, D., Karmakar, P., Atalar, E., Hofmann, L., Heldman, A., Pittenger, M. and Bulte, J., *MR-MSCs in the heart*, ISMRM, Toronto, ON, 2003
122. Memis, O., Aytur, O. and Atalar, E., *Optical transmission of MRI signals: A safe alternative for internal MRI probes*, ESMRMB 20th Annual Scientific Meeting, Rotterdam, The Netherlands, 2003
121. Qui, B., Karmarkar, P. and Yang, E.A.a.X., *MRIG as the heating source in Vascular Gene Therapy*, ISMRM, Toronto, ON, 2003
120. Raman, V.K., Karmarkar, P., ick, , Guttman, M., eters, , hompson, , essanha, , eSilva, , Atalar, E., McVeigh, E.R. and Lederman, R., *Magnetic Resonance Fluoroscopy-Guided Endovascular Repair of Abdominal Aortic Aneurysm in Swine*, AHA, 2003
119. Shah, V.C., El-Sharkawy, A., Du, X., Yang, X. and Atalar, E., *MR signal for one pixel Temperature in degree-C SSSP based MR Thermometry*, ISMRM, Toronto, ON, 2003
118. Susil, R.C., Camphausen, K., Atalar, E., McVeigh, E.R., Ning, H., Miller, R.W., Coleman, C.N. and Menard, C., *MRI Guidance and Planning for High-Dose-Rate Brachytherapy (HDRT) of the Prostate*, ISMRM, Toronto, ON, 2003
117. Susil, R.C., Krieger, A., Derbyshire, J.A., Whitcomb, L.L., Fichtinger, G. and Atalar, E., *MRI Guided Intraprostatic Therapeutic Injections in a Closed, 1.5T Scanner*, ISMRM, Toronto, ON, 2003

116. Susil, R., Camphausen, K., Choyke, P., Gustafson, G., Miller, R.W., Ning, H., Ullman, K., Atalar, N.C.n.E., Coleman, C.N. and Menard, C., *A System For Transperineal Prostate Biopsy And Hdr Brachytherapy Under 1.5 T MRI Guidance: Techniques And Clinical Experience*, RSNA, Chicago, IL, 2003
115. Susil, R., Krieger, A., Menard, C., Coleman, J., Camphausen, K., Choyke, P., Coleman, N.C., Whitcomb, L.L., Fichtinger, G. and Atalar, E., *An MRI System For Guidance And Monitoring Of Transrectal Prostate Interventions In A 1.5 T Scanner*, RSNA, Chicago, IL, 2003
114. Yung, A.C. and Atalar, E., *Spoiled Gradient Echo (SPGR) Ghost Artifacts in Endoluminal MRI*, ISMRM, Toronto, ON, 2003
113. Brushett, C., Qiu, B., Kraitchman, D., Wasserman, B., Hoffman, L., Atalar, E. and Yang, X., *Comparison of 4 MR Contrast Agents for Characterization of Atherosclerotic Plaque: Preliminary Results*, ISMRM, Toronto, ON, 2003
112. El-Sharkawy, A. and Atalar, E., *A Radiometric Approach to Temperature Monitoring in the MR Scanner: A Feasibility Study*, ISMRM, Toronto, ON, 2003
111. Eryaman, Y., Celik, H., Abdel-Hafez, I.A. and Atalar, E., *Evaluation of Internal MRI coils using Ultimate Intrinsic SNR*, ISMRM, Toronto, ON, 2003
110. Kraitchman, D.L., Heldman, A.W., Atalar, E., Martin, B.J., Pittenger, M.F., Hare, J. and J. W. M. Bulte, , *in Vivo MR Imaging of Mesenchymal Stem Cells in Myocardial Infarction*, AHA, 2002
109. Krieger, A., Susil, R.C., Tanacs, A., Fichtinger, G., Whitcomb, L.L. and Atalar, E., *A MRI Compatible Device for MRI Guided Transrectal Prostate Biopsy*, ISMRM Book of Abstracts, Honolulu, HI, 2002
108. Osman, N.F., Garot, J., Sampath, S., Gerber, B., Wu, K., Atalar, E., Lima, J. and Prince, J.L., *Direct Imaging of Left Ventricular Regional Dysfunction Using SENC MRI*, Journal of Cardiovascular Magnetic Resonance, 2002
107. Qiu, B., Yeung, C.J., Du, X., Atalar, E. and Yang, X., *Using an MR Imaging-Guidewire as an Intravascular Heating Source: Toward Thermal Enhancement of Vascular Gene Transfection under MR Guidance*, ISMRM, Book of abstracts, Honolulu, HI, 2002
106. Qui, B., Yeung, C.J., Du, X., Atalar, E. and Yang, X., *Development of an Intravascular Heating Source Using An MR Imaging-Guidewire: Toward Thermal Enhancement of Endovascular Gene Transfection*, RSNA, Chicago, IL, 2002
105. Susil, R.C., Yeung, C.J. and Atalar, E., *Design Techniques for Loopless MRI Receivers*, SMRM, Book of abstracts, Honolulu, HI, 2002
104. Susil, R.C., Derbyshire, J.A., Kreiger, A., Tanacs, A., Solaiyappan, M., Whitcomb, L.L., McVeigh, E., Fichtinger, G. and Atalar, E., *A Realtime MRI System for Guidance and Monitoring of Prostate Biopsy*, ISMRM, Book of abstracts, Honolulu, HI, 2002
103. Susil, R., Krieger, A., Derbyshire, J., Tanacs, A., McVeigh, E., Whitcomb, L., Fichtinger, G. and Atalar, E., *A System for Guidance and Monitoring of Transrectal Prostate Biopsy in a 1.5 T Closed MR Scanner*, Eur. Radiology, iMRI Workshop, Leipzig, Germany, 2002
102. Yang, X., Atalar, E., Serfaty, J.M., Wang, D. and Kumar, A., *In vivo MR Imaging of Catheter-Based Vascular Gene Delivery*, Journal of Cardiovascular Magnetic Resonance, 2002
101. Yang, X., Atalar, E., Serfaty, J.M., Wang, D. and Kumar, A., *In Vivo MR Imaging of Catheter-Based Vascular Gene Delivery*, Society of Cardiovascular and Interventional Radiology-Scientific Meeting, Baltimore, MD, 2002
100. Yeung, C.J., Susil, R.C. and Atalar, E., *Accurately Modeling RF Heating at the Tips of Wires in Interventional MRI*, ISMRM, Book of abstracts, Honolulu, HI, 2002
99. Yung, A.C., Oner, A.Y., Serfaty, J.M., Feneley, M., Yang, X. and Atalar, E., *High Resolution Imaging of Canine Prostate using Endorectal/Endourethral Phased Array Coils*, ISMRM, Book of Abstracts, Honolulu, HI, 2002
98. Kumar, A. and Atalar, E., *MR Imaging with a Biopsy Needle*, Proceeding of the Annual ISMRM Meeting, Glasgow, Scotland, 2001
97. Osman, N.F., Sampath, S., Atalar, E. and Prince, J.L., *Imaging Longitudinal Cardiac Strain on Short-Axis Imaging using 3D-HARP*, Proceeding of the Annual ISMRM Meeting, Glasgow, Scotland, 2001
96. Osman, N.F., Sampath, S., Derbyshire, J.A., Atalar, E. and Prince, J.L., *Synthetic Tagged MR Images For Real-time HARP Imaging*, Proceeding of the Annual ISMRM Meeting, Glasgow, Scotland, 2001

95. Sampath, S., Derbyshire, J.A., Osman, N.F., Atalar, E. and Prince, J.L., *Real-time Imaging of Cardiac Strain using Ultra-Fast HARP Sequence*, Proceeding of the Annual ISMRM Meeting, Glasgow, Scotland, 2001
94. Serfaty, J.M., Yang, X., Kumar, A. and Atalar, E., *Coronary Artery Intervention Guided with Magnetic Resonance Imaging*, Proceeding of the Annual ISMRM Meeting, Glasgow, Scotland, 2001
93. Susil, R.C., Yeung, C.J., Lardo, A.C. and Atalar, E., *A Combined Electrophysiology/MR Antenna Catheter*, Proceeding of the Annual ISMRM Meeting, Glasgow, Scotland, 2001
92. Susil, R.C., Yeung, C.J. and Atalar, E., *Design Principles for Insulated Internal Loopless MRI receivers*, IEEE EMBS, Istanbul, Turkiye, 2001
91. Susil, R.C., Yeung, C.J., Halperin, H.R., Lardo, A.C. and Atalar, E., *A trackable electrophysiology catheter for use under MRI*, AHA, Anaheim, CA, 2001
90. Yang, X., Atalar, E., Li, D., Serfaty, J.M., Wang, D. and Cheng, L., *Intravascular MR Imaging of Vascular Gene Delivery: A Feasibility Study*, Proceeding of the Annual ISMRM Meeting, Glasgow, Scotland, 2001
89. Yang, X., Atalar, E., Li, D., Serfaty, J.M., Wang, D., Kumar, A. and Cheng, L., *In Vivo Magnetic Resonance Imaging of Catheter-Based Vascular Gene Transfer*, IEEE EMBS, Istanbul, Turkiye, 2001
88. Yang, X., Atalar, E., Li, D., Serfaty, J.M., Wang, D., Kumar, A. and Cheng, L., *In vivo MR imaging of catheter-based vascular gene transfer*, AHA, Anaheim, CA, 2001
87. Yang, X., Atalar, E., Li, D., Serfaty, J.M., Wang, D., Kumar, A. and Cheng, L., *In vivo MR imaging of catheter-based vascular gene transfer*, RSNA, Chicago, IL, 2001
86. Yeung, C.J. and Atalar, E., *Estimating In Vivo Temperature Changes Due to Localized RF Heating from Interventional Devices*, Proceeding of the Annual ISMRM Meeting, Glasgow, Scotland, 2001
85. Yeung, C.J., Susil, R.C. and Atalar, E., *RF Safety of Wires in Interventional MRI: Using a Safety Index*, IEEE EMBS, Istanbul, Turkiye, 2001
84. Yung, A.C., Oner, Y.A., Serfaty, J.M., Feloney, M., Yang, X. and Atalar, E., *Phased Array Coils for High Resolution Prostate MR Imaging*, IEEE EMBS, Istanbul, Turkiye, 2001
83. Lardo, A.C., McVeigh, E.R., Halperin, H.H. and Atalar, E., *A Loopless Helical Intravascular MR imaging antenna*, ISMRM, Denver, CO, 2000
82. Lardo, A.C., Yang, X., Serfaty, J.M., Halperin, H.R. and Atalar, E., *Branch Pulmonary Artery Balloon Angioplasty and Stent Deployment Guided by Real-time Magnetic Resonance Imaging*, Circulation, 2000
81. Quick, H.H., Pannu, H.K., Genadry, R. and Atalar, E., *Endorethral MRI*, ISMRM, Denver, CO, 2000
80. Quick, H.H., Pannu, H.K., Genadry, R. and Atalar, E., *Endorethral MRI*, Interventional MRI Workshop, Leipzig, Germany, 2000
79. Serfaty, J., Yang, X., Quick, H.H., Aksit, P., Yeung, C., Karmarkar, P. and Atalar, E., *Simultaneous visualization of Active Catheters, Guidewires, and Roadmaps*, Interventional MRI Workshop, Leipzig, Germany, 2000
78. Serfaty, J.M., Atalar, E., Declerck, J., Karmarkar, P., Quick, H.H., Shunk, K.A., Heldman, A.W. and Yang, X., *Real-time projection MR Angiography with intra-arterial injections of Gadolinium*, ISMRM, Denver, CO, 2000
77. Serfaty, J., Yang, X., Quick, H., Aksit, P. and Atalar, E., *MR-guided coronary artery Intervention*, Circulation, 2000
76. Serfaty, J.M., Yang, X., Aksit, P., Solaiyappan, M. and Atalar, E., *Toward MR-guided coronary intervention*, Radiology, Chicago, IL, 2000
75. Serfaty, J.M., Yang, X., Aksit, P., Solaiyappan, M. and Atalar, E., *MR-guided vascular interventions*, Radiology, Chicago, IL, 2000
74. Solaiyappan, M., Lee, J. and Atalar, E., *Intensity Correction in Intravascular MRI using Projection Images*, ISMRM, Denver, CO, 2000
73. Aksit, P., Derbyshire, J.A. and Atalar, E., *Multiple FOV Imaging for Real-time Catheter Tracking*, ISMRM, Denver, CO, 2000
72. Yang, X., Serfaty, J.M., Quick, H.H., Heldman, A.W., Shunk, K.A., Karmarkar, P. and Atalar, E., *Intracoronary high-resolution MR imaging using a loopless antenna: an initial in vivo study*, ISMRM, Denver, CO, 2000
71. Yang, X., Serfaty, J.M., Quick, H.H., Heldmann, A.W., Shunk, K.A., Karmakar, P. and Atalar, E., *Intracoronary high-resolution MR imaging using a loopless antenna: an initial in vivo study*, Interventional MRI Workshop, Leipzig, Germany, 2000

70. Yang, X., Serfaty, J.M., Quick, H.H., Heldman, A.W. and Atalar, E., *Intracoronary high-resolution MR imaging using a 0.032 MRI-guidewire: an in vivo feasibility study*, Radiology, Chicago, IL, 2000
69. Yeung, C. and Atalar, E., *RF Transmit Power Limit for the Loopless Barewire Catheter Antenna*, ISMRM, Denver, CO, 2000
68. Bolster, B., Serfaty, J.M. and Atalar, E., *Measurement of Local Pulsewave Velocity in a Single Heartbeat Using Intravascular MR*, ISMRM, Denver, CO, 2000
67. Shunk, K.A., Lima, J.A.C., Rochitte, C. and Atalar, E., *Transesophageal MRI of Thoracic Aorta in Vivo in Patients with and without Atherosclerosis*, Seventh Scientific Meeting and Exhibition, International Society for Magnetic Resonance in Medicine, Philadelphia, PA, 1999
66. Shunk, K.A., Lima, J.A.C., Rochitte, C. and Atalar, E., *Transesophageal MRI of Thoracic Aorta in Vivo in Patients with and without Atherosclerosis*, American Heart Association, 1999
65. Solaiyappan, M., Lee, J. and Atalar, E., *Three dimensional visualization of intravascular MRI probes*, Seventh Scientific Meeting and Exhibition, International Society for Magnetic Resonance in Medicine, Philadelphia, PA, 1999
64. Yang, X. and Atalar, E., *On-line management of ische mic disease using intravascular MR-guided intervention combined with MR perfusion imaging and MR angiography*, Seventh Scientific Meeting and Exhibition, International Society for Magnetic Resonance in Medicine, Philadelphia, PA, 1999
63. Yang, X., Ji, H. and Atalar, E., *Local thermal safety in intravascular MR imaging: an in vivo evaluation*, Seventh Scientific Meeting and Exhibition, International Society for Magnetic Resonance in Medicine, Philadelphia, PA, 1999
62. Yang, X. and Atalar, E., *On-line management of ischemic disease using intravascular MR-guided intervention combined with MR perfusion imaging and MR angiography*, AHA, 1999
61. Atalar, E., *Safe Coaxial Cable*, 7th Annual Scientific Meeting of ISMRM, Philadelphia, PA, 1999
60. Atalar, E., *Split View Intravascular MR Fluoroscopy*, ISMRM, Philadelphia, PA, 1999
59. Lardo, A.C., McVeigh, E.R., Atalar, E., Jumrussirikul, P., Berger, R., Calkins, H. and Halperin, H.R., *Magnetic resonance guided radiofrequency ablation: visualization and temporal characterization of thermal lesions*, Circulation, 1998
58. Revelon, G., Artemov, D., Bhujwala, Z., Atalar, E., Brem, R., Zerhouni, E. and Bluemke, D.A., *In Vivo Microscopic MR Imaging of Breast Lesions*, ISMRM, Sidney Australia, 1998
57. Shunk, K.A., Lima, J.A.C., Heldman, A.W. and Atalar, E., *Transesophageal MRI of Thoracic Aorta using an Esophageal Loopless Antenna*, ISMRM, Sidney, Australia, 1998
56. Shunk, K.A., Lima, J.A.C., Heldman, A.W. and Atalar, E., *Aortic Imaging by Transesophageal MRI (TEMRI)*, Circulation, 1998
55. Artemov, D., Revelon, G., Atalar, E., Bluemke, D., Bhujwala, Z.M. and Zerhouni, E.A., *Switchable 12 Element Coil Array for MR Microimaging of Breast Lesions*, ISMRM, Sidney Australia, 1998
54. Yang, X., Bolster, B.D., Kraitchman, D.L. and Atalar, E., *Intravascular MR-Monitored Balloon Angioplasty Process: A Feasibility Study on Rabbit Models*, ISMRM, Sidney Australia, 1998
53. Yang, X., Kraitchman, D.L., Bolster, B.D. and Atalar, E., *Creation of A rabbit Model with Aortic Stenosis for In Vivo Studies of Intravascular MR-Guided Interventions*, ISMRM, Sidney Australia, 1998
52. Yang, X. and Atalar, E., *Intravascular MR-Guided Balloon Angioplasty Using An MR Imaging-Guidewire*, RSNA, Chicago, IL, 1998
51. Atalar, E., *Safe Coaxial Cables for MRI*, RSNA, Chicago, IL, 1998
50. Atalar, E., Kraitchman, D.L., Lesho, J., Carkhuff, B., Ocali, O., Solaiyappan, M. and Guttman, M.A., *Catheter-Tracking FOV MR Fluoroscopy*, ISMRM, Sidney Australia, 1998
49. Bolster, B.D. and Atalar, E., *Signal Localization Using Catheter Coils for Interventional MRI*, ISMRM, Sidney Australia, 1998
48. Halperin, H., Jumrussirikul, P., Laredo, A., McVeigh, E., Atalar, E., Lima, J.A.C., Calkins, H. and Berger, R., *Magnetic Resonance Guided Catheter Ablation*, 19th Annual Scientific Meeting of North America Society of Pacing and Electrophysiology, San Diego CA, 1998

47. McVeigh, E.R., Reeder, S.B. and Atalar, E., *An Ultra-Fast MR Tagging Pulse Sequence for Rapid Quantitative Stress Testing*, ISMRM, Vancouver, BC, Canada, 1997
46. Ocali, O. and Atalar, E., *Ultimate Intrinsic Signal-to-Noise Ratio in MRI*, ISMRM, Vancouver, BC, Canada, 1997
45. Ocali, O. and Atalar, E., *Signal-to-Noise Ratio Gain from Small, Deeply Implanted MR Imaging Coils*, Radiology, Chicago, IL, 1997
44. Atalar, E., Kraitchman, D.L., Ocali, O. and Guttman, M.A., *Narrow Catheter-tracking FOV MR Fluoroscopy using a Loopless Catheter Antenna*, Radiology, Chicago, IL, 1997
43. Bluemke, D.A., Zerhouni, E.A., Mosher, T. and Atalar, E., *CINE Segmented K-space Acquisition: Technique and Application to Evaluation of Aortic Disease*, American Roentgen Ray Society, Boston, MA, 1997
42. Bolster, B.D., Kraitchman, D.L., Ocali, O., Lesho, J.C., Carkhuff, G. and Atalar, E., *In-vivo Measurement of Pulsewave Velocity in the Rabbit Aorta Using Intravascular Magnetic Resonance*, ISMRM, Vancouver, BC, Canada, 1997
41. Constandinidis, C., Atalar, E. and McVeigh, E.R., *SNR Measurements in Magnitude Images from NMR Phase Arrays*, IEEE-EMBS, Chicago IL, 1997
40. Hees, P.S., Gottlieb, M.C., Atalar, E. and Shapiro, E.P., *Cardiac Tagging Employed in Small Animals Using Custom Gradient and RF Coils on a 1.5T Clinical System to Measure Left Ventricular Functional Parameters*, ISMRM, Vancouver, BC, Canada, 1997
39. Kelemen, M.D., Atalar, E., Correia, L.C.L., G. M. Hutchins, G.G., Zerhouni, E.A. and Lima, J.A.C., *Intravascular Magnetic Resonance Imaging Accurately Quantifies Human Aortic Atherosclerosis*, American College of Cardiology, 45th Annual Scientific Session, Orlando, FL, 1996
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., lag, , 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