

## AUDRIUS BRAZDEIKIS

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### Education:

1997	Doctor of Philosophy (Ph.D.)	The Royal Institute of Technology, Stockholm, Sweden
1994	Licentiate of Engineering	The Royal Institute of Technology, Stockholm, Sweden
1989	M.S Solid State Physics	Vilnius University, Vilnius, Lithuania

### Employment History:

2017-present	Research Professor of Physics, Department of Physics and TcSUH
2007-2017	Research Associate Professor of Physics, Department of Physics and TcSUH
2007-2010	Adjunct Associate Professor, University of Texas Health Science Center-Houston
2002-2003	Adjunct Research Scientist, Texas Heart Institute
1999-2007	Research Assistant Professor of Physics, Department of Physics and TcSUH
1997-1999	Postdoctoral Fellow, Department of Physics and TcSUH

### Honors and Awards:

- 2007 Innova Award for Best Technology
- 2010 Breast Cancer Innovator Award, Alliance for NanoHealth
- MacRobert Award finalist, The Royal Academy of Engineering (2015)

### Recent Research Highlights:

- Magnetic nanoparticle hyperthermia and imaging applications
- Magnetic sensor technologies for staging and treatment of cancers

### Lab Facilities/Expertise:

- Research Interests: Ultra-low field magnetic imaging techniques; Biomagnetic measurements of fetal neuromaturation; Biomedical applications of magnetic nanoparticles; Magnetic sensors for oncology applications; Biomedical signal acquisition and processing; Epitaxial oxide thin films (ferroelectrics, magnetoresistive oxides, superconductors) for device applications.

### Five Relevant Publications:

- M. Cho, J. Key, M. Ramirez, C. Stigliano, A. Cervadoro, A. Brazdeikis, V. Colvin, P. Civera, P. Decuzzi, "Assemblies of Iron Oxide Nanocubes for Enhanced Cancer Hyperthermia and Magnetic Resonance Imaging", *Nanomaterials* (Basel), 7(4), 72 (2017). [doi:10.3390/nano7040072](https://doi.org/10.3390/nano7040072)
- S. Rittikulsittichai, S. Sarangi, A. Kolhatkar, P. Vekilov, A. Brazdeikis, and T.R. Lee, "Multi-responsive Hybrid Particles: Thermo-, pH-, Photo-, and Magneto-responsive Magnetic Hydrogel Cores with Gold Nanorod Optical Triggers", *Nanoscale*, **8**, 11851-11861 (2016).
- A. Brazdeikis and J. Wosik, "Superconducting pick-up coils" in *Applied Superconductivity. Handbook on Devices and Applications*, ed. Paul Seidel, Wiley-VCH, pp 762-779 (2015).
- Cervadoro, M.J. Cho, J. Key, C. Cooper, C. Stigliano, A. Santosh, A. Brazdeikis, J. Leary, P. Decuzzi, "Synthesis of Multifunctional Magnetic NanoFlakes for Magnetic Resonance Imaging, Hyperthermia, and Targeting", *ACS Applied Materials & Interfaces* 6 (15), pp 12939-46 (2014).
- A. Cervadoro, C. Givero, R. Pande, S. Sarangi, L. Preziosi, J. Wosik, A. Brazdeikis, P. Decuzzi, "Design Maps for the Hyperthermic Treatment of Tumors with Superparamagnetic Nanoparticles", *PLoS ONE* 8(2): e57332. [doi:10.1371/journal.pone.0057332](https://doi.org/10.1371/journal.pone.0057332)