

# Publications & Preprints

In descending chronological order. Citation data from Google Scholar.

- 2022 Pauline Coralie Guillemain, [David Sinden](#), Yacine M'Rad, Michael Schwenke, Jennifer Le Guevelou, Johan Uiterwijk, Orane Lorton, Max Scheffler, Pierre-Alexandre Poletti, Jürgen Jenne, Thomas Zilli, and Rares Salomir, "A novel concept of transperineal focused ultrasound transducer for prostate cancer local deep hyperthermia treatments". *Cancers* 15, 163 —
- 2022 Christina A. Neizert, Hoang N. C. Do, Miriam Zibell, Christian Rieder, [David Sinden](#), Stefan M. Niehues, Janis L. Vahldiek, Kai S. Lehmann, and Franz G. M. Poch, "Three-dimensional assessment of vascular cooling effects on hepatic microwave ablation in a standardized ex vivo model", *Sci. Rep.* 12, 17061 *cites: 2*
- 2022 Karl Heimes, Marina Evers, Tim Gerrits, Sandeep Gyawali, [David Sinden](#), Tobias Preusser, and Lars Linsen, "Studying the effect of tissue properties on radiofrequency ablation by visual simulation ensemble analysis", in *Eurographics Workshop on Visual Computing for Biology and Medicine*, edited by Renata G. Raidou, Björn Sommer, Torsten W. Kuhlen, Michael Krone, Thomas Schultz, and Hsiang-Yun Wu (The Eurographics Association, 2022) ISBN 978-3-03868-177-9, ISSN 2070-5786 —
- 2021 Santeri Kaupinmäki, Ben Cox, Simon Arridge, Christian Baker, [David Sinden](#), and Bajram Zeqiri, "Pyroelectric ultrasound sensor model: directional response", *Meas. Sci. Technol.* 32, 035106 *cites: 4*
- 2021 Dongwoon Hyun, Alicen Wiacek, Sobhan Goudarzi, Sven Rothlübbers, Amir Asif, Klaus Eickel, Yonina C. Eldar, Jiaqi Huang, Massimo Mischi, Hassan Rivaz, [David Sinden](#), Ruud J. G. van Sloun, Hannah Strohm, and Muyinatu A. Lediju Bell, "Deep learning for ultrasound image formation: CUBDL evaluation framework and open datasets", *IEEE Trans. Ultrason. Ferroelectr. Freq. Control* 68, 3466--3483 *cites: 54*
- 2020 Sven Rothlübbers, Hannah Strohm, Klaus Eickel, Jürgen Jenne, Vincent Kuhlen, [David Sinden](#), and Matthias Günther, "Improving image quality of single plane wave ultrasound via deep learning based channel compounding", *2020 IEEE International Ultrasonics Symposium (IUS)* pp. 1--4 *cites: 22*
- 2020 Nadia A. S. Smith, [David Sinden](#), Spencer A. Thomas, Marina Romanchikova, Jessica E. Talbott, and Michael Adegun, "Building confidence in digital health through metrology", *Br. J. Radiol.* 93, 20190574 *cites: 12*
- 2017 Ki Joo Pahk, Pierre G  lat, [David Sinden](#), Dipok Kumar Dhar, and Nader Saffari, "Numerical and experimental study of mechanisms involved in boiling histotripsy", *Ultrasound Med. Biol.* 43, 2848--2861 *cites: 37*
- 2017 [David Sinden](#), Srinath Rajagopal, N. Christopher Chaggares, Guofeng Pang, and Oleg Ivanytskyy, "Reducing uncertainties for spatial averaging at high frequencies", *2017 IEEE International Ultrasonics Symposium (IUS)* (IEEE, 2017) pp. 1-4 *cites: 1*
- 2014 [David Sinden](#) and Gail ter Haar, "Dosimetry implications for correct ultrasound dose deposition: uncertainties in descriptors, planning and treatment delivery", *Trans. Cancer Res.* 3, 459--471 *cites: 10*
- 2012 [David Sinden](#), Eleanor Stride, and Nader Saffari, "Approximations for acoustically excited bubble cluster dynamics", *J. Phys.: Conf. Ser.*, Vol. 353 (IOP Publishing, 2012) p. 012008 *cites: 3*
- 2011 Gert H. M. van der Heijden and [David Sinden](#), "Localisation of a twisted conducting rod in a uniform magnetic field: the Hamiltonian-Hopf-Hopf bifurcation", in *Proc. 7<sup>th</sup> European Nonlinear Dynamics Conference (ENOC 2011)*, edited by D. Bernardini, G. Rega, and F. Romeo (European Mechanics Society, 2011) p. 4, ISBN 978-88-906234-2-4 *cites: 2*
- 2011 [David Sinden](#) and Gert H. M. van der Heijden, "The buckling of magneto-strictive Cosserat rods", in *Proc. 7<sup>th</sup> European Nonlinear Dynamics Conference (ENOC 2011)*, edited by D. Bernardini, G. Rega, and F. Romeo (European Mechanics Society, 2011) p. 4, ISBN 978-88-906234-2-4 —
- 2009 [David Sinden](#), Eleanor Stride, and Nader Saffari, "The effects of nonlinear wave propagation on the stability of inertial cavitation", *J. Phys.: Conf. Ser.*, Vol. 195 (IOP Publishing, 2009) p. 012008 *cites: 3*
- 2009 [David Sinden](#) and Gert H. M. van der Heijden, "Spatial chaos of an extensible conducting rod in a uniform magnetic field", *J. Phys. A: Math. Theor.* 42, 375207 *cites: 10*
- 2008 [David Sinden](#) and Gert H. M. van der Heijden, "Integrability of a conducting elastic rod in a magnetic field", *J. Phys. A: Math. Theor.* 41, 045207 *cites: 10*