

List of Publications

SAWtrain Network

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A list of the publications and contributions to conferences, workshops, and meetings of the SAWtrain project, ordered according to author and date.

Please note that the access to some of the links (i.e. those to <https://kohlenstoff.physik.uni-augsburg.de/...>) requires special permission.

Articles

- Arvidsson-Shakur, D R M et al. 2017. "Protocol for Fermionic Positive-Operator-Valued Measures." *Physical Review A* 96(5). https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/LePage_et_al_PhysRevA
- Caliendo, C, and M Hamidullah. 2016. "A Theoretical Study of Love Wave Sensors Based on ZnO-Glass Layered Structures for Application to Liquid Environment." *Biosensors MDPI*. https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Caliendo_BMDPIa_16.pdf
- Caliendo, C, M Hamidullah, and Farouk Laidoudi. 2017a. "Amorphous SiC/c-ZnO-Based Quasi-Lamb Mode Sensor for Liquid Environments." *Sciforum Electronic Conference Series* 3: 1. https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Caliendo_ECSA3_3767_16.pdf.
- . 2017b. "Love Wave Sensor Based on PMMA/ZnO/Glass Structure for Liquids Sensing." *Sciforum Electronic Conference Series* 3: 1. https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Caliendo_ECSA3_3768_16.pdf.
- Caliendo, C, M Hamidullah, and F Mattioli. 2016. "Finite Element Modeling and Synthesis of C-Axis Tilted AlN TFBAR for Liquid Sensing Applications." *Procedia Engineering* 168: 1032. https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Caliendo_EuroSensor16.pdf
- Fandan R., Pedros J. Schiefele J. Bosca A. Martinez J. Calle F. "Acoustically- driven surface and hyperbolic plasmon-phonon polaritons in graphene/h-BN heterostructures on

piezoelectric substrates". In: Journal of Physics D 51 (2018). doi: 10.1088/1361-6463/aab8bd.

Romero M. F., Bosca A. Pedros J. Martinez J. Fandan R. Palacios T. Calle F. "Impact of 2D-Graphene on SiN Passivated AlGaIn/GaN MIS-HEMTs Under Mist Exposure". In: IEEE Electron Device Letters 38 (2017). doi: 10.1109/LED.2017.2747500

Book Chapters

Caliendo, Cinzia, and Muhammad Hamidullah. 2016. "Advances in Sensors: Reviews." In *Advances in Sensors: Reviews*, ed. Sergey Y Yurish. International Frequency Sensor Association (IFSA) Publishing, S. L., 121.
http://www.sensorsportal.com/HTML/BOOKSTORE/Advance_in_Sensors_Vol_4.htm

Conference/Workshop Contributions

Andersson, Gustav. "Non-exponential decay of a giant artificial atom". In: Spice workshop: Quantum Acoustics meet Surface Acoustic Waves meets Solid State Qubits (Mainz, Germany, May 17-20, 2016). url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Andersson_SpiceWS_16.pdf.

Andersson, Gustav, B Suri, L Guo, T Aref, M K Ekström, A Ask, G Johansson, and P Delsing. "Quantum acoustics with qubits: the SAW giant atom". In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/ANDERSSON_SAWtrainSuS_17.pdf.

Biermann, K, A S Kuznetsov, P L J Helgers, A Tahraoui, and P V Santos. "Confined exciton-polaritons in a laterally structured (Al,Ga)As microcavity". In: 19th European Workshop on Molecular Beam Epitaxy (Korobitsyno, Russia, 19.-22.03.2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Biermann_EUROMBE_17.pdf.

Biermann, K, P L J Helgers, A S Kuznetsov, A Tahraoui, and P V Santos. "Exciton-polaritons in a laterally structured GaAs(001) based microcavity". In: 19th European Workshop on Molecular Beam Epitaxy (Korobitsyno, Russia, 19.-22.03.2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Biermann_CSW2017.pdf.



- Bilobran, A L O, M M de Lima, and P V Santos. “High-Q one- and two-dimensional phononic cavities”. In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/BILOBRAN_SAWtrainSuS_17.pdf.
- Boscá, Alberto, Jorge Pedrós, Antonio Ladrón de Guevara, Rajveer Fandan, Javier Martínez-Rodrigo, and Fernando Calle. “Optical quantification of strain and doping in graphene”. In: Workshop: Understanding Materials Structure and Performance by Raman Confocal Microscopy (Madrid, Spain, April 26-28, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Bosca_Workshop_Raman_Confocal_Microscopy_16.pdf.
- Bühler, Dominik D, A Crespo-Poveda, A Cantarero, and Jr. de Lima. “Advanced acoustically tuned optical modulators for integrated photonics”. In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Buehler_SAWtrainSuS_17.pdf.
- Edlbauer, H, S Takada, T Bautze, G Roussely, H Zahn, A D Wieck, T Meunier, and C Bäuerle. “Transfer on demand towards SAW-driven single shot quantum optics experiments at the single electron level”. In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/EDLBAUER_SAWtrainSuS_17.pdf.
- Fandan, R, J Pedrós, J Schiefele, A Boscá, A Ladrón de Guevara, M Sinusía, G Fuentes, J Martínez, Calle, and F. “Acoustically-driven surface phonon-plasmon polaritons in graphene/h-BN/AlN heterostructures”. In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/FANDAN_SAWtrainSuS_17.pdf.
- Hamidullah, Muhammad and Cinzia Caliendo. “Higher order quasi-longitudinal lamb wave for liquid sensing application”. In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Hamidullah_SAWtrainSuS_17.pdf.
- Helgers, Paul L J, Klaus Biermann, and Paulo V Santos. “Acoustic modulated single-photon sources”. In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url:



https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Helgers_SAWtrainSuS_17.pdf.

Kuznetsov, A, P Helgers, K Biermann, and P V Santos. “Confined exciton-polaritons in structured (Al,Ga)As micro-cavities”. In: German-Japanese meeting on the science of hybrid quantum systems (Berlin, Nov. 10-11 2016). 2016.

— “Optical confinement and conversion of exciton polaritons in a structured (Al,Ga)As microcavity”. In: Spring Meeting of the German Physical Society (DPG) (Dresden, Germany, Mar. 19-24, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Kuznetsov_DPG_17.pdf.

Lepage, H V, C J B Ford, and C H W Barnes. “GPU-accelerated simulations of SAW-driven single electron transport”. In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/LePage_SAWtrainSuS_17.pdf.

Liou, Yi-Ting. “Anisotropic Conductivity in Graphene induced by Surface Acoustic Waves”. In: Spice workshop: Quantum Acoustics meet Surface Acoustic Waves meets Solid State Qubits (Mainz, Germany, May 17-20, 2016). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Liou_SpiceWS_16.pdf.

Liou, Yi-Ting, Alberto Hernández-Mínguez, Jens Herfort, Joao Marcelo Lopes, Abbas Tahraoui, and Paulo V Santos. “Acoustoelectric transport in ZnO/MgO- covered graphene on silicon carbide”. In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/LIOU_SAWtrainSuS_17.pdf.

Liou, Yi-Ting, Alberto Hernández-Mínguez, Joao Marcelo Lopes, Abbas Tahraoui, and Paulo V Santos. “Modulation of Graphene Electronic Properties by High- frequency Surface Acoustic Waves”. In: 4th SPP 1459 Graphene Workshop (Chemnitz, Germany, Sep. 25-29, 2016). 2016. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/LIOU_SPP_1459_17.pdf.

Nysten, E D S and H Krenner. “Towards strong sound-matter interactions in hybrid quantum dot-surface acoustic wave resonators”. In: NIM Winterschool (Kirchberg, Austria, March 13-18, 2016). 2016. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Nysten_NIM_Winterschool_16.



- Nysten, E D S and H J Krenner. "Towards strong sound-matter interactions in hybrid quantum dot-surface acoustic wave resonators". In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/NYSTEN_SAWtrainSuS_17.pdf.
- Nysten, Emeline. "Towards strong sound-matter interactions in hybrid quantum dot-surface acoustic wave resonator". In: Spice workshop: Quantum Acoustics meet Surface Acoustic Waves meets Solid State Qubits (Mainz, Germany, May 17-20, 2016). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Nysten_SpiceWS_16.pdf.
- Rubino, A, T K Hsiao, Y Chung, A Nasir, H Hou, S K Son, J P Griffiths, I Farrer, D A Ritchie, and C J B Ford. "Development of a SAWdriven source of polarised single photons". In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/RUBINO_SAWtrainSuS_17.pdf.
- Ukropec, R, B Vratzov, P V Santos, and W G van der Wiel. "Ultrahigh-Frequency Silicon Acousto-Electronics". In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/UKROPEC_SAWtrainSuS_17.pdf.
- Ukropec, Robert. "High-frequency surface acoustic waves in silicon using nano- imprinting lithography". In: Spice workshop: Quantum Acoustics meet Surface Acoustic Waves meets Solid State Qubits (Mainz, Germany, May 17-20, 2016). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Ukropec_SpiceWS_16.pdf.
- Uzun, Y. "Ultrahigh-Frequency Acousto-Electronics - Poster presentation". In: FOM Physics Meeting 2017 (Veldhoven, The Netherlands, Jan. 17-18 2017). 2017.
- Villa, B, A J Bennett, D J P Ellis, J P Lee, J Skiba-Szymanska, T A Mitchell, J Griffiths, I Farrer, D A Ritchie, C J B Ford, and A J Shields¹. "Surface acoustic wave modulated single-photon generation from a quantum dot". In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Villa_SAWtrainSuS_17.pdf.
- Villa, B. "Surface acoustic wave modulated single photon source". In: Spice workshop: Quantum Acoustics meet Surface Acoustic Waves meets Solid State Qubits (Mainz,



Germany, May 17-20, 2016). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Villa_SpiceWS_16.pdf.

Wang, Sixuan, Rudolf Herrmann, Achim Wixforth, and Christoph Westerhausen. "SAW-assisted water splitting". In: SAWtrain Summer School: Physics and applications of GHz vibrations in semiconductors (Cargèse, France, Jul. 11-21, 2017). 2017. url: https://kohlenstoff.physik.uni-augsburg.de/owncloud/remote.php/webdav/2_communication/publications/publications/Wang_SAWtrainSuS_17.pdf.

