

List of Publications

SAWtrain Network

Status: December 5, 2018

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

The name of the Early Stage Researcher is highlighted in **bold**. Please refer to <http://www.sawtrain.eu/about-us/#fellows> for more information about each individual researcher.

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Articles

Arvidsson-Shukur, D. R. M., **Lepage, H. V.**, Owen, E. T., Ferrus, T., and Barnes, C. H. W. (2017). Protocol for fermionic positive-operator-valued measures. *Physical Review A*, 96(5). <https://doi.org/10.1103/PhysRevA.96.052305>

Caliendo, C., and **Hamidullah, M.** (2016). "A Theoretical Study of Love Wave Sensors Based on ZnO-Glass Layered Structures for Application to Liquid Environment." *Biosensors MDPI*. <https://doi.org/10.3390/bios6040059>

———. (2017). "Zero-group-velocity acoustic waveguides for high-frequency resonators". *Journal of Physics D: Applied Physics*, 50(47). <https://doi.org/10.1088/1361-6463/aa900f>

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- Edlbauer, H.**, Takada, S., Roussely, G., Yamamoto, M., Tarucha, S., Ludwig, A., Bäuerle, C. (2017). Non-universal transmission phase behaviour of a large quantum dot. *Nature Communications*, 8(1). <https://doi.org/10.1038/s41467-017-01685-z>
- . (2018). SAWtrain Research Highlight 2: “Non-universal transmission phase behaviour of a large quantum dot.” Retrieved from <https://www.sawtrain.eu/research-highlights/SAWtrain-Research-Highlight-2-Non-universal-transmission-phase-behaviour-of-a-large-quantum-dot.pdf>
- Fandan, R.**, Pedros, J., Schiefele, J., Bosca, A., Martinez, J., and 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). <https://doi.org/10.1088/1361-6463/aab8bd>.
- . (2018) SAWtrain Research Highlight 4: “Acoustically- driven surface and hyperbolic plasmon-phonon polaritons in graphene/h-BN heterostructures on piezoelectric substrates”.
- Hernández-Mínguez, A. , **Liou, Y.-T.** and Santos, P. V. “Interaction of surface acoustic waves with electronic excitations in graphene” *J. Phys. D: Appl. Phys.* 51, 383001 (2018) <https://doi.org/10.1088/1361-6463/aad593>
- Kuznetsov, A. S., **Helgers, P. L. J.**, Biermann, K., and Santos, P. V. (2018). Quantum confinement of exciton-polaritons in a structured (Al,Ga)As microcavity. *Physical Review B*, 97(19). <https://doi.org/10.1103/PhysRevB.97.195309>
- Lee, J. P., Wells, L. M., **Villa, B.**, Kalliakos, S., Stevenson, R. M., Ellis, D. J. P., Farrer, I., Ritchie, D. A., Bennett, A. J., and Shields, A. J. “*Controllable Photonic Time-Bin Qubits from a Quantum Dot*”. *Phys. Rev. X* 8, 021078 <https://doi.org/10.1103/PhysRevX.8.021078>
- . (2018) SAWtrain Research Highlight 7: “Controllable Photonic Time-Bin Qubits from a Quantum Dot” <https://www.sawtrain.eu/wp-content/uploads/2018/08/SAWtrain-Research-Highlight-7-Controllable-Photonic-Time-Bin-Qubits-from-a-Quantum-Dot-BrunoVilla.pdf>
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Nysten, E. D. S., Huo, Y. H., Yu, H., Song, G. F., Rastelli, A., and Krenner, H. J. (2017). Multi-harmonic quantum dot optomechanics in fused LiNbO₃–(Al)GaAs hybrids. *Journal of Physics D: Applied Physics*, 50(43), 43LT01. <https://doi.org/10.1088/1361-6463/aa861a>

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

Villa, B., Bennett, A. J., Ellis, D. J. P., Lee, J. P., Skiba-Szymanska, J., Mitchell, T. A., and Shields, A. J. (2017). Surface acoustic wave modulation of a coherently driven quantum dot in a pillar microcavity. *Applied Physics Letters*, 111(1). <https://doi.org/10.1063/1.4990966>

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Book Chapters

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Biermann, K, **Helgers, P. L. J.**, Kuznetsov, A. S., Santos, P. V. and Tahraoui, A. “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.

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Boscá, Alberto, Pedrós, Jorge, Ladrón de Guevara, Antonio, **Fandan, Rajveer**, Martínez-Rodrigo, Javier and Calle, Fernando. “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, Crespo-Poveda, A., Cantarero, A., and de Lima M. M. "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.

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- Uzun, Y.** “Ultrahigh-Frequency Acousto-Electronics - Poster presentation”. In: FOM Physics Meeting 2017 (Veldhoven, The Netherlands, Jan. 17-18 2017). 2017.
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