Forschungsfabrik Mikroelektronik Deutschland

Technology Platform »Sensor Systems«

Publications from the Technology Platform "Sensor Systems" of the Research Fab Microelectronics Germany (2022)

- Wamala I., Payne C.J., Saeed M.Y., Bautista-Salinas D., Van Story D., Thalhofer T., Staffa S.J., Ghelani S.J., del Nido P.J., Walsh C.J., Vasilyev N.V. (2022): Importance of Preserved Tricuspid Valve Function for Effective Soft Robotic Augmentation of the Right Ventricle in Cases of Elevated Pulmonary Artery Pressure. In: Cardiovascular Engineering and Technology, Vol. 13, Nr. 1, pp. 120-128 (Article). DOI:10.1007/s13239-021-00562-7. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85125553446&doi=10.1007%2fs13239-021-00562-7&partnerID=40&md5=3d2240d12cae64fc01c963b2a6e2de47

- Beale Christopher, Altana Antonio, Hamacher Stefanie, Yakushenko Alexey, Mayer Dirk, Wolfrum Bernhard, Offenhäusser Andreas (2022-10-15): Inkjet printed Ta2O5 on a flexible substrate for capacitive pH sensing at high ionic strength. In: Sensors and Actuators. B, Vol.369, Art.132250 (Article). DOI:10.1016/j.snb.2022.132250. Link: https://publica.fraunhofer.de/entities/publication/be4e76d2-178f-4777-ba04-ec8733351803/details

- Grünerbel Arthur, Grünerbel Lorenz (2022-09-30): Intelligent Prophylaxis of Diabetic Foot Ulcer. In: International Journal of Diabetes and Clinical Research, Vol.9, Nr.3, Art.159, 2 S. (Article). DOI:10.23937/2377-3634/1410159. Link: https://publica.fraunhofer.de/entities/publication/0a50c544-ae71-4952-b9dd-8c6749903942/details

- Skiba M., Stolwijk J.A., Wegener J. (2022): Label-free impedance measurements to unravel biomolecular interactions involved in G protein-coupled receptor signaling. In: Methods in Cell Biology, Vol. 169, pp. 221-236 (Book Chapter). DOI:10.1016/bs.mcb.2021.12.005. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85123869083&doi=10.1016%2fbs.mcb.2021.12.005&partnerID=40&md5=3d6ea4b0bb2d3f5bcdb5753dc1ba428d

- Steinmaßl M., Boudaden J., Edgue G., Freund L.J., Meyer S., Mordehay N., Soto M., Endres H.-E., Muth J., Prüfer D., Lerch W., Kutter C. (2022): Passivated Impedimetric Sensors for Immobilization-Free Pathogen Detection by Isothermal Amplification and Melt Curve Analysis. In: Biosensors, Vol. 12, Nr. 5, Art. 261 (Article). DOI:10.3390/bios12050261. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129439829&doi=10.3390%2fbios12050261&partnerID=40&md5=7508f3704d4ada39869488d153d20141

- Aichroth P., Antes C., Gembatzka P., Graf H., Johnson D.S., Jung M., Kämpfe T., Kleinberger T., Köllmer T., Kuhn T., Kutter C., Krüger J., Loroch D.M., Lukashevich H., Laleni N., Zhang L., Leugering J., Martín Fernández R., Mateu L., Mojumder S., Prautsch B., Pscheidl F., Roscher K., Schneickert S., Vanselow F., Wallbott P., Walter O., Weber N. (2022): SEC-Learn: Sensor Edge Cloud for Federated Learning: Invited Paper. In: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Vol. 13227 LNCS, pp. 432-448 (Conference Paper). DOI:10.1007/978-3-031-04580-6_29. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129819292&doi=10.1007%2f978-3-031-04580-6_29&partnerID=40&md5=a28793284ca4a0009aba17baa02acc6a

- Grunerbel L., Heinrich F., Diebolder D., Richter M. (2022): Wearable Decubitus Prophylaxis Tool Based on Machine Learning Methods. In: 2022 IEEE International Conference on Pervasive Computing and Communications Workshops and other Affiliated Events, PerCom Workshops 2022, pp. 730-734 (Conference Paper). DOI:10.1109/PerComWorkshops53856.2022.9767265. Link:

https://www.scopus.com/inward/record.uri?eid=2-s2.0-85130590533&doi=10.1109%2fPerCom-Workshops53856.2022.9767265&partnerID=40&md5=2ad0fabcdf1c2cea8d5af5c0f3846057

- Shaporin A., Weidlich S., Wunsch D., Hahn S., Forke R., Hiller K., Kuhn H. (2022): Design, Fabrication and Characterization of High-G Acceleration Sensors for Automotive Industry and Test Structures for the Process Characterization. In: 2022 23rd International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems, EuroSimE 2022 (Conference Paper). DOI:10.1109/EuroSimE54907.2022.9758898. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129561212&doi=10.1109%2fEuroSimE54907.2022.9758898&partnerID=40&md5=8d81b21e985c31cf3efe1405cb8f3bcd

- Marschalt C., Schröder D., Lange S., Hilleringmann U., Hedayat C., Kuhn H., Sievers D., Förstner J. (2022): Far-field Calculation from magnetic Huygens Box Data using the Boundary Element Method. In: 2022 Smart Systems Integration, SSI 2022 (Conference Paper). DOI:10.1109/SSI56489.2022.9901431. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140914988&doi=10.1109%2fSSI56489.2022.9901431&partnerID=40&md5=76bc74073143ce96fbc922a61d6dc000

- Pareek K.A., May D., Meszmer P., Ras M.A., Wunderle B. (2022): Finite Element Supported Data Augmentation for a Deep Learning Driven Intelligent Failure Analysis System Based on Infrared Thermography. In: 2022 23rd International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems, EuroSimE 2022 (Conference Paper). DOI:10.1109/EuroSimE54907.2022.9758902. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129511035&doi=10.1109%2fEuroSimE54907.2022.9758902&partnerID=40&md5=173909beb44bfe8d194a998be5b1797e

- Johrmann N., Stockel C., Wunderle B. (2022): High-Cycle Fatigue Testing of thin Metal Films on MEMS Cantilever. In: 2022 23rd International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems, EuroSimE 2022 (Conference Paper). DOI:10.1109/EuroSimE54907.2022.9758838. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129514268&doi=10.1109%2fEuroSimE54907.2022.9758838&partnerID=40&md5=1a16fd5fe0ce808e52cb30b45ac4ab7e

- Pregl S., Landgraf E., Koehler D., Bieselt S., Hengst C., Meinhold D., Dahl C., Shaporin A., Weidlich S., Wünsch D., Hahn S., Forke R., Hiller K., Kuhn H. (2022): HIGH-G ACCELERATION SENSORS FOR THE AUTOMOTIVE INDUSTRY. In: 2022 Smart Systems Integration, SSI 2022 (Conference Paper). DOI:10.1109/SSI56489.2022.9901438. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129548680&doi=10.1109%2fSSI56489.2022.9901438&partnerID=40&md5=df051e65e71c52685ea6adadbb5d461a

- Saeidi N., Selvam K., Tortato F., Wiemer M., Kuhn H. (2022): High Precision Liquid Level and Leak Detection Based on Capacitive Micromachined Ultrasound Transducer. In: 2022 Smart Systems Integration, SSI 2022 (Conference Paper). DOI:10.1109/SSI56489.2022.9901430. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140893028&doi=10.1109%2fSSI56489.2022.9901430&partnerID=40&md5=0c299d29d4ac032ba4f2ca05bd6f13fe

- Moeller H., Knoll H., Hille P., Dudek R., Rzepka S. (2022): Improving the production quality and robustness of a SO16 sensor package by a simulation based digital twin approach. In: 2022 IEEE 9th Electronics System-Integration Technology Conference, ESTC 2022 - Proceedings, pp. 203-209 (Conference Paper). DOI:10.1109/ESTC55720.2022.9939391. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143174404&doi=10.1109%2fESTC55720.2022.9939391&partnerID=40&md5=674beb9e55ffeeb1473d90e63ac0a4ba

Publications from the Technology Platform "Sensor Systems" of the Research Fab Microelectronics Germany (2022)

- May D., Heilmann J., Schulz M., Boschman E., Ras M.A., Wunderle B. (2022): Inline Tilt Measurements of Sintered Dies by Optical Line Scanning as Quality Assessment Tool for Smart Production. In: 2022 23rd International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems, EuroSimE 2022 (Conference Paper). DOI:10.1109/EuroSimE54907.2022.9758871. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129504866&doi=10.1109%2fEuroSimE54907.2022.9758871&partnerID=40&md5=a67f2c046e15880ee166f3d46efd96d0

- Schlagmann M., Selbmann F., Haubold M., Vobl M., Otto T. (2022): Miniaturized and Highly Integrated Humidity Sensor with Biocompatible Sensing Material for Smart Farming. In: 2022 Smart Systems Integration, SSI 2022 (Conference Paper). DOI:10.1109/SSI56489.2022.9901427. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140891125&doi=10.1109%2fSSI56489.2022.9901427&partnerID=40&md5=22c8b9e1920346c1b26ca027510bb7e2

- Kappert H., Schopferer S., Saeidi N., Döring R., Ziesche S., Olowinsky A., Naumann F., Jägle M., Spanier M., Grabmaier A. (2022): Sensor Systems for Extremely Harsh Environments. In: Journal of Microelectronics and Electronic Packaging, Vol. 19, Nr. 4, pp. 101-114 (Article). DOI:10.4071/001C.57715. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85147529042&doi=10.4071%2f001C.57715&partnerID=40&md5=f06a8293f5993e7b31b00fc3c0fa024c

- Forke R., Hiller K., Hahn S., Shaporin A., Weidlich S., Bulz D., Kuchler M., Reuter D., Helke C., Wunsch D., Gottfried K., Kuhn H. (2022): The BDRIE-HS* Technology Approach for Tiny Motion Detection with Improved Sensitivity and Noise Performance. In: INERTIAL 2022 - 2022 9th IEEE International Symposium on Inertial Sensors and Systems, Proceedings (Conference Paper). DOI:10.1109/INERTIAL53425.2022.9787762. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85133240813&doi=10.1109%2fINERTIAL53425.2022.9787762&partnerID=40&md5=d37d23a9fab042e3d9a77eb9b34ac1df

- Streit P., Forke R., Voigt S., Schwarz U., Ziegenhardt R., Weidlich S., Billep D., Gaitzsch M., Kuhn H. (2022): Vibration sensors with a high bandwidth and low SNR, enhanced with post processing gap reduction. In: 2022 23rd International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems, EuroSimE 2022 (Conference Paper). DOI:10.1109/EuroSimE54907.2022.9758891. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129481533&doi=10.1109%2fEuroSimE54907.2022.9758891&partnerID=40&md5=9259270f961f4ad3d19e38f30c1dd5b0

- Mostardinha H., Matos D., Carvalho N.B., Sampaio J., Pinto M., Gonçalves P., Sousa T., Kurpas P., Wuerfl J., Barnes A., Garat F., Poivey C. (2022): Pioneering evaluation of GaN transistors in geostationary satellites. In: Scientific Reports, Vol. 12, Nr.1, Art. 12886 (Article). DOI:10.1038/s41598-022-17179-y. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135127269&doi=10.1038%2fs41598-022-17179-y&partnerID=40&md5=925c7be988253a178c52707f2089a736

- Glaab J., Lobo-Ploch N., Cho H.K., Filler T., Gundlach H., Guttmann M., Hagedorn S., Lohan S.B., Mehnke F., Schleusener J., Sicher C., Sulmoni L., Wernicke T., Wittenbecher L., Woggon U., Zwicker P., Kramer A., Meinke M.C., Kneissl M., Weyers M., Winterwerber U., Einfeldt S. (2022): Author Correction: Skin tolerant inactivation of multiresistant pathogens using far-UVC LEDs (Scientific Reports, (2021), 11, 1, (14647), 10.1038/s41598-021-94070-2). In: Scientific Reports, Vol. 12, Nr.1, Art. 7702 (Erratum). DOI:10.1038/s41598-022-11796-3. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129805190&doi=10.1038%2fs41598-022-11796-3&partnerID=40&md5=29469859428bf22819b17c997b2fcfbe

- INNOVENT e. V. Technologienentwicklung (2022): Detecting nano-fluorescence signals [Nano-Fluoreszenz-Signale detektieren]. In: JOT, Journal fuer Oberflaechentechnik, Vol. 62, Nr.9, pp. 24-

25 (Note). DOI:10.1007/s35144-022-2205-y. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137977617&doi=10.1007%2fs35144-022-2205-y&partnerID=40&md5=20885e4538effe66deb625a59e7c3315

- Maiwald M., Sowoidnich K., Sumpf B. (2022): Portable shifted excitation Raman difference spectroscopy for on-site soil analysis. In: Journal of Raman Spectroscopy, Vol. 53, Nr.9, pp. 1560-1570 (Article). DOI:10.1002/jrs.6400. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85131817823&doi=10.1002%2fjrs.6400&partnerID=40&md5=5f3a81f3473bf9e9f44c031119d4621d

- Wiegand B., Leykauf B., Jördens R., Krutzik M. (2022): Linien: A versatile, user-friendly, open-source FPGA-based tool for frequency stabilization and spectroscopy parameter optimization. In: Review of Scientific Instruments, Vol. 93, Nr.6, Art. 063001 (Article). DOI:10.1063/5.0090384. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85133716353&doi=10.1063%2f5.0090384&partnerID=40&md5=675456f6c05a643f1a11f20a5e7908f5

- Wu S., Guttmann M., Lobo-Ploch N., Gindele F., Susilo N., Knauer A., Kolbe T., Raß J., Hagedorn S., Cho H.K., Hilbrich K., Feneberg M., Goldhahn R., Einfeldt S., Wernicke T., Weyers M., Kneissl M. (2022): Enhanced light extraction efficiency of UV LEDs by encapsulation with UV-transparent silicone resin. In: Semiconductor Science and Technology, Vol. 37, Nr.6, Art. 065019 (Article). DOI:10.1088/1361-6641/ac6823. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85130140951&doi=10.1088%2f1361-6641%2fac6823&partnerID=40&md5=0fd4927c6f678f06c83877c6fcfbfbdb

- Sowoidnich K., Vogel S., Maiwald M., Sumpf B. (2022): Determination of Soil Constituents Using Shifted Excitation Raman Difference Spectroscopy. In: Applied Spectroscopy, Vol. 76, Nr.6, pp. 712-722 (Article). DOI:10.1177/00037028211064907. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85125066619&doi=10.1177%2f00037028211064907&partnerID=40&md5=b6083e4b06727f1a86e3a9369462e507

- Nkebiwe P.M., Sowoidnich K., Maiwald M., Sumpf B., Hartmann T.E., Wanke D., Müller T. (2022): Detection of calcium phosphate species in soil by confocal μ-Raman spectroscopy#. In: Journal of Plant Nutrition and Soil Science, Vol. 185, Nr.2, pp. 221-231 (Article). DOI:10.1002/jpln.202100233. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85122896478&doi=10.1002%2fjpln.202100233&partnerID=40&md5=bd5079ce72f14cf550d735b282595bcb

- Maiwald M., Sowoidnich K., Sumpf B. (2022): On-site shifted excitation Raman difference spectroscopy for soil investigations. In: Progress in Biomedical Optics and Imaging - Proceedings of SPIE, Vol. 11978, Art. 1197804 (Conference Paper). DOI:10.1117/12.2608190. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85131374309&doi=10.1117%2f12.2608190&partnerID=40&md5=3f5dc24f976cae824522095c25e89c7e

- Sumpf B., Müller A., Braune M., Gleim J., Ruhnke N., Vastag M., Maiwald M. (2022): Diode laser based light sources for shifted excitation resonance Raman difference spectroscopy in the spectral range between 450 nm and 532 nm. In: Progress in Biomedical Optics and Imaging - Proceedings of SPIE, Vol. 11978, Art. 1197802 (Conference Paper). DOI:10.1117/12.2607741. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85131372984&doi=10.1117%2f12.2607741&partnerID=40&md5=da5f3cd4f4177025bdf4c63cb5db825e

- Uhlig L., Becht C., Freier E., Kang J.H., Hoffmann V., Stölmacker C., Einfeldt S., Schwarz U.T. (2022): Micro-electroluminescence and micro-photoluminescence study on GaN-based laser diode aging. In: Proceedings of SPIE - The International Society for Optical Engineering, Vol. 12001, Art.

1200106 (Conference Paper). DOI:10.1117/12.2609394. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85131218471&doi=10.1117%2f12.2609394&partnerID=40&md5=699a1b1e186142e86c3674cd18f7d420

- Schoepfel J., Braun T.T., Kueppers S., Aufinger K., Pohl N. (2022): A Fully Differential Hybrid Coupler for Automotive Radar Applications. In: 2022 17th European Microwave Integrated Circuits Conference, EuMIC 2022, pp. 107-110 (Conference Paper). DOI:10.23919/EuMIC54520.2022.9923546. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85141868706&doi=10.23919%2fEuMIC54520.2022.9923546&partnerID=40&md5=d29e9f90ce7c82323a2e89b07a9df063

- Starke D., Wittemeier J., Vogelsang F., Sievert B., Erni D., Rennings A., Rucker H., Pohl N. (2022): A Fully Integrated 0.48 THz FMCW Radar Transceiver MMIC in a SiGe-Technology. In: 2022 17th European Microwave Integrated Circuits Conference, EuMIC 2022, pp. 56-59 (Conference Paper). DOI:10.23919/EuMIC54520.2022.9923443. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85141868041&doi=10.23919%2fEuMIC54520.2022.9923443&partnerID=40&md5=f004dc9b5954b1010ca8cd7e15ae1b5a

- Braun T.T., Schopfel J., Schweer C., Pohl N. (2022): A Harmonic Automotive Radar for Bicycle Detection with RFID Tags at 79/158 GHz. In: IEEE MTT-S International Microwave Symposium Digest, Vol. 2022-June, pp. 526-529 (Conference Paper). DOI:10.1109/IMS37962.2022.9865601. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137996114&doi=10.1109%2fIMS37962.2022.9865601&partnerID=40&md5=91172cc69e140bd8eb7424fa793b2c06

- Nagesh S., Ender J., Gonzalez-Huici M.A. (2022): Array Position Optimisation for Compressed Sensing MIMO Radar based on Mutual Coherence Minimisation. In: Proceedings International Radar Symposium, Vol. 2022-September, pp. 98-103 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140459460&partnerID=40&md5=acfe98a66351bb7b30085dcb85923820

- Hansen S., Bredendiek C., Briese G., Froehly A., Herschel R., Pohl N. (2022): A SiGe-Chip-Based D-Band FMCW-Radar Sensor with 53-GHz Tuning Range for High Resolution Measurements in Industrial Applications. In: IEEE Transactions on Microwave Theory and Techniques, Vol. 70, Nr. 1, pp. 719-731 (Article). DOI:10.1109/TMTT.2021.3121746. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85118681825&doi=10.1109%2fTMTT.2021.3121746&partnerID=40&md5=91fdf9f3e4e359670c036aee7c385ca4

- Weishaupt F., Tilly J.F., Appenrodt N., Dickmann J., Heberling D. (2022): Calibration and Signal Processing of Polarimetric Radar Data in Automotive Applications. In: Mediterranean Microwave Symposium, Vol. 2022-May (Conference Paper). DOI:10.1109/MMS55062.2022.9825584. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135199365&doi=10.1109%2fMMS55062.2022.9825584&partnerID=40&md5=7fd2776a2112aa041e248db1bf6223dc

- Kielmann F., Knott P., Koch W. (2022): Core temperature estimation of food items based on non-contact thermal and high frequency sensor data with an LSTM network. In: 2022 Sensor Data Fusion: Trends, Solutions, Applications, SDF 2022 (Conference Paper). DOI:10.1109/SDF55338.2022.9931957. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142413102&doi=10.1109%2fSDF55338.2022.9931957&partnerID=40&md5=63b7da481dd653f751766a4fdcc495d1

- Hamid S., Heberling D., Junghähnel M., Preussner T., Gretzki P., Pongratz L., Hördemann C., Gillner A. (2022): Development of a millimeter-wave transparent antenna inside a headlamp for automotive radar application. In: International Journal of Microwave and Wireless Technologies, Vol.

14, Nr. 6, pp. 677-688 (Article). DOI:10.1017/S1759078722000484. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129560714&doi=10.1017%2fS1759078722000484&partnerID=40&md5=09b6cdb64f9603426f7462af11799a6d

- Moch R., Heberling D. (2022): Fast Spline-Based Antenna Measurements for Robotic Test Ranges via Pointwise Probe Correction. In: 2022 16th European Conference on Antennas and Propagation, EuCAP 2022 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85130617857&partnerID=40&md5=7883b43c76d5abe40fbeb95693ea3987

- Wojaczek P.M., Cristallini D. (2022): First Results of Polarimetric Passive SAR Imaging. In: Proceedings of the IEEE Radar Conference (Conference Paper). DOI:10.1109/RadarConf2248738.2022.9764315. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85146198426&doi=10.1109%2fRadarConf2248738.2022.9764315&partnerID=40&md5=35a71509fa1d9fd12b126db1aec4a5af

- Reising C., Gilles M., Hoffmann R., Horstmann S., Schneider S. (2022): GESTRA - upgrading to future distributed phased array radar networks for space surveillance. In: IEEE International Symposium on Phased Array Systems and Technology, Vol. 2022-October (Conference Paper). DOI:10.1109/PAST49659.2022.9975037. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85145667355&doi=10.1109%2fPAST49659.2022.9975037&partnerID=40&md5=b00e0e7296865bedd16e7b9f42393a68

- Mohammadzadeh S., Keil A., Leuchs S., Krebs C., Nüßler D., Seewig, J., Friederich F. (2022): Hand-Guided Mobile Terahertz 3D Imaging Platform with Aspherical Telecentric f-θ Optics. In: EuRAD 2021, 18th European Radar Conference (Conference Paper). DOI:10.23919/EuRAD50154.2022.9784526. Link: https://publica.fraunhofer.de/entities/publication/4f41842e-3fca-4d64-8727-64721d1e38af/details

- Muckermann N., Piotrowsky L., Pohl N. (2022): High Accuracy Thickness Measurements of Conducting Material with Single FMCW Radar Sensor. In: 2022 German Microwave Conference, GeMiC 2022, pp. 53-56 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85133500632&partnerID=40&md5=ccbfba1848f646020b984119d03c31a1

- Seidel V., Heckenbach J., Kriehmigen F., Pisciottano I., Ummenhofer M., Cristallini D. (2022): High resolution DVB-S based passive radar for ISAR imaging and drone detection. In: Proceedings of the European Conference on Synthetic Aperture Radar, EUSAR, Vol. 2022-July, pp. 34-37 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143582172&partnerID=40&md5=c099fdb63bfc4f70ec8682b92b85372b

- Lavau L.C., Suhrke M., Knott P. (2022): Impact of IEMI pulses on a barometric sensor. In: IEEE International Symposium on Electromagnetic Compatibility, Vol. 2022-September, pp. 290-294 (Conference Paper). DOI:10.1109/EMCEurope51680.2022.9900930. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140261370&doi=10.1109%2fEMCEurope51680.2022.9900930&partnerID=40&md5=df940e2bd5a267d26744795bd40f36e7

- Santi F., Pisciottano I., Pastina D., Cristallini D. (2022): Impact of Motion Estimation Errors on DVB-S Based Passive ISAR Imaging. In: Proceedings of the IEEE Radar Conference (Conference Paper). DOI:10.1109/RadarConf2248738.2022.9764183. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85146196792&doi=10.1109%2fRadarConf2248738.2022.9764183&partnerID=40&md5=b65bfd403c49ff9695f7aff452cff68e

- Nagesh S., Ender J., Gonzalez-Huici M.A. (2022): Influence of Waveform Orthogonality and Array Geometry on Compressed Sensing Algorithms for CDMA MIMO Radar. In: 2022 German Micro-

wave Conference, GeMiC 2022, pp. 76-79 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85133552213&partnerID=40&md5=566b9d2021e09dee76b212e85fb3533b

- Lippke M., Stoja E., Philipp D., Konstandin S., Jenne J., Bertuch T., Gunther M. (2022): Investigation of a Digitally-Reconfigurable Metasurface for Magnetic Resonance Imaging. In: 2022 52nd European Microwave Conference, EuMC 2022, pp. 668-671 (Conference Paper). DOI:10.23919/EuMC54642.2022.9924424. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142276550&doi=10.23919%2fEuMC54642.2022.9924424&partnerID=40&md5=cd0489ace151468bd39511be403b51c5

- Chen S., Stockel P., Taghia J., Kühnau U., Martin R. (2022): Iterative 2D sparse signal reconstruction with masked residual updates for automotive radar interference mitigation. In: Eurasip Journal on Advances in Signal Processing, Vol. 2022, Nr. 1, Art. 33 (Article). DOI:10.1186/s13634-022-00863-6. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85127964189&doi=10.1186%2fs13634-022-00863-6&partnerID=40&md5=5c5f9ac81e8e971809cc3f61f4d19289

- Moch R., Heberling D. (2022): Maximum Determinant Sampling Using Spline-Based Trajectories in a Robot-Based mm-Wave Antenna Test Range. In: AMTA 2022 - Proceedings: 2022 Antenna Measurement Techniques Association Symposium (Conference Paper). DOI:10.23919/AMTA55213.2022.9954952. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143797484&doi=10.23919%2fAMTA55213.2022.9954952&partnerID=40&md5=04f560304b67a3809506a1ac9fe84766

- Slavov A., Sandenbergh S., O'Hagan D., Knott P. (2022): Multiple FM-Based Passive Bistatic Pairs for Robust Target Detection with Improved Position Accuracy. In: Proceedings International Radar Symposium, Vol. 2022-September, pp. 332-337 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140436206&partnerID=40&md5=b2c862ec87bec6850ee27b6e6725d5d6

- Sempere Chaves C., Geschke R.H., Shargorodskyy M., Herschel R., Kose S., Leuchs S., Krebs C. (2022): Multisensor Polarimetric MIMO Radar Network for Disaster Scenario Detection of Persons. In: IEEE Microwave and Wireless Components Letters, Vol. 32, Nr. 3, pp. 238-240 (Article). DOI:10.1109/LMWC.2021.3132788. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85121825012&doi=10.1109%2fLMWC.2021.3132788&partnerID=40&md5=69544d4e58b7e2bc4355dade05ae8528

- Awadhiya R. (2022): Particle Filter Based Track before Detect Method for Space Surveillance Radars. In: Proceedings of the IEEE Radar Conference (Conference Paper). DOI:10.1109/RadarConf2248738.2022.9764213. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85136944372&doi=10.1109%2fRadarConf2248738.2022.9764213&partnerID=40&md5=0a19a0f343f506d9a34b6015fdb4a519

- Correas-Serrano A., Gonzalez-Huici M., Simoni R., Bredderman T., Warsitz E., Muller T., Kirsch O. (2022): Performance Analysis and Design of a Distributed Radar Network for Automotive Application. In: Proceedings International Radar Symposium, Vol. 2022-September, pp. 30-35 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140442655&partnerID=40&md5=4241190060512ade67f5ed27350ab574

- Nowok S., Wallrath P., Herschel R., Langkemper R. (2022): Radar-based detection of hidden people at different frequency bands. In: 51st European Microwave Conference, EuMC 2021, 4 S. (Conference Paper). DOI:10.23919/EuMC50147.2022.9784168. Link: https://publica.fraunhofer.de/entities/publication/7dad1ee8-378a-4e33-a12c-34720227fcf8/details

- Nuessler D., Krebs C., Froehly A., Gutgemann S. (2022): Radar concepts for inline non-destructive testing. In: IEEE MTT-S International Microwave Symposium Digest, Vol. 2022-June, pp. 649-652 (Conference Paper). DOI:10.1109/IMS37962.2022.9865303. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137977547&doi=10.1109%2fIMS37962.2022.9865303&partnerID=40&md5=2a0e67660c31e8428c769ea108b28fc8

- Granich A.C., Moch R., Al-Bassam A., Heberling D. (2022): Radiation Pattern Measurements using an Active Radar Module. In: AMTA 2022 - Proceedings: 2022 Antenna Measurement Techniques Association Symposium (Conference Paper). DOI:10.23919/AMTA55213.2022.9955018. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143753314&doi=10.23919%2fAMTA55213.2022.9955018&partnerID=40&md5=781517c9b8e13d6723ca194740081be3

- Guha S., Datcu M., Ender J. (2022): Sar Super-Resolution Using Physics-Aware Adaptive Compressed Sensing. In: International Geoscience and Remote Sensing Symposium (IGARSS), Vol. 2022-July, pp. 52-55 (Conference Paper). DOI:10.1109/IGARSS46834.2022.9884535. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140382725&doi=10.1109%2fIGARSS46834.2022.9884535&partnerID=40&md5=45156a1faef889d629e5c5b823fbda8a

- Wagner S., Ender J. (2022): Scattering Identification in ISAR Images via Sparse Decomposition. In: Proceedings of the IEEE Radar Conference (Conference Paper). DOI:10.1109/RadarConf2248738.2022.9764208. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85146200039&doi=10.1109%2fRadarConf2248738.2022.9764208&partnerID=40&md5=ea5e9dab39227ac1c67ecf6299a4cb13

- Wengerter T., Perez R., Biebl E., Worms J., O'Hagan D. (2022): Simulation of Urban Automotive Radar Measurements for Deep Learning Target Detection. In: IEEE Intelligent Vehicles Symposium, Proceedings, Vol. 2022-June, pp. 309-314 (Conference Paper). DOI:10.1109/IV51971.2022.9827284. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135381201&doi=10.1109%2fIV51971.2022.9827284&partnerID=40&md5=f167deacf1bde9c1b45e83e86a454946

- Nubler D., Friederich F. (2022): Terahertz imaging arrays for industrial inline measurements. In: 2022 52nd European Microwave Conference, EuMC 2022, pp. 36-39 (Conference Paper). DOI:10.23919/EuMC54642.2022.9924307. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142214299&doi=10.23919%2fEuMC54642.2022.9924307&partnerID=40&md5=7ab49654aca33b6fb68dc09099ffe6b3

- Herschel R., Wallrath P., Hofstaetter M., Taupe P., Krueger E., Philippi M., Kunze J., Rotter J.M., Heusinger V., Ari M., Kastner R., Al-Akrawi A. (2022): UAV-borne remote sensing for AI-assisted support of search and rescue missions. In: Proceedings of SPIE - The International Society for Optical Engineering, Vol. 12272, Art. 1227203 (Conference Paper). DOI:10.1117/12.2636032. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85145436526&doi=10.1117%2f12.2636032&partnerID=40&md5=603da2e5a077d6377500f8593c878295

- Warnke M., Bruggenwirth S. (2022): Waveform Adaptation for Target Classification using HRRP in a Cognitive Framework. In: IEEE Transactions on Aerospace and Electronic Systems, pp. 1-19 (Article). DOI:10.1109/TAES.2022.3230659. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85146239247&doi=10.1109%2fTAES.2022.3230659&partnerID=40&md5=2e5365faf11ec11294de9f41ab11aa8e

- Schultze A., Schmieder M., Wittig S., Klessig H., Peter M., Keusgen W. (2022): Angle-Resolved THz Channel Measurements at 300 GHz in an Industrial Environment. In: IEEE Vehicular Technology Conference, Vol. 2022-June (Conference Paper). DOI:10.1109/VTC2022-Spring54318.2022.9860598. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-

85137815503&doi=10.1109%2fVTC2022-Spring54318.2022.9860598&partnerID=40&md5=0ba01adf13ccc767b495d643e037ddf7

- Kutz J., Liebermeister L., Vieweg N., Wenzel K., Kohlhaas R., Naftaly M. (2022): A Terahertz Fast-Sweep Optoelectronic Frequency-Domain Spectrometer: Calibration, Performance Tests, and Comparison with TDS and FDS. In: Applied Sciences (Switzerland), Vol. 12, Nr. 16, Art. 8257 (Article). DOI:10.3390/app12168257. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85136534601&doi=10.3390%2fapp12168257&partnerID=40&md5=e75425b22fc9a4352974d6b2dc725a80

- Eisner L., Flachenecker G., Schade W. (2022): Doped silica sol layer coatings on evanescent field fiber Bragg gratings for optical detection of nitroaromate based explosives. In: Sensors and Actuators A: Physical, Vol. 343, Art. 113687 (Article). DOI:10.1016/j.sna.2022.113687. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85132341008&doi=10.1016%2fj.sna.2022.113687&partnerID=40&md5=f0146f5ea1453379d1f2cab5a53f78d1

- Reimer V., Zhang Z., Jansen S.L., Angelmahr M., Schade W. (2022): Enhanced fire sprinkler system: Fiber optical monitoring of fire sprinkler heads. In: Fire Safety Journal, Vol. 127, Art. 103518 (Article). DOI:10.1016/j.firesaf.2021.103518. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85122260082&doi=10.1016%2fj.firesaf.2021.103518&partnerID=40&md5=2b59e252b47cd1cf9050f76c65b3ae37

- Batsyts S., Tombrink A., Lederle F., Hübner E.G., Namyslo J.C., Nieger M., Schmidt A. (2022): Ethynyl-Bridged Bis-quinolinium Dyes: Studies of the Dependence of Different Types of Conjugation on Spectroscopic Properties. In: European Journal of Organic Chemistry, Vol. 2022, Nr. 47, Art. e202201244 (Article). DOI:10.1002/ejoc.202201244. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85144285012&doi=10.1002%2fejoc.202201244&partnerID=40&md5=51e20efc276927ebe2bba30062947836

- Zeitler N., Sowieja F., Gabler H., Dommel J., Koerte H., Erben S., Konrad T., Kurth M., Sikora A. (2022): Experimental Evaluation of NB-IoT Private Networks for Process Automation. In: 2022 Joint European Conference on Networks and Communications and 6G Summit, EuCNC/6G Summit 2022, pp. 405-410 (Conference Paper). DOI:10.1109/EuCNC/6GSummit54941.2022.9815802. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85134679638&doi=10.1109%2fEuCNC%2f6GSummit54941.2022.9815802&partnerID=40&md5=1d8247ae2a52747599c90e07680a1b62

- Kohlhaas R.B., Gingras L., Dardanis E., Holzwarth R., Breuer S., Schell M., Globisch B. (2022): Fiber-coupled THz TDS system with mW-level THz power. In: International Conference on Infrared, Millimeter, and Terahertz Waves, IRMMW-THz, Vol. 2022-August (Conference Paper). DOI:10.1109/IRMMW-THz50927.2022.9896001. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85139820428&doi=10.1109%2fIRMMW-THz50927.2022.9896001&partnerID=40&md5=08aa7080f97f23829b81d5f3d27d3914

- Wilbur S., Anastopoulos C., Angelmahr M., Asfis G., Koch J., Lindblom M., Lohwasser K., Margulis W. (2022): Flexible X-ray imaging detectors using scintillating fibers. In: Journal of Instrumentation, Vol. 17, Nr. 10, Art. C10013 (Conference Paper). DOI:10.1088/1748-0221/17/10/C10013. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140081513&doi=10.1088%2f1748-0221%2f17%2f10%2fC10013&partnerID=40&md5=10277158609c2343fa141770fd2b0979

- Hernangómez R., Visentin T., Servadei L., Khodabakhshandeh H., Stańczak S. (2022): Improving Radar Human Activity Classification Using Synthetic Data with Image Transformation. In: Sensors,

Vol. 22, Nr. 4, Art. 1519 (Article). DOI:10.3390/s22041519. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85124605041&doi=10.3390%2fs22041519&partnerID=40&md5=debbd5af29a4ee4af5a18daf19dfa726

- Ma Z., Kouhini S.M., Kottke C., Freund R., Jungnickel V., Muller M., Behnke D. (2022): LiFi Positioning and Optimization in an Indoor Factory Environment. In: IECON Proceedings (Industrial Electronics Conference), Vol. 2022-October (Conference Paper). DOI:10.1109/IECON49645.2022.9968530. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143914046&doi=10.1109%2fIECON49645.2022.9968530&partnerID=40&md5=32ff5eb1e3da5b66fcb8cc754d79a198

- Muller M., Emmelmann M., Behnke D., Schulz D., Bober K.L., Kottke C., Jungnickel V., Metin T. (2022): LiFi with 5G for the Smart Factory. In: IEEE Wireless Communications and Networking Conference, WCNC, Vol. 2022-April, pp. 2310-2315 (Conference Paper). DOI:10.1109/WCNC51071.2022.9771969. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85130741029&doi=10.1109%2fWCNC51071.2022.9771969&partnerID=40&md5=1a8d4bf8e7e9db23b4c5b97f348ffa3f

- Manjunath R.P., Boban M., Cavalcante R.L.G., Zhou C., Stanczak S. (2022): Mechanisms for the Estimation of Prediction Intervals in Vehicular Communication Scenarios. In: IEEE International Conference on Communications, Vol. 2022-May, pp. 4474-4479 (Conference Paper). DOI:10.1109/ICC45855.2022.9838848. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137272376&doi=10.1109%2fICC45855.2022.9838848&partnerID=40&md5=92c12147976a5fd83191921607800650

- Schwenson L., Nellen S., Lauck S., Deumer M., Wenzel K., Kohlhaas R.B., Liebermeister L., Breuer S., Schell M., Globisch B. (2022): Miniaturized Photonic Terahertz Receivers for Imaging and Sensing. In: 2022 52nd European Microwave Conference, EuMC 2022, pp. 32-35 (Conference Paper). DOI:10.23919/EuMC54642.2022.9924423. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142250444&doi=10.23919%2fEuMC54642.2022.9924423&partnerID=40&md5=3873eaeeddd10406135fea94049bfba0

- Kouhini S.M., Ma Z., Kottke C., Mana S.M., Freund R., Jungnickel V. (2022): Object Tracking in an Indoor Scenario: Potential for Centimeter Accuracy with LiFi. In: 2022 13th International Symposium on Communication Systems, Networks and Digital Signal Processing, CSNDSP 2022, pp. 806-811 (Conference Paper). DOI:10.1109/CSNDSP54353.2022.9908025. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140443167&doi=10.1109%2fCSNDSP54353.2022.9908025&partnerID=40&md5=43f1aecba86747983a8e83ab5d89bdcb

- Schultze A., Keusgen W., Peter M., Eichler T. (2022): Observations on the Angular Statistics of the Indoor Sub-THz Radio Channel at 158 GHz. In: 2022 IEEE USNC-URSI Radio Science Meeting (Joint with AP-S Symposium), USNC-URSI 2022 - Proceedings, pp. 9-10 (Conference Paper). DOI:10.23919/USNC-URSI52669.2022.9887443. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85139159234&doi=10.23919%2fUSNC-URSI52669.2022.9887443&partnerID=40&md5=06bd7f53837981768f85c3a2db992462

- Hernangómez R., Palaios A., Guruvayoorappan G., Kasparick M., Ain N.U., Stanczak S. (2022): Online QoS estimation for vehicular radio environments. In: European Signal Processing Conference, Vol. 2022-August, pp. 1701-1705 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85141010089&partnerID=40&md5=448e486421e0a7813f421b9cb804248c

- Lauck S., Sawallich S., Kohlhaas R.B., Michalski A., Liebermeister L., Nagel M., Schell M., Globisch B. (2022): Photonic THz near-field imaging: Characterizing high-frequency components from 100 GHz to 4 THz. In: International Conference on Infrared, Millimeter, and Terahertz Waves,

IRMMW-THz, Vol. 2022-August (Conference Paper). DOI:10.1109/IRMMW-THz50927.2022.9895869. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85139822288&doi=10.1109%2fIRMMW-THz50927.2022.9895869&partnerID=40&md5=0db09407c90eb7d91499b76004a26554

- Wenzel K., Mertin J., Vedder C., Klein S., Traub M., Kohlhaas R.B., Schell M., Globisch B., Liebermeister L. (2022): Sheet Resistance Imaging on Ag Thin Films with THz-TDS in Reflection Geometry. In: International Conference on Infrared, Millimeter, and Terahertz Waves, IRMMW-THz, Vol. 2022-August (Conference Paper). DOI:10.1109/IRMMW-THz50927.2022.9895484. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85139846630&doi=10.1109%2fIRMMW-THz50927.2022.9895484&partnerID=40&md5=d77b8ddf683c3420a31616ea434052d4

- Keil A., Mohammadzadeh S., Liebermeister L., Schwenson L.M., Globisch B., Friederich F. (2022): Synthetic Aperture Terahertz Imaging with an Optoelectronic FMCW Radar. In: 2022 19th European Radar Conference, EuRAD 2022, pp. 265-268 (Conference Paper). DOI:10.23919/EuRAD54643.2022.9924725. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85141937196&doi=10.23919%2fEuRAD54643.2022.9924725&partnerID=40&md5=81c400c6b1b103a902b1fdbe6846f9c4

- Fobbe F., Vogel T., Wulf F., Kohlhaas R., Globisch B., van Delden M., Rudin B., Emaury F., Musch T., Saraceno C.J. (2022): THz Generation with Photoconductive Emitters with a Low-noise GHz Repetition Rate Laser. In: 2022 Conference on Lasers and Electro-Optics, CLEO 2022 - Proceedings, Art. SS2C.2 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85139936410&partnerID=40&md5=71816391b966fe93ff2da115a52e26ce

- Ketelsen H., Mästle R., Liebermeister L., Kohlhaas R., Globisch B. (2022): THz Time-Domain Ellipsometer for Material Characterization and Paint Quality Control with More Than 5 THz Bandwidth. In: Applied Sciences (Switzerland), Vol. 12, Nr. 8, Art. 3744 (Article). DOI:10.3390/app12083744. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85128476879&doi=10.3390%2fapp12083744&partnerID=40&md5=656da02e4a2ea5a1d968a23a460ff2d8

- Baek I.-H., Bart F., Elschner R., Meier F., Hellmann D., Maaßen A., Schubert C., Freund R. (2022): Time Adaptive Probabilistic Shaping for Combined Optical/THz Links. In: Photonische Netze - 23. ITG-Fachtagung, pp. 65-71 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137772041&partnerID=40&md5=90364dddf0e0685a458d2ac07733fed0

- Reimer V., Abdalwareth A., Flachenecker G., Willer U., Angelmahr M., Schade W. (2022): Ultra-Short Fiber Bragg Grating Used For Spectral Analysis of Guided Light in Single-Mode Fibers. In: Journal of Lightwave Technology, pp. 1-8 (Article). DOI:10.1109/JLT.2022.3217113. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85141545862&doi=10.1109%2fJLT.2022.3217113&partnerID=40&md5=ef7b8b7b46bc5b567dc7a37bdfb32723

- Moench S., Meyer J.M., Žukauskaite A., Lebedev V., Fichtner S., Su J., Niekiel F., Giese T., Thormählen L., Quandt E., Lofink F. (2022): AlScN-Based SAW Magnetic Field Sensor for Isolated Closed-Loop Hysteretic Current Control of Switched-Mode Power Converters. In: IEEE Sensors Letters, Vol. 6, Nr. 10, Art. 2500904 (Article). DOI:10.1109/LSENS.2022.3205853. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85139255945&doi=10.1109%2fLSENS.2022.3205853&partnerID=40&md5=88a4c7c6deeb91443c34d9bcd45b5ce6

- Luo T., Lindner L., Langer J., Cimalla V., Vidal X., Hahl F., Schreyvogel C., Onoda S., Ishii S., Ohshima T., Wang D., Simpson D.A., Johnson B.C., Capelli M., Blinder R., Jeske J. (2022): Creation of nitrogen-vacancy centers in chemical vapor deposition diamond for sensing applications.

In: New Journal of Physics, Vol. 24, Nr. 3, Art. 033030 (Article). DOI:10.1088/1367-2630/ac58b6. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85127330036&doi=10.1088%2f1367-2630%2fac58b6&partnerID=40&md5=54d14969189632858aad22d22dbe2f6d

- Hahl F.A., Lindner L., Vidal X., Luo T., Ohshima T., Onoda S., Ishii S., Zaitsev A.M., Capelli M., Gibson B.C., Greentree A.D., Jeske J. (2022): Magnetic-field-dependent stimulated emission from nitrogen-vacancy centers in diamond. In: Science Advances, Vol. 8, Nr. 22, Art. eabn7192 (Article). DOI:10.1126/sciadv.abn7192. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85131702163&doi=10.1126%2fsciadv.abn7192&partnerID=40&md5=7dedd139f518298020a3be434816d74b

- Allert R.D., Bruckmaier F., Neuling N.R., Freire-Moschovitis F.A., Liu K.S., Schrepel C., Schätzle P., Knittel P., Hermans M., Bucher D.B. (2022): Microfluidic quantum sensing platform for lab-on-a-chip applications. In: Lab on a Chip, Vol. 22, Nr. 24, pp. 4831-4840 (Article). DOI:10.1039/d2lc00874b. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142766214&doi=10.1039%2fd2lc00874b&partnerID=40&md5=a25bf1a3aad682c46cd65a695e009762

- Luo T., Lindner L., Blinder R., Capelli M., Langer J., Cimalla V., Hahl F.A., Vidal X., Jeske J. (2022): Rapid determination of single substitutional nitrogen N s 0 concentration in diamond from UV-Vis spectroscopy. In: Applied Physics Letters, Vol. 121, Nr. 6, Art. 064002 (Article). DOI:10.1063/5.0102370. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85136810381&doi=10.1063%2f5.0102370&partnerID=40&md5=820b286105c1e476a39af8c25303b39c

- Mai A., Mai C., Steglich P. (2022): From Lab-on-chip to Lab-in-App: Challenges towards silicon photonic biosensors product developments. In: Results in Optics, Vol.9, Art.100317 (Article). DOI:10.1016/j.rio.2022.100317. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142142080&doi=10.1016%2fj.rio.2022.100317&partnerID=40&md5=c28f9ffb432675520fbbf8b7db82695f

- Rothbart N., Schmalz K., Koczulla R., Hübers H.-W. (2022): A compact breath gas sensor system based on terahertz/millimeter-wave gas spectroscopy. In: Frequenz, Vol.76, Nr.11-12, pp.669-676 (Article). DOI:10.1515/freq-2022-0131. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140414434&doi=10.1515%2ffreq-2022-0131&partnerID=40&md5=3421f8e2b8750fcfaa85257d6d077ccb

- Heine C., Durmaz E.C., Wang D., Cao Z., Wietstruck M., Tillack B., Kissinger D. (2022): Towards a fully integrated sub-THz microfluidic sensor platform for dielectric spectroscopy. In: Frequenz, Vol.76, Nr.11-12, pp.685-697 (Article). DOI:10.1515/freq-2022-0091. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140079169&doi=10.1515%2ffreq-2022-0091&partnerID=40&md5=4aafabcda3c62838e0b932c66df03c57

- Chavarin C.A., Hardt E., Skibitzki O., Voss T., Eissa M., Spirito D., Capellini G., Baldassarre L., Flesch J., Piehler J., You C., Grüssing S., Römer F., Witzigmann B. (2022): Terahertz subwavelength sensing with bio-functionalized germanium fano-resonators. In: Frequenz, Vol.76, Nr.11-12, pp.639-650 (Article). DOI:10.1515/freq-2022-0078. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85136189241&doi=10.1515%2ffreq-2022-0078&partnerID=40&md5=a327a2999ebb5f2bb4b14e09d0a0ec65

- Andjelkovic M., Marjanovic M., Chen J., Ilic S., Ristic G., Krstic M. (2022): PS-BBICS: Pulse stretching bulk built-in current sensor for on-chip measurement of single event transients. In: Microelectronics Reliability, Vol.138, Art.114726 (Article). DOI:10.1016/j.microrel.2022.114726. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140981999&doi=10.1016%2fj.microrel.2022.114726&partnerID=40&md5=0cd1b1d85a4940812335fc62c5a4fcf7

- Kissinger D., Kaynak M., Mai A. (2022): Integrated Millimeter-Wave and Terahertz Analyzers for Biomedical Applications. In: IEEE Transactions on Microwave Theory and Techniques, Vol.70, Nr.11, pp.5141-5158 (Article). DOI:10.1109/TMTT.2022.3185053. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85133580633&doi=10.1109%2fTMTT.2022.3185053&partnerID=40&md5=1e2a325336cf9f5ad8dae857e786ca60

- Hardt E., Chavarin C.A., Gruessing S., Flesch J., Skibitzki O., Spirito D., Vita G.M., Simone G.D.E., Masi A.D.I., You C., Witzigmann B., Piehler J., Capellini G. (2022): Quantitative protein sensing with germanium THz-antennas manufactured using CMOS processes. In: Optics Express, Vol.30, Nr.22, pp.40265-40276 (Article). DOI:10.1364/OE.469496. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140298309&doi=10.1364%2fOE.469496&partnerID=40&md5=3d8eb6e6a9f6e3370fbc6ebe704b94f0

- Inomata N., Usuda T., Yamamoto Y., H. Zoellner M., Costina I., Ono T. (2022): Effects of temperature and doping concentration on the piezoresistive property of vanadium dioxide thin film. In: Sensors and Actuators A: Physical, Vol.346, Art.113823 (Article). DOI:10.1016/j.sna.2022.113823. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137161114&doi=10.1016%2fj.sna.2022.113823&partnerID=40&md5=9f001180747ea168a41242c7604aea42

- Henriksson A., Neubauer P., Birkholz M. (2022): Dielectrophoresis: An Approach to Increase Sensitivity, Reduce Response Time and to Suppress Nonspecific Binding in Biosensors?. In: Biosensors, Vol.12, Nr.10, Art.784 (Review). DOI:10.3390/bios12100784. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140377168&doi=10.3390%2fbios12100784&partnerID=40&md5=09162677b5360036a93afcdce330f022

- Prüfer M., Wenger C., Bier F.F., Laux E.-M., Hölzel R. (2022): Activity of AC electrokinetically immobilized horseradish peroxidase. In: Electrophoresis, Vol.43, Nr.18-19, pp.1920-1933 (Article). DOI:10.1002/elps.202200073. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135629534&doi=10.1002%2felps.202200073&partnerID=40&md5=44c1e7264adb9de4f4d41937696cce1b

- Rothbart N., Stanley V., Koczulla R., Jarosch I., Holz O., Schmalz K., Hübers H.-W. (2022): Millimeter-wave gas spectroscopy for breath analysis of COPD patients in comparison to GC-MS. In: Journal of Breath Research, Vol.16, Nr.4, Art.046001 (Article). DOI:10.1088/1752-7163/ac77aa. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85133103029&doi=10.1088%2f1752-7163%2fac77aa&partnerID=40&md5=2b283926387f3bd0537119deb1c4516b

- Ruiz-García I., Román-Raya J., Escobedo P., Andjelkovic M., Guirado D., Palma A.J., Carvajal M.A. (2022): Thermal drift reduction in photodiode dosimeters with switching bias. In: Measurement: Journal of the International Measurement Confederation, Vol.199, Art.111538 (Article). DOI:10.1016/j.measurement.2022.111538. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85133291361&doi=10.1016%2fj.measurement.2022.111538&partnerID=40&md5=a32553ed1ce1d19225c32fd45721ca39

- Spirito D., Asensio Y., Hueso L.E., Martín-García B. (2022): Raman spectroscopy in layered hybrid organic-inorganic metal halide perovskites. In: JPhys Materials, Vol.5, Nr.3, Art.034004 (Article). DOI:10.1088/2515-7639/ac7977. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85134652856&doi=10.1088%2f2515-7639%2fac7977&partnerID=40&md5=44adfbb1593ce3e12be33b041bb516a0

- Stanke S., Wenger C., Bier F.F., Hölzel R. (2022): AC electrokinetic immobilization of influenza virus. In: Electrophoresis, Vol.43, Nr.12, pp.1309-1321 (Article). DOI:10.1002/elps.202100324. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-

85128385083&doi=10.1002%2felps.202100324&partnerID=40&md5=11c60d4cb32675d6247592bb804d1fde

- Ristić G.S., Andjelković M.S., Duane R., Jakšić A.B. (2022): Fading of pMOS dosimeters over a long period of time. In: Micro and Nano Letters, Vol.17, Nr.7, pp.155-158 (Article). DOI:10.1049/mna2.12119. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85127609882&doi=10.1049%2fmna2.12119&partnerID=40&md5=df615dff0e4a13b0e4f10dfac7c3e1b5

- Eisermann R., Krenek S., Winzer G., Rudtsch S. (2022): Erratum: Photonic contact thermometry using silicon ring resonators and tuneable laser-based spectroscopy (tm - Technisches Messen (2021) 88:10 (640-654) DOI: 10.1515/teme-2021-0054). In: Technisches Messen, Vol.89, Nr.5, pp.393 (Erratum). DOI:10.1515/teme-2022-0038. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129875795&doi=10.1515%2fteme-2022-0038&partnerID=40&md5=27e0c95293de10b79faaaa9659eb6544

- Ristic G.S., Ilic S.D., Andjelkovic M.S., Duane R., Palma A.J., Lalena A.M., Krstic M.D., Jaksic A.B. (2022): Sensitivity and fading of irradiated RADFETs with different gate voltages. In: Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, Vol.1029, Art.166473 (Article). DOI:10.1016/j.nima.2022.166473. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85125498664&doi=10.1016%2fj.nima.2022.166473&partnerID=40&md5=d1f3b6171fed4c1ed93361425f48972f

- Kabin I., Dyka Z., Langendoerfer P. (2022): Atomicity and Regularity Principles Do Not Ensure Full Resistance of ECC Designs against Single-Trace Attacks. In: Sensors, Vol.22, Nr.8, Art.3083 (Article). DOI:10.3390/s22083083. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85128800729&doi=10.3390%2fs22083083&partnerID=40&md5=1ffb4ea2c9f67d5e4df796af89e880c0

- Steglich P., Lecci G., Mai A. (2022): Surface Plasmon Resonance (SPR) Spectroscopy and Photonic Integrated Circuit (PIC) Biosensors: A Comparative Review. In: Sensors, Vol.22, Nr.8, Art.2901 (Review). DOI:10.3390/s22082901. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85127852109&doi=10.3390%2fs22082901&partnerID=40&md5=c844f1465be9f82cba66cbc7df631d1e

- Ristić G.S., Ilić S.D., Veljković S., Jevtić A.S., Dimitrijević S., Palma A.J., Stanković S., Andjelković M.S. (2022): Commercial P-Channel Power VDMOSFET as X-ray Dosimeter. In: Electronics (Switzerland), Vol.11, Nr.6, Art.918 (Article). DOI:10.3390/electronics11060918. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85128460877&doi=10.3390%2felectronics11060918&partnerID=40&md5=65d915c4375034e93528839e48c0b362

- Wägele J.W., Bodesheim P., Bourlat S.J., Denzler J., Diepenbroek M., Fonseca V., Frommolt K.-H., Geiger M.F., Gemeinholzer B., Glöckner F.O., Haucke T., Kirse A., Kölpin A., Kostadinov I., Kühl H.S., Kurth F., Lasseck M., Liedke S., Losch F., Müller S., Petrovskaya N., Piotrowski K., Radig B., Scherber C., Schoppmann L., Schulz J., Steinhage V., Tschan G.F., Vautz W., Velotto D., Weigend M., Wildermann S. (2022): Towards a multisensor station for automated biodiversity monitoring. In: Basic and Applied Ecology, Vol.59, pp.105-138 (Article). DOI:10.1016/j.baae.2022.01.003. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85123872761&doi=10.1016%2fj.baae.2022.01.003&partnerID=40&md5=b97d84a72ed344402b8ecdfbe4e14210

- Boldt N.P., Spath J., Hartmann S., Birkholz M., Thewes R. (2022): The Impact of Signal Quality in Dielectrophoresis Experiments. In: BioCAS 2022 - IEEE Biomedical Circuits and Systems Conference: Intelligent Biomedical Systems for a Better Future, Proceedings, pp.354-358 (Conference

Paper). DOI:10.1109/BioCAS54905.2022.9948589. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142920446&doi=10.1109%2fBioCAS54905.2022.9948589&partnerID=40&md5=f09fb610986426181e30b0a085a90093

- Zhao Y., Sark V., Krstic M., Grass E. (2022): Low Computational Complexity Algorithm for Hand Gesture Recognition using mmWave RADAR. In: Proceedings of the International Symposium on Wireless Communication Systems, Vol.2022-October (Conference Paper). DOI:10.1109/ISWCS56560.2022.9940253. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142629293&doi=10.1109%2fISWCS56560.2022.9940253&partnerID=40&md5=91015e29f872ea938bcd2c5089ad116c

- Meller G., Methfessel M., Lindner B., Wagner J., Kraemer R., Ellinger F. (2022): Wakeup Receiver Using Passive Amplification by Means of a Switched SAW Resonator. In: Annual IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks workshops, Vol.2022-September, pp.136-144 (Conference Paper). DOI:10.1109/SECON55815.2022.9918620. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85141198384&doi=10.1109%2fSECON55815.2022.9918620&partnerID=40&md5=4af8af147d97c6369dd0cf2a42da44ce

- Zhao Y., Sark V., Krstic M., Grass E. (2022): Synthetic Training Data Generator for Hand Gesture Recognition Based on FMCW RADAR. In: Proceedings International Radar Symposium, Vol.2022-September, pp.463-468 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140432320&partnerID=40&md5=7d0f0c5087e799c2e665a1ee95cebe0b

- Herfurth N., Boit C. (2022): A GUIDE TO ACCURATE SYSTEM CALIBRATION AND DATA EXTRACTION TO INCREASE THE SIGNIFICANCE OF SPECTRAL PHOTON EMISSION MICROSCOPY MEASUREMENTS. In: Electronic Device Failure Analysis, Vol.24, Nr.4, pp.4-11 (Article). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140238683&partnerID=40&md5=ce0eba221abbe2dc11443c2df2cadce2

- Wietstruck M., Mausolf T., Lehmann J., Cao Z., Nguyen T.D., Wöhrmann M., Braun T. (2022): BiCMOS Integrated Temperature Sensor for Thermal Evaluation of Fan-out Wafer-level Packaging (FOWLP) including Hot Spot Analysis. In: 2022 IMAPS Nordic Conference on Microelectronics Packaging, NordPac 2022 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85138496299&partnerID=40&md5=eade7d531a7f1881c90e66ed7d2dd717

- Zhao Y., Sark V., Krstic M., Grass E. (2022): Novel Approach for Gesture Recognition Using mmWave FMCW RADAR. In: IEEE Vehicular Technology Conference, Vol.2022-June (Conference Paper). DOI:10.1109/VTC2022-Spring54318.2022.9860976. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137796875&doi=10.1109%2fVTC2022-Spring54318.2022.9860976&partnerID=40&md5=c0b2abde46c5757674ce3c0719205f78

- Raja S.P., Sawicka B., Stamenkovic Z., Mariammal G. (2022): Crop Prediction Based on Characteristics of the Agricultural Environment Using Various Feature Selection Techniques and Classifiers. In: IEEE Access, Vol.10, pp.23625-23641 (Article). DOI:10.1109/ACCESS.2022.3154350. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85125728802&doi=10.1109%2fACCESS.2022.3154350&partnerID=40&md5=98e05ba5817a5c61b74dade838299639

- Langer P., Haddadi Esfahani A., Dyka Z., Langendörfer P. (2022): FPGA-Based Realtime Detection of Freezing of Gait of Parkinson Patients. In: Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, LNICST, Vol.420 LNICST, pp.101-111 (Conference Paper). DOI:10.1007/978-3-030-95593-9_9. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85125274432&doi=10.1007%2f978-3-030-95593-9_9&partnerID=40&md5=67b2ac7efd169b9d40b099c449aaacf6

- Stankevic V., Zurauskiene N., Kersulis S., Plausinaitiene V., Lukose R., Klimantavicius J., Tolvaišienė S., Skapas M., Selskis A., Balevicius S. (2022): Nanostructured Manganite Films Grown by Pulsed Injection MOCVD: Tuning Low-and High-Field Magnetoresistive Properties for Sensors Applications. In: Sensors, Vol.22, Nr.2, Art.605 (Article). DOI:10.3390/s22020605. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85122882377&doi=10.3390%2fs22020605&partnerID=40&md5=f67bf92f58d29a2512f1f8ce4ad1b58b

- Ben Halima H., Bellagambi F.G., Hangouët M., Alcacer A., Pfeiffer N., Heuberger A., Zine N., Bausells J., Errachid A. (2022): A Novel IMFET Biosensor Strategy for Interleukin-10 Quantification for Early Screening Heart Failure Disease in Saliva. In: Electroanalysis (Article). DOI:10.1002/elan.202200141. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135815241&doi=10.1002%2felan.202200141&partnerID=40&md5=afa138076eaaeafbfcaa093c287b300a

- Reichel A., Döge J., Mayer D., Bräunig J. (2022): Application of AI-based Image Processing for Occupancy Monitoring in Building Energy Management. In: International Conference on Smart Cities and Green ICT Systems, SMARTGREENS - Proceedings, pp. 139-146 (Conference Paper). DOI:10.5220/0011080600003203. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85141027081&doi=10.5220%2f0011080600003203&partnerID=40&md5=a6709530e5877fa0c4da1ce4cb3ac415

- Turkmen E., Zerna C., Kandis H., Hotopan R., Debski W., Scherbaum S., Ott A., Govoni L., Drost A., Dupont R.F., Balbach-Sobkowicz J.J. (2022): Car Interior Radar for Advanced Life-Signs Detection. In: 2022 24th International Microwave and Radar Conference, MIKON 2022 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142031420&partnerID=40&md5=9526915bfff98827b0817818074ac3fb

- Lang T. (2022): Clustering large 3D volumes: A sampling-based approach. In: 59th Annual Conference of the British Institute of Non-Destructive Testing, NDT 2022, pp. 20-31 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143389915&partnerID=40&md5=81b277f42c73199e8a19afea58919902

- Bauer Christine, Wagner Rebecca, Orberger Beate, Firsching Markus, Wagner Christiane, Boudouma Omar, Siahcheshm Kamal (2022-08): Copper porphyry exploration: Combination of X-ray investigations with other methods. In: 1 S. (Meeting Abstract). DOI:. Link: https://publica.fraunhofer.de/entities/publication/af64338b-7c96-4aff-9cab-220b81a39256/details

- Gojdka B., Cichon D., Lembrecht Y., Bodduluri M.T., Lisec T., Stahl-Offergeld M., Hohe H.-P., Niekiel F. (2022): Demonstration of Fully Integrable Long-Range Microposition Detection with Wafer-Level Embedded Micromagnets. In: Micromachines, Vol. 13, Nr. 2, Art. 235 (Article). DOI:10.3390/mi13020235. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85124129609&doi=10.3390%2fmi13020235&partnerID=40&md5=2b693d332991b20483ad3c6ced580f39

- Werny M.J., Müller D., Hendriksen C., Chan R., Friederichs N.H., Fella C., Meirer F., Weckhuysen B.M. (2022): Elucidating the Sectioning Fragmentation Mechanism in Silica-Supported Olefin Polymerization Catalysts with Laboratory-Based X-Ray and Electron Microscopy. In: ChemCatChem, Vol. 14, Nr. 21, Art. e202200067 (Article). DOI:10.1002/cctc.202200067. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85139402300&doi=10.1002%2fcctc.202200067&partnerID=40&md5=ef5b3c414f08cb6b357ecb537c2b4a3e

- Stahlke M., Kram S., Ott F., Feigl T., Mutschler C. (2022): Estimating TOA Reliability with Variational Autoencoders. In: IEEE Sensors Journal, Vol. 22, Nr. 6, pp. 5133-5140 (Article). DOI:10.1109/JSEN.2021.3101933. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-

85112644672&doi=10.1109%2fJSEN.2021.3101933&partnerID=40&md5=7fe-ceff51e64b05ab4ec0cf1b0688e39

- Mey O., Neufeld D. (2022): Explainable AI Algorithms for Vibration Data-Based Fault Detection: Use Case-Adadpted Methods and Critical Evaluation. In: Sensors, Vol. 22, Nr. 23, Art. 9037 (Article). DOI:10.3390/s22239037. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143798767&doi=10.3390%2fs22239037&partnerID=40&md5=d743ac5a7a51f460ff5dc8cf603225f1

- Niu H., Dupleich D., Volker-Schoneberg Y., Ebert A., Muller R., Eichinger J., Artemenko A., Galdo G.D., Thoma R.S. (2022): From 3D Point Cloud Data to Ray-tracing Multi-band Simulations in Industrial Scenario. In: IEEE Vehicular Technology Conference, Vol. 2022-June (Conference Paper). DOI:10.1109/VTC2022-Spring54318.2022.9861002. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137762227&doi=10.1109%2fVTC2022-Spring54318.2022.9861002&partnerID=40&md5=9aab6ebe50649e82dffa1526a5f0deb7

- Wagner Rebecca, Bauer Christine, Firsching Markus, Leisner Johannes (2022): From Food to Mining: Dual Energy XRT Applications. In: Sensors, Measurements and Networks, 19 S. (Book Chapter). DOI:. Link: https://publica.fraunhofer.de/entities/publication/0743824c-6003-4d5a-b8b6-bca245ac4bfd/details

- Schimmel S., Salamon M., Tomida D., Neumeier S., Ishiguro T., Honda Y., Chichibu S.F., Amano H. (2022): High-Energy Computed Tomography as a Prospective Tool for In Situ Monitoring of Mass Transfer Processes inside High-Pressure Reactors—A Case Study on Ammonothermal Bulk Crystal Growth of Nitrides including GaN. In: Materials, Vol. 15, Nr. 17, Art. 6165 (Article). DOI:10.3390/ma15176165. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137920734&doi=10.3390%2fma15176165&partnerID=40&md5=3f7ae1534583610e1bebc793ab70fc52

- Ibrahim I., Maus N.-A., Hafner Y., Kolinsky K., Draeger T., Oswald S. (2022): Identification and Quantification of Metallic-Conductive Objects Using Low Frequency Magnetic Field. In: 2022 3rd URSI Atlantic and Asia Pacific Radio Science Meeting, AT-AP-RASC 2022 (Conference Paper). DOI:10.23919/AT-AP-RASC54737.2022.9814218. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85134881807&doi=10.23919%2fAT-AP-RASC54737.2022.9814218&partnerID=40&md5=c595fd6dd276a1b4d4925af212df9633

- Danzl Reinhard, Berndt Dirk, Bertz Alexander, Burke Jan, Boochs Frank, Carl Daniel, Dunker Thomas, Effenberger Ira, Fratz Markus, Hachgenei Enno, Groneberg Maik, Gutmann Carina, Haase Tina, Hauptvogel Matthias, Heizmann Michael, Heist Stefan, Helmli Franz, Hornberger Peter, Hünermund Martin, Kasperl Stefan, Kaufmann Manuel, Keil Fabian, Kostka Günther, Kludt Christian, Längle Thomas, Luhmann Thomas, Neuschaefer-Rube Ulrich, Notni Gunther, Ponciano Jean-Jacques, Reiterer Alexander, Schiller Annelie, Schmid-Schirling Tobais, Scholz Oliver, Seifert Lars, Seyler Tobias, Sopauschke Daniel, Tan Özgür, Trostmann Erik, Ulm Andreas, Warnemünde Ralf, Zangl Kerstin, Zechel Fabian, Riediger Max, Schütz Artur (2022): Leitfaden zur optischen 3D-Messtechnik. In: 128 S. (Book). DOI:. Link: https://publica.fraunhofer.de/entities/publication/7cf744fb-4c90-44c8-9797-04cea51805a4/details

- Sackewitz Michael (2022): Leitfaden zur Wärmefluss-Thermographie. In: 72 S. (Anthology). DOI:. Link: https://publica.fraunhofer.de/entities/publication/59bf077e-5aa1-4e30-88d9-e0f913561ccb/details

- Cortes I., Conde N., Van Der Merwe J.R., Lohan E.S., Nurmi J., Felber W. (2022): Low-Complexity Adaptive Direct-State Kalman Filter for Robust GNSS Carrier Tracking. In: 2022 International Conference on Localization and GNSS, ICL-GNSS 2022 - Proceedings (Conference Paper).

DOI:10.1109/ICL-GNSS54081.2022.9797020. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85134563957&doi=10.1109%2fICL-GNSS54081.2022.9797020&partnerID=40&md5=6a8ed0c8be9de2f73641bf5fb75867ff

- Van Der Merwe J.R., Franco D.C., Jdidi D., Feigl T., Rugamer A., Felber W. (2022): Low-cost COTS GNSS interference detection and classification platform: Initial results. In: 2022 International Conference on Localization and GNSS, ICL-GNSS 2022 - Proceedings (Conference Paper). DOI:10.1109/ICL-GNSS54081.2022.9797025. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85134579402&doi=10.1109%2fICL-GNSS54081.2022.9797025&partnerID=40&md5=db10844d3dcff20a5889d50f9f1fcc79

- Zhang H., Zhang Y., Cosmas J., Jawad N., Li W., Muller R., Jiang T. (2022): mmWave Indoor Channel Measurement Campaign for 5G New Radio Indoor Broadcasting. In: IEEE Transactions on Broadcasting, Vol. 68, Nr. 2, pp. 331-344 (Article). DOI:10.1109/TBC.2021.3131864. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85123698811&doi=10.1109%2fTBC.2021.3131864&partnerID=40&md5=7533304a7fb6ef15edda2f75bd9877ad

- Brockmann C., Al-Magazachi S., Rezaei A., Hefer J., Hager J., Gerstner H., Matlok S., Eckardt B., Eppel M., Milosiu H., Oehler F. (2022): Modular Ultra-Low-Power IoT-Core-Bridging the Gap Between Power Electronics and Distributed Sensor Networks. In: PCIM Europe Conference Proceedings, pp. 37-42 (Conference Paper). DOI:10.30420/565822008. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85131143486&doi=10.30420%2f565822008&partnerID=40&md5=2ccd9d74f9cfc0bc140be13af6b922b0

- Sawant S.S., Prabukumar M., Loganathan A., Alenizi F.A., Ingaleshwar S. (2022): Multi-objective multi-verse optimizer based unsupervised band selection for hyperspectral image classification. In: International Journal of Remote Sensing, Vol. 43, Nr. 11, pp. 3990-4024 (Article). DOI:10.1080/01431161.2022.2105666. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135877831&doi=10.1080%2f01431161.2022.2105666&partnerID=40&md5=40d0fdc1636e9c72c54cc6a4cad85e3a

- Potorti F., Torres-Sospedra J., Quezada-Gaibor D., Jimenez A.R., Seco F., Perez-Navarro A., Ortiz M., Zhu N., Renaudin V., Ichikari R., Shimomura R., Ohta N., Nagae S., Kurata T., Wei D., Ji X., Zhang W., Kram S., Stahlke M., Mutschler C., Crivello A., Barsocchi P., Girolami M., Palumbo F., Chen R., Wu Y., Li W., Yu Y., Xu S., Huang L., Liu T., Kuang J., Niu X., Yoshida T., Nagata Y., Fukushima Y., Fukatani N., Hayashida N., Asai Y., Urano K., Ge W., Lee N.-T., Fang S.-H., Jie Y.-C., Young S.-R., Chien Y.-R., Yu C.-C., Ma C., Wu B., Zhang W., Wang Y., Fan Y., Poslad S., Selviah D.R., Wang W., Yuan H., Yonamoto Y., Yamaguchi M., Kaichi T., Zhou B., Liu X., Gu Z., Yang C., Wu Z., Xie D., Huang C., Zheng L., Peng A., Jin G., Wang Q., Luo H., Xiong H., Bao L., Zhang P., Zhao F., Yu C.-A., Hung C.-H., Antsfeld L., Chidlovskii B., Jiang H., Xia M., Yan D., Li Y., Dong Y., Silva I., Pendao C., Meneses F., Nicolau M.J., Costa A., Moreira A., De Cock C., Plets D., Opiela M., Dzama J., Zhang L., Li H., Chen B., Liu Y., Yean S., Lim B.Z., Teo W.J., Lee B.S., Oh H.L. (2022): Off-Line Evaluation of Indoor Positioning Systems in Different Scenarios: The Experiences from IPIN 2020 Competition. In: IEEE Sensors Journal, Vol. 22, Nr. 6, pp. 5011-5054 (Article). DOI:10.1109/JSEN.2021.3083149. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85107221312&doi=10.1109%2fJSEN.2021.3083149&partnerID=40&md5=a362354c6fa29e8e32f5f6d2b200fa5b

- Soleymani D.M., Gholami M.R., Galdo G.D., Mueckenheim J., Mitschele-Thiel A. (2022): Open sub-granting radio resources in overlay D2D-based V2V communications. In: Eurasip Journal on Wireless Communications and Networking, Vol. 2022, Nr. 1, Art. 46 (Article). DOI:10.1186/s13638-022-02128-0. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85130633150&doi=10.1186%2fs13638-022-02128-0&partnerID=40&md5=b5788baf8be44e08e28f9281036ac4cb

Publications from the Technology Platform "Sensor Systems" of the Research Fab Microelectronics Germany (2022)

- Cortés I., van der Merwe J.R., Lohan E.S., Nurmi J., Felber W. (2022): Performance Evaluation of Adaptive Tracking Techniques with Direct-State Kalman Filter. In: Sensors, Vol. 22, Nr. 2, Art. 420 (Article). DOI:10.3390/s22020420. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85122213213&doi=10.3390%2fs22020420&partnerID=40&md5=7d233445bf12aaf9879c1c45ac849972

- Bruckner S., Sippel E., Lipka M., Geiss J., Vossiek M. (2022): Phase Difference Based Precise Indoor Tracking of Common Mobile Devices Using an Iterative Holographic Extended Kalman Filter. In: IEEE Open Journal of Vehicular Technology, Vol. 3, pp. 55-67 (Article). DOI:10.1109/OJVT.2022.3144570. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85123710727&doi=10.1109%2fOJVT.2022.3144570&partnerID=40&md5=0d4f8e674b53b1b2b1c224a114d97cfc

- Sun W., Symes D.R., Brenner C.M., Böhnel M., Brown S., Mavrogordato M.N., Sinclair I., Salamon M. (2022): Review of high energy X-ray computed tomography for non-destructive dimensional metrology of large metallic advanced manufactured components. In: Reports on Progress in Physics, Vol. 85, Nr. 1, Art. 016102 (Review). DOI:10.1088/1361-6633/ac43f6. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85124319260&doi=10.1088%2f1361-6633%2fac43f6&partnerID=40&md5=c882dbbf4de6541d66861c3b2b40d4d0

- Aichroth P., Antes C., Gembatzka P., Graf H., Johnson D.S., Jung M., Kämpfe T., Kleinberger T., Köllmer T., Kuhn T., Kutter C., Krüger J., Loroch D.M., Lukashevich H., Laleni N., Zhang L., Leugering J., Martín Fernández R., Mateu L., Mojumder S., Prautsch B., Pscheidl F., Roscher K., Schneickert S., Vanselow F., Wallbott P., Walter O., Weber N. (2022): SEC-Learn: Sensor Edge Cloud for Federated Learning: Invited Paper. In: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Vol. 13227 LNCS, pp. 432-448 (Conference Paper). DOI:10.1007/978-3-031-04580-6_29. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129819292&doi=10.1007%2f978-3-031-04580-6_29&partnerID=40&md5=a28793284ca4a0009aba17baa02acc6a

- Pannek Carolin, Lambrecht Armin, Wöllenstein Jürgen, Buse Karsten, Keßler Armin, Tschuncky Ralf, Jäckel Patrick, Quirin Steven, Oeckl Steven, Youssef Sargon, Herrmann Hans-Georg (2022): Sensorik und Sicherheit. In: Wasserstofftechnologien, 36 S. (Book Chapter). DOI:10.1007/978-3-662-64939-8_14. Link: https://publica.fraunhofer.de/entities/publication/36395b0d-48c5-47c8-81ec-21e012a9900d/details

- Wicht J., Wetzker U., Jain V. (2022): Spectrogram Data Set for Deep-Learning-Based RF Frame Detection. In: Data, Vol. 7, Nr. 12, Art. 168 (Article). DOI:10.3390/data7120168. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85144591813&doi=10.3390%2fdata7120168&partnerID=40&md5=96a19d33de54981244c9d6b7de51aebc

- Gedschold J., Wegner T.E., Kalisz A., Thoma R.S., Thielecke J., Del Galdo G. (2022): Time-domain Analysis of Ultra-Wideband Scattering Properties of Fruits. In: 2022 19th European Radar Conference, EuRAD 2022, pp. 77-80 (Conference Paper). DOI:10.23919/EuRAD54643.2022.9924720. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85141935921&doi=10.23919%2fEuRAD54643.2022.9924720&partnerID=40&md5=210650f4913c2e2a4f846f8dc2264938

- Gram M., Albertova P., Schirmer V., Blaimer M., Gamer M., Herrmann M.J., Nordbeck P., Jakob P.M. (2022): Towards robust in vivo quantification of oscillating biomagnetic fields using Rotary Excitation based MRI. In: Scientific Reports, Vol. 12, Nr. 1, Art. 15375 (Article). DOI:10.1038/s41598-022-19275-5. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137755733&doi=10.1038%2fs41598-022-19275-5&partnerID=40&md5=2f08b127bf647e8d4cde40eea3da93f0

- Stahlke M., Feigl T., Garcia M.H.C., Stirling-Gallacher R.A., Seitz J., Mutschler C. (2022): Transfer Learning to adapt 5G AI-based Fingerprint Localization across Environments. In: IEEE Vehicular Technology Conference, Vol. 2022-June (Conference Paper). DOI:10.1109/VTC2022-Spring54318.2022.9860906. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137742899&doi=10.1109%2fVTC2022-Spring54318.2022.9860906&partnerID=40&md5=3b3573aa53008b2907a5bfb6b7d247b5

- van der Merwe J.R., Garzia F., Rügamer A., Urquijo S., Contreras Franco D., Felber W. (2022): Wide-Band Interference Mitigation in GNSS Receivers Using Sub-Band Automatic Gain Control. In: Sensors, Vol. 22, Nr. 2, Art. 679 (Article). DOI:10.3390/s22020679. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85122872634&doi=10.3390%2fs22020679&partnerID=40&md5=95a2e605e9042d5751d4c0ea0906df21

- Chen W., Berwald A., Hauke A., Zimmermann V., Bayer C.F., Jank M.P.M. (2022): Integration of a humidity sensor with power electronic applications. In: Proceedings of IEEE Sensors, Vol. 2022-October (Conference Paper). DOI:10.1109/SENSORS52175.2022.9967313. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85144040398&doi=10.1109%2fSENSORS52175.2022.9967313&partnerID=40&md5=6be96795aa49b06364b4574f4a95acca

- Fritsch B., Wu M., Hutzler A., Zhou D., Spruit R., Vogl L., Will J., Hugo Pérez Garza H., März M., Jank M.P.M., Spiecker E. (2022): Sub-Kelvin thermometry for evaluating the local temperature stability within in situ TEM gas cells. In: Ultramicroscopy, Vol. 235, Art. 113494 (Article). DOI:10.1016/j.ultramic.2022.113494. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85125260884&doi=10.1016%2fj.ultramic.2022.113494&partnerID=40&md5=8f5d6437aedd4bd69abc1eac795a5b93

- Dreher V., Joch D., Kren H., Schwarberg J.H., Jank M.P.M. (2022): Ultrathin and flexible sensors for pressure and temperature monitoring inside battery cells. In: Proceedings of IEEE Sensors, Vol. 2022-October (Conference Paper). DOI:10.1109/SENSORS52175.2022.9967234. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85144062976&doi=10.1109%2fSENSORS52175.2022.9967234&partnerID=40&md5=1a3682841f4490c37edf25b698c5e3a4

- Romijn Joost, Vollebregt Sten, May Alexander, Erlbacher Tobias, Zeijl Henk W. van, Leijtens Johan, Zhang Guoqi, Sarro Pasqualina M. (2022): Visible Blind Quadrant Sun Position Sensor in a Silicon Carbide Technology. In: IEEE 35th International Conference on Micro Electro Mechanical Systems Conference, MEMS 2022 (Conference Paper). DOI:10.1109/MEMS51670.2022.9699533. Link: https://publica.fraunhofer.de/entities/publication/57e30ca8-b543-4120-805a-b455cf080a32/details

- Wiede Christian, Wuerich Carolin, Grabmaier Anton (2022): A calibration-free blood pressure measurement on a scale: Concept and challenges. In: 15th International Joint Conference on Biomedical Engineering Systems and Technologies, BIOSTEC 2022. Proceedings. Vol.4: BIOSIGNALS (Conference Paper). DOI:10.5220/0010873100003123. Link: https://publica.fraunhofer.de/entities/publication/bfba1089-7849-42a0-b218-406c05199433/details

- Wuerich C., Humm E.-M., Wiede C., Schiele G. (2022): A Feature-based Approach on Contactless Blood Pressure Estimation from Video Data. In: European Signal Processing Conference, Vol. 2022-August, pp. 1343-1347 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85141010726&partnerID=40&md5=ecd93a6cac1fc8214d95bce5200db157

- Elizarova S., Chouaib A.A., Shaib A., Hill B., Mann F., Brose N., Kruss S., Daniel J.A. (2022): A fluorescent nanosensor paint detects dopamine release at axonal varicosities with high spatiotemporal resolution. In: Proceedings of the National Academy of Sciences of the United States of America, Vol. 119, Nr. 22, Art. e2202842119 (Article). DOI:10.1073/pnas.2202842119. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-

85131107740&doi=10.1073%2fpnas.2202842119&partnerID=40&md5=13d730bbf8305d57c73147337087601c

- Kappert H., Braun S., Kordas N., Kosfeld A., Utz A., Weber C., Rämer O., Spanier M., Ihle M., Ziesche S., Kokozinski R. (2022): A High Temperature SOI-CMOS Chipset Focusing Sensor Electronics for Operating Temperatures up to 300°C. In: Journal of Microelectronics and Electronic Packaging, Vol. 19, Nr. 1, pp. 1-7 (Article). DOI:10.4071/imaps.1547377. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129104721&doi=10.4071%2fimaps.1547377&partnerID=40&md5=3e7b1b7bf15374fe8bb1ed50c49830b7

- Netaev A., Schierbaum N., Seidl K. (2022): Advantages and Limitations of Fluorescence Lifetime Measurements Using Single-Photon Avalanche Diode (SPAD) Array Detector: A Comprehensive Theoretical and Experimental Study. In: Sensors, Vol. 22, Nr. 10, Art. 3822 (Article). DOI:10.3390/s22103822. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85130114740&doi=10.3390%2fs22103822&partnerID=40&md5=bcc04549cc3c48ae0b49eba0f2960437

- Piechaczek D.S., Schrey O., Ligges M., Hosticka B., Kokozinski R. (2022): Anti-Blooming Clocking for Time-Delay Integration CCDs. In: Sensors, Vol. 22, Nr. 19, Art. 7520 (Article). DOI:10.3390/s22197520. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85139917124&doi=10.3390%2fs22197520&partnerID=40&md5=5c34724dcd09b0cbfe447e4b036bfb32

- Erbsloh A., Viga R., Seidl K., Kokozinski R. (2022): Artefact-Suppressing Analog Spike Detection Circuit for Firing-Rate Measurements in Closed-Loop Retinal Neurostimulators. In: IEEE Sensors Journal, Vol. 22, Nr. 12, pp. 11328-11335 (Article). DOI:10.1109/JSEN.2021.3133716. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85121390800&doi=10.1109%2fJSEN.2021.3133716&partnerID=40&md5=87b2f5df33f35718746ec67a2c5a4eee

- Ackermann J., Metternich J.T., Herbertz S., Kruss S. (2022): Biosensing with Fluorescent Carbon Nanotubes. In: Angewandte Chemie - International Edition, Vol. 61, Nr. 18, Art. e202112372 (Review). DOI:10.1002/anie.202112372. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85125388986&doi=10.1002%2fanie.202112372&partnerID=40&md5=37c29e032bd4417049527a5dc1efa98b

- Wuerich C., Wichum F., El-Kadri O., Ghantawi K., Grewal N., Wiede C., Seidl K. (2022): Blood Pressure Estimation based on Electrocardiograms. In: Current Directions in Biomedical Engineering, Vol. 8, Nr. 2, pp. 53-56 (Conference Paper). DOI:10.1515/cdbme-2022-1015. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137717304&doi=10.1515%2fcdbme-2022-1015&partnerID=40&md5=393397eff6ddaa502147308a14bd2af0

- Clément P., Ackermann J., Sahin-Solmaz N., Herbertz S., Boero G., Kruss S., Brugger J. (2022): Comparison of electrical and optical transduction modes of DNA-wrapped SWCNT nanosensors for the reversible detection of neurotransmitters.. In: Biosensors and Bioelectronics, Vol. 216, Art. 114642 (Article). DOI:10.1016/j.bios.2022.114642. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137082432&doi=10.1016%2fj.bios.2022.114642&partnerID=40&md5=a43cc24abaeac754183a468addd28914

- Wichum Felix, Hassel Jacqueline, Wiede Christian, Seidl Karsten (2022): Contactless measurement of respiratory volumes: A calibration free method based on depth information. In: 15th International Joint Conference on Biomedical Engineering Systems and Technologies, BIOSTEC 2022. Proceedings. Vol.4: BIOSIGNALS (Conference Paper). DOI:10.5220/0010813300003123. Link: https://publica.fraunhofer.de/entities/publication/476d7cb8-818f-4d5b-a4ca-fe8fab056ff9/details

- Wichum F., Wiede C., Seidl K. (2022): Depth-Based Measurement of Respiratory Volumes: A Review. In: Sensors, Vol. 22, Nr. 24, Art. 9680 (Review). DOI:10.3390/s22249680. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85144519450&doi=10.3390%2fs22249680&partnerID=40&md5=1acb35ab1202631646135ea91f76765e

- Nißler R., Müller A.T., Dohrman F., Kurth L., Li H., Cosio E.G., Flavel B.S., Giraldo J.P., Mithöfer A., Kruss S. (2022): Detection and Imaging of the Plant Pathogen Response by Near-Infrared Fluorescent Polyphenol Sensors. In: Angewandte Chemie - International Edition, Vol. 61, Nr. 2, Art. e202108373 (Article). DOI:10.1002/anie.202108373. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85119591652&doi=10.1002%2fanie.202108373&partnerID=40&md5=f8822e2e378644d016fb2bbeaaf28798

- Hoyer I., Utz A., Ludecke A., Richter M., Wichum F., Gembaczka P., Kohler K., Rohr M., Antink C.H., Seidl K. (2022): Detection of atrial fibrillation with an optimized neural network on a RISC-V-based microcontroller for efficient integration into ECG patches. In: 2022 IEEE International Symposium on Medical Measurements and Applications, MeMeA 2022 - Conference Proceedings (Conference Paper). DOI:10.1109/MeMeA54994.2022.9856502. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137897411&doi=10.1109%2fMeMeA54994.2022.9856502&partnerID=40&md5=1a1c1b9cd487e7b26a170aead631574c

- Doliwa S., Erbsloh A., Seidl K., Iossifidis I. (2022): Development of an Analog Front-End for Brain-Computer Interfaces. In: PRIME 2022 - 17th International Conference on Ph.D Research in Microelectronics and Electronics, Proceedings, pp. 309-312 (Conference Paper). DOI:10.1109/PRIME55000.2022.9816757. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135186170&doi=10.1109%2fPRIME55000.2022.9816757&partnerID=40&md5=ca7695a9ae9bc3d4a217c4887196780b

- Chen G., Landmeyer F., Wiede C., Kokozinski R. (2022): Feature extraction and neural network-based multi-peak analysis on time-correlated LiDAR histograms. In: Journal of Optics (United Kingdom), Vol. 24, Nr. 3, Art. 034008 (Article). DOI:10.1088/2040-8986/ac486d. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85125587393&doi=10.1088%2f2040-8986%2fac486d&partnerID=40&md5=f471bbac4f4592df920f0b129136abb3

- Wulfert L., Wiede C., Verbunt M.H., Gembaczka P., Grabmaier A. (2022): Human Detection with A Feedforward Neural Network for Small Microcontrollers. In: 2022 7th International Conference on Frontiers of Signal Processing, ICFSP 2022, pp. 14-22 (Conference Paper). DOI:10.1109/ICFSP55781.2022.9924667. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142357974&doi=10.1109%2fICFSP55781.2022.9924667&partnerID=40&md5=23ce3c628855561d789dd35a1a6bb320

- Vora K.H., Sharov V., Kordas N., Seidl K. (2022): Impedance-based cell density measurement with inkjet printed flexible sensor. In: FLEPS 2022 - IEEE International Conference on Flexible and Printable Sensors and Systems, Proceedings (Conference Paper). DOI:10.1109/FLEPS53764.2022.9781560. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137178452&doi=10.1109%2fFLEPS53764.2022.9781560&partnerID=40&md5=3074e472d76b03a624c037106ba0af5b

- Hoyer I., Utz A., Lüdecke A., Rohr M., Antink C.H., Seidl K. (2022): Inference runtime of a neural network to detect atrial fibrillation on customized RISC-V-based hardware. In: Current Directions in Biomedical Engineering, Vol. 8, Nr. 2, pp. 703-706 (Conference Paper). DOI:10.1515/cdbme-2022-1179. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137942728&doi=10.1515%2fcdbme-2022-1179&partnerID=40&md5=fb6e8c89c5c9c6b1c0a4aff819503af4

Publications from the Technology Platform "Sensor Systems" of the Research Fab Microelectronics Germany (2022)

- Kordas N., Kappert H. (2022): Integrated High Temperature Electronics for Sensors in Harsh Environments. In: Sensoren und Messsysteme - 21. ITG/GMA-Fachtagung, pp. 113-115 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143252262&partnerID=40&md5=418a1a5cbfeed496f3c4ad04804b5353

- Neubieser R.-M., Wree J.-L., Jagosz J., Becher M., Ostendorf A., Devi A., Bock C., Michel M., Grabmaier A. (2022): Low-temperature ALD process development of 200 mm wafer-scale MoS2 for gas sensing application. In: Micro and Nano Engineering, Vol. 15, Art. 100126 (Article). DOI:10.1016/j.mne.2022.100126. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85126539829&doi=10.1016%2fj.mne.2022.100126&partnerID=40&md5=3a7959a22c4420ae549e91a36d84dbf4

- Ziesche S., Goldberg A., Kappert H., Schopferer S. (2022): Mehrlagenkeramische Sensorlösungen für die turbinennahe Druckund Temperaturbestimmung. In: Sensoren und Messsysteme - 21. ITG/GMA-Fachtagung, pp. 122-123 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143255856&partnerID=40&md5=2eabd6893952ae5b07d37642e463aa31

- Pernau H.-F., Yurchenko O., Bierer B., Jägle M., Dreiner S., Naumann F., Wöllenstein J. (2022): MEMS based micropellistors for methane detection [MEMS basierte Mikro-Pellistoren zur Detektion von Methan]. In: Sensoren und Messsysteme - 21. ITG/GMA-Fachtagung, pp. 29-32 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143254622&partnerID=40&md5=16bcca4f0fc96ece90de134f9f8dad43

- Zakizade E., Michel M., Dittrich D., Litke A., Dreiner S., Weyers S. (2022): Microbolometer compatible metamaterial absorber for multispectral imaging. In: Proceedings of SPIE - The International Society for Optical Engineering, Vol. 12271, Art. 122710G (Conference Paper). DOI:10.1117/12.2638111. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85145434031&doi=10.1117%2f12.2638111&partnerID=40&md5=f234cef98b7a12d4c338c1c57a4bda1b

- Selvaggio G., Nißler R., Nietmann P., Patra A., Patalag L.J., Janshoff A., Werz D.B., Kruss S. (2022): NIR-emitting benzene-fused oligo-BODIPYs for bioimaging. In: Analyst, Vol. 147, Nr. 2, pp. 230-237 (Article). DOI:10.1039/d1an01850g. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85123479102&doi=10.1039%2fd1an01850g&partnerID=40&md5=16696da75f7decc752b4c22beab6ddd9

- Vora K.H., Kordas N., Seidl K. (2022): Optimization and characterization of inkjet printed interdigitated electrode geometries for impedance measurements. In: PRIME 2022 - 17th International Conference on Ph.D Research in Microelectronics and Electronics, Proceedings, pp. 109-112 (Conference Paper). DOI:10.1109/PRIME55000.2022.9816789. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135149011&doi=10.1109%2fPRIME55000.2022.9816789&partnerID=40&md5=f8fcf2f50cb7c18ab75d711ff1a9b79e

- Zhao Y., Vora K., Liu X., Bögel G., Seidl K., Balzer J.C. (2022): Photonic Crystal Resonator in the Millimeter/Terahertz Range as a Thin Film Sensor for Future Biosensor Applications. In: Journal of Infrared, Millimeter, and Terahertz Waves, Vol. 43, Nr. 5-6, pp. 426-444 (Article). DOI:10.1007/s10762-022-00859-1. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85131511442&doi=10.1007%2fs10762-022-00859-1&partnerID=40&md5=0cad8e20f864541843833ee0ce6ed71c

- Litke Alexander, Zakizade Elahe, Michel Marvin Daniel, Dittrich Dirk, Weyers Sascha, Schall-Giesecke Anna Lena (2022): Plasmonic metamaterial absorber for multispectral MWIR microbolometers. In: Mikro-Nano-Integration. Beiträge des 9. GMM-Workshops 2022 (Conference Paper). DOI:. Link: https://publica.fraunhofer.de/entities/publication/5f73b9bd-d137-4954-b27a-2186a7c09c88/details

- Nißler R., Ackermann J., Ma C., Kruss S. (2022): Prospects of Fluorescent Single-Chirality Carbon Nanotube-Based Biosensors. In: Analytical Chemistry, Vol. 94, Nr. 28, pp. 9941-9951 (Review). DOI:10.1021/acs.analchem.2c01321. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135943337&doi=10.1021%2facs.analchem.2c01321&partnerID=40&md5=66434783cacab4954091112e49e99c2d

- Mann F.A., Galonska P., Herrmann N., Kruss S. (2022): Quantum defects as versatile anchors for carbon nanotube functionalization. In: Nature Protocols, Vol. 17, Nr. 3, pp. 727-747 (Review). DOI:10.1038/s41596-021-00663-6. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85124343083&doi=10.1038%2fs41596-021-00663-6&partnerID=40&md5=b6a1b4216a27b416f96ed73277829a46

- Blaeser S., Michel M., Zakizade E., Weyers S., Weiler D. (2022): Scalable Nanotube Microbolometers for uncooled thermal Imaging. In: Proceedings of SPIE - The International Society for Optical Engineering, Vol. 12107, Art. 1210719 (Conference Paper). DOI:10.1117/12.2617406. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135776644&doi=10.1117%2f12.2617406&partnerID=40&md5=ff99bd1eea9084c372c38cae76ce4b79

- Zhao Y., Buchholz J.-H., Grenter T., Liu X., Bogel G.V., Seidl K., Balzer J.C. (2022): Sensitive and Robust Millimeter-Wave/Terahertz Photonic Crystal Chip for Biosensing Applications. In: IEEE Access, Vol. 10, pp. 92237-92248 (Article). DOI:10.1109/ACCESS.2022.3202537. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85137542694&doi=10.1109%2fACCESS.2022.3202537&partnerID=40&md5=7e6833379a25062441a2e03e7adfb1a2

- Kappert H., Schopferer S., Saeidi N., Döring R., Ziesche S., Olowinsky A., Naumann F., Jägle M., Spanier M., Grabmaier A. (2022): Sensor Systems for Extremely Harsh Environments. In: Journal of Microelectronics and Electronic Packaging, Vol. 19, Nr. 4, pp. 101-114 (Article). DOI:10.4071/001C.57715. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85147529042&doi=10.4071%2f001C.57715&partnerID=40&md5=f06a8293f5993e7b31b00fc3c0fa024c

- Lohler P., Pickhinke A., Erbsloh A., Kokozinski R., Seidl K. (2022): SoC for Retinal Ganglion Cell Stimulation with Integrated Sinusoidal Kilohertz Frequency Waveform Generation. In: PRIME 2022 - 17th International Conference on Ph.D Research in Microelectronics and Electronics, Proceedings, pp. 341-344 (Conference Paper). DOI:10.1109/PRIME55000.2022.9816766. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135162083&doi=10.1109%2fPRIME55000.2022.9816766&partnerID=40&md5=c89454d83676995d3229179d450a6db7

- Blaeser S., Michel M., Zakizade E., Geruschke T., Weyers S., Weiler D. (2022): Uncooled IRFPAs based on scalable nanotube microbolometers with 6 um pixel pitch for thermal imaging. In: Sensoren und Messsysteme - 21. ITG/GMA-Fachtagung, pp. 341-343 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143257273&partnerID=40&md5=d6d5c717620e9c973c8b5c697c184a76

- Reinig P., Dallmann H.-G., Schwarzenberg M., Ziebarth J., Knobbe J., Junek J., Herbst R., Rathert J., Gerlach R., Blache U., Tretbar S., Fricke S. (2022): MEMS-based confocal laser scanning fluorescence microscopy for tumor demarcation in oncological surgery. In: Progress in Biomedical Optics and Imaging - Proceedings of SPIE, Vol. 11949, Art. 1194906 (Conference Paper). DOI:10.1117/12.2608547. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129403055&doi=10.1117%2f12.2608547&partnerID=40&md5=2aa71db066f1bbf2b146e525aae6887c

- Suawa P., Meisel T., Jongmanns M., Huebner M., Reichenbach M. (2022): Modeling and Fault Detection of Brushless Direct Current Motor by Deep Learning Sensor Data Fusion. In: Sensors,

Vol. 22, Nr. 9, Art. 3516 (Article). DOI:10.3390/s22093516. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129371614&doi=10.3390%2fs22093516&partnerID=40&md5=04857aa65a3d9ed31f4330f0608673e0

- Aichroth P., Antes C., Gembatzka P., Graf H., Johnson D.S., Jung M., Kämpfe T., Kleinberger T., Köllmer T., Kuhn T., Kutter C., Krüger J., Loroch D.M., Lukashevich H., Laleni N., Zhang L., Leugering J., Martín Fernández R., Mateu L., Mojumder S., Prautsch B., Pscheidl F., Roscher K., Schneickert S., Vanselow F., Wallbott P., Walter O., Weber N. (2022): SEC-Learn: Sensor Edge Cloud for Federated Learning: Invited Paper. In: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Vol. 13227 LNCS, pp. 432-448 (Conference Paper). DOI:10.1007/978-3-031-04580-6_29. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129819292&doi=10.1007%2f978-3-031-04580-6_29&partnerID=40&md5=a28793284ca4a0009aba17baa02acc6a

- Lv H., Fidalgo J., Kampfe T., Langer J., Wrona J., Ocker B., Freitas P.P., Cardoso S. (2022): Seebeck effect and Joule heating in CoFeB/MgO/CoFeB-based perpendicular magnetic tunnel junctions with low resistance area product. In: Journal of Physics D: Applied Physics, Vol. 55, Nr. 26, Art. 265302 (Article). DOI:10.1088/1361-6463/ac5e8a. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85128909656&doi=10.1088%2f1361-6463%2fac5e8a&partnerID=40&md5=2435f45b9277ea22440146229bc0222b

- Lupan O., Santos-Carballal D., Magariu N., Mishra A.K., Ababii N., Kruger H., Wolff N., Vahl A., Bodduluri M.T., Kohlmann N., Kienle L., Adelung R., de Leeuw N.H., Hansen S. (2022): Al2O3/ZnO Heterostructure-Based Sensors for Volatile Organic Compounds in Safety Applications. In: ACS Applied Materials and Interfaces, Vol. 14, Nr. 25, pp. 29331-29344 (Article). DOI:10.1021/acsami.2c03704. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85133214245&doi=10.1021%2facsami.2c03704&partnerID=40&md5=bea955c841e82cbff0608810f84d1cee

- Moench S., Meyer J.M., Žukauskaite A., Lebedev V., Fichtner S., Su J., Niekiel F., Giese T., Thormählen L., Quandt E., Lofink F. (2022): AlScN-Based SAW Magnetic Field Sensor for Isolated Closed-Loop Hysteretic Current Control of Switched-Mode Power Converters. In: IEEE Sensors Letters, Vol. 6, Nr. 10, Art. 2500904 (Article). DOI:10.1109/LSENS.2022.3205853. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85139255945&doi=10.1109%2fLSENS.2022.3205853&partnerID=40&md5=88a4c7c6deeb91443c34d9bcd45b5ce6

- Hoppe M., Aßmann C., Schmidtmann S., Honsberg M., Tatenguem H., Schanze T., Sacher J.R., Gu-Stoppel S. (2022): Interband cascade external laser system for the rapid detection of trace gases in the MIR region. In: 2022 Conference on Lasers and Electro-Optics, CLEO 2022 - Proceedings, Art. ATu4O.4 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85139914147&partnerID=40&md5=0214c31684f6d972d92a13cc1fb44541

- Santos-Arana F., Pascal Y., Kuprat J., Langwasser M., Debbadi K., Liserre M. (2022): Optical Sensing Applied to Thermal Observers for Enhanced Reliability of Power Modules. In: 2022 IEEE 13th International Symposium on Power Electronics for Distributed Generation Systems, PEDG 2022 (Conference Paper). DOI:10.1109/PEDG54999.2022.9923139. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142094823&doi=10.1109%2fPEDG54999.2022.9923139&partnerID=40&md5=0ec2d6c14b37ec36bf497ae871337343

- Mortel R., Franz J., Rindelaub S., Wijayawardhana C., Langnes E., Burger A., Wursig A., Muller-Groeling A. (2022): Smart Cells - Battery monitoring via internal sensors. In: 2022 IEEE 13th International Symposium on Power Electronics for Distributed Generation Systems, PEDG 2022 (Conference Paper). DOI:10.1109/PEDG54999.2022.9923167. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142058670&doi=10.1109%2fPEDG54999.2022.9923167&partnerID=40&md5=471004695bea392499de057caf7e1ab0

- Kappert H., Braun S., Kordas N., Kosfeld A., Utz A., Weber C., Rämer O., Spanier M., Ihle M., Ziesche S., Kokozinski R. (2022): A High Temperature SOI-CMOS Chipset Focusing Sensor Electronics for Operating Temperatures up to 300°C. In: Journal of Microelectronics and Electronic Packaging, Vol. 19, Nr. 1, pp. 1-7 (Article). DOI:10.4071/imaps.1547377. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129104721&doi=10.4071%2fimaps.1547377&partnerID=40&md5=3e7b1b7bf15374fe8bb1ed50c49830b7

- Wietstruck M., Mausolf T., Lehmann J., Cao Z., Nguyen T.D., Wöhrmann M., Braun T. (2022): BiCMOS Integrated Temperature Sensor for Thermal Evaluation of Fan-out Wafer-level Packaging (FOWLP) including Hot Spot Analysis. In: 2022 IMAPS Nordic Conference on Microelectronics Packaging, NordPac 2022 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85138496299&partnerID=40&md5=eade7d531a7f1881c90e66ed7d2dd717

- Kolovou-Kouri K., Rashidi A., Varkevisser F., Serdijn W.A., Giagka V. (2022): Energy Savings of Multi-Channel Neurostimulators with Non-Rectangular Current-Mode Stimuli Using Multiple Supply Rails. In: Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBS, Vol. 2022-July, pp. 3443-3446 (Conference Paper). DOI:10.1109/EMBC48229.2022.9871145. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85138127858&doi=10.1109%2fEMBC48229.2022.9871145&partnerID=40&md5=7ddc5caa3698ae3dc637f8ceff5cea4c

- Mackowiak P., Erbacher K., Bäuscher M., Höppner K., Schiffer M., Ngo H.-D., Schneider-Ramelow M. (2022): Herstellung eines piezoresistiven Drucksensors aus Siliziumcarbid mittels reaktiven Ionenätzen. In: Sensoren und Messsysteme - 21. ITG/GMA-Fachtagung, pp. 81-84 (Conference Paper). DOI:. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143285064&partnerID=40&md5=2ad2e2b045a1d319e31c673893b4dccd

- Leese H.S., Tejkl M., Vilar L., Georgi L., Yau H.C., Rubio N., Reixach E., Buk J., Jiang Q., Bismarck A., Hahn R., Shaffer M.S.P. (2022): High- k dielectric screen-printed inks for mechanical energy harvesting devices. In: Materials Advances, Vol. 3, Nr. 3, pp. 1780-1790 (Article). DOI:10.1039/d1ma00661d. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85124610261&doi=10.1039%2fd1ma00661d&partnerID=40&md5=334ee764174aa4820693bda9b2ba2211

- Schütze D., Spanier M., Löher T., Voitel M., Becker K.-F., Hofmeister A., Gottwald S., Ostmann A., Schneider-Ramelow M. (2022): Miniaturized Sensor Modules for under Water Applications realized by Printed Circuit Board Embedding Technology. In: 2022 IEEE 9th Electronics System-Integration Technology Conference, ESTC 2022 - Proceedings, pp. 49-54 (Conference Paper). DOI:10.1109/ESTC55720.2022.9939405. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143119153&doi=10.1109%2fESTC55720.2022.9939405&partnerID=40&md5=1c2de6ef408898eca6c39e39040e25b2

- Bakhshaee Babaroud N., Palmar M., Velea A.I., Coletti C., Weingärtner S., Vos F., Serdijn W.A., Vollebregt S., Giagka V. (2022): Multilayer CVD graphene electrodes using a transfer-free process for the next generation of optically transparent and MRI-compatible neural interfaces. In: Microsystems and Nanoengineering, Vol. 8, Nr. 1, Art. 107 (Article). DOI:10.1038/s41378-022-00430-x. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85139245595&doi=10.1038%2fs41378-022-00430-x&partnerID=40&md5=0422bf8acfd27ba230db87905f183cef

- Bickel J., Schneider-Ramelow M., Lang K.-D., Gesche R., Ngo H.-D. (2022): Platinum interconnections for harsh environment applications using atmospheric pressure sputtering. In: 2022 International Conference on Electronics Packaging, ICEP 2022, pp. 167-168 (Conference Paper). DOI:10.23919/ICEP55381.2022.9795437. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85133405544&doi=10.23919%2fICEP55381.2022.9795437&partnerID=40&md5=6db0ca6b9f93d9cb01039eec8087cad7

- Varkevisser F., Rashidi A., Costa T.L., Giagka V., Serdijn W.A. (2022): Pre-Filtering of Stimuli for Improved Energy Efficiency in Electrical Neural Stimulation. In: BioCAS 2022 - IEEE Biomedical Circuits and Systems Conference: Intelligent Biomedical Systems for a Better Future, Proceedings, pp. 312-316 (Conference Paper). DOI:10.1109/BioCAS54905.2022.9948643. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142924569&doi=10.1109%2fBioCAS54905.2022.9948643&partnerID=40&md5=c9af367150db5b3615ee9a1b63220159

- Kappert H., Schopferer S., Saeidi N., Döring R., Ziesche S., Olowinsky A., Naumann F., Jägle M., Spanier M., Grabmaier A. (2022): Sensor Systems for Extremely Harsh Environments. In: Journal of Microelectronics and Electronic Packaging, Vol. 19, Nr. 4, pp. 101-114 (Article). DOI:10.4071/001C.57715. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85147529042&doi=10.4071%2f001C.57715&partnerID=40&md5=f06a8293f5993e7b31b00fc3c0fa024c

- Tavakolibasti M., Meszmer P., Kettelgerdes M., Bottger G., Elger G., Erdogan H., Seshaditya A., Wunderle B. (2022): Structural-Thermal-Optical-Performance (STOP) Analysis of a Lens Stack for Realization of a Digital Twin of an automotive LiDAR. In: 2022 23rd International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems, EuroSimE 2022 (Conference Paper). DOI:10.1109/EuroSimE54907.2022.9758897. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129502467&doi=10.1109%2fEuroSimE54907.2022.9758897&partnerID=40&md5=a185c9691573c25e5d44f5b1f3fa8efa

- Liaskos C., Tsioliaridou A., Georgopoulos K., Morianos I., Ioannidis S., Salem I., Manessis D., Schmid S., Tyrovolas D., Tegos S.A., Mekikis P.-V., Diamantoulakis P.D., Pitilakis A., Kantartzis N.V., Karagiannidis G.K., Tasolamprou A.C., Tsilipakos O., Kafesaki M., Akyildiz I.F., Pitsillides A., Pateraki M., Vakalellis M., Spais I. (2022): XR-RF Imaging Enabled by Software-Defined Metasurfaces and Machine Learning: Foundational Vision, Technologies and Challenges. In: IEEE Access, Vol. 10, pp. 119841-119862 (Article). DOI:10.1109/ACCESS.2022.3219871. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85141609900&doi=10.1109%2fACCESS.2022.3219871&partnerID=40&md5=0abc3be51b31e580efaa4f74fdb5488d