

Walter Lang - Liste der Veröffentlichungen

Updated December 5^h 2017

- 562 Tahir, M. W.; Zaidi, N. A.; Blank, R.; Papireddy Vinayaka, P.; Vellekoop, M. J.; Lang, W. *An Efficient and Simple Embedded System of Fungus Detection System*. Proc. INMIC 2017, Lahore, Pakistan, 2017.
- 561 Tiedemann, R.; Pille , C.; Dumstorff, G.; Lang, W. *Sensor Integration in Castings Made of Aluminum - New Approaches for Direct Sensor Integration in Aluminum High Pressure Die Casting*. Proc. 21. Symposium Verbundwerkstoffe und Werkstoffverbunde, Bremen, Deutschland, pp 786-792, 2017 DOI 10.4028/www.scientific.net/KEM.742.786.
- 560 Sarma, M.; Borchers, F.; Dumstorff, G.; Heinzel, C.; Lang, W., *Measuring strain during a cylindrical grinding process using embedded sensors in a workpiece*. J. Sens. Sens. Syst. 6, (2), pp 331-340, 2017 10.5194/jsss-6-331-2017.
- 559 Hübner, M.; Dumstorff, G.; Kahali Mogaddam, M.; Plagemann, P.; Lang, W., *Online monitoring of the curing of adhesives with a miniaturised interdigital sensor using impedance spectroscopy*. Journal of Adhesion Science and Technology, pp 1-15, 2017 DOI 10.1080/01694243.2017.1385122.
- 558 Papireddy Vinayaka, P.; Blank, R.; Frodl, M.; Tahir, W.; Zaidi, N. A.; Oellers, M.; Driesche van den, S.; Lang, W.; Vellekoop, M. J. A replaceable bioreactor array for monitoring mold spore contamination in archives. Proc. MikroSystemTechnik Kongress 2017, München, Deutschland, pp 641-644, 2017.
- 557 Strokov, S.; Schander, A.; Stemmann, H.; Tessmann, T.; Lang, W.; Kreiter, A. *A flexible multichannel ECoG array with PEDOTcoated electrodes for minimally invasive recording and stimulation*. Proc. IEEE SENSORS 2017, Glasgow, Schottland, pp 1667-1669, 2017 DOI
- 556 Zaidi, N. A.; Tahir, M. W.; Vellekoop, M. J.; Lang, W. *Using Allan Variance to Determine the Resolution of Ethylene Gas Chromatographic System*. Proc. IEEE SENSORS 2017, Glasgow, Schottland, pp 157-159, 2017 DOI
- 554 Jedermann, R.; Henning, P.; Lang, W. *Spatial processing of sensor network data*. Proc. IEEE SENSORS 2017, Glasgow, Schottland, pp 73-75, 2017 DOI
- 553 Jedermann, R.; Hartgenbusch, N.; Borysov, M.; Lang, W. *Housing design for two-dimensional air flow sensors*. Proc. IEEE SENSORS 2017, Glasgow, Schottland, pp 1272-1274, 2017 DOI

- 552 Zaidi, N. A.; Tahir, M. W.; Vellekoop, M. J.; Lang, W., *A Gas Chromatographic System for the Detection of Ethylene Gas Using Ambient Air as a Carrier Gas*. Sensors 17, (10), p 2283, 2017 DOI 10.3390/s17102283
- 551 Tahir, M. W.; Zaidi, N. A.; Blanke, M.; Papireddy Vinayaka, P.; Vellekoop, M. J.; Lang, W., *Fungus Detection Through Optical Sensor System Using Two Different Kinds of Feature Vectors for the Classification*. IEEE Sensors Journal 17, (16), pp 5341-1748, 2017
- 550 Osipov, D.; Strokov, S.; Kreiter, A. K.; Schander, A.; Tessmann, T.; Lang, W.; Paul, S., *HV compliant current driver with on-chip read-out protection switch for neural stimulation*. Analog Integrated Circuits and Signal Processing 92, (3), pp 415-426, 2017 DOI 10.1007/s10470-017-1022-3
- 549 Moghaddam, K. M.; Hübner, M.; Koerdт, M.; Brauner, C.; Lang, W., *Sensors on a Plasticized Thermoset Substrate for Cure Monitoring of CFRP Production*. Sensors and Actuators A: Physical, 2017 DOI <https://doi.org/10.1016/j.sna.2017.10.007>
- 548 Jedermann, R.; Praeger, U.; Lang, W., *Challenges and opportunities in remote monitoring of perishable products*. Food Packaging and Shelf Life 14, (Part A), pp 18-25, 2017 <https://doi.org/10.1016/j.fpsl.2017.08.006>
- 547 Driesche, S. v. d.; Habben, C.; Bödecker, A.; Lang, W.; Vellekoop, M. J. *A Simple Method to Allow Paraflexene-C Coatings on Gold Substrates*. Proc. Eurosensors, Paris, Frankreich, p 299, 2017 DOI 10.3390/proceedings1040299
- 546 Gräßner, D.; Tintelott, M.; Dumstorff, G.; Lang, W. *Low-Cost Thin and Flexible Screen-Printed Pressure Sensor*. Proc. Eurosensors, Paris, Frankreich, p 616, 2017 DOI 10.3390/proceedings1040616
- 545 Gräßner, D.; Zahn, R.; Giese, U.; Lang, W. *Intelligent Machine Parts: Challenges in the Condition Monitoring of Elastomer Gaskets with Integrated Sensors*. Proc. Eurosensors, Paris, Frankreich, p 632, 2017 DOI 10.3390/proceedings1040632
- 544 Hübner, M.; Lang, W. *Online Monitoring of Composites with a Miniaturized Flexible Combined Dielectric and Temperature Sensor*. Proc. Eurosensors, p 627, 2017 DOI 10.3390/proceedings1040627
- 543 Hübner, M.; Lang, W.; Dumstorff, G. *Surface Integrated Printed Interdigital Structure for Process Monitoring the Curing of an Adhesive Joint*. Proc. Eurosensors, Paris, Frankreich, p 631, 2017 DOI 10.3390/proceedings1040631
- 542 Moghaddam, M. K.; Breede, A.; Dimassi, A.; Lang, W. *Piezoresistive Pressure Sensors for Resin Flow Monitoring in Carbon Fibre-Reinforced Composite*. Proc. Eurosensors, Paris, Frankreich, p 339, 2017 DOI 10.3390/proceedings1040339

- 541 Moghaddam, M. K.; Hübner, M.; Lang, W. *Screen-Printed Interdigital Structure on Flexible RTM6 Substrate*. Proc. Eurosensors, Paris, Frankreich, p 612, 2017
DOI 10.3390/proceedings1040612
- 540 Moghaddam, M. K.; Hübner, M.; Lang, W. *Screen-Printed Interdigital Structure on Flexible RTM6 Substrate*. Proc. Eurosensors, Paris, Frankreich, p 612, 2017
DOI 10.3390/proceedings1040612
- 539 Pranti, A. S.; Schander, A.; Bödecker, A.; Lang, W. *Highly Stable PEDOT:PSS Coating on Gold Microelectrodes with Improved Charge Injection Capacity for Chronic Neural Stimulation*. Proc. Eurosensors, Paris, Frankreich, p 492, 2017
DOI 10.3390/proceedings1040492
- 538 Schander, A.; Stemmann, H.; Kreiter, A. K.; Lang, W. *Demonstration of Intracortical Chronic Recording and Acute Microstimulation Using Novel Floating Neural Probes*. Proc. Eurosensors, Paris, Frankreich, p 511, 2017 DOI 10.3390/proceedings1040511
- 537 Dumstorff, G.; Lang, W. *Printed Sensors for Material Integrated Sensing: Functionalization of Semi-Finished Parts*. Proc. Eurosensors, Paris, Frankreich, 2017
DOI 10.3390/proceedings1040608
- 536 Reimers, M.; Lang, W.; Dumstorff, G., *Experimental and Numerical Investigations in Shallow Cut Grinding by Workpiece Integrated Infrared Thermopile Array*. Sensors 17, (10), p 2250, 2017 DOI 10.3390/s17102250
- 535 Hartgenbusch, N.; Borysov, M.; Jedermann, R.; Lang, W., *Reduction of power consumption and expansion of the measurement range by pulsed excitation of thermal flow sensors*. Sensors and Actuators A: Physical, 2017 <http://dx.doi.org/10.1016/j.sna.2017.08.029>
- 534 Berkemeyer, F.; Joost, M.; Lang, W. *Towards a Wireless Sensor System for Wind Turbine Control Optimization*. Proc. EWSN 2017, Uppsala, Sweden, 2017
- 533 Dumstorff, G.; Willert, M.; Riemer, O.; Lang, W. *Characterizing precision cutting process by workpiece integrated printed thermocouples*. Proc. euspen's 17th International Conference, Hannover, Deutschland, 2017
- 532 Moghaddam, K. M.; Salas, M.; Ersöz, I.; Michels, I.; Lang, W., *Study of resin flow in carbon fiber reinforced polymer composites by means of pressure sensors*. Journal of Composite Materials 0, (0), p 0021998317691877, 2017 DOI 10.1177/0021998317691877
- 531 Papireddy Vinayaka, P.; Kahali Moghaddam, M.; Blank, R.; van den Driesche, S.; Lang, W.; Vellekoop, M. J., *Sensor Sticker for Detection of Fungi Spore Contamination on Bananas*. Advances in Science and Technology 100, pp 130-133, 2017
DOI 10.4028/www.scientific.net/AST.100.130
- 530 Dumstorff, G.; Pille, C.; Tiedemann, R.; Busse, M.; Lang, W., *Smart aluminum components: Printed sensors for integration into aluminum during high-pressure casting*. Journal of Manufacturing Processes 26, pp 166-172, 2017
<http://dx.doi.org/10.1016/j.jmapro.2017.02.006>

- 529 Sarma, M.; Borchers, F.; Lang, W. *In situ strain measurement during a grinding process using a sensor-integrated workpiece*. Proc. euspen's 17th International Conference, Hannover, Deutschland, 2017
- 528 Jedermann, R.; Praeger, U.; Geyer, M.; Lang, W., *Remote quality monitoring in the banana chain. Monitoreo remoto de la calidad en la cadena de comercialización del banano*. Philosophical Transactions of the Royal Society A. Mathematical Physical and Engineering Sciences. A 372, p 20130303, 2017 DOI <http://dx.doi.org/10.1098/rsta.2013.0303>
- 527 Osipov, D.; Strokov, S.; Kreiter, A. K.; Schander, A.; Tessmann, T.; Lang, W.; Paul, S., *8-Channel Neural Stimulation ASIC for Epidural Visual Cortex Stimulation*. Journal of Circuits, Systems and Computers, p 1740008, 2017 DOI <http://dx.doi.org/10.1142/S0218126617400084>
- 526 Rotermund, D.; Pistor, J.; Hoeffmann, J.; Schellenberg, T.; Boll, D.; Tolstosheeva, E.; Gauck, D.; Stemmann, H.; Peters-Drolshagen, D.; Kreiter, A. K.; Lang, W.; Pawelzik, K. R., *Implications for a Wireless, External Device System to Study Electrocorticography*. Sensors 17, (4), p 761, 2017 DOI 10.3390/s17040761
- 525 Jedermann, R.; Pratti, P.; Lang, W. *Lessons learned from the intelligent container*. Proc. FRUTIC Symposium 2017: Quality and safety of fresh horticultural commodities, Berlin, Germany, 2017
- 524 Jedermann, R.; Paul, H.; Lang, W. *In-network Processing by the Example of Maxima Estimation in Spatial Fields*. Proc. 11th International ITG Conference on Systems, Communications and Coding Hamburg, Germany, 2017
- 523 Lloyd, C.; Chung, S.-H.; Lang, W.; Jedermann, R., Advantages of Sub-GHz Communication in Food Logistics and DASH7 Implementation. In *Dynamics in Logistics: Proceedings of the 5th International Conference LDIC, 2016 Bremen, Germany*, Freitag, M.; Kotzab, H.; Pannek, J., Eds. Springer International Publishing: Cham, pp 219-228 2017 DOI 10.1007/978-3-319-45117-6_20
- 522 Lloyd, C.; Jedermann, R.; Lang, W., Airflow Behavior Under Different Loading Schemes and Its Correspondence to Temperature in Perishables Transported in Refrigerated Containers. In *Dynamics in Logistics: Proceedings of the 5th International Conference LDIC, 2016 Bremen, Germany*, Freitag, M.; Kotzab, H.; Pannek, J., Eds. Springer International Publishing: Cham, pp 481-490 2017 DOI 10.1007/978-3-319-45117-6_42
- 521 Raza, T.; Lang, W.; Jedermann, R., Integration of Wireless Sensor Networks into Industrial Control Systems. In *Dynamics in Logistics: Proceedings of the 5th International Conference LDIC, 2016 Bremen, Germany*, Freitag, M.; Kotzab, H.; Pannek, J., Eds. Springer International Publishing: Cham, pp 209-218 2017 DOI 10.1007/978-3-319-45117-6_19
- 520 Jedermann, R.; Paul, H.; Lang, W.
Compressed radio transmission of spatial field measurements by virtual sensors.
Proc. 2016 IEEE International Conference on Wireless for Space and Extreme Environments (WiSEE), Aachen, Deutschland, pp 184-189, 2016 DOI 10.1109/WiSEE.2016.7877329.

- 519 Pimentel, J. V.; Tolstosheeva, E.; Kempen, L.; Lang, W.; Vellekoop, M. J.
 An easy fabrication process of fully-sealed parylene microfluidic channels with a single deposition step.
Microsyst Technol 22, (7), pp 1927-1932, 2016 DOI 10.1007/s00542-016-2911-6.
- 518 Papireddy Vinayaka, P.; van den Driesche, S.; Blank, R.; Tahir, M. W.; Lang, W.; Vellekoop, M. J.
 An Impedance-Based Mold Sensor with on-Chip Optical Reference.
Sensors 2016 16, (10), pp 1603, 2016 DOI 10.3390/s16101603.
- 517 Blank, R.; Papireddy Vinayaka, P.; Tahir, M. W.; Yong, J.; Vellekoop, M. J.; Lang, W.
 Comparison of Several Optical Methods for an Automated Fungal Spore Sensor System Concept.
Ieee Sens J 16, (14), pp 5596-5602, 2016 DOI 10.1109/JSEN.2016.2567538
- 516 Tahir, M. W.; Zaidi, N. A.; Papireddy Vinayaka, P.; Lang, W.
 Detection of Fungus through an Optical Sensor System using the Histogram of Oriented Gradients.
 Proc. IEEE Sensors, Orlando, Florida, USA, pp 418-420, 2016
 DOI 10.1109/ICSENS.2016.7808537
- 515 Tahir, M. W.; Zaidi, N. A.; Blank, R.; Papireddy Vinayaka, P.; Vellekoop, M. J.; Lang, W.
 Comparison of Pre-processing on Different Kind of Images Produced by Optical Sensor System.
 Proc. 2nd International Conference on Sensors Engineering and Electronics Instrumental Advances (SEIA' 2016), Barcelona, Spanien, pp 41-43, 2016.
- 514 Schander, A.; Tessmann, T.; Strokov, S.; Stemmann, H.; Kreiter, A.; Lang, W.
 In-vitro evaluation of the long-term stability of PEDOT:PSS coated microelectrodes for chronic recording and electrical stimulation of neurons.
 Proc. 2016 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Orlando, Florida, USA, pp 6174-6177, 2016
 DOI 10.1109/EMBC.2016.7592138.
- 513 Salas, M.; Koerdt, M.; Hübner, M.; Kahali, M.; Lang, W.
 Material integrated sensors for an optimal baseline selection on a wireless SHM network.
 Proc. 2016 IEEE SENSORS, Orlando, Florida, USA 2016
 DOI 10.1109/ICSENS.2016.7808731.
- 512 Rothe, H.; Stemmann, H.; Schander, A.; Lisitsyn, D.; Kreiter, A.; Lang, W.; Ernst, U.
 Analysis of neural signals from chronically implanted, novel multi-channel floating probes.
 Proc. 11th Bernstein Sparks Conference Delmenhorst, Deutschland, 2016.
- 511 Osipov, D.; Paul, S.; Strokov, S.; Kreiter, A.; Schander, A.; Tessmann, T.; Lang, W.
 Current Driver with Read-Out HV Protection for Neural Stimulation.
 Proc. IEEE Nordic Circuits and Systems Conference (NORCAS), Kopenhagen, Dänemark, pp 6174-6177, 2016 DOI 10.1109/NORCHIP.2016.7792909.

- 510 Gräbner, D.; Meyer, E. M.; Lang, W.
 Foil-based strain gauges with nanogranular platinum structures for the integration in
 elastomer gaskets.
 Proc. 2016 IEEE SENSORS, Orlando, Florida, USA 2016
 DOI 10.1109/ICSENS.2016.7808844.
- 509 Dumstorff, G.; Lang, W.
 Strain Gauge Printed on Carbon Weave for Sensing in Carbon Fiber Reinforced Plastics.
 Proc. 2016 IEEE SENSORS, Orlando, Florida, USA, pp 1305-1307, 2016.
- 508 Blank, R.; Papireddy Vinayaka, P.; Tahir, M. W.; Yong, J.; Vellekoop, M. J.; Lang, W.
 Development of a Fungal Risk Monitor for the Next Generation of Intelligent Containersaper.
 Proc. IEEE Sensors, Orlando, Florida, USA, pp 677-682, 2016.
- 507 Rotermund, D.; Pistor, J.; Hoeffmann, J.; Schellenberg, T.; Boll, D.; Tolstosheeva, E.; Gauck,
 D.; Peters-Drolshagen, D.; Kreiter, A. K.; Schneider, M.; Paul, S.; Lang, W.; Pawelzik, K.
 Open Hardware: Towards a Fully-Wireless Sub-Cranial Neuro-Implant for Measuring
 Electrocorticography Signals.
 bioRxiv, pp 036855, 2016 DOI org/10.1101/036855.
- 506 Hübner, M.; Kahali Moghaddam, M.; Salas, M.; Dumstorff, G.; Lang, W.
 Materialintegrierte Sensorik für Fahrzeug-Leichtbautechnik. In Automobil-Sensorik:
 Ausgewählte Sensorprinzipien und deren automobile Anwendung.
 Hrsg. Tille, T., Springer Berlin Heidelberg: Berlin, Heidelberg, pp 191-216 2016
 DOI 10.1007/978-3-662-48944-4_10.
- 505 Kahali Moghaddam, M.; Breede, A.; Chaloupka, A.; Bödecker, A.; Meyer, E.-M.; Brauner, C.;
 Lang, W.
 Design, fabrication and embedding of microscale interdigital sensors for real-time cure
 monitoring during composite manufacturing.
 Sensors and Actuators A: Physical 243, pp 123-133, 2016 DOIorg/10.1016/j.sna.2016.03.017.
- 504 Tahir, M. W.; Zaidi, N. A.; Papireddy Vinayaka, P.; Lang, W.
 Fungus Detection System.
 Proc. 2016 IEEE International Conference on Autonomic Computing (ICAC), Würzburg,
 Deutschland, pp 227-228, 2016 DOI 10.1109/ICAC.2016.50.506
- 503 Hartgenbusch, N.; Borysov, M.; Jedermann, R. L., Walter; Lang, W.
 Pulsed excitation of thermal flow sensors for reduced power consumption and expanded
 measurement range.
 Proc. Eurosensors 2016, Budapest, Ungarn, Procedia Engineering 168, pp 762-765, 2016
 DOI 10.1016/j.proeng.2016.11.273.
- 502 Kahali Moghaddam, M.; Hellmann, J.; Lang, W.
 Plasticisation of epoxy resin transfer molding substrate for fabrication of interdigital
 capacitive sensors.
 Proc. Eurosensors 2016, Budapest, Ungarn, Procedia Engineering 168, pp 1110-1113, 2016
 DOI http://dx.doi.org/10.1016/j.proeng.2016.11.358.

- 501 Kempen, L.; Hartmer, R.; Brekenfeld, A.; Holle, A.; Lang, W.
A Multi-Nozzle Electrospray Emitter for Pneumatically Assisted Electrospray in LC-MS Analysis.
Proc. Eurosensors 2016, Budapest, Ungarn, Procedia Engineering 168, pp 1366-1369, 2016
DOI <http://dx.doi.org/10.1016/j.proeng.2016.11.378>.
- 500 Papireddy Vinayaka, P.; van den Driesche, S.; Blank, R.; Chakraborty, A.; Amin, R.; Tahir, M. W.; Zaidi, N. A.; Frodl, M.; Lang, W.; Vellekoop, M. J.
Membrane-sealed bioreactor for on-site autonomous detection of fungi spore contamination in archives.
Proc. Eurosensors 2016, Budapest, Ungarn, Procedia Engineering 168, pp 529-532, 2016
DOI [10.1016/j.proeng.2016.11.515](https://doi.org/10.1016/j.proeng.2016.11.515).
- 499 Reimers, M.; Kolkwitz, B.; Beck, D.; Sarma, M.; Heinzel, C.; Lang, W.; Dumstorff, G.
Steel Integrated IR Thermopile Array for Characterizing Grinding Processes.
Proc. Eurosensors 2016, Budapest, Ungarn, Procedia Engineering 168, pp 1568-1571, 2016
DOI <http://dx.doi.org/10.1016/j.proeng.2016.11.462>.
- 498 Zaidi, N. A.; Tahir, M. W.; Papireddy Vinayaka, P.; Lucklum, F.; Vellekoop, M. J.; Lang, W.
Detection of Ethylene using Gas Chromatographic System.
Proc. Eurosensors 2016, Budapest, Ungarn, Procedia Engineering 168, pp 380-383, 2016
DOI <http://dx.doi.org/10.1016/j.proeng.2016.11.140>.
- 497 Schander, A.; Stemmann, H.; Tolstosheeva, E.; Roese, R.; Biefeld, V.; Kempen, L.; Kreiter, A. K.; Lang, W.
Design and fabrication of novel multi-channel floating neural probes for intracortical chronic recording.
Sensors and Actuators A: Physical, Vol. (247), pp 125-135, 2016
DOI [org/10.1016/j.sna.2016.05.034](https://doi.org/10.1016/j.sna.2016.05.034).
- 496 Lang, W.; Jedermann, R.
What can MEMS do for Logistics of Food?
Intelligent Container Technologies; a Review.
Ieee Sensor Journal PP, (99), pp 1, 2016 DOI [10.1109/JSEN.2016.2576287](https://doi.org/10.1109/JSEN.2016.2576287).
- 495 Khan, A. M.; Dumstorff, G.; Winkelmann, C.; Lang, W.
Investigations on Noise Level in AC- and DC-Bridge Circuits for Sensor Measurement Systems.
Proc. 18. ITG/GMA-Fachtagung Sensoren und Meßsysteme, Nürnberg, Deutschland, pp 601-605, 2016 DOI [10.5162/sensoren2016/P4.4](https://doi.org/10.5162/sensoren2016/P4.4).
- 494 Jedermann, R.; Hartgenbusch, N.; Borysov, M.; Lloyd, C.; Praeger, U.; Spuler, M.; Lang, W.
Spatial profiling of airflow conditions in cold storage warehouses by wireless anemometers.
In: Proc. 6th International Cold Chain Management Conference, eds. Herbert, U.; Kreyenschmidt, J, Bonn, Deutschland, pp 93-98, 2016.

- 493 Dumstorff, G.; Sarma, M.; Reimers, M.; Kolkwitz, B.; Brinksmeier, E.; Heinzel, C.; Lang, W.
 Steel integrated thin film sensors for characterizing grinding processes.
Sensors and Actuators A: Physical, online, 2016 DOI org/10.1016/j.sna.2016.03.014.
- 492 Issa, S.; Lang, W.
 Airflow Simulation Inside Reefer Containers. In *Dynamics in Logistics*.
 Proceedings of the 4th International Conference LDIC, 2014 Bremen, Germany
 Kotzab, H.; Pannek, J.; Thoben, K.-D., Eds., Springer International Publishing: Cham,
 pp 303-311, 2016 DOI 10.1007/978-3-319-23512-7_29.
- 491 Hübner, M.; Kahali Moghaddam, M.; Dumstorff, G.; Lang, W.
 Materialintegrierte Sensorik für Fahrzeug-Leichtbautechnik.
Fachtagung Sensoren im Automobil, München, Deutschland; 2016.
- 490 Salas, M.; Focke, O.; Herrmann, A.; Lang, W.
 Wireless actuation of piezo-elements for the structural health monitoring of carbon-fiber-reinforced-polymers.
Mechatronics, pp 2171-2176, 2016 DOI org/10.1016/j.mechatronics.2015.09.003.
- 489 Schotzko, T., Gräßner, D., Lang, W.
 Strain gauges based on NBR substrates for the integration into elastic materials.
Material Letters 172, pp 60-63, 2016 DOI 0.1016/j.matlet.2016.02.129.
- 488 Raza, T., Lang, W., Jedermann, R.
 Integration of Wireless Sensor Networks into Industrial Control Systems.
5th International Conference on Dynamics in Logistics (LDIC 2016), Bremen, Deutschland,
 2016.
- 487 Lloyd, C., Sang-Hwa, C., Lang, W., Jedermann, R.
 Advantages of sub-GHz communication in food logistics and DASH7 implementation.
5th International Conference on Dynamics in Logistics (LDIC 2016), Bremen, Deutschland,
 2016.
- 486 Blank, R., Papireddy Vinayaka, P., Tahir, M. W., Vellekoop, M. J., Lang, W.
 Optical Sensor System for the Detection of Mold. Concept for a fully automated sensor system for the detection of airborne fungal spores.
Proc. IEEE Sensors, Busan, Südkorea, pp 677-682, 2015.
- 485 Lang, W., Jedermann, R.
 What can MEMS do for Logistics of Food?
Proc. IEEE Sensors, Busan, Südkorea, 2015.
- 484 Schotzko, T., Gräßner, D., Lang, W.
 Smart Gasket: Sensor Integration in Elastomer Gaskets for Structural Health Monitoring (SHM).
37th Colloquium of Automation, Steinfeld, Deutschland, 2015.

- 483 Dumstorff, G., Lang, W.
 Materialintegrierte Mikrosensoren.
Industrie 4.0 Management 31, (1), pp 33-36, 2015.
- 482 Salas, M., Focke, O., Stoltenberg, G., Herrmann, A. S., Lang, W.
 Wireless Sensor Network for Structural Health Monitoring by Means of Lamb-Waves.
Proc. 10th International Workshop on Structural Health Monitoring (IWSHM), Stanford, Kalifornien, USA, 2015 DOI 10.12783/SHM2015/134.
- 481 Dumstorff, G., Winkelmann, C., Lang, W.
 Linear Guide with Material Integrated Strain Gauges for Structural Health Monitoring.
Proc. 10th International Workshop on Structural Health Monitoring (IWSHM), Stanford, Kalifornien, USA, 2015 DOI 10.12783/SHM2015/125.
- 480 Sarma, M., Reimers, M., Dumstorff, G., Lang, W.
 Evaluating Thermo-Mechanical Stress Measured during Surface Grinding on a Sensor Integrated Workpiece Using COMSOL Multiphysics.
Proc. Comsol Conference, Grenoble, Frankreich, 2015.
- 479 Schotzko, T., Reuter, M., Lang, W.,
 Sensor integration in rubber gaskets for structural health monitoring made by compression molding.
Polymer Testing 48, pp 31-36, 2015 DOI 10.1016/j.polymertesting.2015.09.002.
- 478 Babazadeh, M., Garcia, J. M., Lang, W.
 A new practical ARC-Shaped fractional order hold.
 23rd Mediterranean Conference on Control and Automation (MED), Torremolinos, Spanien,
Proc. IEEE, pp 911-915, 2015 DOI 10.1109/MED.2015.7158874.
- 477 Brandhoff, L., Zirath, H., Salas, M., Haller, A., Peham, J. R., Wiesinger-Mayr, H., Spitzbart, M., Schnetz, G., Lang, W., Vellekoop, M. J.,
 A multi-purpose ultrasonic streaming mixer for integrated magnetic bead.
Journal of Micromechanics and Microengineering 25, (104001), 2015
 DOI 10.1088/0960-1317/25/10/104001.
- 476 Breede, A., Kahali Moghaddam, M., Brauner, C., Herrmann, A. S., Lang, W.
 Online Process Monitoring and Control by Dielectric Sensors for a Composite Main Spar for Wind Turbine Blades.
Proc. 20th International Conference on Composite Materials, Kopenhagen, Dänemark, 2015.
- 475 Dumstorff, G., Lang, W.
 Printed Sensor for Integrating in Aluminum during Casting.
Proc. AMA SENSOR 2015, Nürnberg, Deutschland, pp 580-583, 2015
 DOI 10.5162/sensor2015/D4.4.
- 474 Ebrahimifard, R., Driesche van den, S., Lang, W., Vellekoop, J. M.
 D2O Based Microfluidics for in Vitro IR Cell Analysis.
Proc. Tansducers, Anchorage, Alaska, USA, pp 1688-1691, 2015.

- 473 Papireddy Vinayaka, P., S. Driesche van den, S. Janssen, M. Frodl, R. Blank, F. Cipriani, W. Lang, M.J. Vellekoop
 Impedance spectroscopy for detection of mold in archives with an integrated reference measurement.
 Proc. SPIE Microtechnologies, Vol. 9518, 95180T, Barcelona, Spanien, pp 1-6, 2015 DOI 10.1117/12.2178510.
- 472 Schander, A., Tolstosheeva, E., Biefeld, V., Kempen, L., Kreiter, A., Lang, W.
 Design and Fabrication of Multi-Contact Flexible Silicon Probes for Intracortical Floating Implantation.
 Proc. Transducers 2015, Anchorage, Alaska, USA, pp 1739-1742, 2015.
- 471 Hübner, M., Dumstorff, G., Kahali Moghaddam, M., Plagemann, P., Lang, W.
 Ultra-thin capacitive foil sensor for characterization of an adhesive join.
 Eurosensors 2015, Freiburg, Deutschland, Procedia Engineering 120, 2015.
- 470 Tolstosheeva, E., J. Pimentel, A. Schander, L. Kempen, M.J. Vellekoop, Lang, W.
 Fabrication of parylene channels embedded in silicon using a single parylene deposition step.
 Proc. SPIE Microtechnologies, Vol. 9518, 95180T, Barcelona, Spanien, pp 1-6, 2015 DOI 10.1117/12.2179780.
- 469 Kropp, M., W. Lang
 None hazardous chemical method for etching thin film silicon nitride using aqueous solutions of chelating agents.
 Eurosensors 2015, Freiburg, Deutschland, Procedia Engineering, Vol 120, pp 1107-1110, doi: 10.1016/j.proeng.2015.08.761 (2015)
- 468 Lucklum F., S. Janssen, W. Lang, M.J. Vellekoop
 Miniature 3D gas chromatography columns with integrated fluidic connectors using high-resolution stereolithography fabrication.
 Eurosensors 2015, Freiburg, Deutschland, Procedia Engineering, Vol 120, pp 703-706, 10.1016/j.proeng.2015.08.761 (2015)
- 467 Tolstosheeva E., V. Biefeld, W. Lang
 Accelerated soak performance of BPDA-PPD polyimide for implantable MEAs.
 Eurosensors 2015, Freiburg, Deutschland, Procedia Engineering, Vol 120, pp 36-40, doi:10.1016/j.proeng.2015.08.560 (2015)
- 466 Tausendfreund, A., D. Stöbener, G. Dumstorff, M. Sarma, C. Heinzel, W. Lang
 Systems for locally resolved measurements of physical loads in manufacturing processes.
 CIRP Annals - Manufacturing Technology, DOI 10.1016/j.cirp.2015.03.005 (2015)
- 465 Kahali Moghaddam, M., A. Breede, C. Brauner, W. Lang
 Embedding Piezoresistive Pressure Sensors to Obtain Online Pressure Profiles Inside Fiber Composite Laminates.
 Sensors Vol. 15 Iss. 4, pp 7499-7511, doi: 10.3390/s150407499 (2015)

- 464 Focke O., M. Salas, A.S. Hermann, W. Lang
 Inductive wireless sensor-actuator node for structural health monitoring of fiber reinforced polymers by means of Lamb-waves.
 Proc. SPIE Smart Structures and Materials+ Nondestructive Evaluation and Health Monitoring, San Diego, CA, USA, pp 94352V-94352V-10, doi:10.1117/12.2083778 (2015)
- 463 Tolstosheeva E., V. Gordillo-González, V. Biefeld, L. Kempen, S. Mandon, A. Kreiter, W. Lang
 A Multi-Channel, Flex-Rigid ECoG Microelectrode Array for Visual Cortical Interfacing.
 Sensors, Vol 15 Iss.1, doi:10.3390/s150100832 (2015)
- 462 Dumstorff, G., E. Brauns, W. Lang
 Investigations into packaging technology for membrane-based thermal flow sensors.
 Journal of Sensors and Sensor Systems 4, (1), pp 45-52, doi: 10.5194/jsss-4-45-2015 (2015)
- 461 Dumstorff, G., W. Lang
 Investigations on the Impact of Material-Integrated Sensors with the Help of FEM-Based Modeling.
 Sensors, Vol 15 Iss.1, pp 2336-2353, doi: 10.3390/s150202336 (2015)
- 460 Palafox-Albarran, J., R. Jedermann, B. Hong, W. Lang
 Cokriging for cross-attribute fusion in sensor networks.
 Information Fusion dx.doi.org/10.1016/j.inffus.2014.09.007 1566-2535 (2014)
- 459 Dumstorff, G., B. Kolkwitz, M. Sarma, C. Heinzel, W. Lang
 Sensorial Steel: In-Situ Measurement of Strains and Temperatures during Grinding by Workpiece Integrated Thin Film Sensors.
 Proc. Sensors IEEE, Valencia, Spain, Poster-Session (2014)
- 458 Dumstorff, G., W. Lang
 Strain gauges – volume embedding vs. surface application.
 Proc. IEEE Sensors, Valencia, Spain, pp 1292-1295 (2014)
- 457 Jedermann, R., T. Pötsch, W. Lang
 Smart sensors for the intelligent container.
 In: Smart SysTech Proceedings, ITG Fachbericht Band 251 (2014)
- 456 Schotzko, T., W. Lang
 Embedded Strain Gauges for Condition Monitoring of Silicone Gaskets.
 Sensors 14 No. 7 Pages 12387-12398 (2014)
- 455 Papireddy Vinayaka, P., S. van den Driesche, S. Janßen, M. Frodl, R. Blank, F. Cipriani, W. Lang, M.J. Vellekoop
 On-Chip Monitoring of pH Change in Agar-Gels During Fungi Growth by Integrating Impedance and Colorimetric Principles.
 EUROSENSORS 2014, In: Procedia Engineering Vol 87, pp 373-376 (2014)
<http://dx.doi.org/10.1016/j.proeng.2014.11.739>

- 454 Brauns, E., E. Morsbach, S. Kunz, M. Baeumer, W. Lang
 CokTemperature Modulation of a Catalytic Gas Sensor.
 Sensors 14 No. 11, pp 20372-20381 (2014)
- 453 Morsbach, E., E. Brauns, T. Kowalik, W. Lang, S. Kunz, M. Baumer
 Ligand-stabilized Pt nanoparticles (NPs) as novel materials for catalytic gas sensing:
 influence of the ligand on important catalytic properties.
 Physical Chemistry Chemical Physics Online (2014)
- 452 Kahali Moghaddam, M., D. Boll, W. Lang
 Embedding Rigid and Flexible Inlays in Carbon Fiber Reinforced Plastics.
 Proc. IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM) pp
 1387-1392 (2014)
- 451 Dumstorff, G., W. Lang
 Resistive silicon microstructure for embedding in aluminium during casting.
 Proc. IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM) pp
 582-586 (2014)
- 450 Berganski, R., W. Lang
 Flexible Flow Measuring System for Measurements on Non-Planar Surfaces.
 Proc. of the 2nd International Conference on System-Integrated Intelligence: Challenges for
 Product and Production Engineering, July 2nd - 4th Bremen, Germany pp 239-245 (2014)
- 449 Salas, M., O. Focke, A.S. Hermann, W. Lang
 Low-Frequency Inductive Power Transmission for Piezo-Wafer-Active-Sensors in the
 Structural Health Monitoring of Carbon- Fiber-Reinforced-Polymer.
 Proc. of the 2nd International Conference on System-Integrated Intelligence: Challenges for
 Product and Production Engineering, July 2nd - 4th Bremen, Germany pp 587-596 (2014)
- 448 Dumstorff, G., W. Lang
 Failure of Silicon Substrates embedded in Epoxy Resin.
 Proc. of the 2nd International Conference on System-Integrated Intelligence: Challenges for
 Product and Production Engineering, July 2nd - 4th Bremen, Germany pp 205-220 (2014)
- 447 Dumstorff, G., S. Paul, W. Lang
 Integration without Disruption: the Basic Challenge of Sensor Integration.
 IEEE Sensors Journal: Special Issue on Material-Integrated Sensing, Data Processing and
 Communication Vol 14(7), pp 2102-2111 (2014)
- 446 Lehmhus, D., S. Bosse, W. Lang, P.C. Chao, F. Chang,
 Guest Editorial.
 Sensors Journal, IEEE: Special Issue on Material-Integrated Sensing, Data Processing and
 Communication Vol 14(7), pp 2077-2077 (2014)

- 445 Boll, D., K. Schubert, C. Brauner, W. Lang
 Miniaturized Flexible Interdigital Sensor for In Situ Dielectric Cure Monitoring of Composite Materials.
Sensors Journal, IEEE: Special Issue on Material-Integrated Sensing, Data Processing and Communication Vol 14(7), pp 2193-2197 (2014)
- 444 Salas, M., O. Focke, A.S. Hermann, W. Lang
 Wireless Power Transmission for Structural Health Monitoring of Fiber-Reinforced-Composite Materials.
Sensors Journal, IEEE: Special Issue on Material-Integrated Sensing, Data Processing and Communication Vol 14(7), pp 2171-2176 (2014)
- 443 Dumstorff, G., R. Berganski, E. Brauns, H. Sturm, W. Lang
 Flexible Flow Sensors – Packaging and Applications.
Proc. of 17. ITG/GMA-Fachtagung Sensoren und Messsysteme, Nürnberg, Germany, pp (2014)
- 442 Ibragimov, A., V. Uhlenwinkel, N. Ellendt, L. Mädler, W. Lang
 Monocrystalline-silicon-based thermogenerator with broad temperature working range embedded using metal-spray-deposition.
Sensors and Actuator A: Physical Vol 216, pp 417-425 (2014)
- 441 Morsbach, E., J. Speder, M. Arenz, E. Brauns, W. Lang, S. Kunz, M. Bäumer
 Stabilizing catalytically active nanoparticles by ligand-linking: towards three dimensional networks with high catalytic surface area.
Langmuir Vol 30 (7), pp 5546-5573 (2014)
- 440 Winkelmann, C., W. Lang
 Sensorial surfaces–Embedding sensor structures into the surface of materials.
Sensors Journal, IEEE Vol 14(7), pp 2078-2083 (2014)
- 439 Janßen, S., K. Schmitt, M. Blanke, ML. Bauersfeld, J. Wöllensteiner, W. Lang
 Ethylene detection in fruit supply chains.
Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences Vol 372(2017), pp 20130311 (2014)
- 438 Jedermann, R., U. Praeger,, M. Geyer, W. Lang
 Remote quality monitoring in the banana chain.
Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences Vol 372(2017), pp 20130303 (2014)
- 437 Jedermann, R., M. Nicometo, I. Uysal, W. Lang
 Reducing food losses by intelligent food logistics.
Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences Vol 372(2017), pp 20130302 (2014)

- 436 Brauns,E., E. Morsbach, S. Kunz, M. Bäumer, W. Lang
A fast and sensitive catalytic gas sensors for hydrogen detection based on stabilized nanoparticles as catalytic layer.
Sensors and Actuators B: Chemical Vol 193(0), pp 895-903 (2014)
- 435 Janßen, S., T. Teßmann, W. Lang
High sensitive and selective ethylene measurement by using a large-capacity-on-chip preconcentrator device.
Sensors and Actuators B: Chemical Vol 179(0), pp 405-413 (2014)
- 434 Tolstosheeva, E., E. Barborini, E.M. Meyer, M. Shafi, S. Vinati, W. Lang
Micropatterning of nanoparticle films by bilayer lift-off.
Journal of Micromechanics and Microengineering, Vol. 24(1) (2014).
- 433 Jedermann, R., U. Praeger,, M. Geyer, A. Moehrke, W. Lang
The Intelligent Container for Banana Transport Supervision and Ripening.
MQUIC 2013 - Managing Quality in Chains, Cranfield, Great Britain, (2013)
- 432 Heidmann, N., N. Hellwege, D. Peters-Drolshagen, A. Dannies, S. Paul, W. Lang
A Low-Power Wireless UHF / LF Sensor Network with Web-Based Remote Supervision -
Implementation in the Intelligent Container -.
Proc. IEEE Sensors 2013, Baltimore USA, pp 1176-1179 (2013)
- 431 Issa, S., W. Lang
Minimum Detectable Air Velocity by Thermal Flow Sensors.
Sensors, Vol. 13, Issue 8, pp 10944-10953 (2013)
- 430 Biefeld, V., S. Springmann, W. Lang
3-Layer-Copper Microcoils Transformed into 3-D Cylindrical Stator Windings for
Micromotors.
Proc. IEEE Transducers 2013, The 17th International Conference on Solid-State Sensors,
Actuators and Microsystems, Barcelona, Spain, pp 1915-1918 (2013)
- 429 Janßen, S., T. Teßmann, M. Nießen, A. Sklorz, W. Lang
Large-Capacity-on-Chip Preconcentrator Device for Selective Ethylene Measurement below
400 ppbv.
Proc. IEEE Transducers Transducers 2013, The 17th International Conference on Solid-State
Sensors, Actuators and Microsystems, Barcelona, Spain, pp 2271-2274 (2013)
- 428 Ibragimov, A., V. Uhlenwinkel, N. Ellendt, L. Mädler, W. Lang
Silicon-Based Thermogenerator for Wide Temperature Range Applications Embedded Using
Metal-Spray-Deposition.
Proc. IEEE Transducers 2013, The 17th International Conference on Solid-State Sensors,
Actuators and Microsystems, Barcelona, Spain, pp 482-485 (2013)

- 427 Tolstosheeva, E., J. Hoeffmann, J. Pistor, D. Rotermund, T. Schellenberg, D. Boll, T. Hertzberg, V. Gordillo-Gonzales, S. Mandon, D. Peters-Drolshagen, M. Schneider, K. Pawelzik, A. Kreiter, W. Lang
 Towards a Wireless and Fully-Implantable Ecog System.
 Proc. IEEE Transducers 2013, The 17th International Conference on Solid-State Sensors, Actuators and Microsystems, Barcelona, Spain, pp 384-387 (2013)
- 426 Brauns, E., E. Morsbach, M. Bäumer, W. Lang
 A Fast and Sensitive Catalytic Hydrogen Sensor Based on a Stabilized Nanoparticle Catalyst.
 Proc. IEEE Transducers 2013, The 17th International Conference on Solid-State Sensors, Actuators and Microsystems, Barcelona, Spain, pp 1178-1181 (2013)
- 425 Lloyd, C., S. Issa, R. Jedermann, W. Lang
 Empirical Airflow Pattern Determination of Refrigerated Banana Containers Using Thermal Flow Sensors.
 Proc. 5th International Cold Chain Management Workshop, University Bonn, Germany, (2013)
- 424 Jedermann, R., A. Dannies, A. Moehrke, U. Praeger, M. Geyer, W. Lang
 Supervision of Transport and Ripening of Bananas by the Intelligent Container.
 Proc. 5th International Cold Chain Management Workshop, University Bonn, Germany, (2013)
- 423 Janßen, S., W. Lang
 Ethylene Measurement for Fruit Logistic Process in a Range of 400 ppbv and below.
 Proc. 5th International Cold Chain Management Workshop, University Bonn, Germany, (2013)
- 422 Safaei, M., S. Issa, M. Seifert, K.-D. Thoben, W. Lang
 A Method to Estimate the Accumulated Delivery Time Uncertainty in Supply Networks.
 In: Dynamics in Logistics. Edited by H.-J. Kreowski, H.-J., B. Scholz-Reiter, K.-D. Thoben, Springer Verlag, Berlin-Heidelberg, 2013, 978-3-ISBN 642-35965-1, pp 337-347
- 421 Issa, S., W. Lang
 Characterization of Thermal Flow Sensors for Air Flow Measurements in Transport Containers.
 In: Dynamics in Logistics. Edited by H.-J. Kreowski, H.-J., B. Scholz-Reiter, K.-D. Thoben, Springer Verlag, Berlin-Heidelberg, 2013, ISBN 642-35965-1, pp 361-370
- 420 Hertzberg, T., V. Gordillo-González, S. Mandon, E. Tolstosheeva, A. Kreiter, W. Lang
 Characterization of different electrode configurations on neural probes.
 Bernstein Sparks Workshop “Towards Long-Term Cortical Neuro-Interfaces, Hanse-Wissenschaftskolleg, March 2013, Delmenhorst, Germany (2013)
- 419 Dannies, A., J. Palafox-Albarrán, W. Lang, R. Jedermann
 Smart dynamic software components enabling decision support in Machine-to-machine networks.
 JCSI International Journal of Computer Science Issues, Vol. 10, Issue 1, No 3, pp 540-550 (2013)

- 418 Winkelmann, C., W. Lang
 Influence of the electrode distance and metal ion concentration on the resulting structure in electrochemical micromachining with structured counter electrodes.
International Journal of Machine Tools and Manufacture, Vol. 72 (0), pp 25-31 (2013)
- 417 Sturm, H., W. Lang
 Membrane-based thermal flow sensors on flexible substrates.
Sensors and Actuators A: Physical 195 (2013), pp 113– 122 (2013)
- 416 Brauns, E., E. Morsbach, G. Schnurpfeil, M. Bäumer, W. Lang
 A miniaturized catalytic gas sensor for hydrogen detection based on stabilized nanoparticles as catalytic layer.
Sensors and Actuators B: Chemical(0), Page 6 (2013)
- 415 Lang, W.
 Neuro-Implants.
 CEWIT-TZI-acatech Workshop, “ICT meets Medicine and Health”, ICTMH2013,
 Invited Talk, March 2013, Bremen, Germany (2013)
- 414 Lang, W., E. Tolstosheeva, J. Pistor, J. Hoeffmann, D. Rotermund, T. Schellenberg, D. Boll,
 T. Hertzberg, V. Gordillo-Gonzales, S. Mandon, D. Peters-Drolshagen, M. Schneider,
 K. Pawelzik, A. Kreiter, S. Paul
 Neural Implants: A Challenge for Microtechnology and Microelectronics.
 1st Bernstein Sparks Workshop on Cortical Neurointerfaces, Hanse-Wissenschaftskolleg,
 Invited Talk, March 2013, Delmenhorst, Germany (2013)
- 413 Kibben, S., M. Kropp, G. Dumstorff, M. Koerdt, W. Lang, F. Vollertsen
 Bend Sensor Based on Fibreoptics and Concept for a Compact Evaluation Unit.
Production Engineering, Vol. 7, Issue 1, January 2013, pp 15–22, Springer Verlag
 Berlin/Heidelberg (2013)
- 412 Jedermann, R., M. Geyer, U. Praeger, W. Lang
 Sea Transport of Bananas in Containers – Parameter Identification for a Temperature Model.
Journal of Food Engineering, Vol. 115, Issue 3, pp 330–338 (2013)
- 411 Dannies, A., J. Palafox-Albarrán, R. Jedermann, W. Lang
 Feasibility of shifting decision support tools for quality estimation in food logistics to the sensor node level.
 6th International Conference on Software Knowledge Information Management and Applications (SKIMA), Chengdu University, Page 5, Chengdu, China (2012)
- 410 Sklorz, A., S. Janßen, W. Lang
 Application of a miniaturised packed gas chromatography column and a SnO₂ gas detector for analysis of low molecular weight hydrocarbons with focus on ethylene detection.
Sensors and Actuators B: Chemical(0), Page 7 (2012)
- 409 Boll, D., E. Tolstosheeva, K. Schubert, C. Brauner, W. Lang
 Flexible Interdigital Sensor for Dielectric Cure Monitoring of Composites.
 In: DEWEK 2012, Bremen, Germany (2012)

- 408 Rotermund, D., D. Boll, V. Gordillo-Gonzalez, D. Gould, T. Hertzberg, J. Höffmann, S. Sunita Mandon, D. Peters-Drolshagen, J. Pistor, M. Richter, T. Schellenberg, E. Tolstosheeva, G. Widman, C. Elger, W. Lang, et al.
A wireless and fully implantable recording system for ECoG signals.
In: Bernstein Conference 2012. TU Munich, Munich, Germany (2012)
- 407 Brauns, E., W. Lang, E. Morsbach, G. Schnurpfeil, M. Bäumer
A Nanoparticles Based Catalytic Gas Sensor with Improved Stability.
Proc. 11th IEEE Sensors Conference, Taipei, Taiwan, pp 1148-1151 (2012)
- 406 Lang, W., D. Boll, E. Tolstosheeva, A. Ibragimov, K. Schubert, C. Brauner, C. Pille
Embedding without disruption: The Basic Challenge of Sensor Integration.Invited talk.
Proc.11th IEEE Sensors Conference, Taipei, Taiwan, pp 351-354 (2012)
- 405 Hertzberg, T., V. Gordillo-Gonzalez, E. Tolstosheeva, A. Kreiter, W. Lang
Fabrication and characterization of different electrode configurations on neural probes.
Proc. of the 8th International Meeting on Substrate-Integrated Microelectrode Arrays, Reutlingen, Germany, pp 366-367 (2012)
- 404 Lang, W., D. Boll, T. Schotzko
Function Scale Integration – Embedding Sensors in Materials for Structural Health Monitoring.
Invited plenary talk. 6th European Workshop on Structural Health Monitoring, DGZfP-Proceedings BB 135-CD - Th.1.A.1, Dresden, Germany (2012)
- 403 E. Brauns, T. Seemann, V. Zoellmer, W. Lang
A Miniaturized Catalytic Gas Sensor for Hydrogen Detection Containing a High Porous Catalytic Layer Formed by Dry Lift-Off.
Procedia Engineering, Vol. 47, pp 1149-1152
26th European Conference on Solid-State Transducers, EUROSENSOR 2012 (2012)
- 402 N. Heidmann, S. Janßen, W. Lang, S. Paul
Implementation and Verification of a Low-Power UHF/LF Wireless Sensor Network as Part of the Intelligent Container.
Procedia Engineering, Volume 47, pp 68–71
- 401 Mrugala, D., F. Ziegler, J. Kostelnik, W. Lang
Temperature Sensor Measurement System for Firefighter Gloves.
Procedia Engineering, Vol. 47, pp 611–614, 26th European Conference on Solid-State Transducers, EUROSENSOR 2012 (2012)
26th European Conference on Solid-State Transducers, EUROSENSOR 2012 (2012)
- 400 Sklorz, A., S. Janßen, W. Lang
Gas Chromatograph based on Packed μ GC-Columns and μ -Preconcentrator Devices for Ethylene Detection in Fruit Logistic Applications.
Procedia Engineering, Vol. 47, pp 486–489
26th European Conference on Solid-State Transducers, EUROSENSOR 2012 (2012)

- 399 Sturm, H., G. Dumstorff, P. Busche, D. Westermann, W. Lang
 Boundary Layer Separation and Reattachment Detection on Airfoils by Thermal Flow Sensors.
Sensors 2012, Vol. 12(11), pp 14292-14306 (2012)
- 398 Sklorz, A., S. Janßen, W. Lang
 Detection limit improvement for NDIR ethylene gas detectors using passive approaches.
Sensors and Actuators B: Chemical, Vol. 175, pp 246-254 (2012)
- 397 Altmann, L., H. Sturm, H., E. Brauns, E., W. Lang, M. Bäumer
 Novel catalytic gas sensors based on functionalized nanoparticle layers.
Sensors and Actuators B: Chemical, Vol. 174, pp 145-152 (2012)
- 396 Dow, A.B.A., W. Lang
 Design and Fabrication of a Micropreconcentrator Focuser for Sensitivity Enhancement of Chemical Sensing Systems.
Sensor Journal, IEEE, Vol. 12, Issue 7, pp 2528-2534 (2012)
- 395 Decho, H., H.-R. Stock, C. Winkelmann, W. Lang
 Development of hydrogenated amorphous carbon thin film with high electrical resistance for use in embedded sensors in abrasive environment.
Journal of Intelligent Material Systems and Structures, Vol. 0(0), pp 1-7 (2012)
- 394 Gould, D., H. Sturm, W. Lang
 Thermoelectric Flow Sensor Integrated Into an Inductively Powered Wireless System.
Sensors Journal, IEEE, Vol. 12, No. 6, pp 1891-1892 (2012)
- 393 Brauns, E., W. Lang, E. Morsbach, G. Schnurpfeil, M. Bäumer
 P2. 4.15 A Miniaturized Catalytic Gas Sensor with Functionalized Nanoparticles as Catalytic Layer.
 IMCS 2012 – The 14th International Meeting on Chemical Sensors, Nürnberg, Germany, pp 1546-1549 (2012)
- 392 Ibragimov, A., H. Pleteit, C. Pille, W. Lang
 A Thermoelectric Energy Harvester Directly Embedded Into Casted Aluminum.
Electron Device Letters, IEEE 33 (2), pp 233-235 (2012)
- 391 Ibragimov, A., H. Pleteit, Ch. Pille, W. Lang
 Micromachined thermogenerator directly integrated into metal parts: technological aspects of the embedding process.
 1st Joint International Symposium on System-Integrated Intelligence 2012: New Challenges for Product and Production Engineering, Hanover, Germany, pp 1-4 (2012)
- 390 Knieling, T., M. Shafi, W. Lang, W. Benecke
 Microlens array production in a microtechnological dry etch and reflow process for display applications.
Journal of the European Optical Society - Rapid publications, Vol. 7, 12007 (2012)

- 389 Janßen, S., A. Sklorz, W. Lang
 Flow rate influence on the adsorption capabilities on a preconcentrator device for a NDIR ethylene gas sensor.
 Smart Systems Integration, Zurich, Switzerland, Paper 46 (2012)
- 388 Palafox-Albarrán, J., A. Dannies, B.K. Sanjeeva, W. Lang, R. Jedermann
 Combining Machine-to-Machine Communications with Intelligent Objects in Logistics.
 ImViReLL'12 - The Impact of Virtual, Remote and Real Logistics Labs, Bremen, Germany,
 pp 102-112 (2012)
- 387 Dannies, A., J. Palafox-Albarrán, W. Lang, R. Jedermann
 Dynamic Java Components in Pervasive Systems - A Review of the Feasibility of Dynamic Data Processing on Wireless Platforms.
 PECCS 2012 - International Conference on Pervasive and Embedded Computing and Communication Systems, Rome, Italy, pp 58-66 (2012)
- 386 Safaei, M., S. Issa, M. Seifert, K.-D. Thoben, W. Lang
 A method to estimate the accumulation delivery time uncertainty in supply networks.
 3rd International Conference on Dynamics in Logistics, Bremen, Germany, Page 11 (2012)
- 385 Issa, S., W. Lang
 Characterization of thermal flow sensors for air flow measurements in transport containers.
 3rd International Conference on Dynamics in Logistics, Bremen, Germany, Page 10 (2012)
- 384 Garcia, C., K. Syrnik, L. Yan, A. Feyen, A.L. Schomacker, C. Harms, W. Lang
 Fabrication of disposable microfluidic devices for monitoring fluid samples.
 MSB 2012, 27th International Symposium on MicroScale Bioseparations and Analyses,
 Geneva, Switzerland (2012)
- 383 Dow, A. B. A., A. Sklorz, W. Lang
 A microfluidic preconcentrator for enhanced monitoring of ethylene gas.
 Sensors and Actuators A: Physical, Vol. 167, Issue 2, pp 226-230 (2011)
- 382 Jedermann, R., J. Palafox-Albarrán, J. I. Robla, J. Barreiro, L. Ruiz-Garcia, W. Lang
 Interpolation of Spatial Temperature Profiles by Sensor Networks.
 2011 IEEE SENSORS Proceedings, Limerick, Ireland, pp 778-781 (2011)
- 381 Jedermann, R., J. Palafox-Albarrán, J. Barreiro, L. Ruiz-Garcia, J. I. Robla, W. Lang
 Modelling and interpolation of spatial temperature during food transportation and storage by the Variogram.
 The 10th International Conference on Modeling and Applied Simulation (MAS 2011), Rome, Italy, pp 195-201 (2011)
- 380 Ibragimov, A., W. Lang
 Micromachined thermogenerator for high-temperature applications.
 PowerMEMS 2011, Seoul, Republic of Korea, pp 298-301 (2011)
- 379 Ibragimov, A., H. Kesuma, M. Hormann, M. Trabelsi, W. Lang
 Micromachined membrane-based heat engine as an electrostatic power generator
 PowerMEMS 2011, Seoul, Republic of Korea, pp 450-453 (2011)

- 378 Bögner, M., A. Feyen, A. Köhler, A.L. Schomacker, C. Harms, C. Garcia, W. Lang
TOXsense - Immunodetection and quantification of Bisphenol A via microfluidic device.
2nd International Conference of Bio-Sensing Technology, Amsterdam, Netherlands (2011)
- 377 Garcia, C., A.L. Schomacker, T. Teßmann, I. Klarholz, C. Harms, W. Lang
Design and fabrication of passive microfluidic devices using SU-8 photoresist to concentrate low levels of virus in fluid samples.
Lab-on-a-Chip Microarray World Congress 2009, South San Francisco, United States (2009)
- 376 Garcia C., A.L. Schomacker, I. Klarholz, C. Harms, W. Lang
Mikrofluidisches System zur Virenuntersuchung.
MST 1. Regionaltagung des Regionalverbundes Mikrosysteme für die Biotechnologie - Nord (MBN) des Arbeitskreis BioMST und Lifesciences e.V., Bremen, Germany (2008)
- 375 Garcia, C., A.L. Schomacker, A. Cigoj, A. Vrecko, C. Harms, W. Lang
Polymer Vitralit®UC6772 used as support material to detect low levels of protein concentration.
6th International Conference on Microtechnologies in Medicine and Biology, MMB2011, Lucerne, Switzerland, pp 54-55 (2011)
- 374 Sklorz, A., A. Schu, M. Nießen, S. Janßen, W. Lang
Humidity Influence in Application of µGC-Systems for Ethylene Gas with Preconcentrator Devices and SnO₂ Based Detectors.
IEEE Sensors 2011 Conference, October 2011, Limerick, Ireland, pp 1085-1088 (2011)
- 373 Tolstosheeva, E., V. Gordillo-González, T. Hertzberg, L. Kempen, I. Michels, A. Kreiter, W. Lang
A novel flex-rigid and soft-release ECoG array.
33rd Annual International Conference of the IEEE EMBS, September 2011, Boston, Massachusetts USA, Pages 2973-2976 (2011)
- 372 Kibben, S., M. Koerdт, M. Kropp, G. Dumstorff, W. Lang, F. Vollertsen
Fiber Bragg grating based bend sensor with compact evaluation unit.
1st EOS Topical Meeting on Micro- and Nano-Optoelectronic Systems, December 2011, Bremen, Germany (2011)
- 371 Kibben, S., M. Kropp, G. Dumstorff, T. Seefeld, W. Lang, F. Vollertsen
Fiber optic bend sensor with precise angle resolution and compact evaluation unit
Euromat 2011 Conference, Montpellier, France (2011)
- 370 Jacobs, T., C. Kutzner , M. Kropp, G. Brokmann, W. Lang, A. Steinke, A. Kienle, P. Hauptmann
Novel impedimetric and perforated thermal flow sensor for inline chemical process analysis in micro residence time reactors.
Sensors, 2009 IEEE, Christchurch, New Zealand. Pages 719–722 (2009)
- 369 Woitschach, O., W. Lang
Intelligente Mikropumpe mit integrierter Strömungsregelung.
Mikrosystemtechnik Kongress 2011, Darmstadt, Germany, Pages 58-61 (2011)

- 368 Brauns, E., M. Kropp, W. Lang
 Kalibrierung thermischer Strömungssensoren mit monolithisch integrierten Kanälen durch Prozessparameter.
 Mikrosystemtechnik-Kongress 2011, Darmstadt, Germany, Pages 173-176 (2011)
- 367 Kropp M., Brauns E., Sosna C., Lang W.
 In-process parameter calibration of thermoelectrical flow sensors with monolithic integrated channel.
 TRANSDUCERS 2011 - 16th International Solid-State Sensors, Actuators and Microsystems Conference, Pages 1064–1067 (2011)
- 366 Wang, X., S. Yuan, R. Laur, W.Lang
 Dynamic localization based on spatial reasoning with RSSI in wireless sensor networks for transport logistics.
 Sensors and Actuators A: Physical, Vol. 171, Issue 2, November 2011, pp 421-428 (2011)
- 365 Mrugala, D., T. Riebeck, W. Lang
 Heat Transfer Model for Embedded Thermocouple in Firefighter Glove.
 COMSOL Conference 2011, Stuttgart, Germany. Access No.: 10985 (2011)
- 364 Issa, S., H. Sturm, W. Lang
 Modeling of the Response Time of Thermal Flow Sensors.
 Micromachines 2011, Vol. 2, Issue 4, Pages 385-393 (2011)
- 363 Jakobs, F., T. Hertzberg, W. Lang, J. Güttler
 Zylindrische Kupfer-Mikrospulen eingebettet in SU-8 - Cylindrical formed copper microcoils embedded in SU-8.
 Mikrosystemtechnik Kongress 2011, pp 563-566, Darmstadt, Germany (2011)
- 362 Winkelmann, C., O. Woitschach, E. M. Meyer, W. Lang
 Entwicklung eines mechanisch hoch belastbaren Sensors für Rollkontaktebeanspruchung - Sensor for measuring rolling contact forces in an axial cylindrical roller bearing.
 Mikrosystemtechnik Kongress 2011, Pages 209-212, Darmstadt, Germany (2011)
- 361 Winkelmann, C., O. Woitschach, E. M. Meyer, W. Lang
 Development of a strain sensor for rolling contact loads.
 Solid-State Sensors, Actuators and Microsystems Conference (TRANSDUCERS), 2011 16th International, Pages 1080-1083 (2011)
- 360 Issa, S., H. Sturm, W. Lang
 Modeling of the response time of thermal flow sensors.
 37th International Conference on Micro and Nano Engineering: 362, Berlin, Germany (2011)
- 359 Sklorz, A., W. Lang
 Strategies for Passive Sensitivity Improvement of NDIR Ethylene Gas Detectors.
 Eurosensors XXV, Athen, Griechenland, Procedia Engineering (2011)

- 358 **Lang, W., F. Jakobs, E. Tolstosheeva, H. Sturm, A. Ibragimov, A. Kesel, D. Lehmhus, U. Dicke**
From embedded sensors to sensorial materials -The road to function scale integration.
Sensors and Actuators A: Physical, Vol. 171, Issue 1, November 2011, Pages 3-11 (2011)
- 357 Palafox-Albarrán, J., R. Jedermann, W. Lang
Energy-Efficient Parameter Adaptation and Prediction Algorithms for the Estimation of Temperature Development Inside a Food Container.
Lecture Notes in Electrical Engineering - Informatics in Control, Automation and Robotics: 77-90. Berlin, Springer Verlag (2011)
- 356 Jedermann, R., J. Palafox-Albarrán, A. Jabbari, W. Lang
Embedded intelligent objects in food logistics - Technical limits of local decision making. Autonomous Cooperation and Control in Logistics: 207-228. Berlin, Springer Verlag (2011)
- 355 Jedermann, R., M. Becker, C. Görg, W. Lang
Testing network protocols and signal attenuation in packed food transports.
International Journal of Sensor Networks (IJSNet) 9(3/4): 170-181. (2011)
- 354 Sklorz, A., A. Schu, W. Lang
Analysis of C1 and C2 hydrocarbon gas mixtures using miniaturized gas chromatography and SNO₂ gas detectors.
Proceedings of the 16th International Conference on Solid-State Sensors, Actuators and Microsystems Transducers, 128-131, Beijing, China. (2011)
- 353 Sosna, C., T. Walter, W. Lang
Response time of thermal flow sensors with air as fluid.
Sensors and Actuators A: Physical, Vol. 172, Issue 1, Pages 15-20 (2011)
- 352 Bödecker, A., C. Habben, A. Sackmann, K. Burdorf, E. Giese, W. Lang
Manufacturing of a wear detecting sensor made of 17-4PH steel using standard wafer processing technology.
Sensors and Actuators A: Physical, Vol. 171, Issue 1, November 2011, Pages 34-37 (2011)
- 351 **Lang, W., R. Jedermann, D. Mrugala, A. Jabbari, B. Krieg-Brückner, K. Schill**
The “Intelligent Container”—A Cognitive Sensor Network for Transport Management.
Sensors Journal, IEEE 11 Issue: 3, Pages 688-698 (2011)
- 350 Woitschach, O., J. Uckelmann, C. Sosna, W. Lang
A New Generation of a Regulated Micropump for Medical Applications.
The 9th Annual IEEE Conference on Sensors, Pages 2472-2477, Waikoloa, Hawaii, USA (2010)
- 349 Sklorz, A., W. Lang
Approaches to Increase the Sensitivity of Miniaturized Ethylene Concentration Measurement Systems in the Fresh Fruit Chain.
Cold-Chain-Management; 4th International Workshop, Bonn, Germany (2010)

- 348 Sklorz, A., N. Miyashita, A. Schäfer, W. Lang
 Low Level Ethylene Detection Using Preconcentrator/Sensor Combinations.
 The 9th Annual IEEE Conference on Sensors, Waikoloa, Hawaii, USA (2010)
- 347 Sosna, C., T. Walter, W. Lang
 Response Time of Thermal Flow Sensors.
 Eurosensors XXIV, Linz, Österreich, Procedia Engineering 5, Pages 524-527 (2010)
- 346 Sosna, C., M. Kropp, W. Lang, R. Buchner
 Miniaturized Thermal Flow Sensors with Through Silicon Vias for Flip-Chip Packaging.
 IEEE Sensors Conference, Hawaii, Pages 2460-2463. (2010)
- 345 Wessels, A., R. Jedermann, W. Lang
 Transport supervision of perishable goods by embedded context aware objects.
 WSEAS TRANSACTIONS on CIRCUITS and SYSTEMS 9(5), Pages 295-304 (2010)
- 344 Brinksmeier, E., C. Heinzel, A. Wilkens, W. Lang, T. Seedorf
 Monitoring of Machining Processes Using Sensor Equipped Tools.
 Advanced Engineering Materials Vol. 12, Issue 7, July 2010, Pages 641-645 (2010)
- 343 Jacobs, T., C. Kutzner , M. Kropp , G. Brokmann , W. Lang , A. Steinke , A. Kienle,
 P. Hauptmann
 Inline chemical process analysis in micro-plants based on thermoelectric flow and
 impedimetric sensors.
 Measurement Science and Technology, Nr. 21 (2010)
- 342 Holthaus, M. G., M. Kropp , L. Treccani , W. Lang, K. Rezwan
 Versatile Crack-Free Ceramic Micropatterns Made by a Modified Molding Technique.
 The American Ceramic Society Nr. 93, Pages 2574-2578 (2010)
- 341 Tolstosheeva, E., E. Pal , H. Sturm , D. Lehmhus , C. Werner , V. Zöllmer , M. Busse,
 W. Lang
 Realisation of Microscale Conductive Structures by Combination of Direct Write Technology
 and Photolithography.
 EMRS (European Materials Research Society) 2010, Strasbourg, France (2010)
- 340 Sturm, H., W. Lang
 Thin chip flow sensors for non-planar assembly.
 Ultra-thin Chip Technology and Applications, Berlin, Pages 377-388 (2010)
- 339 Sturm, H., E. Brauns , T. Seemann , V. Zöllmer, W. Lang
 A Highly Sensitive Catalytic Gas Sensor for Hydrogen Detection Based on Sputtered
 Nanoporous Platinum.
 Eurosensors XXIV, Linz, Austria (2010)
- 338 Sturm, H., E. Brauns , K. Froehner , R. Buchner and W. Lang
 Thermoelectric Flow Sensors on Flexible Substrates and Their Integration Process.
 IEEE Sensors Conference 2010, Waikoloa, Hawaii, USA (2010)

- 337 Sklorz, A., A. Schäfer and W. Lang
 Merging Ethylene NDIR Gas Sensors with Preconcentrator-Devices for Sensitivity Enhancement.
 Sensors and Actuators B 170 (2012) 21-27
- 336 Pal, E., D. Lehmhus , E. Tolstosheeva , H. Sturm , C. Werner , V. Zöllmer , M. Busse, W. Lang
 Preparation of conductive microstructures by combination of photolithography and direct write technology.
 Materials Science and Engineering, Darmstadt, Germany (2010)
- 335 Wessels, A., R. Jedermann, W. Lang
 Embedded context aware objects for the transport supervision of perishable goods.
 9th WSEAS International Conference on Electronics, Hardware, Wireless and Optical Communications (EHAC '10), Athens, Greece, Pages 119-125 (2010)
- 334 Wessels, A., R. Jedermann, W. Lang
 Ein treuer Reisebegleiter - Nahtlose Transportüberwachung dank OSGi und RFID.
 RFID im Blick, Sonderausgabe Bremen, Pages 30-31 (2010)
- 333 Wang, X., A. Jabbari , R. Laur, W. Lang
 Dynamic Control of Data Measurement Intervals in a Networked Sensing System using Neurocomputing.
 International Conference on Networked Sensing Systems, Kassel, Germany (2010)
- 332 Wang, X., A. Jabbari , R. Jedermann , R. Laur, W. Lang
 Adaptive Data Sensing Rate in Ad-hoc Sensor Networks for Autonomous Transport Application.
 International Conference on Information Fusion, Edinburgh, Great Britain (2010)
- 331 Sturm, H., K. Froehner , E. Brauns , R. Buchner, W. Lang
 Flexible Thermoelectric Flow Sensors – An Integration of Sensorial Layers on Polymers.
 EMRS (European Materials Research Society) 2010, Strasbourg, France (2010)
- 330 Sosna, C., R. Buchner, W. Lang
 A Temperature Compensation Circuit for Thermal Flow Sensors Operated in Constant-Temperature-Difference Mode.
 IEEE Transactions on Instrumentation and Measurement, Nr. 59 (2010)
- 329 Sklorz, A., N. Miyashita, W. Lang
 Miniaturised Gas Chromatographic System for Ethylene Detection in Fruit Logistics.
 Smart System Integration 2010, Como, Italy (2010)
- 328 Sklorz, A., R. Jedermann, W. Lang
 Quality Inspection During Fruit Transport in Containers. 8th NEMO-SpectroNet Collaboration Forum, Jena, Germany (2010)
- 327 Mrugala, D., A. Dannies, W. Lang
 A Wearable Computing System for Dynamic Lacating of Parking Spaces.
 IJCSI International Journal of Computer Science Issue, Nr. 7 (2010)

- 326 Palafox-Albarrán, J., R. Jedermann, W. Lang
 Prediction of temperature inside a refrigerated container in the presence of perishable goods.
 7th International Conference on Informatics in Control, Automation and Robotics (ICINCO),
 Funchal, Portugal (2010)
- 325 Jedermann, R., W. Lang , M. Becker , X. Wang, A. Jabbari
 Der Intelligente Container.
 Schadenverhütungstagung 2010 - Temperaturgeführte Transporte, Bremerhaven, Germany
 (2010)
- 324 Jedermann, R., M. Becker , C. Görg, W. Lang
 Pilot tests of the intelligent container.
 Cool Chain Association Workshop (CCA) AGM 2010: Quality Matters!, Berlin, Germany
 (2010)
- 323 Jedermann, R., M. Becker , C. Görg, W. Lang
 Field Test of the Intelligent Container.
 7th European Conference on Wireless Sensor Networks EWSN2010, Coimbra, Portugal,
 Pages 11-12 (2010)
- 322 Jabbari, A., W. Lang
 Advanced Bio-Inspired Plausibility Checking in a Wireless Sensor Network.
 International Conference on Sensor Technologies and Applications (IEEE), Venice, Italy
 (2010)
- 321 Jabbari, A., H.-J. Kreowski, W. Lang
 Bio-Inspired Data Processing in Intelligent Transportation Systems.
 IEEE International Conference on Intelligent Systems, London, Great Britain (2010)
- 320 Hülsmann, M., W. Lang , R. Colmorn , R. Jedermann , C. Illigen, P. Cordes
 Ecological Impacts of Autonomous Co-operating Technologies in International Supply
 Networks – Establishing a Model for Analyzing CO2-Effects of Implementing Intelligent
 Containers in Fruit Logistics.
 Proceedings of the 15th International Symposium on Logistics. Configuring Next Generation
 Supply Chains, Kuala Lumpur, Malaysia (2010)
- 319 Breckenfelder, C., D. Mrugala , C. An , A. Timm-Giel , C. Görg , O. Herzog, W. Lang
 A Cognitive Glove Sensor Network for Fire Fighters.
 5th Workshop on "Artificial Intelligence Techniques for Ambient Intelligence" (AITAmI'10) .
 Kuala Lumpur, Malaysia (2010)
- 318 Junge, S., F. Jakobs, W. Lang
 Measurement results of the first two chip silicon microphone with low stress nickel membrane
 covering full audio range.
 IEEE MEMS 2009, Pages 777-780, Sorrento, Italy (2009)
- 317 Kropp, M., C. Kutzner , N. Hartgenbusch , S. Gu , C. Sosna , R. Buchner , P. Hauptmann,
 W. Lang
 Druckbeständige thermoelektrische Strömungssensoren mittels Membranperforation.
 MikroSystemTechnik Kongress 2009, Berlin, Germany (2009)

- 316 Sturm, H., C. Sosna , R. Buchner , C. Werner , D. Godlinski , V. Zöllmer , M. Busse, W. Lang
 New Electrical Connection Technology for Microsystems using Inktelligent Printing® and Functional Nanoscaled Inks.
 Proceedings of the Transducers'09: The 15th International Conference on Solid-State Sensors, Actuators and Microsystems, Denver, USA, Pages 1702-1705 (2009)
- 315 Sosna, C., H. Sturm , R. Buchner , C. Werner , D. Godlinski , V. Zöllmer , M. Busse, W. Lang
 INKtelligent printing® of Scale Comprehensive Electrical Connections for Thermal Flow Sensors. Sensor+Test 2009, Nürnberg, Germany, Pages 215-220 (2009)
- 314 Sklorz, A., D. Mrugala, W. Lang
 IR-Ethylene Concentration Measurement in Fruit Logistics.
 Smart Systems Integration 2009, Brussels, Belgium, 286-574 (2009)
- 313 Mrugala, D., C. Ruthenbeck , B. Scholz-Reiter, W. Lang
 Smart Jacket as a Computing System for Automobile Warehouse Logistics.
 Smart Systems Integration 2009, Brussels, Belgium, Pages 286-574 (2009)
- 312 Kropp, M., C. Kutzner , N. Hartgenbusch , S. Gu , C. Sosna , R. Buchner , P. Hauptmann W. Lang
 Pressure Stable Thermoelectric Flow Sensors by Means of Membrane Perforation.
 Solid-State Sensors, Actuators and Microsystems Conference, 2009. Transducers 2009. International, IEEE-1133 (2009)
- 311 Jedermann, R., W. Lang
 The Minimum Number of Sensors – Interpolation of Spatial Temperature Profiles in Chilled Transports.
 6th European Conference on Wireless Sensor Networks, Cork, Ireland, Nr. 5432, Pages 232-246 (2009)
- 310 Jedermann, R., E. d. Jong , L. Kleiboer , A. Wessels , S. Yuan, W. Lang
 Demo Abstract: Wireless quality monitoring in the food chain.
 6th European Conference on Wireless Sensor Networks, Cork, Ireland, Nr. 5432, Pages 1-2 (2009)
- 309 Jederman, R., L. Ruiz-Garcia, W. Lang**
Spatial temperature profiling by semi-passive RFID loggers for perishable food transportation.
Computers and Electronics in Agriculture, Nr. 65(2), Pages 145-154 (2009)
- 308 Jafari, A., A. Sklorz, W. Lang
 Energy Consumption Comparision between Autonomous and Central Wireless Sensor Network.
 Communications of SIWN, Nr. 6, Pages 166-170 (2009)

- 307 Jafari, A., A. Sklorz, W. Lang
 Target-Oriented Routing Algorithm Based on Sequential Coordinates for Autonomous Wireless Sensor Network.
Journal of Networks, Nr. 4, Pages 421-427 (2009)
- 306 Jacobs, T., C. Kutzner, M. Kropp, W. Lang, A. Kienle, P. Hauptmann
 Novel pressure stable thermoelectric flow sensor in non-steady state operation mode for inline process analysis in micro reactors
Procedia Chemistry, Nr. 1, Pages 148-151 (2009)
- 305 Jacobs, T., C. Kutzner, M. Kropp, G. Brokmann, W. Lang, A. Steinke, A. Kienle, P. Hauptmann
 Combination of a novel perforated thermoelectric flow and impedimetric sensor for monitoring chemical conversion in micro fluidic channels.
Procedia Chemistry, Nr. 1, Pages 1127-1130 (2009)
- 304 Jabbari, A., R. Jedermann, R. Muthuraman, W. Lang
 Application of Neurocomputing for Data Approximation and Classification in Wireless Sensor Networks.
Sensor Journal, Nr. 9, Pages 3056-3077 (2009)
- 303 Hentschel, D., R. Jedermann, W. Lang
 Autonomous Cooperating Processes for the Improvement of Food Quality.
Sensor+Test 2009, Nürnberg, Germany (2009)
- 302 Garcia, C., A. Schomacker, I. Klarholz, C. Harms, W. Lang
 Fabrication of Microfluidic Devices using SU-8 for Detection and Analysis of Viruses.
Sensors + Test 2010, Nürnberg, Germany (2009)
- 301 Buchner, R., C. Sosna, H. Sturm, O. Lassek, W. Lang
 High Temperature Stable Thermopiles – From Technology-Driven to Application Orientated Development.
COMS2009, Copenhagen, Denmark (2009)
- 300 Buchner, R., C. Sosna, W. Lang
 Temperature Stability Improvement of Thin-Film Thermopiles by Implementation of a Diffusion Barrier of TiN.
IEEE Sensors 2009 Conference, Christchurch, New Zealand, Pages 483-486 (2009)
- 299 Buchner, R., C. Sosna, W. Lang
 Erhöhung der Temperaturstabilität von Dünnschicht-Thermoelementen durch Implementierung einer Diffusionsbarriere aus TiN.
Mikrosystemtechnik Kongress 2009, Berlin, Germany, Paper P8.9 (2009)
- 298 Junge, S., F. Jakobs, W. Benecke, W. Lang
 INDIUM-BISMUTH_lead free alloy for electrical and mechanical die-attach at low temperatures.
EUROSENSORS 2008 Dresden, Germany, Pages 1250-1253 (2008)

- 297 Sosna, C., R. Buchner , W. Benecke, W. Lang
 A Simple One-Dimensional Analytical Model for Calculation of the Output Signal of Thermal Flow Sensors.
 Eurosensors XXII, Dresden, Germany, Pages 129-132.(2008)
- 296 Sklorz, A., A. B. Alamin-Dow , D. Mrugala , R. Jedermann , W. Benecke, W. Lang
 In-situ Ethylen-Konzentrationsmesssysteme für die Qualitätsüberwachung in der Fruchtlogistik.
 10. DFMRS Fachtagung, Pages 50-71 (2008)
- 295 Jedermann, R. , K. Stein , M. Becker, W. Lang
 UHF-RFID in the Food Chain - From Identification to Smart Labels.
 Coldchain Manangement. 3rd International Workshop, Bonn, Germany (2008)
- 294 Jedermann, R., W. Lang**
The Benefits of Embedded Intelligence - Tasks and Applications for Ubiquitous Computing in Logistics.
Internet of Things, Zurich, Switzerland, Pages 105-122 (2008)
- 293 Jedermann, R., J. P. Edmond, W. Lang
 Shelf life prediction by intelligent RFID - Technical limits of model accuracy.
 Logistic Dynamics International Conference, Bremen, Germany (2008)
- 292 Jedermann, R., L. J. A. Congil , M. Lorenz , J. D. Gehrke , W. Lang, O. Herzog
 Dynamic Decision making on Embedded Platforms in Transport Logistics - A Case Study.
 Logistics Dynamics International Conference, Bremen, Germany, Pages 191-198 (2008)
- 291 Jabbari, A., R. Jedermann and W. Lang
 Neural Network based Data Fusion in Food Transportation System
 11th International Conference on Information Fusion, Cologne, Germany.(2008)
- 290 Jabbari, A., R. Jedermann, W. Lang
 Application of Data Approximation and Classification in Measurement Systems - Comparison of “Neural Network” and “Least Squares” Approximation.
 IEEE international conference on computational intelligence for measurement systems and applications (CIMSA08), Istanbul, Turkey (2008)
- 289 Jabbari, A., R. Jedermann, W. Lang
 Application of Computational Intelligence for SFDI
 Proceedings of CESSE '07: 22nd International Conference on Computer, Electrical, Systems Science and Engineering, Prague, Czech Republic (2008)
- 288 Gould, D., M. Meiners , W. Benecke, W. Lang
 Condensation Detection Using a Wirelessly Powered RF-Temperature Sensor.
 IEEE Transactions on Vehicular Technology (2008)
- 287 Buchner, R. , K. Froehner , C. Sosna , W. Benecke, W. Lang
 Toward Flexible Thermoelectric Flow Sensors: A New Technological Approach.
 Journal of Microelectromechanical Systems, Nr. 15, Pages 1114-1119 (2008)

- 286 Babazadeh, M., W. Lang
A new approach for modeling environmental conditions using sensor networks.
5th International Conference on Informatics in Control, Automation and Robotics (ICINCO '08), Funchal (Madeira), Portugal.(2008)
- 285 Babazadeh, M. , H.-J. Kreowski, W. Lang
Selective Predictors of Environmental Parameters in Wireless Sensor Networks.
International Journal of Mathematical Models and Methods in Applied Sciences, Nr. 2, Pages 355-363 (2008)
- 284 Babazadeh, M. , R. Jedermann, W. Lang
A Heuristic Method in Monitoring Environmental Parameters using a Floating Input Approach in Wireless Sensor Networks.
International Journal of Mathematical Models and Methods in Applied Sciences, Nr. 2, 303-311 (2008)
- 283 Babazadeh, M. , R. Jedermann, W. Lang
Empirical Issues of a new Environmental Parameters Modeling Technique Using Wireless Sensor Networks.
The 12th WSEAS International Conference on Systems (WSEAS '08), Crete, Greece (2008)
- 282 Babazadeh, M. , R. Jedermann, W. Lang
Comparative study of the best estimators in a New Modeling Technique Using Wireless Sensor Networks.
8th WSEAS International Conference on Simulation, Modelling and Optimization (SMO '08), Santander, Spain (2008)
- 281 Alamin, A. B., A. Sklorz , W. Benecke, W. Lang
Development and Optimization of ICP-RIE Parameters for Deep Silicon Microfluidic Systems.
19th MicroMechanics European Workshop, Aachen, Germany (2008)
- 280 Alamin, A. B. , A. Sklorz , W. Benecke, W. Lang
Development and Characterization of Platinum Thin Films for Gas Analysis Microsystem.
Smart Systems Integration '08, Barcelona, Spain (2008)
- 279 Zschintzsch, M., A. Jabbari, W. Lang and B. Scholz-Reiter:
Adaptive Production and Inventory Control in Supply Chains against Changing Demand Uncertainty.
International Conference on Dynamics in Logistics, Bremen, Germany (2007)
- 278 **Zhuang, Y. X., O. Hansen, T. Knieling, C. Wang, P. Rombach, W. Lang, W. Benecke, M. Kehlenbeck, J. Koblitz**
Vapor-Phase Self-Assembled Monolayers for Anti-Stiction Applications in MEMS.
IEEE Journal of Microelectromechanical Systems (JMEMS) 16(6), 1451-1460 (2007)

- 277 Sosna, C., R. Buchner, W. Benecke, W. Lang, C. Böhm, J. Binder
 Development of a Highly Miniaturized PQT-Sensor for Monitoring and Diagnosing of Pneumatic Systems.
 Proceedings of the 2007 International Manufacturing Science And Engineering Conference, Atlanta, Georgia, USA (2007)
- 276 Pelczar, C., M. Meiners, D. Gould, W. Lang, W. Benecke
 Contactless liquid level sensing using wave damping phenomena in free-space.
 Proceedings of the TRANSDUCERS'07. International Solid-State Sensors, Actuators and Microsystems Conference, Lyon, France, Pages 2353-2356 (2007)
- 275 Ni, J., M. Maiwald, R. Buchner, C. Sosna, W. Benecke, W. Lang
 Simple modelling of the thermal behaviour of a tiny liquid splat on a thermal microsensor.
Journal of Microelectromechanical Systems 2, Pages 473-479 (2007)
- 274 Ni, J., W. Benecke, W. Lang
 Evaporation Model of Micro-Menisci for Thermoelectric Drop Sensor.
 Proceedings of IEEE Sensors 2007 (2007)
- 273 Ni, J., W. Benecke and W. Lang:
 Mutliphysics analysis of deformation and phase transition of a heated droplet.
Proc. of Smart Systems Integration 2007, 569–572 (2007)
- 272 Missal, W., Panitz, M. Benecke, W., Lang, W.
 Capacitive Dew Point Microsensor.
 13. SENSOR Kongress 2007, Nürnberg, Germany (2007)
- 271 Knieling, T., W. Lang, W. Benecke
 Gas phase hydrophobisation of MEMS silicon structures with self-assembling monolayers for avoiding in use sticking.
Sensors and Actuators B 126, 13-17 (2007)
- 270 Junge, S., F. Jakobs, W. Benecke, W. Lang
 Ultra low tensile stress Electroplated Nickel layers: A new application as membrane material for acoustic devices.
 Proceedings of the Transducers'07. International Solid-State Sensors, Actuators and Microsystems Conference, Lyon, France, Pages1259-1262 (2007)
- 269 **Jedermann, R., W. Lang**
Semi-passive RFID and beyond: steps towards automated quality tracing in the food chain.
International Journal of Radio Frequency Identification Technology and Applications (IJRFITA), 1(2007)3, 247-259 (2007)
- 268 **Jedermann, R., W. Lang**
Semi-passive RFID and beyond - steps towards automated quality tracing in the food chain.
Fifth RFID Academic Convocation, Orlando, Florida, USA (2007)

- 267 Jedermann, R., J. D. Gehrke, M. Becker, C. Behrens, E. Morales-Kluge, O. Herzog, W. Lang
 Transport scenario for the intelligent container.
 Hülsmann, M.; Windt, K (eds.): Understanding Autonomous Cooperation & Control in Logistics - The Impact on Management, Information and Communication and Material Flow. Springer, Berlin, Pages 393-404 (2007)
- 266 Jedermann, R., J. P. Edmond, W. Lang
 Shelf life prediction by intelligent RFID - Technical limits of model accuracy.
 International Conference on Dynamics in Logistics, Bremen, Germany (2007)
- 265 Jedermann, R., C. Behrens, R. Laur, W. Lang**
Intelligent containers and sensor networks, Approches to apply autonomous cooperation on systems with limited resources.
Hülsmann, M.; Windt, K (eds.): Understanding Autonomous Cooperation & Control in Logistics - The Impact on Management, Information and Communication and Material Flow. Springer, Berlin (2007)
- 264 Jedermann, R., R. Aldag, W. Lang
 Automatisches Monitoring der Warenqualität von Lebensmitteln bei logistischen Vorgängen.
 Einbeziehung der aktuellen Produktqualität in warenvorauseilende Informationsströme.
 Z G F L L Fachzeitschrift für die gesamte Frische- und Lebensmittel-Logistik, 1(2007)3,
 Internet Publication, Pages 11-17 (2007)
- 263 Jabbari, A., R. Jedermann and W. Lang:
 Application of Computational Intelligence for SFDI.
 Proceedings of CESSE 2007: 22nd International Conference on Computer, Electrical,
 Systems Science and Engineering, Prague, Czech Republic (2007)
- 262 Jabbari, A., R. Jedermann, W. Lang
 Application of Computational Intelligence for Sensor Fault Detection and Isolation (SFDI).
 International Journal of Computer, Information, Systems Science, and Engineering (2007)
- 261 Gould, D., A. Sklorz, C. Schröder, M. Meiners, W. Benecke, W. Lang
 Herausforderungen in der Entwicklung passiver HF-Sensoren.
 Technisches Messen (2007)
- 260 Gould, D., J. Knabe, C. Schröder, A. Sklorz, M. Meiners, W. Benecke, W. Lang
 Passive RF-Temperatursensoren zur Detektion von Beschlag auf Fahrzeug-
 Windschutzscheiben.
 Sensoren Im Automobil 2007, München, Germany (2007)
- 259 Buchner, R., C. Sosna, W. Benecke, W. Lang and P. Bhargava:
 Thermische Strömungssensoren mit monolithisch integrierten Kanalstrukturen für die
 Messung von kleinsten Flussraten.
 Proceedings of the Mikrosystemtechnik Kongress 2007, Dresden, Germany (2007)
- 258 Buchner, R., C. Sosna, W. Benecke, W. Lang
 New Integration Technologies and Applications for Miniaturised Thermoelectric Flow
 Sensors.
 13. SENSOR Kongress 2007, Nürnberg, Germany (2007)

- 257 Buchner, R., P. Bhargava, C. Sosna, W. Benecke, W. Lang
 Thermoelectric Flow Sensors with Monolithically Integrated Channel Structures for Measurements of Very Small Flow Rates.
 Proceedings of IEEE Sensors 2007, Pages 828-831 (2007)
- 256 Jedermann, R., Schouten, R., Sklorz, A. Lang, W., v.Kooten, O.
 Linking keeping quality models and sensor systems to an autonomous transport supervision system.
 Cold-Chain-Management, 2nd Workshop, Bonn, Germany, May 2006 (2006)
- 255 Zhuang, Y. X., O. Hansen, T. Knieling, C. Wang, P. Rombach, W. Lang, W. Benecke, M. Kehlenbeck, J. Koblitz**
Thermal stability of vapor phase deposited self-assembled monolayers for MEMS anti-stiction.
Journal of Micromechanics and Microengineering 16, Pages 2259-2264 (2006)
- 254 Sklorz, A., D. Gould, W. Lang and W. Benecke:
 Passive RFID-Sensoren.
 RFID im Blick, Sonderausgabe Bremen, 40-41 (2006)
- 253 Maiwald, M., R. Buchner, J. Ni, V. Zöllmer, I. Wirth, M. Busse, W. Benecke and W. Lang:
 Droplet Characterisation using Thermoelectric Microsensors.
 Proceedings of the 20th Eurosensors Conference Anniversary, Göteborg, Sweden, W2C-02 (2006)
- 252 Knieling, T., W. Lang, W. Benecke
 Gas phase hydrophobisation of MEMS silicon structures with self-assembling monolayers for avoiding in-use sticking.
Sensors and Actuators B 126, Pages 13–17 (2006)
- 251 Knieling, T., W. Lang and W. Benecke:
 Gas phase hydrophobisation of MEMS silicon structures with self-assembling monolayers for avoiding in-use sticking.
 Proceedings of the E-MRS 2006, Spring Meeting, Symposium G, pp 5-10, 2006, Nice, France (2006)
- 250 Jedermann, R., D. Uckelmann, A. Sklorz, W. Lang
 The intelligent container: Combining RFID with sensor networks, dynamic quality models and software agents.
 Second RFID Academic Convocation Las Vegas, USA (2006)
- 249 Jedermann, R., W. Lang
 Mobile Java Code for Embedded Transport Monitoring Systems.
 Proceedings of the Embedded World Conference 2006, Nürnberg, Germany, 2, Pages 771-777 (2006)

- 248 Jedermann, R., J. D. Gehrke, M. Lorenz, O. Herzog, W. Lang
 Realisierung lokaler Selbststeuerung in Echtzeit. Der Übergang zum intelligenten Container.
 3. Wissenschaftssymposium Logistik, Bundesvereinigung Logistik, Dortmund, Germany,
 Pages 145-166 (2006)
- 247 **Jedermann, R., C. Behrens, D. Westphal, W. Lang**
Applying autonomous sensor systems in logistics combining Sensor Networks, RFIDs and Software Agents.
Sensors and Actuators A (Physical) 132(1), Pages 370-375 (2006)
- 246 Gould, D., A. Sklorz, M. Meiners, W. Benecke, W. Lang
 Passive Wireless Temperature Sensing using an RF Technology for an Automotive Application.
 Wireless Sensor Networks, Banff, Canada (2006)
- 245 Gould, D., C. Schröder, A. Sklorz, M. Meiners, R. Jedermann, W. Lang
 Herausforderungen in der Entwicklung passiver HF-Sensoren.
 4. GMM Workshop Energieautarke Sensorik, Karlsruhe, Germany, Pages 57-61 (2006)
- 244 **Buchner, R., C. Sosna, M. Maiwald, W. Benecke and W. Lang:**
A high-temperature thermopile fabrication process for thermal flow sensors.
Sensors and Actuators A: Physical 130-131, 262-266 (2006)
- 243 Buchner, R., M. Maiwald, C. Sosna, T. Schary, W. Benecke and W. Lang:
 Miniaturised Thermal Flow Sensors for Rough Environments.
 Proceedings of the 19th IEEE International Conference on Micro Electro Mechanical Systems - Technical Digest - MEMS 2006, Istanbul, Turkey, 582-585 (2006)
- 242 Behrens, C., M. Becker, J. D. Gehrke, O. Herzog, W. Lang and R. Laur:
 Ein Multi-Agentensystem für Selbststeuerung in der Transportlogistik.
 Fachungsberichte VDE Kongress 2006 - Innovations for Europe, Band 1, Aachen, Deutschland, 29-34 (2006)
- 241 Stürmann, J., W. Benecke, S. Zampolli, I. Elmi, G. C. Cardinali and W. Lang:
 A Micromachined Gas Chromatographic Column to Optimize the Gas Selectivity for a Resistive Thin Film Gas Sensor.
 Proceedings of the Sensor+Test 2005, Nürnberg, Germany, 1, 85-90 (2005)
- 240 Stürmann, J., W. Benecke, S. Zampolli, I. Elmi, G. C. Cardinali and W. Lang:
 A micromachined gas chromatographic column to optimize the gas selectivity for a resistive thin film gas sensor.
 Proceedings of the Transducers'05. The 13th International Conference on Solid-State Sensors, Actuators and Microsystems, Seoul, Korea, 2, 2083-2086 (2005)
- 239 Schary, T., M. Meiners, W. Lang and W. Benecke:
 Surface Micromachined Capacitive Absolute Pressure Sensors on Fused Silica Substrates Operable in Touch-Mode.
 Proceedings of the Eurosensors XIX, Eurosensors 2005 Conference, Barcelona, (2005)

- 238 Schary, T., M. Meiners, W. Lang and W. Benecke:
Decreasing Parasitics of Surface Micromachined Capacitive Pressure Sensors by Means of Quarz-Substrates.
Proceedings of the Sensor+Test 2005, Sensor 2005 12th International Conference, Nürnberg, Germany, 1, 25-30 (2005)
- 237 Schary, T., M. Meiners, W. Lang and W. Benecke:
Fused Silica as Substrate Material for Surface Micromachined Capacitive Pressure Sensors Operable in Touch-Mode.
Proceedings of the IEEE Sensors 2005 Conference, Irvine, USA, 1-5 (2005)
- 236 Schary, T., M. Meiners, W. Lang and W. Benecke:
Fused Silica as Substrate Material for Surface Micromachining of LPCVD-Layers: Benefits and Issues for Capacitive Mechanical Transducers.
Proceedings of the Eurosensors XIX, Eurosensors 2005 Conference, Barcelona, Spa, 2, WPb10 (2005)
- 235 Meiners, M., M. Süssenguth, W. Missal, T. Schary, W. Benecke, W. Lang and M. Stücker:
RF Smart-Sensor for Venous Ulcer Treatment.
Proceedings of the Transducers'05, The 13th International Conference on Solid-State Sensors, Actuators and Microsystems, Seoul, Korea, 1, 453-456 (2005)
- 234 Lang, W., B. Scholz-Reiter, T. Philipp and R. Jedermann:
Intelligent RFID in Logistics - Identification and Beyond.
MST-News, Special Issue on Microsystems Technologies, 15 (also A1). (2005)
- 233 Lang, W., R. Jedermann, C. Behrens, A. Sklorz, W. Benecke and R. Laur:
Intelligente RFID - Mehr als Identifizierung.
Proceedings of the Mikrosystemtechnik Kongress 2005, Freiburg, Germany, 393-396 (2005)
- 232 Lang, W. and R. Jedermann:
Intelligente RFID-Systeme für logistische Anwendungen.
Micro-Technology Forum, Hannover Fair, Germany (2005)
- 231 Knieling, T., W. Lang and W. Benecke:
Passive Fabry-Perot-Interferenzdisplays zur einfachen Musterprojektion.
Proceedings of the Mikrosystemtechnik Kongress 2005, Freiburg, Germany, 183-186 (2005)
- 230 Knieling, T., W. Lang and W. Benecke:
Characteristics and Electrical Addressing of Optical Fabry-Perot Displays.
Proceedings of SPIE, the International Society for Optical Engineering, San Diego (California), USA, 5875, 125-134 (2005)
- 229 Jedermann, R., C. Behrens, D. Westphal and W. Lang:
Applying Autonomous Sensors Systems in Logistics - Combining Sensor Networks, RFIDs and Software Agents.
Proceedings of Eurosensors XIX, Eurosensors 2005 Conference, Barcelona, Spa, 1, TC5 (2005)

- 228 Jedermann, R., C. Behrens, C. A. Gorecki, D. Westphal, L. J. A. Congil, R. Laur, W. Benecke and W. Lang:
Linking RFIDs and Sensors for Logistical Applications.
 Proceedings of the 12th International Conference on Sensors and Test (Sensor 2005), Nürnberg, Germany, 1, 317-322 (2005)
- 227 Gorecki, C. A., C. Behrens, C. Zheng, D. Westphal, R. Jedermann, W. Lang and R. Laur:
TAP-SNS - A Test Platform for Secure Communication in Wireless Sensor Networks for Logistic Applications.
 Proceedings of Sensor+Test 2005, Sensor 2005 12th International Conference, Nürnberg, Germany, 1, 317-322 (2005)
- 226 Buchner, R., C. Sosna, W. Benecke and W. Lang:
Eine neue Generation thermoelektrischer Strömungssensoren optimiert für den Einsatz in Flüssigkeiten.
 Veröffentlichungen zum Mikrosystemtechnik Kongress 2005; BMBF, Freiburg, Deutschland, 225-228 (2005)
- 225 Buchner, R., K. Rohloff, W. Benecke and W. Lang:
A high-temperature thermopile fabrication process for thermal flow sensors.
 Proceedings of the 13th International Conference on Solid-State Sensors, Actuators and Microsystems (Transducers '05), Seoul, Korea, 1, 575-578 (2005)
- 224 Stürmann, J., W. Lang, W. Benecke, S. Zampolli and I. Elmi:
Microfabricated Ultra Small Packed Gas Chromatographic Column.
 Proceedings of the 10th International Meeting on Chemical Sensors, Tsukuba, Japan, 824 (2004)
- 223 Lang, W., R. Jedermann, M. Meiners and W. Benecke:
Sensorik und Identifikation mit aktiven RFID-Tags.
 3. GMM-Workshop Energieautarke Sensorik, Kassel, Deutschland (2004)
- 222 Lang, W., Glosch, H., Billat, S., Querrioux, T.:
Humidity Measurement by Dynamic Dew-Point Detection
 Transducers 2003, Boston, June 2003, pp. 1864 - 1866. IEEE Catalogue number 03TH8664.
- 221 Cross-Coupling of the Oscillation Modes of Vibratory Gyroscopes
 M. Braxmaier, A. Gaißer, T. Link, A. Schumacher, I. Simon, J. Frech, H. Sandmaier,
 W. Lang
 Transducers 2003, Boston, June 2003, pp. 167 – 170. IEEE Catalogue number 03TH8664.
- 220 Novel Approaches to Microfluidic Components in High-End Medical Applications
 T. Goetsche, J. Kohnle, M. Willmann, H. Ernst, S. Messner, R. Steger, M. Storz,
 W. Lang, R. Zengerle, H. Sandmaier
 Transducers 2003, Boston, June 2003, pp. 623 – 626. IEEE Catalogue number 03TH8664.
- 219 Software optimization of digital readout electronics for micromachined gyroscopes
 B. Hou, Z. Gao, A. Gaisser, T. Link, M. Braxmaier, A. Schumacher, W. Lang, H. Sandmaier
 Symposium Gyro Technology 2002, Stuttgart, Germany

- 218 Digital readout electronics for micro-machined gyroscopes
 A. Gaißer, T. Link, M. Braxmaier, A. Schumacher, W. Lang, H. Sandmaier
 Symposium Gyro Technology 2002, Stuttgart, Germany
- 217 New Micromachined Membrane Switches in Silicon Technology
 K. Hiltmann, A. Schumacher, K. Guttmann, E. Lemp, H. Sandmaier, W. Lang
 IEEE Transactions on Components and Packaging Technologies
 Vol. 25, No 3, Sept 2002, pp 397-402
- 216 Low cost micro - machined gyroscope in SOI – technology
 A. Gaißer, J. Frech, G. Hölzer, P. Nommensen, M. Braxmaier, T. Link, W. Geiger,
 U. Schwarz, H. Sandmaier, W. Lang
 AMAA (Advanced Microsystems for Automotive Applications), Berlin, Mai 2002
 Proceedings (ISBN 3-540-43232-9, Springer-Verlag) 311-315
- 215 New Digital Readout Electronics for Capacitive Sensors by the Example of Micro-Machined Gyroscopes
 A. Gaißer, W. Geiger, T. Link, J. Merz, S. Steigmajer, A. Hauser, H. Sandmaier, W. Lang
 Sensors and Actuators A 97-98 (2002) 557-562
- 214 Micromachined Inclinometer with High Sensitivity and Very Good Stability**
S. Billat, H. Glosch, M. Kunze, J. Frech, F. Hedrich, J. Auber, H. Sandmaier, W. Lang
Sensors and Actuators A 97-98 (2002) 125-130
- 213 Anisotropic Conductive Adhesion of Microsensors Applied in the Instance of a Low Pressure Sensor
 R. Briegel, M. Ashauer, H. Ashauer, H. Sandmaier, W. Lang
 Sensors and Actuators A 97-98 (2002) 323-328
- 212 Mikromechanische Drehratensensoren für KFZ-Anwendungen
 A. Gaißer, W. Geiger, M. Braxmaier, T. Link, A. Schumacher, P. Nommensen, J. Auber, J.
 Frech, H. Sandmaier, W. Lang
 Entwicklerforum KFZ-Elektronik, Stuttgart, 24.4.2002, Proceedings 251-260
- 211 W. Geiger, W. U. Butt, A. Gaißer, J. Frech, M. Braxmaier, T. Link, A. Kohne,**
P. Nommensen, H. Sandmaier, W. Lang
Decoupled Microgyros and the Design Principle Daved
Sensors and Actuators A 95 (2002) 239-249
- 210 Kai Hiltmann, Axel Schumacher, Kai Guttmann, Engelbert Lemp, Hermann Sandmaier, Walter Lang
 New Micromachined Membrane Switches in Silicon Technology
 47 IEEE Holm Conference on Electrical Contacts; 10-12 September 2001, Montral, Canada.
 Proceedings 117-121; IEEE Catalog Number 01CH37192
- 209 Geiger, J. Frech, M. Braxmaier, T. Link, A. Gaißer, W. Butt, P. Nommensen,
 H. Sandmaier, W. Lang
 DAVED-LL - A Novel Gyroscope in SOI-Technology
 Symposium Gyro Technology 2001, Stuttgart, Germany, 18.-19.9.2001

- 208 M. Ashauer, H. Scholz, R. Briegel, P. Nommensen, H. Sandmaier, W. Lang
 New application for thermal flow sensors
 Sensor 2001, Nürnberg, Germany, Mai 2001, Proceedings II, pp. 251-256
- 207 B. Folkmer, L. Alexandre, W. Lang
 Calculations on micromachined piezoresistive sensor devices
 CAD FEM Users' Meeting 2001, Potsdam, Oktober 2001
- 206 Microsystems - News Concepts for an emerging market
 W. Lang, S. Billat, H. Glosch, M Kunze, F. Hedrich, J. Auber, H. Sandmaier, W. Wimmer, T. Wagmann, D. Bauernfeind,
 AMAA (Advanced Microsystems for Automotive Applications), Berlin, Mai 2001
 Post deadline Vortrag
- 205 The Silicon Angular Rate Sensor System DAVED**
W. Geiger, J. Merz, T. Fischer, B. Folkmer, H. Sandmaier, W. Lang
Sensors & Actuators A 84 (2000) pp. 280-284
- 204 New Digital Readout Electronics for Capacitive Sensors by the Example of Micro-Machined Gyroscopes
 A. Gaißer, W. Geiger, T. Link, J. Merz, S. Steigmajer, A. Hauser, H. Sandmaier, W. Lang
 Transducers 2001, Munich, Germany, June 2001, Proceedings S. 472-475
- 203 Thermal Flow Sensor for Very Small Flow Rate
 M. Ashauer, H. Scholz, R. Briegel, H. Sandmaier, W. Lang
 Transducers 2001, Munich, Germany, June 2001, Proceedings S. 1464-1467
- 202 Micromachined Inclinometer with High Sensitivity and Very Good Stability
 S. Billat, H. Glosch, M. Kunze, J. Frech, F. Hedrich, J. Auber, H. Sandmaier, W. Lang
 Transducers 2001, Munich, Germany, June 2001, Proceedings S. 1488-1491
- 201 Anisotropic Conductive Adhesion of Microsensors Applied in the Instance of a Low Pressure Sensor
 R. Briegel, M. Ashauer, H. Ashauer, H. Sandmaier, W. Lang
 Transducers 2001, Munich, Germany, June 2001, Proceedings S. 210-213
- 200 Convection-Based Micromachined Inclinometer Using SOI Technology
 S. Billat, H. Glosch, M. Kunze, F. Hedrich, J. Frech, J. Auber, W. Lang, H. Sandmaier, W. Wimmer
 Sensor 2001, Nürnberg, Germany, Mai 2001, Proceedings I, pp. 77-81
- 199 The Design Principle Daved and its Decoupled Microgyros
 W. Geiger, W. Butt, A. Gaißer, J. Frech, M. Braxmaier, T. Link, H. Sandmaier, W. Lang
 Sensor 2001, Nürnberg, Germany, Mai 2001, Proceedings I, pp. 13-18
- 198 Mikrosystemtechnik – Beispiele und Trends
 Walter Lang
 5. Fachtagung "Sensoren zum Messen mechanischer Größen im KFZ"
 Haus der Technik, Essen, Germany, 15.2.2001

- 197 Optical Characterization of Free-Standing Porous Silicon Films
 S. Guha, P. Steiner, F. Kozlowski, W. Lang
Journal of Porous Materials 4, 227-237 (1997)
- 196 W. Geiger, W. U. Butt, A. Gaißer, J. Frech, M. Braxmaier, T. Link, A. Kohne,
 P. Nommensen, H. Sandmaier, W. Lang
 Decoupled Microgyros and the Design Principle Daved
 IEEE Conference on Micro Electro Mechanical Systems (MEMS) 2001, Jan 22-25. 2001,
 Interlaken, Switzerland;
- 195 S. Billat, H. Glosch, M. Kunze, F. Hedrich, J. Frech, J. Auber, H. Sandmaier, W. Wimmer,
 W. Lang
 Convection-based micromachined inclinometer using SOI technology
 IEEE Conference on Micro Electro Mechanical Systems (MEMS) 2001, Jan 22-25. 2001,
 Interlaken, Switzerland;
- 194 J. Ducree, R. Zengerle, W. Lang, H. Sandmaier
 From Research to Application: Experiences of HSG-IMIT
 6th international micromachining symposium
- 193 J. Ducree, H. Sandmaier, W. Lang
 MEMS: From Development to Produktion
Seisan-Kenkyu, Vol. 52, no. 6 (2000), pp. 22-25
- 192 B. Folkmer, Th. Link, M. Braxmaier, W. Geiger, W. Lang
 Design of Micromachined Vibrating Gyroscopes with Matlab, Ansys and Saber
 18. CAD-FEM Users' Meeting; Sept. 2000, Friedrichshafen, Germany
 Technical Proceedings
- 191 B. Prillwitz, B. Folkmer, K. Hiltmann, W. Lang
 Deflection of Silicon Membranes by Piezoelectric and Temperature Effects
 18. CAD-FEM Users' Meeting; Sept. 2000, Friedrichshafen, Germany
 Technical Proceedings
- 190 Folkmer, M. Hirt, M. Vosseler, H. Glosch, F. Hedrich, S. Billat, W. Lang,
 H. Sandmaier
 Calculations on Micromachined Electro-Thermal Sensor Devices
 18. CAD-FEM Users' Meeting; Sept. 2000, Friedrichshafen, Germany
 Technical Proceedings
- 189 Gyro-Inclinometer Based on Micromachined Inertial Sensors
 X. J. Niu, W. Geiger, H. Sandmaier, W. Lang and Z. Y. Gao
 Symposium Gyro Technology 2000, Stuttgart, Germany, September 2000
- 188 B. Prillwitz, B. Folkmer, K. Hiltmann, W. Lang
 Deflection of Silicon Membranes by Piezoelectric and Temperature Effects
 CAD-FEM User's Meeting 2000, Friedrichshafen, Germany, Technical Proceedings

- 187 Porous Silicon: Material, Technology and Application
 W. Lang, F. Hedrich, S. Billar Invited Speaker
 EMRS-Meeting, Strasbourg, Mai 2000,
- 186 A mechanically Controlled Oscillator
 W. Geiger, H. Sandmaier, W. Lang Sensors & Actuators 82 (2000) 74-78
- 185 Applications of Porous Silicon for Micromachining
 W. Lang, F. Hedrich, S. Billat Invited speaker
 PSST 2000: Porous Semiconductors Science and Technology, Madrid, March 2000
- 184 Structuring of membrane sensors using sacrificial porous silicon**
 F. Hedrich, S. Billat and W. Lang
 Sensors and Actuators A: Physical, Vol. 84, Issue 3, 1 September 2000, Pages 315-323
- 183 The Silicon Angular Rate Sensor System MARS-RR
 W. Geiger, J. Merz, T. Fischer, B. Folkmer, H. Sandmaier, W. Lang
 Transducers 99, June 7-9, 1999, Sendai, Japan; Techn. Proc. 1578-1581
- 182 A mechanically Controlled Oscillator
 W. Geiger, H. Sandmaier, W. Lang
 Transducers 99, June 7-9, 1999, Sendai, Japan; Techn. Proc. 1406-1409
- 181 Electronic Tunneling Accelerometer for High Resolution
 T. Strobel, H. J. Faißt, O. Nagler, F. Kozlowski, H. Sandmaier, W. Lang
 Transducers 99, June 7-9, 1999, Sendai, Japan; Techn. Proc. 1534-1537
- 180 Thermal Flow Sensor for Liquids and Gases
 M. Ashauer, H. Glosch, F. Hedrich, N. Hey, H. Sandmaier and W. Lang
 Sensor 99, Nürnberg; Technical Proceedings 387-392 (1999)
- 179 The Silicon Angular Rate Sensor MARS-RR
 Wolfram Geiger, Bernd Folkmer, Hermann Sandmaier and Walter Lang
 Sensor 99, Nürnberg; Technical Proceedings 59-64 (1999)
- 178 Materials Aspects in Microsystem Technologies
 D. Barbier, W. Lang, J. R. Morante, P. Temple-Boyer, G. Müller editors
 E-MRS spring conference; Strasbourg, France, June 16-19 1998
 Proceedings of the European Materials Research Society 83
 North Holland Elsevier Science Publ., ISBN 0-08-04361-0
 Special Issue of the Journal of „Sensors and Actuators“, Vol. 74/1-3 (1999)
- 177 DAVED – A Micromachined Sensor for Angular Rate
 W. Geiger, J. Merz, M. Braxmaier, A. Strunz, H. Sandmaier, W. Lang
 Microengineering 99, Stuttgart (1999)
- 176 DAVED – Micromachined Decoupled Angular Velocity Detector
 W. Geiger, J. Merz, B. Folkmer, M. Braxmaier, A. Strunz, H. Mitterling, X. Niu,
 H. Sandmaier, W. Lang, Symposium Gyro Technology 1999, Stuttgart, Germany

- 175 Mikrosystemtechnik: Von der Grundlagenforschung zur Produktion
 H.Sandmaier and W. Lang
 Symposium „Wirtschaft trifft Wissenschaft“, Stuttgart, 8.-9- dezember 1998
- 174 MEMS: From Development to Production
 H. Sandmaier and W. Lang
 Conference on the Comercialisation of Microsystems, San Diego, Ca, September 1998
- 173 Porous Silicon: Material, Technology and Devices
 R. Herino, W. Lang, H. Münder editors
 E-MRS spring conference; Strasbourg, France, May 22-26, 1995
 Proceedings of the European Materials Research Society 57
 North Holland Elsevier Science Publ., ISBN 0 444 824 146
 Special Issue of the Journal „Thin Solid Films“, Vol. 276, Numbers 1-2, 15 April 1996
- 172 Thermal Flow Sensor for Liquids and Gases based on combinations of two principles**
M. Ashauer, H. Glosch, F. Hedrich, N. Hey, H. Sandmaier and W. Lang
Sensors & Actuators 73 (1999) 7-13
- 170 Micro Electro Mechanical Systems: From Research to Applications
 Walter Lang and Hermann Sandmaier Invited Review
 Japanese Journal of Applied Physics Vol. 37 (1998) pp. 7047-7051
- 169 A New Silicon Rate Gyroscope**
W. Geiger, B. Folkmer, J. Merz, H. Sandmaier, W. Lang
Sensors & Actuators 73 (1999) 45-51
- 168 MEMS: From Research to Applications
 H. Sandmaier, W. Lang Invited talk
 Micropocesses and Nanotechnology Conference, Kyoungju, Korea, July 1998,
- 167 New designs of micromachined vibrating rate gyroscope with decoupled oscillation modes.**
W. Geiger, B. Folkmer, U. Sobe, H. Sandmaier, W. Lang
Sensors & Actuators A 66 (1998) 118-124
- 166 Rationelle Simulation mikro-elektro-mechanischer Systeme unter Einsatz von FEM- und Systemsimulationssoftware
 B. Folkmer, B. Prillwitz, H. Sandmaier, W. Lang
 16. CAD-FEM User's Meeting, 7.-9. Oktober 1998, Bad Neuenahr-Ahrweiler
- 165 Electrostatically actuated micromirror devices in silicon technology
 W. Lang, H. Pavlicek, Th. Marx, H. Scheithauer, B. Schmidt
 EMRS Meeting, June 1998, Strasbourg
 Also in: Sensors & Actuators 74 (1999) 216-218
- 164 Reflexions on the future of microsystems**
W. Lang Invited Review Article Sensors & Actuators 72 (1999) 1-15

- 163 A Silicon Rate Gyroscope with Decoupled Driving and Sensing Mechanism
 W. Geiger, M. Kieninger, B. Folkmer, H. Sandmaier, W. Lang
 Symposium Gyro Technology 1998; Stuttgart, Germany (1998) 6.0-6.8
- 162 Thermal Flow Sensor for Liquids and Gases
 M. Ashauer, H. Glosch, F. Hedrich, N. Hey, H. Sandmaier, W. Lang
 μ Fluidics, Anaheim, Ca, Nov. 1998
- 161 Liquid Mass Flow Sensor Using Dynamic Pressure Detection
 M. Ashauer, H. Glosch, H. Ashauer, H. Sandmaier, W. Lang
 μ Fluidics, Anaheim, Ca, Nov. 1998
- 160 MEMS: From Development to Production
 H. Sandmaier, W. Lang
 The Commercialization of Microsystems '98; San Diego, Ca, Sept. 1998
- 159 Micromachined Angular Rate Sensor MARS-RR
 W. Geiger, M. Kieninger, M. Pascal, B. Folkmer, W. Lang Invited speaker
 SPIE (International Society for Optical Engineering) Conference on micromachined devices and components IV, Santa Clara, Ca, Sept. 1998; 190-198
- 158 Improved Simulation for Strongly Coupled MEMS: Resonant Vacuum Sensor Optimization
 B. Folkmer, A. Siber, W. Große Bley, H. Sandmaier, W. Lang
 EMRS Meeting, June 1998, Strasbourg
 Also in: Sensors and Actuators 74 (1999) 190-192
- 157 Micromachined Switches for Low Electric Loads
 K. Hiltmann, W. Keller, W. Lang
 EMRS Meeting, June 1998, Strasbourg
 Also in: Sensors and Actuators 74 (1999) 203-206
- 156 **A Thermoelectric Converter for Energy Supply**
H. Glosch, M. Ashauer, U. Pfeiffer, W. Lang
Spring Meeting of the EMRS (European Materials Research Society),
June 1998, Strasbourg
 Also in: Sensor & Actuators 74 (1999) 246-250
- 155 A New Silicon Rate Gyroscope with Decoupled Oscillation Modes
 W. Geiger, B. Folkmer, M. Kieninger, J. Merz, H. Förstermann, H. Sandmaier, W. Lang
 AMAA: Sensors for Automotive Application, March 1998, Berlin
- 154 Microsensors: From Research to Applications
 H. Sandmaier and W. Lang
 The 16th Sensor Forum, Inst. of Electr. Eng. of Japan, Kawasaki, June 2-3, 1998 (1998)
 Techn. Proc. 1-7; Invited talk
- 153 Improved Simulation For Strongly Coupled MEMS: Resonant Vacuum Sensor Optimization
 B. Folkmer, A. Siber, W. Große-Bley, H. Sandmaier, W. Lang
 ITW98: „Numerische Simulation in Feinwerk-/ Mikrotechnik und Elektronik“;
 München 1998

- 152 Thermal conductivity of porous silicon
 Walter Lang
 „Properties of Porous Silicon“, emis datareviews series No. 18, IEE-INSPEC 1997
 L. Canham editor, ISBN 0 85296 932 5, pp 138 - 141.
- 151 Micromachining applications of porous silicon
 W. Lang
 „Properties of Porous Silicon“, emis datareviews series No. 18, IEE-INSPEC 1997
 L. Canham editor, ISBN 0 85296 932 5, pp 377-383.
- 150 A New Silicon Rate Gyroscope
 W. Geiger, B. Folkmer, J. Merz, H. Sandmaier, W. Lang
 IEEE Conference on Micro Electro Mechanical Systems (MEMS) 1998, Heidelberg, Jan. 1998,
 proceedings 615-620
- 149 Thermal Flow Sensor for Liquids and Gases
 M. Ashauer, H. Glosch, F. Hedrich, N. Hey, H. Sandmaier and W. Lang
 IEEE Conference on Micro Electro Mechanical Systems (MEMS) 1998, Heidelberg, Jan. 1998,
 proceedings 351-355
- 148 Improved Rate Gyroscope Design Designated for Fabrication by Modern Deep Silicon Etching
 W. Geiger, B. Folkmer, H. Sandmaier, W. Lang
 Int. Meeting on Gyroscopes, Stuttgart, 1997 Proceedings 2.0-2.8
- 147 A Layout Study on Microgravit-Control-System with Electron Tunneling Accelerometers
 T. Strobelt, O. Nagler, H. J. Faißt, F. Kozlowski, W. Lang
 ESA 2nd Round Table on Micro/Nano Technologies for Space
 ESTEC, Noordwijk, The Netherlands, Oct. 15-17, 1997; Proceedings 161-163
- 146 Silicon thermal microrelais with multiple switching states
 K. Hiltmann, M. Ashauer, H. Sandmaier, W. Lang
 Sensors & Actuators A62 (1997) 612-615
- 145 Optimization of micromachined membrane switches
 K. Hiltmann and W. Lang
 J. Micromech. Microeng. 7 (1997) 240-243
- 144 Mikromechanische Tunnelstromsensoren zur Messung der Mikrogravitation
 O. Nagler, T. Strobelt, K. Feilkas, F. Kozlowski, H. Hamacher, W. Lang
 Deutscher Luft- und Raumfahrtkongress 1997, München, Oktober 1997
- 143 Development of Micromachined Switches with Increased Reliability
 K. Hiltmann, B. Schmidt, H. Sandmaier, W. Lang
 Transducers 97, Chicago 1997, 1157 - 1160
- 142 New Designs of Micromachined Vibrating Rate Gyroscopes with Decoupled Oscillation Modes
 W. Geiger, B. Folkmer, U. Sobe, H. Sandmaier, W. Lang
 Transducers 97, Chicago 1997, 1129 - 1132

- 141 A pressure sensor based on a nitride membrane using single crystalline piezoresistors
 B. Folkmer, P. Steiner, W. Lang
Sensors & Actuators A 54 (1996) 488-492
- 140 Generating a microplasma with porous silicon
 F. Kozlowski, B. Huber, P. Steiner, W. Lang
Sensors & Actuators A 53 (1996) 284-287
- 139 A novel method to avoid sticking of surface micromachined structures**
F. Kozlowski, N. Lindmair, Th. Scheiter, C. Hierold, W. Lang
Sensors & Actuators A 54 (1996) 659-662
- 138 Mikroklappenarray für Anwendungen in der Flachbildschirmtechnik; Entwicklungsstand und Anforderungen
 B. Schmidt, W. Kulcke, W. Lang, H. Pavlicek
 Workshop - Tagungsband: „Anforderungen an Dünnschichttechnologien für Mikrosysteme, Sensoren und Flachbildschirme“, 5. März 1997, Frankfurt am Main
- 137 New Design, Readout Concept and Simulation Approach of Micromachined Rate Gyroscopes
 W. Geiger, B. Folkmer, H. Sandmaier, W. Lang
 ESSDERC 97, Stuttgart 1997, Proceedings pp 428-431
- 136 A Layout Study on High-Sensitive Accelerometers with Electron Tunneling Transducers
 O. Nagler, T. Strobelt, F. Kozlowski, W. Lang
 European Workshop on Microtechnology and Scanning Probe Microscopy
 April 7th to 9th, 1997, Mainz, Germany
- 135 New Design of Micromachined Rate Gyroscopes with Improved Sensitivity through Decoupled Oscillating Modes
 W. Geiger, B. Folkmer, U. Sobe, H. Sandmaier, W. Lang
 Sensor 97 Kongreßband I, 193-198
- 134 Absolute pressure switches with low contact resistance
 K. Hiltmann, W. Bach, H. Sandmaier, W. Lang
 Sensor 97 Kongreßband III, 143-147
- 133 Silicon Microstructuring Technology**
W. Lang
Mat. Sci. Eng.: Reports. R17, No. 1, Sept. 1996, 1-55
Invited Review Article
- 132 Porous Silicon Technology for Thermal Sensors
 W. Lang, P. Steiner
Sensors & Materials, Vol. 8, No. 6, (1996) 327-344
- 131 Mikrosensoren für thermische Größen
 W. Lang, H. Glosch, N. Hey, M. Ashauer
 MESSCOMP 96 Tagungsband, Ed. K. W. Bonfig.

- 130 Micromirrors in Bulk Silicon - Technology and Modelling
 H. Pavlicek, N. Hey, T. Strobelt, H. Sandmaier, W. Lang
 MME 96, Barcelona 1996, proceedings pp. 137-139
- 129 An Investigation on binary force and pressure sensors.
 K. Hiltmann, W. Lang
 MME 96, Barcelona 1996, proceedings pp. 255-258
- 128 Silicon Thermal Micro Relays with Multiple Switching States.
 M. Ashauer, A. Czarnowske, K. Hiltmann, W. Lang, H. Sandmaier
 Eurosensors 96, Leuwen 1996, proceedings pp. 1189-1192.
- 127 Multi Level Coupled Simulations for MEMS Design.
 B. Folkmer, N. Hey, H. Sandmaier, W. Lang
 Eurosensors 96, Leuwen 1996, proceedings pp. 1357 - 1360
- 126 Micromachining Applications of Porous Silicon.
 Walter Lang
 In: „Structural and Optical Properties of Porous Silicon Nanostructures“
 Edited by G. Amato, C. Delerue, H. J. Von Bardeleben
 Gordon and Breach Publishers, Amsterdam 1997, ISBN 90-5699-604-5, pp. 597-620.
- 125 Porous Silicon Electroluminescent Devices.
 Walter Lang
 „Structural and Optical Properties of Porous Silicon Nanostructures“
 Edited by G. Amato, C. Delerue, H. J. Von Bardeleben
 Gordon and Breach Publishers, Amsterdam 1997, ISBN 90-5699-604-5, pp. 539-556.
- 124 Technology and analysis of porous silicon light emitting diodes.
 W. Lang, F. Kozlowski, P. Steiner, B. Knoll, A. Wiedenhofer, D. Kollewe, T. Bachmann
 EMRS-Meeting Strasbourg June 1996.
 Also in: Thin Solid Films 297 (1997) 268-271
- 123 A Novel Degree of Freedom Separation Techniqoe for Two-Axis Tilt Sensors.
 N. Hey, A. Schumacher, W. Lang, H. Sandmaier
 MST 96, Berlin 1996, pp. 756-758
- 122 Finite Elemente basierte Entwicklung einer zweiachsigen neigunssensitiven Mikrostruktur in <110>-Silizium.
 N. Hey, A. Schumacher, W. Lang, H. Sandmaier
 Fachtagung „Simulation mit der Finite Elemente Methode in Feinwerk- und Mikrotechnik“
 München, März 1996
- 121 Resonant Raman scattering and photoluminescence studies of porous silicon membranes.**
Soumyendu Guha, Peter Steiner, Walter Lang
J. Appl. Phys. 79 (11), 1 June 1996
- 120 Ultrafast absorption in free-standing porous silicon films.
 J. C. Owirutsky, J. K. Rice, S. Guha, P. Steiner, W. Lang
 Appl. Phys. Lett. 67 (14), 2 October 1995

- 119 Fabrication and Performance of Electroluminescent Porous Silicon Devices.
 P. Steiner, F. Kozlowski, A. Wiedenhofer, B. Knoll, W. Lang
 Electrochemical Society Proceedings 95-25, 48-57
- 118 Micro Plasma Discharge Based on Porous Silicon.
 F. Kozlowski, B. Huber, P. Steiner, W. Lang
 Electrochemical Society Proceedings 95-25, 413-422
- 117 Bulk micromachining of Ge for IR gratings.
 W. Lang, R. Leancu, U. Schaber, G. Wiedemann, H. U. Käufel
J. Micromech. Microeng. 6 (1996) 46-48
- 116 Immer gut für Überraschungen: Poröses Silizium - ein Werkstoff der Mikrotechnologie.
 W. Lang, F. Kozlowski, P. Steiner
 Technische Rundschau, Nr. 10, 1996, S. 32-35
- 115 Leuchtendes Silicium
 F. Kozlowski, P. Steiner, W. Lang
 Spektrum der Wissenschaften, Digest: Moderne Werkstoffe, ISSN 0945-9537, S. 84-85
- 114 Die mechanischen Eigenschaften von Membranen aus Silizium, Siliziumkarbid und Siliziumnitrid
 W. Lang, B. Folkmer, R. Hochecker, K. Kühl
 Micro-Mat, Berlin (1995), Proceedings, DVM, Hrsg. B. Michel, T. Winkler, S. 145-150
- 113 Mechanische Sensoren mit Membranen aus Siliziumnitrid
 W. Lang, B. Folkmer, K. Kühnemann, P. Steiner
 8. GMA/ITG Fachtagung Sensoren und Meßsysteme, Bad Nauheim, März 1996
- 112 Ein hybrid integriertes infrarotoptisches Gasmeßsystem
 W. Lang, G. Gillet, P. Steiner, H. E. Endres, S. Drost
 8. GMA/ITG Fachtagung Sensoren und Meßsysteme, Bad Nauheim, März 1996
- 111 Piezoresistive Sensoren in Dickschichttechnik
 W. Lang, B. Folkmer, D. Hemmetsberger, H. Gülich, M. Feil
wt - Produktion und Management 85 (Nov. 1995) 576-578
- 110 Bulk Micromachining of Ge for IR Gratings
 W. Lang, R. Leanku, U. Schaber, G. Wiedemann, H. U. Käufel
 MME 95, Copenhagen 1995, Technical digest, p. 60-63
- 109 Fabrication of high quality MOS devices for application in hazardous environments based on RTP gate dielectrics with in situ RTCVD polysilicon gates
 B. Fröschle, H. P. Brümmer, W. Lang, K. Neumeier, P. Ramm
 MRS spring meeting, San Francisco 1993
Mat. Res. Soc. Symp. Proc. Vol. 303 (1993)
- 108 Applications of porous silicon microstructuring
 W. Lang, P. Steiner, H. Sandmaier
J. Micromech. Microeng. 5 (1995) 175-176

- 107 Anisotropic etching of optical gratings
 A. Klumpp, K. Kühl, U. Schaber, U. Käufel, W. Lang
 EMRS-Meeting, Strasbourg, Mai 1995
 Also in Sensors and Actuators, A 51 (1995) 77-80
- 106 A novel method to prevent surface micromachined structures from sticking
 F. Kozlowski, N. Lindmair, T. Scheiter, C. Hierold, K. Dilger, W. Lang
- 105 Luminescence stabilization of porous n-silicon by wet chemical oxidation with H₂O₂
 F. Kozlowski, W. Wagenseil, P. Steiner, W. Lang
 EMRS-Meeting, Strasbourg, Mai 1995
 Also in: Thin solid films 276 (1996) 284-286
- 104 Time resolved electroluminescence of porous silicon
 F. Kozlowski, C. Sailer, P. Steiner, W. Lang
 EMRS-Meeting, Strasbourg, Mai 1995
 Also in: Thin solid films 276 (1996) 164-167
- 103 Influence of different metallic contacts on porous silicon electroluminescence
 P. Steiner, A. Wiedenhofer, F. Kozlowski, W. Lang
 EMRS-Meeting, Strasbourg, Mai 1995
 Also in: Thin solid films, 276 (1996) 159-163
- 102 Excitation wavelength dependence of Raman and photoluminescence spectra of porous Si membranes.
 S. Guha, P. Steiner, F. Kozlowski, W. Lang
 EMRS-Meeting, Strasbourg, Mai 1995.
 Also in: Thin solid films, 276 (1996) 73-75
- 101 Silicon nitride membrane sensors with monocrystalline transducers
 B. Folkmer, P. Steiner, W. Lang
 EMRS-Meeting, Strasbourg, Mai 1995
 Also in Sensors and Actuators, A 51 (1995) 71-75
- 100 **Porous silicon - a novel material for microsystems**
W. Lang, P. Steiner, H. Sandmaier
EMRS-Meeting, Strasbourg, Mai 1995, Invited speaker
Also in Sensors and Actuators, A 51 (1995) 31-36
- 99 A pressure sensor based on a nitride membrane using single crystalline piezoresistors
 B. Folkmer, P. Steiner, W. Lang
 Transducers 95, Stockholm 1995, 574-577
- 98 Generating a microplasma with porous silicon
 F. Kozlowski, B. Huber, P. Steiner, W. Lang
 Transducers 95, Stockholm 1995, 381-384
- 97 A novel method to avoid sticking of surface micromachined structures
 F. Kozlowski, N. Lindmair, Th. Scheiter, C. Hierold, W. Lang
 Transducers 95, Stockholm 1995, 220-223

- 96 Porous silicon and related materials
 R. Herino and W. Lang editors
 E-MRS spring conference; Strasbourg May 24-27, 1994
 Proceedings of the European Materials Research Society 51
 North Holland Elsevier Science Publ., ISBN 0 444 821 376
 Special Issue of "Thin Solid Films", Vol. 255, Nos. 1-2, Jan 15th 1995, 49-51
- 95 Enhanced Blue-Light Emission from an Indium-Treated Porous Silicon Device**
P. Steiner, F. Kozlowski, M. Wielunski, W. Lang
Jpn. J. Appl. Phys., Vol. 33 (1994) pp. 6075-6077
- 94 Anisotropic Etching of Germanium
 R. Leancu, L. Csepregi, N. Moldovan, H. U. Käufel and W. Lang
 MRS-Meeting, Boston, Dec. 1994
- 93 Stabilization of electroluminescence and photoluminescence of porous n-silicon by chemical oxidation.
 F. Kozlowski, P. Steiner, W. Wagenseil, W. Lang
 Mat. Res. Soc. Symp. Proc. Vol. 358 (1995) 677-682 (MRS-Meeting, Boston, Dec. 1994)
- 92 Observation of variable band gaps in porous silicon by optical spectroscopy
 S. Guha, A. Efros, M. Rosen, J. Rice, J. C. Owrutzky, P. Steiner and W. Lang
 MRS-Meeting, Boston, Dec. 1994
- 91 Porous Silicon as an Ultraviolet Light Source
 F. Kozlowski, B. Huber, P. Steiner, H. Sandmaier and W. Lang
 Mat. Res. Soc. Symp. Proc. Vol. 358 (1995) 629-634 (MRS-Meeting, Boston, Dec. 1994)
- 90 Deposition of metals in porous silicon - the impact on luminescence
 P. Steiner, F. Kozlowski, W. Lang
 Mat. Res. Soc. Symp. Proc. Vol. 358 (1995) 665-670 (MRS-Meeting, Boston, Dec. 1994)
- 89 The thermal conductivity of porous silicon
 W. Lang, A. Drost, P. Steiner, H. Sandmaier
 Mat. Res. Soc. Symp. Proc. Vol. 358 (1995) 561-566 (MRS-Meeting, Boston, Dec. 1994)
- 88 Micro-Raman investigations and a structure model for electroluminescent porous n-type silicon
 F. Kozlowski, P. Steiner, W. Lang
 In "porous Silicon" Z. C. Feng and R. Tsu ed.
 World Scientific, Singapore 1994, ISBN 981-02-1634-4
- 87 Photo- and Electroluminescence in Porous Silicon
 Walter Lang, F. Namavar
 LEOS 94, Boston, Oct 1994, Invited talk
- 86 a-SiC Films: Deposition and Application in Silicon Micromachining.
 A. Klumpp, K. Kühl, W. Lang, H. Sandmaier, U. Schaber
 Microsystems, Berlin 1994, p. 289-298

- 85 Lexikon Elektronik und Mikroelektronik
 Dieter Sautter und Hans Weinert, Hrsg. VDI-Verlag, ISBN 3-18-401178-X
 Mehrere Artikel über thermische Sensoren.
- 84 Applications of porous silicon microstructuring
 W. Lang, P. Steiner, H. Sandmaier
 MME 94; Workshop Micromechanics Europe, Sept. 5-6, Pisa, Italy
- 83 Chemical shaping of germanium
 L. Csepregi and W. Lang
 II. European Workshop on Electrochemical Processing of Semiconductors
 Amsterdam, Nov. 1994
- 82 Residual stress distribution in thin films
 N. Moldovan, M. Ilie, W. Lang
 CAS Annual Semicond. Conf., Sinaia, Romania, October 1994.
- 81 Bulk Micromachining in Materials with Weak Anisotropy: Ge
 R. Leancu, N. Moldovan, L Csepregi, W. Lang
 CAS Annual Semicond. Conf., Sinaia, Romania, October 1994.
- 80 Cooling of Silicon Structures Using an Integrated Peltier Element.
 M. Mansfeld, W. Lang
 Sensors & Materials, Vol. 6, No. 1 (1994) 1-8
- 79 The Thermal Conductivity of Porous Silicon.**
A. Drost, P. Steiner, H. Moser, W. Lang
Sensors and Materials, Vol. 7, No. 2 (1995) 111-120
- 78 Anisotropic Etching of Germanium.
 R. Leancu, L. Csepregi, N. Moldovan, W. Lang
 Eurosensors VIII, Tolouse, September 1994
 Sensors & Actuators A46-47 (1995) 35-37
- 77 Microtherm - a Tool for the Thermal Management of Microstructures.
 W. Lang, W. Kriegl, B. Folkmer, P. Steiner
 Eurosensors VIII, Tolouse, September 1994
 Sensors & Actuators A 46-47 (1995) 637-639
- 76 Influence of Rapid Thermal Oxidation on Differently Prepared Porous Silicon.
 W. Lang, P. Steiner, F. Kozlowski, P. Ramm
 EMRS-Meeting, Strasbourg, May 1994
 Also in: Thin Solid Films, Vol. 255, Nos. 1-2, Jan 15th 1995, 224-227
- 75 A Novel Technique to Study porous Silicon Thin Films by Optical Spectroscopy
 S. Guha, N. Peygambarian, P. Steiner, F. Kozlowski, W. Lang
 EMRS-Meeting, Strasbourg, May 1994
 Also in: Thin Solid Films, Vol. 255, Nos. 1-2, Jan 15th 1995, 119-122

- 74 **Micromachining Application of Porous Silicon.**
P. Steiner, W. Lang
EMRS-Meeting, Strasbourg, May 1994; Invited Talk
Also in: Thin Solid Films, Vol. 255, Nos. 1-2, Jan 15th 1995, 52-58
- 73 **Electroluminescence from porous silicon after metal deposition into the pores.**
P. Steiner, F. Kozlowski, W. Lang
EMRS-Meeting, Strasbourg, May 1994
Also in: Thin Solid Films, Vol. 255, Nos. 1-2, Jan 15th 1995, 49-51
- 72 Porous Silicon Technology for Thermal Sensors.
P. Steiner, U. Schaber, W. Lang
EIW-10, Europhysics Industrial Workshop, Oberhof, Germany, April 1994
- 71 A Tool for the Thermal Management of Microstructures.
W. Kriegl, P. Steiner, W. Lang
EIW-10, Europhysics Industrial Workshop, Oberhof, Germany, April 1994
- 70 Luminescent Properties of Rapid Thermal Oxidized Porous Silicon.
P. Ramm, P. Steiner, F. Kozlowski, B. Fröschle, W. Lang
Mat. Res. Soc. Symp. Proc. Vol. 342 (1994) 85-89 (MRS - Meeting, San Francisco 1994)
- 69 Photoluminescence and Raman Studies of Porous Silicon in Polymethyl Methacrylate.
S. Guha, G. Hendershot, D. Peebles, P. Steiner, F. Kozlowski, W. Lang
Applied Physics Letters, 64 (5), 31. Jan. 1994
- 68 Photoluminescence and Raman Studies of Porous Silicon in Polymethyl Methacrylate.
S. Guha, G. Hendershot, D. Peebles, P. Steiner, F. Kozlowski, W. Lang
MRS Fall Meeting, Boston (1993)
- 67 Porous Silicon Electroluminescent Devices.
W. Lang, P. Steiner, F. Kozlowski
Luminescence of Porous Silicon and Silicon Nanostructures,
Winter School at Les Houches, France, Feb. 1994; Springer Verlag, ISBN 3-540-58936-8;
Invited Speaker
- 66 Light Emission from Silicon.
J.-C. Vial, L. T. Canham, W. Lang editors
E-MRS spring conference; Strasbourg, May 1993
Proceedings of the European Materials Research Society 43
North Holland Elsevier Science Publ., ISBN 0444818227
Special Issue of the Journal of Luminescence 57 (1993).
- 65 Light emitting diodes in porous silicon
F.Kozlowski, P.Steiner, W.Lang, H,Sandmaier
Sensors & Actuators A, 43 (1994) 153-156

- 64 A thin film bolometer using porous silicon technology.**
W.Lang, P.Steiner, U.Schaber, A.Richter
Sensors & Actuators A, 43 (1994) 185-187
- 63 Application of porous silicon as a sacrificial layer.**
W.Lang, P.Steiner, A.Richter, K.Maruseczyk, G.Weimann, H.Sandmaier.
Sensors & Actuators A, 43 (1994) 239-242
- 62 Elektrolumineszenz in porösem Silizium.**
W. Lang, P. Steiner, F. Kozlowski
Frühjahrstagung der Deutschen Physikalischen Gesellschaft,
Münster 1994, eingeladener Vortrag.
- 61 Fabrication and Characterization of Porous Silicon Light Emitting Devices.**
W. Lang, F. Kozlowski, P. Steiner
Europto - Int Symp. on Integrated Optics, Lindau 1994,
- 60 Mikrostrukturierung mit porösem Silizium**
P. Steiner, W. Lang, A. Richter, H. Sandmaier
7. Fachtagung Sensoren, Bad Nauheim 1994
- 59 Microtherm - Ein Programm zur thermischen Modellierung von Mikrostrukturen.**
W. Kriegl, P. Steiner, W. Lang
7. Fachtagung Sensoren, Bad Nauheim 1994
- 58 Porous Silicon Electroluminescent Devices.**
W. Lang, P. Steiner, F. Kozlowski
Review article, J. of Luminescence 57 (1993) 341-349
- 57 A thin film bolometer using porous silicon technology.**
W.Lang, P.Steiner, U.Schaber, A.Richter
Transducers 93 Yokohama June 1993, Late News Paper.
- 56 Blue and green electroluminescence from a porous silicon device.**
P.Steiner, F.Kozlowski, W.Lang
Electron Device Letters, Vol. 14, No. 7, July 1993
- 55 Light emitting porous silicon diode with an increased quantum efficiency.**
P.Steiner, F.Kozlowski, W.Lang
Appl. Phys. Letters, 62, (21), 24. May 1993
- 54 Ultraviolet Light from Porous Silicon by a Microscopic Discharge.**
F.Kozlowski, P.Steiner, M.Sauter, W.Lang
EMRS Meeting, Strasbourg, Mai 1993.
Also in: J. of Luminescence 57 (1993), pp. 185-189.
- 53 A Model for the Electroluminescence of Porous n-Silicon**
F.Kozlowski, P.Steiner, W.Lang
EMRS Meeting, Strasbourg, Mai 1993.
Also in: J. of Luminescence, 57 (1993), pp. 163-167.

- 52 A Porous Silicon Light Emitting P/N Junction.
 W.Lang, F.Kozlowski, P.Steiner, H.Sandmaier
 EMRS Meeting, Strasbourg, Mai 1993.
 Also in: J. of Luminescence 57 (1993).
- 51 Application of porous silicon as a sacrificial layer.
 W.Lang, P.Steiner, A.Richter, K.Marusczyk, G.Weimann, H.Sandmaier
 Transducers 93, Yokohama, June 1993.
- 50 Light emitting diodes in porous silicon
 W.Lang, F.Kozlowski, P.Steiner, H.Sandmaier
 8. Deutsch-Japanisches Forum Informationstechnologie
 Weimar, Mai 1993
- 49 Poröses Silizium - Ein Material der Mikrosystemtechnik.
 W.Lang, P.Steiner, A.Richter, H.Sandmaier
 GVC Jahrestreffen 1993, Nürnberg, September 1993
- 48 Light emitting diodes in porous silicon
 F.Kozlowski, P.Steiner, W.Lang, H.Sandmaier
 Transducers 93, Yokohama, June 1993.
- 47 A phenomenological investigation on porous silicon electroluminescence.
 P.Steiner, W.Lang, F.Kozlowski, H.Sandmaier
 MRS Spring meeting, San Francisco, April 1993
- 46 Using porous silicon as a sacrificial layer.**
P.Steiner, A.Richter, W.Lang
Journal of Micromechanics and Microengineering; Vol.3, No.2, March 1993
- 45 Electroluminescence from porous silicon.
 F.Kozlowski, P.Steiner, W.Lang
 Workshop "Optical properties of low dimensional silicon structures",
 Grenoble, March 1993, ASI Series E, Vol. 224,
 Invited Speaker
- 44 Entwicklung eines Simulationstools für Mikrosensoren niedrigen Druckbereiches.
 B.Hu, K.Rüter, B.Folkmer, W.Lang
 3. Symposium Mikrosystemtechnik, Regensburg 1993
- 43 Herstellung von beweglichen Elementen in der μm -Skala - Surface Micromachining.
 F.Kozlowski, K.Kühl, W.Lang 3. Symposium Mikrosystemtechnik, Regensburg 1993
- 42 Stress Compensation Techniques in Thin Layers Applied to Silicon Micromachining.
 W.Lang, G.Mück, E.Rose, J.Baussels, K.Kühl, N.Moldovan, J.Suski;
 Mat. Res. Soc. Symp. Vol. 284 (1993) 119-125 (MRS-Meeting, Boston 1992)
- 41 Luminescent Porous Silicon Investigated by Accelerator Analytics.
 P.Steiner, J.Weidhaas, W. Lang;
 Mat. Res. Soc. Symp. Vol. 281 (1993) 531-536 (MRS-Meeting, Boston 1992)

- 40 New Results on Electroluminescence from Porous Silicon.**
P.Steiner, F.Kozlowski, H.Sandmaier, W.Lang; Invited speaker:
Mat. Res. Soc. Symp. Vol. 283 (1993) 343-351 (MRS Meeting, Boston 1992)
- 39 Spatially resolved Raman measurements at electroluminescent porous n-silicon.**
F.Kozlowski and W.Lang; J.Appl.Phys. 72 (11), 1 December 1992
- 38 A Simulation Tool for Mechanical Sensor Design.**
B. Folkmer, H.L. Offereins, W. Lang, H. Sandmaier, A. Seidl, P. Groth, R. Pressmar;
Sensors and Actuators A32, Nr 1-3, April 1992
- 37 Lumineszenz in porösem Silizium.**
W.Lang, P.Steiner, F.Kozlowski; Physik in unserer Zeit, März 1993
- 36 Mikromechanische thermische Sensoren auf Membranen aus Siliziumnitrid.**
W.Lang, K.Kühl, H.Sandmaier; Temperatur 92, Düsseldorf, October 1992.
- 35 Stress Biasing in Thin Film Membranes.**
N.Moldovan, J.Suski, L.Csepregi, W.Lang;
CAS Annual Semicond. Conf., Sinaia, Romania, October 1992.
- 34 Stress Compensation by Ion Implantation in SiO₂ and Si₃N₄.**
N.Moldovan, L.Csepregi, A.Klumpp, W.Lang; Micro System Technologies, Berlin 1992.
- 33 Stress Compensation Techniques in Thin Layers Applied to Silicon Micromachining.**
W.Lang, G.Mück, J.Bausells, L.Csepregi, N.Moldovan, J.Suski;
Mat-Tec, Grenoble, October 1992.
- 32 Raman Scattering in Electroluminescent Porous Silicon.**
F.Kozlowski, P.Steiner, W.Lang; XIII. Int. Conf. on Raman Spec., Würzburg (1992)
- 31 Electroluminescent Performance of Porous Silicon.**
W.Lang, F.Kozlowski, M.Sauter, P.Steiner, A.Richter, H.Sandmaier;
EMRS Meeting Strasbourg June 1992, Invited speaker
Also in: Thin Solid Films, 222 (1992)
- 30 Eine Thermosäule in Polysilicium- Dünnfilmtechnologie.**
W. Lang und K. Kühl; 2. Symposium Mikrosystemtechnik, Regensburg 1992.
- 29 Current Induced Light Emission from Nanocrystalline Silicon Structures.**
W. Lang, A. Richter, P. Steiner, F. Kozlowski, H. Sandmaier, I. Ruge;
IEEE Conference on Micro Electro Mechanical Systems (MEMS), Travemünde (1992)
- 28 Compensation of Convex Corners in Aqueous KOH-Etching.**
H.L. Offereins, H. Sandmaier, K. Kühl, W. Lang; Mikrosystems, Berlin 1991
- 27 A Simulation Tool for Mechanical Sensor Design.**
B. Folkmer, H.L. Offereins, W. Lang, H. Sandmaier, A. Seidl, P. Groth, R. Pressmar;
Eurosensors V, Rom 1991.

- 26 Visible Electroluminescence of Porous Silicon Devices with a Solid State Contact.
A. Richter, W. Lang, P. Steiner, F. Kozlowski, H. Sandmaier;
MRS Meeting, Boston (1991). Mat. Res. Soc. Symp. Vol. 256 (1992)
- 25 Current Induced Light Emission from a Porous Silicon Device.
A. Richter, P. Steiner, F. Kozlowski, W. Lang;
IEEE Electron Device Letters, Vol. 12, No. 12, Dec 1991
- 24 Absorbing Layers for Thermal Infrared Detectors.
W. Lang, K. Kühl, H. Sandmaier; Transducers 91, San Francisco (1991).
Also in: Sensors and Actuators A, 34 (1992) 243-248
- 23 Stress Free Assembly Technique for a Silicon Based Pressure Sensor.
H.L. Offereins, H. Sandmaier, B. Folkmer, U. Steger, W. Lang; Transducers 91, San Francisco (1991)
- 22 Corner Compensation Techniques in Anisotropic Etching of (100)-Silicon Using Aqueous KOH.
H. Sandmaier, H.L. Offereins, K. Kühl, W. Lang; Transducers 91, San Francisco (1991)
- 21 Surface Sensitivity of RBS with Nitrogen Ions.
W. Lang and J. Weidhaas; Ion Beam Analysis 10 (1991)
Also in: Nuclear Instruments and Methods B64 (1992) 3 796-799
- 20 ONO Structures Investigated by SIMS, RBS and NRA.
F. Iberl, P. Ramm, W. Lang; Ion Beam Analysis 10 (1991)
Also in: Nuclear Instruments and Methods B64 (1992) 650-653
- 19 Der Wärmeübergang von Mikrostrukturen durch freie Konvektion.
W. Lang und K. Kühl, Sensor 5, Nürnberg 1991.
- 18 Detection Limits of Contamination Analysis by Nitrogen RBS.
J. Weidhaas and W. Lang, Quantitative Surface Analysis 6, London 1990
Also in: Surface and Interface Analysis, Vol. 17, 357 - 362 (1991).
- 17 Festkörperanalytik am Ionenbeschleuniger.
W. Lang, F. Iberl und J. Weidhaas, Physik in unserer Zeit, 22 Nr 2 (1991)
- 16 A thin film Polysilicon-Aluminium Thermocouple.
K. Kühl and W. Lang; Sensors and Materials, 2, 5 (1991) 247 - 251
- 15 Highly porous and electrically insulating films deposited by reactive physical vapour deposition.
W. Lang; J. Vac. Sci. Techn. A, 8 (6) Nov (1990)
- 14 Angular Dispersion of Raman Intensities in Silicon.
W. Lang; XII. Int. Conf. on Raman Spec., Columbia S.C. USA (1990) 3

- 13 Heat Transport from a Chip.
W. Lang, IEEE Trans. on Electron Devices, Vol. 37, No. 4 (1990) S 958-963
- 12 A Micro Thin Film Bolometer for Radiation Thermometry at Ambient Temperature.
W. Lang, K. Kühl, E. Obermeier; Transducers 89, Montreux (1989)
Also in: Sensors and Actuators, A 21 - A 23 (1990) 473-477
- 11 Lärminderung durch Antischall.
W. Lang; Physik in unserer Zeit, 20. Jg. Heft 6 (1989)
- 10 Harmonic Frequency Generation by Oscillating Flames.
W. Lang; Combustion and Flame, 83: 253 - 262 (1991)
- 9 Aktive Stabilisierung einer turbulenten Flamme.
W. Lang, E. Priesack; Gas Wärme Int. 37. Jg. Heft 8 (1988)
- 8 **Suppression of Combustion Instabilities by Active Control.**
Th. Poinsot, W. Lang, F. Bourienne, S. Candel and E. Esposito;
23. Joint Prop. Conf., San Diego, AIAA (1987)
Also in: J. Propulsion, Vol. 5. No. 1 (1989)
- 7 **Active Control of Combustion Instabilities.**
W. Lang, Th. Poinsot, S. Candel; Comb. and Flame, 70: 281 (1987)
- 6 Correlation of Sound Pressure and Heat Release Rate in Flames Oscillating with Several Frequencies.
W. Lang, D. Vortmeyer; Comb. Science and Techn. Vol. 54 (1987)
- 5 Messung der Schallschnelle in einer schwingenden Flamme mit einem Laser- Doppler Anemometer.
W. Lang, D. Vortmeyer; VDI- Bericht 645 (1987)
- 4 Dynamik und Stabilität selbsterregter Verbrennungsschwingungen beim Auftreten mehrerer Frequenzen.
W. Lang, Dissertation an der TU München (1986)
- 3 Ein erweitertes Stabilitätskriterium für selbsterregte Schwingungen.
W. Lang, D. Vortmeyer; VDI- Bericht 574 (1985)
- 2 The Orientation of Water Molecules in Monoclinic $\text{Li}_2\text{SO}_4 \cdot \text{H}_2\text{O}$ Investigated by Light Scattering.
W. Lang, R. Claus; The Journal of Phys. and Chem. of Solids, Vol. 44 Nr. 8 (1983)
- 1 **Geometrical dispersion of dielectric and optic axes in a monoclinic crystal.**
W. Lang, R. Claus; Phys. Rev. B, Vol. 26 Nr. 12 (1982)