

# Lukas Gerlach

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/223299/publications.pdf>

Version: 2024-02-01

13  
papers

73  
citations

2682572

2  
h-index

2917675

2  
g-index

13  
all docs

13  
docs citations

13  
times ranked

40  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | DNN-based performance measures for predicting error rates in automatic speech recognition and optimizing hearing aid parameters. <i>Speech Communication</i> , 2019, 106, 44-56.   | 2.8 | 15        |
| 2  | An area efficient real- and complex-valued multiply-accumulate SIMD unit for digital signal processors. , 2015, , .  |     | 10        |
| 3  | Customizing a VLIW-SIMD application-specific instruction-set processor for hearing aid devices. , 2014, , .  |     | 8         |
| 4  | FLINT: Layout-Oriented FPGA-Based Methodology for Fault Tolerant ASIC Design. , 2015, , .  |     | 7         |
| 5  | Efficient Emulation of Floating-Point Arithmetic on Fixed-Point SIMD Processors. , 2016, , .   |     | 6         |
| 6  | Evolutionary Algorithms for Instruction Scheduling, Operation Merging, and Register Allocation in VLIW Compilers. <i>Journal of Signal Processing Systems</i> , 2020, 92, 655-678. | 2.1 | 6         |
| 7  | Using a genetic algorithm approach to reduce register file pressure during instruction scheduling. , 2017, , .   |     | 5         |
| 8  | KAVUAKA: A Low Power Application Specific Hearing Aid Processor. , 2019, , .   |     | 4         |
| 9  | Real-time implementation of a GMM-based binaural localization algorithm on a VLIW-SIMD processor. , 2017, , .  |     | 3         |
| 10 | Design Space Exploration Framework for Tensilica-Based Digital Audio Processors in Hearing Aids. , 2020, , .   |     | 3         |
| 11 | A Survey on Application Specific Processor Architectures for Digital Hearing Aids. <i>Journal of Signal Processing Systems</i> , 0, , 1.   | 2.1 | 3         |
| 12 | Analyzing the trade-off between power consumption and beamforming algorithm performance using a hearing aid ASIP. , 2017, , .  |     | 2         |
| 13 | Issue-Slot Based Predication Encoding Technique for VLIW Processors. , 2020, , .   |     | 1         |