# Oleg Mukhanov

List of Publications by Year
in descending order



| 63 | 1,963 | 279798 | 254184 |
|---|---|---|---|
| papers | citations | 23 h-index | 43 g-index |

| 64 | 64 | 64 | 904 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Energy-Efficient Single Flux Quantum Technology. IEEE Transactions on Applied Superconductivity, 2011, 21, 760-769. | 1.7 | 403 |
| 2 | Ferromagnetic Josephson switching device with high characteristic voltage. Applied Physics Letters, 2012, 100, . | 3.3 | 136 |
| 3 | Magnetic Josephson Junctions With Superconducting Interlayer for Cryogenic Memory. IEEE Transactions on Applied Superconductivity, 2013, 23, 1701208-1701208. | 1.7 | 126 |
| 4 | Superconductivity and the environment: a Roadmap. Superconductor Science and Technology, 2013, 26, 113001. | 3.5 | 113 |
| 5 | 20GHz Operation of an Asynchronous Wave-Pipelined RSFQ Arithmetic-Logic Unit. Physics Procedia, 2012, 36, 59-65. | 1.2 | 94 |
| 6 | Magnetic Josephson Junction Technology for Digital and Memory Applications. Physics Procedia, 2012, 36, 35-41. | 1.2 | 91 |
| 7 | Digital Channelizing Radio Frequency Receiver. IEEE Transactions on Applied Superconductivity, 2007, 17, 430-437. | 1.7 | 84 |
| 8 | Cryocooled wideband digital channelizing radio-frequency receiver based on low-pass ADC. Superconductor Science and Technology, 2007, 20, S323-S327. | 3.5 | 51 |
| 9 | Active Electrically Small Antenna Based on Superconducting Quantum Array. IEEE Transactions on Applied Superconductivity, 2013, 23, 1800405-1800405. | 1.7 | 44 |
| 10 | Realization and Modeling of Metamaterials Made of rf Superconducting Quantum-Interference Devices. Physical Review X, 2013, 3, . | 8.9 | 44 |
| 11 | Superconducting High-Resolution Low-Pass Analog-to-Digital Converters. IEEE Transactions on Applied Superconductivity, 2007, 17, 442-445. | 1.7 | 41 |
| 12 | Linear Bi-SQUID Arrays for Electrically Small Antennas. IEEE Transactions on Applied Superconductivity, 2011, 21, 713-716. | 1.7 | 34 |
| 13 | Performance Advantages and Design Issues of SQIFs for Microwave Applications. IEEE Transactions on Applied Superconductivity, 2009, 19, 916-919. | 1.7 | 32 |
| 14 | Array designs for active electrically small superconductive antennas. Physica C: Superconductivity and Its Applications, 2012, 479, 119-122. | 1.2 | 31 |
| 15 | ERSFQ 8-Bit Parallel Arithmetic Logic Unit. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-7. | 1.7 | 31 |
| 16 | Superconducting-Ferromagnetic Transistor. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-6. | 1.7 | 29 |
| 17 | Tunable Broadband Transparency of Macroscopic Quantum Superconducting Metamaterials. Physical Review X, 2015, 5, . | 8.9 | 29 |
| 18 | High Linearity SQIF-Like Josephson-Junction Structures. IEEE Transactions on Applied Superconductivity, 2009, 19, 741-744. | 1.7 | 27 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Superconducting Quantum Arrays. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-6. | 1.7 | 26 |
| 20 | Progress in high-linearity multi-element Josephson structures. Physica C: Superconductivity and Its Applications, 2010, 470, 886-889. | 1.2 | 25 |
| 21 | Superconducting Magnetic Field Programmable Gate Array. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-12. | 1.7 | 25 |
| 22 | Cryogenic Memory Architecture Integrating Spin Hall Effect based Magnetic Memory and Superconductive Cryotron Devices. Scientific Reports, 2020, 10, 248. | 3.3 | 25 |
| 23 | Properties of Ferromagnetic Josephson Junctions for Memory Applications. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-6. | 1.7 | 24 |
| 24 | Symmetric Traveling Wave Parametric Amplifier. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-6. | 1.7 | 24 |
| 25 | Voltage response of non-uniform arrays of bi-superconductive quantum interference devices. Journal of Applied Physics, 2012, 111, . | 2.5 | 23 |
| 26 | Quantum Sensitivity: Superconducting Quantum Interference Filter-Based Microwave Receivers. IEEE Microwave Magazine, 2014, 15, 57-65. | 0.8 | 23 |
| 27 | Output Power and Loading of Superconducting Quantum Array. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5. | 1.7 | 23 |
| 28 | Development of SQIF-Based Output Broad Band Amplifier. IEEE Transactions on Applied Superconductivity, 2007, 17, 569-572. | 1.7 | 22 |
| 29 | Experimental Investigation of Energy-Efficient Digital Circuits Based on eSFQ Logic. IEEE Transactions on Applied Superconductivity, 2013, 23, 1301505-1301505. | 1.7 | 21 |
| 30 | Interfacing Superconducting Qubits With Cryogenic Logic: Readout. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5. | 1.7 | 21 |
| 31 | Control of Supercurrent in Hybrid Superconductingâ€“Ferromagnetic Transistors. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5. | 1.7 | 20 |
| 32 | Superconducting Quantum Interference Filters as RF Amplifiers. IEEE Transactions on Applied Superconductivity, 2007, 17, 718-721. | 1.7 | 19 |
| 33 | Coherent oscillations of driven rf SQUID metamaterials. Physical Review E, 2017, 95, 050201. | 2.1 | 16 |
| 34 | SQIF Antenna Measurement in Near Field. , 2015, , . | | 15 |
| 35 | Wave-Pipelined eSFQ Circuits. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5. | 1.7 | 14 |
| 36 | Simulation Analysis and Energy-Saving Techniques for ERSFQ Circuits. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-7. | 1.7 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Superconductor Components for Direct Digital Synthesizer. IEEE Transactions on Applied Superconductivity, 2007, 17, 416-421. | 1.7 | 13 |
| 38 | Superconductor analog-to-digital converters and their applications. , 2011, , . | | 13 |
| 39 | High Performance, All Digital RF Receiver Tested at 7.5 GigaHertz. , 2007, , . | | 12 |
| 40 | Bi-SQUID: design for applications. Superconductor Science and Technology, 2020, 33, 113001. | 3.5 | 11 |
| 41 | High-Linearity Bi-SQUID: Design Map. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5. | 1.7 | 10 |
| 42 | Multiterminal Superconducting-Ferromagnetic Device with Magnetically Tunable Supercurrent for Memory Application. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-4. | 1.7 | 10 |
| 43 | High linearity Josephson-junction array structures. Physica C: Superconductivity and Its Applications, 2008, 468, 813-816. | 1.2 | 7 |
| 44 | Modeling the effects of fabrication spreads and noise on series coupled arrays of bi-SQUIDs. , 2013, , . | | 7 |
| 45 | Critical Current Gain in High-jc Superconducting-Ferromagnetic Transistors. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-7. | 1.7 | 7 |
| 46 | Critical Current Spread and Thermal Noise in Bi-SQUID Cells and Arrays. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5. | 1.7 | 7 |
| 47 | High-Inductance Bi-SQUID. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-4. | 1.7 | 6 |
| 48 | Investigation of Current Gain in Superconducting-Ferromagnetic Transistors With High-j ${}_{m c}$ Acceptor. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-4. | 1.7 | 6 |
| 49 | Microwave Dynamics of Superconducting Quantum Cell. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-6. | 1.7 | 5 |
| 50 | A Guide to Active Antennas Based on Superconducting Quantum Arrays. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-4. | 1.7 | 5 |
| 51 | Analysis of Multilayer Devices for Superconducting Electronics by High-Resolution Scanning Transmission Electron Microscopy and Energy Dispersive Spectroscopy. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-4. | 1.7 | 5 |
| 52 | Operation of practical eSFQ circuits. , 2013, , . | | 3 |
| 53 | Josephson Junctions for Digital Applications. Springer Series in Materials Science, 2019, , 611-701. | 0.6 | 3 |
| 54 | Ultra high speed ADCs and DSP brings direct digital RF beam forming to MILSATCOM phased array apertures. , 2009, , . | | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Dimensional Effects Affecting the Linearity of Active Superconducting Antennas. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5. | 1.7 | 2 |
| 56 | Superconducting-Ferromagnetic Injection-Controlled Switching Device. IEEE Transactions on Applied Superconductivity, 2019, , 1-1. | 1.7 | 2 |
| 57 | Bi-SQUID Loading. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5. | 1.7 | 2 |
| 58 | Magnetic Field Sensor Based on a Single Josephson Junction With a Multilayer Ferromagnet/Normal Metal Barrier. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5. | 1.7 | 2 |
| 59 | Design Map for Bi-SQUIDs. , 2017, , . | | 1 |
| 60 | Diagnosis of Factors Impacting Yield in Multilayer Devices for Superconducting Electronics. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-4. | 1.7 | 1 |
| 61 | All Digital-RF SATCOM Transceiver Provides the Modular Open Systems Architecture Required to Meet HC3 GRA. , 2007, , . | | 0 |
| 62 | Design, fabrication and testing of Superconducting Quantum Interference Device (SQUID) metamaterials. , 2013, , . | | 0 |
| 63 | Characterization of Amplification Properties of the Superconducting-Ferromagnetic Transistor. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5. | 1.7 | 0 |