

Edward Goldobin – List of publications

1991

1. V. K. Kaplunenko, M. I. Khabipov, **E. B. Goldobin**, “*Experimental investigation of a high frequency sampling system based on shunted Josephson junctions*”, *Superc. Sci. Technol.* **4**, 674–676 (1991).

1992

2. **E. B. Goldobin**, V. K. Kaplunenko, M. I. Khabipov, L. V. Filipenko, “*Wide frequency band system to test RSFQ logic*”, *Cryogenics* **32**, ISEC Supplement, 549–552 (1992).

1993

3. **E. B. Goldobin**, V. M. Golomidov, V. K. Kaplunenko, M. I. Khabipov, D. Yu. Khohlov, A. Yu. Kidiyarova-Shevchenko, “*Direct determination of the ultimate performance of the RSFQ digital devices and Single Flux Quantum Voltage Amplifier*”, *IEEE Trans. on Appl. Supercond.* **3**, 2641–2644 (1993).
4. V. K. Kaplunenko, **E. B. Goldobin**, M. I. Khabipov, Britt H. Larsen, J. Mygind, N. F. Pedersen, “*Self-induced magnetic field effects caused by edge currents in parallel array of Josephson junctions*”, *J. Appl. Phys.* **74**, 5854–5858 (1993).

1995

5. **E. Goldobin**, P. G. Litskevitch, and V. P. Koshelets, “*Superconducting Digital Correlator for Integrated Sub-mm Receiver for Space Application*”, was presented at EUCAS’95, Edinburgh, Great Britain, report SD 1-16, July 1995. Conf. Ser., 1697–1700 (1995).
6. **E. Goldobin**, P. G. Litskevitch, and V. P. Koshelets, “*Superconducting Digital Correlator for Integrated Sub-mm Receivers*”, was presented at ISEC’95, Nagoya, Japan, September 18–21, 1995, report 7-20, 217–219 (1995).

1996

7. **E. Goldobin**, H. Kohlstedt, A. V. Ustinov, “*Tunable phase locking of stacked Josephson flux-flow oscillators*”, *Appl. Phys. Lett.* **68**, 250–252 (1996).
8. A. Wallraff, **E. Goldobin**, A. V. Ustinov, “*Numerical Analysis of the Coherent Radiation Emission by Two Stacked Josephson Flux-flow Oscillators*”, *J. Appl. Phys.* **80** 6523–6535 (1996).

9. **E. Goldobin**, A. Golubov, A. V. Ustinov, “Two-fold stacks of long Josephson junctions with different parameters”, Czech. J. Phys. **46**, 663 (1996), LT-21 Suppl. S2.

1997

10. **E. Goldobin**, A. Wallraff, B. Malomed and A. V. Ustinov, “Delocking of flux-flow states in dc-driven magnetically coupled Josephson junctions”, Phys. Lett. A **224**, 191–195 (1997).
11. I. P. Nevirkovets, J. E. Evetts, M. G. Blamire, Z. H. Barder, **E. Goldobin**, “Investigation of the coupling between outer electrodes in the superconducting double-barrier devices”, Phys. Lett. A **232**, 299 (1997).
12. I. P. Nevirkovets, A. V. Ustinov, **E. Goldobin**, M. G. Blamire, J. E. Evetts, “Zero-Field Resonances in a Double-Barrier Josephson System with Highly Transmissive Tunnel Barriers”, IOP Conf. Ser. **158**, 547–550 (1997).

1998

13. **E. Goldobin**, A. Wallraff, N. Thyssen, and A. V. Ustinov, “Cherenkov radiation in coupled long Josephson junctions”, Phys. Rev. B **57**, 130–133 (1998).
14. **E. Goldobin**, I. P. Nevirkovets, M. Yu. Kupriyanov, and A. V. Ustinov, “Strong coupling effects in $(\text{Nb-Al-AlO}_x)_2\text{-Nb}$ stacked Josephson junctions”, Phys. Rev. B **58**, 15078 (1998).

1999

15. A. V. Ustinov, **E. Goldobin**, G. Hechtfischer, N. Thyssen, A. Wallraff, R. Kleiner, and P. Müller, “Cherenkov radiation from Josephson fluxons”, Advances in Solid State Physics **38**, 521–531 (1999).
16. **E. Goldobin**, and A. V. Ustinov, “Current locking in magnetically coupled long Josephson junctions”, Phys. Rev. B **59**, 11532 (1999).
17. A. V. Ustinov, B. A. Malomed, **E. Goldobin**, “Backbending current-voltage characteristic for an annular Josephson junction in a magnetic field”, Phys. Rev. B **60**, 1365 (1999).
18. V. Kurin, A. Yulin, **E. Goldobin**, A. Klushin, H. Kohlstedt, M. Levitchev, and N. Thyssen, “Experimental investigation of Cherenkov Flux-Flow Oscillators”, IEEE Trans. on Appl. Supercond. **9**, 3733 (1999).

2000

19. **E. Goldobin**, B. A. Malomed, A. V. Ustinov, “Maximum velocity of fluxon in a stack of coupled Josephson junctions”, Phys. Lett. A **266**, 67 (2000).

20. A. V. Ustinov, B. A. Malomed, **E. Goldobin**, “Nonlinear resonance between a soliton and Josephson plasma waves: experiment and theory”, *Physica B*, **280**, 239 (2000).
21. **E. Goldobin**, A. Wallraff, A. V. Ustinov, “Cherenkov Radiation from Fluxon in a Stack of Coupled Long Josephson Junctions”, *J. Low Temp. Phys.*, **119**, 589 (2000).
22. **E. Goldobin**, B. A. Malomed, and A. V. Ustinov, “Bunching of fluxons by Cherenkov radiation in Josephson multilayers”, *Phys. Rev. B* **62**, 1414–1420 (2000).
23. **E. Goldobin** and A. V. Ustinov, “Neighboring junction state effect on the fluxon motion in a Josephson stack”, *Phys. Rev. B* **62**, 1427–1432 (2000).

2001

24. **E. Goldobin**, A. Sterck, and D. Koelle, “Josephson vortex in a ratchet potential: Theory”, *Phys. Rev. E* **63**, 031111 (2001).
25. D. Cassel, G. Pickartz, M. Siegel, **E. Goldobin**, H. H. Kohlstedt, A. Brinkman, A. A. Golubov, M. Yu. Kupriyanov, and H. Rogalla, “Influence of the transparency of tunnel barriers in Nb/Al₂O₃/Al/Al₂O₃/Nb junctions on transport properties”, *Physica C* **350**, 276–290 (2001).
26. M. V. Fistul, **E. Goldobin**, and A. V. Ustinov, “ac-induced damping of a fluxon in a long Josephson junction”, *Phys. Rev. B* **64**, 092501 (2001).
27. J.-K. Heinsohn, R. Dittmann, J. RodriguezContreras, **E. Goldobin**, A. M. Klushin, M. Siegel, D. Hagedorn, R. Pöpel, R. Dolata, F.-Im. Buchholz, and J. Niemeyer, “Effect of the magnetic-field orientation on the modulation period of the critical current of ramp-type Josephson junctions”, *J. Appl. Phys.* **90**, 4623–4631 (2001).
28. A. M. Klushin, **E. Goldobin**, G. A. Melkov, O. M. Ivanjuta, Y. V. Eghorov, K. Numssen, M. Siegel, “Frequency locking of Josephson junctions in a surface wave resonator”, *IEEE Trans. Appl. Supercond.* **11**, 944–947 (2001).

2002

29. **E. Goldobin**, B. A. Malomed, A. V. Ustinov, “Progressive motion of an ac-driven kink in an annular damped system”, *Phys. Rev. E* **65**, 056613 (2002).
30. **E. Goldobin**, A. M. Klushin, M. Siegel, and N. Klein, “Long Josephson junction embedded into a planar resonator at microwave frequencies: Numerical simulation of fluxon dynamics”, *J. Appl. Phys.* **92**, 3239–3250 (2002).

31. **E. Goldobin**, D. Koelle, R. Kleiner, “*Semifluxons in long Josephson $0-\pi$ -junctions*” Phys. Rev. B **66**, 100508 (2002).

2003

32. M. M. Khapaev, M. Y. Kupriyanov, **E. Goldobin** and M. Siegel, “*Current distribution simulation for superconducting multi-layered structures*”, Supercond. Sci. Tech. **16**, 27–27 (2003).
33. I. Bozovic, G. Logvenov, M. A. J. Verhoeven, P. Caputo, **E. Goldobin** and T. H. Geballe, “No mixing of superconductivity and antiferromagnetism in a high-temperature superconductor”, Nature **422**, 873–875 (2003).
34. **E. Goldobin**, D. Koelle and Kleiner, “Ground states and bias-current-induced rearrangement of semifluxons in $0-\pi$ long Josephson junctions”, Phys. Rev. B **67**, 224515 (2003).