

# CONTENTS

---

**VOLUME 49****NUMBER 8****2006**

---

**RADIOELECTRONICS AND COMMUNICATIONS SYSTEMS**

PAGES  
RUSSIAN/ENGLISH

Analysis of single-valuedness of solutions to the inverse problems of chaotic dynamics  
for concealment of information in communication systems and networks.

P. Yu. Kostenko, A. V. Antonov, and T. P. Kostenko . . . . . 3 1

The electrodynamic theory of metal probe-scatterer for measurement of amplitude-phase  
field distribution in a multimode waveguide. B. I. Vlasov and Yu. B. Nekhayev 11 7

A complex generalized model of autoregression of non-Gaussian processes.  
V. A. Tikhonov and K. V. Netrebenko . . . . . 21 14

Excitation of a nonlinear Hertz dipole in a dielectric layer on metal.  
V. A. Kostyukov and B. M. Petrov . . . . . 31 21

A frequency detector with a balance amplitude modulator and with a shift generator.  
Ri Bak Song . . . . . 42 29

A variant of identification of a linear discrete recursive filter.  
S. V. Zvyagintsev and V. L. Seletkov . . . . . 49 34

A waveguide-coaxial resonator for the millimeter range. R. I. Belous,  
A. P. Motornenko, I. G. Skuratovskii, and O. I. Khazov . . . . . 55 39

The whispering-gallery waves in a disk dielectric resonator located on a dielectric  
substrate. A. Ya. Kirichenko, S. P. Martynyuk, A. P. Motornenko,  
and I. G. Skuratovskii . . . . . 61 43

Compensation of experimental errors in the multiresonance method of measurement  
of reflection factor in a waveguide. V. I. Ponomarenko, V. V. Popov,  
and D. F. Vinogradskii . . . . . 66 47

The impact of microwave radiation on radiative recombination of CdS.  
I. B. Yermolovitch, V. V. Milenin, R. A. Red'ko, and S. N. Red'ko . . . . . 71 51

A 180-degree microwave phase modulator ( $\pi$ -keyer). V. K. Lebedev . . . . . 76 55