

NATIONAL ACADEMY OF SCIENCES OF UKRAINE  
A.Y. USIKOV INSTITUTE OF RADIO-PHYSICS AND ELECTRONICS

Manuscript

**Elena I. Smotrova**

UDC 537.86 : 535.417.2

**ELECTROMAGNETIC FIELDS AND EMISSION THRESHOLDS  
OF STAND-ALONE AND COUPLED TWO-DIMENSIONAL  
DIELECTRIC RESONATORS WITH ACTIVE REGIONS**

01.04.03 – Radio Physics

Dissertation for the degree of Ph.D.  
in Physics and Mathematics

Academic supervisor  
Alexander I. Nosich  
Doctor of Sciences,  
Professor  
Principal Scientist

Kharkov - 2010