

# Optical-digital system for real-time fingerprint identification

S.N. Khonina<sup>1,2</sup>, V.V. Kotlyar<sup>1,2</sup>, A.G. Nalimov<sup>1,2</sup>, R.V. Skidanov<sup>1,2</sup>, V.A. Soifer<sup>1,2</sup>

<sup>1</sup>*Image Processing Systems Institute of RAS;*

<sup>2</sup>*Samara State Aerospace University*

## Abstract

The article describes an optical-digital system for real-time fingerprint identification using a method of optical construction of the direction field.

**Keywords:** Optical-digital system, fingerprint identification, method of optical construction, direction field.

**Citation:** Khonina SN, Kotlyar VV, Nalimov AG, Skidanov RV, Soifer VA. Optical-digital system for real-time fingerprint identification. Computer Optics 2002; 24: 144-147.

[Access full text \(in Russian\)](#)

## References

- [1] Sasakawa K, Isogai F, Ikebata S. Personal verification system with high tolerance of poor quality fingerprints. Proc SPIE 1990; 1386: 265-272.
- [2] Gamble FT, Frye LM, Grieser DR. Real-time fingerprint verification system. Appl Opt 1992; 31(5): 652-655.
- [3] Skidanov RV, Soifer VA, Kotlyar VV, Khonina SN. Optical-digital experiment on fingerprint identification [In Russian]. Avtometriya 1997; 5: 55-63.
- [4] Soifer VA, Kotlyar VV, Khonina SN, Skidanov RV. Optical-digital methods of fingerprint identification. Opt Lasers Eng 1998; 29(4-5): 351-359.