

[Lavrik, V. I.](#); [Fil'chakova, V. P.](#); [Yashin, A. A.](#)

Conformal mappings of physical-topological models. (Konformnye otobrazheniya fiziko-topologicheskikh modelej.) (Russian) [Zbl 0769.76057](#)

Kiev: Naukova Dumka. 375 p. (1990).

The monograph is devoted to the use of exact and approximate conformal mapping (CM) techniques for mathematical simulation in underground water hydrodynamics, in hydrodynamic theory of lattices, and in microelectronics. There are fourteen chapters combined into the following four sections: 1. CMs and the physical-topological modeling; 2. The use of CM techniques in underground water hydrodynamics; 3. CMs in hydrodynamic theory of lattices; 4. CMs of physical-topological models in the computer-aided design of microelectronic devices.

Reviewer: [A.Pil'kevich](#) (Kiev)

MSC:

[76M99](#) Basic methods in fluid mechanics

[74S30](#) Other numerical methods in solid mechanics (MSC2010)

[65E05](#) General theory of numerical methods in complex analysis (potential theory, etc.)

[30C35](#) General theory of conformal mappings

[76S05](#) Flows in porous media; filtration; seepage

Keywords:

[underground water hydrodynamics](#); [hydrodynamic theory of lattices](#); [microelectronic devices](#)