

**Novozhilov, V. V.; Kadashevich, Yu. I.; Chernyakov, Yu. A.**

**Theory of plasticity taking account of microdeformations.** (English. Russian original)

[Zbl 0637.73035](#)

Sov. Phys., Dokl. 30, No. 10, 897-898 (1985); translation from Dokl. Akad. Nauk SSSR 284, No. 4, 821-823 (1985).

Summary: Starting from relationships of Krener type, the requirements of the mutual influence of local plastic deformations, and the essential role of the initial microstresses, a quasistatic theory of plasticity is proposed that takes microstresses into account.

**MSC:**

[74C99](#) Plastic materials, materials of stress-rate and internal-variable type

Cited in **1** Document

**Keywords:**

relationships of Krener type; mutual influence of local plastic deformations; initial microstresses; quasistatic theory of plasticity; microstresses