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The asymptotic behavior of globally smooth solutions of the multidimensional isentropic hydrodynamic model for semiconductors. (English) Zbl 1045.35088

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The asymptotic behaviour of globally smooth solutions of the Cauchy problem for the multidimensional isentropic hydrodynamic model for semiconductors is studied. It is proved that smooth close to equilibrium solutions of the problem converge to a stationary solution exponentially fast.

Reviewer: Igor Andrianov (Köln)

MSC:

[35Q60](#) PDEs in connection with optics and electromagnetic theory

[35B40](#) Asymptotic behavior of solutions to PDEs

[82D37](#) Statistical mechanical studies of semiconductors

Cited in **42** Documents

Keywords:

[hydrodynamic model](#); [semiconductors](#); [globally Cauchy problem](#); [close to equilibrium solutions](#); [stationary solution](#)

Full Text: [DOI](#)

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