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INTERNATIONAL WORKSHOP
ADVANCES IN CLEANER PRODUCTION

“CLEANER PRODUCTION TOWARDS A SUSTAINABLE TRANSITION”

Trends for use Niobium in the Sector of Microelectronics

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Abstract

The economic management and production, in the semiconductor industry, can give the companies in sector microelectronic opportunities to be more competitive. To be competitive, business management requires planning, research, developing manufacturing processes, especially in technology. New models of production and the increase in technologies are becoming more specialized to industries of microelectronics sectors increasing the added value to the product and / or process. The increase of these processes and improved and strategically well-defined production projects may provide greater technical advantage. Recent research points to the development of alternative materials for the production of semiconductors such as niobium, in replacement of silicon, which due to its property of high tolerance to extreme temperatures can significantly increase processing speed, converging to a revolution in technology computational.

Keywords: *Semiconductor; superconductivity; silicon; niobium*