

THE DISCOVERY OF SEMICONDUCTOR PROPERTIES OF PLANT AND HUMAN SKIN: THE ABILITY TO REDUCE THE ENVIRONMENTAL RISK FROM SEMICONDUCTORS INDUSTRY

Vasiliy Rud^{1,2}
*Vladimir Ch. Shpunt*³
*Yuri V. Rud*³

¹*Federal State Budgetary Scientific Institution "All-Russian Research Institute
of Phytopathology"*

²*Peter the Great Saint-Petersburg Polytechnic University*

³*Ioffe Physicotechnical Institute, Russian Academy of Sciences
Russia*

Abstract

Since the advent of the electronics industry, the harm to her environment is constantly increasing because there and receiving components, and processes to produce semiconductor structures, and the If only to list what components of our environment are suffering, it is evident that:

1. Interregional pollution (water and air) ;
2. Direct withdrawal of land areas, often considerable, disruption and even destruction of natural landscapes, change patterns, growth stresses in the rock masses, the violation of the regime of surface and groundwater, distortion gravity, geophysical fields, creating geochemical anomalies.
3. Thermal power plants, which : - pollute the atmospheric air by oxides of carbon, nitrogen, sulfur, accumulate a considerable mass of solid waste slag;

Hydroelectric significant changes, however, if you create a large reservoir, which leads to the flooding of arable lands, settlements, changes in groundwater, sinking, swamping, salinization and sometimes a change in the composition of aquatic flora and fauna.

4. The forest area drastically reduced under the blows of the growing needs of wood and arable areas.
5. PR and production of minerals formed large career, up to several hundred kilometres. After this the required reclamation.

Keywords

Heterophotoelements, Thin film, Photopleochroism, CIGS, Solar radiation, Luminescence, High efficiency, Photoconverters.