

Informatika i sistemy upravleniya. – 2017. – No. 4(54). – P. 94-104.

Nazarov D.A. (nazardim@iacp.dvo.ru)
Institute of Automation and Control Processes

APPROACH TO SYSTEM'S PARAMETRIC SENSITIVITY ANALYSIS BASED ON THE DISCRETE REPRESENTATION OF EFFICIENCY AREAS

The estimation problem of parametric perturbation influence on engineering system performance is considered in the article. The author offers a problem-solution-approach on the basis of discrete representation of multidimensional efficiency area. Thus, there was proposed an algorithm of inscribed hyperparallelepipeds construction, allowing to estimate the tolerance intervals of parameter variations within this area and reveal the system sensitivity to particular parameters drifting.

Keywords: reliability, efficiency area, systems sensitivity.

DOI: 10.22250/isu.2017.54.94-104

For citation:

Nazarov D.A. APPROACH TO SYSTEM'S PARAMETRIC SENSITIVITY ANALYSIS BASED ON THE DISCRETE REPRESENTATION OF EFFICIENCY AREAS // Informatika i sistemy upravleniya. – 2017. – No. 4(54). – P. 94-104.