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**Investigation of the optimal method for producing films
non-stoichiometric silicon nitride in order
to maximize yield of photoluminescence**

The article deals the relevance of the light source based on silicon nitride. Results from the difference between the stoichiometric non-stoichiometric silicon nitride are presented, and the dependence of the photoluminescence properties from silicon content. The optical properties of the thin films were investigated using photoluminescence. Further heat treatment in various environments indicated that annealing at 1100 °C photoluminescence intensity is absent, and during the annealing photoluminescence increases with 800 °C. The highest yield of photoluminescence was observed in air, the least — in a nitrogen environment.

References

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