

LUMINESCENT LIGHT SOURCES BASED ON CARBON MATERIAL COLD CATHODE

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ABSTRACT

Environmentally friendly power saving cathode luminescent light sources could substitute current power saving light sources. They are based on light emission as a result of field emitted electrons from a cold cathode impacting a luminophore. Streamlined, uniform concept of a general purpose field emission cathode lamp has not been developed yet to this moment. Thus, designing a prototype of a highly-efficient cathode luminescent light source becomes the main objective of our work [1,2].

Different types of light sources, both of a general and special (UV, colored, etc) purpose, were considered, as well as the ways of efficiency enhancement.

References

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[2] A.YU. KOLODYAZHNYJI, A.O. GETMAN, D.I. OZOL and E.P. SHESHIN J.of Vacuum Science and Technology B, v.37, 3, (2019) 10.11.16/1.5070108