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Annihilation of Positrons with High Momentum states in Lithium Fluoride using Local Density Approximation and Generalized Gradient Approximation

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**Abstract content
 (Max 300 words)**

High momentum components of electron-positron annihilation radiation in ionic lithium fluoride are obtained via annihilation of positrons with core electrons. The ratios of annihilation probabilities for various electronic levels as a function of momentum are calculated within the local density approximation (LDA) and generalized gradient approximation (GGA). Annihilation rates associated with defects and in the bulk are also calculated

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Primary author: Mr JILI, Thulani (University of Zululand)

Co-authors: Dr WAMWANGI, Daniel (University of the Witwatersrand); Prof. SIDERAS-HADDAD, Elias (University of the Witwatersrand); Mrs BUTHELEZI, Tsepiso (University of Zululand)

Presenter: Mr JILI, Thulani (University of Zululand)

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