# Revista de Saúde Pública do Paraná

# ARTIGO ORIGINAL

# TÍTULO EM PORTUGUÊS

# TÍTULO EM INGÊS

**RESUMO**

Elemento obrigatório. Deve apresentar de forma concisa, os objetivos, a metodologia e os resultados alcançados. Sequencia de frases concisas, afirmativas e não a enumeração de tópicos. Recomenda-se o uso de parágrafo único. Usar o verbo na voz ativa e na terceira pessoa do singular. Deve conter até 150palavras. Abaixo do resumo devem constar as palavras-chave ou descritores, de acordo com o DECS, separado por ponto. Evite o uso de símbolos e contrações que não sejam de uso corrente e de formulas, equações diagramas e etc., que não sejam absolutamente ecessários.

**PALAVRAS-CHAVE:** Palavra chave 1. Palavra chave 2. Palavra chave 3.

# ABSTRACT

Scanning probe microscopy investigations have extensively used graphite as a substrate due to its chemical inertness and ease of cleaving. The atomically flat surface of graphite has provided an ideal platform for surface scientists to deposit various kinds of materials of interest for imaging and examining. The natural graphite surface is also worthy of further understanding as it consists of a variety of defects [1], among which superlattice structure is reported to be found on graphite surfaces, and its origin is not yet completely understood [2]. It is of general interest and wide applicability to have a simplistic model for theoretical interpretation of scanning tunnelling microscope (STM) images of graphite, and even molecular dynamic simulations on graphite [3]. Here we describe a model of graphite which is easy to comprehend and simple to implement (fig.1 and fig.2). This model simulates the atomic density of graphite layers, which in turn correlates with the local density of states. The mechanism and construction of such a model is explained with all the necessary details which are not explicitly reported before. This model is applied in investigating the corrugation conservation phenomenon and rippling fringes of the superlattice which we observed on graphite [4]. The “odd-even” transition along the atomic rows of a superlattice is simulated (fig.3), and this result is discussed with reference to other reports in the literature [5]. A comparison is made with the result of Cee [6] about the validity of the moiré rotation pattern assumption.

**KEYWORDS:** Keywords 1. Keywords 2. Keywords 3.

# INTRODUÇÃO

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# METODOLOGIA

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# RESULTADOS

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# DISCUSSÃO

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# CONSIDERAÇÕES FINAIS

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