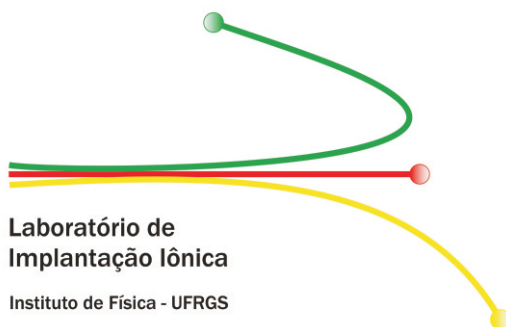




VII Encontro Sul- Americano de Colisões Inelásticas na Matéria

Gramado, RS, Brasil
27 a 30 de outubro de 2014

Livro de Resumos



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Inelásticas na Matéria

Organizadores
Raul Carlos Fadanelli Filho
Pedro Luis Grande

Porto Alegre
2014

UFRGS – Instituto de Física

Ficha catalográfica elaborada pela Biblioteca Professora Ruth de Souza Schneider

E562 Encontro Sul-Americano de Colisões Inelásticas na Matéria
(7. : 2014 : Gramado, RS).

Livro de Resumos VII Encontro Sul-Americano de
Colisões Inelásticas na Matéria [recurso eletrônico] /
Organizadores: Raul Carlos Fadanelli Filho, Pedro Luis
Grande. – Porto Alegre : UFRGS - Instituto de Física, 2014.

Modo de acesso:

<<http://www.if.ufrgs.br/~grande/VIIESCIM.pdf>>

ISBN 978-85-64948-12-9

1. Implantação de íons. 2. Feixes de íons. I. Fadanelli
Filho, Raul Carlos. II. Grande, Pedro Luis. III. Título

The role of micro-NRA and micro-PIXE in carbon mapping of organic tissues

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This study reports the work developed in order to implement the micro-NRA technique in the microprobe line of the Ion Implantation Laboratory, thus allowing to obtain elemental maps of light elements in organic tissues. In particular, the work was focused on nuclear reactions employing protons with carbon. The results obtained with the micro-NRA technique are compared with those obtained with micro-PIXE employing a SDD detector equipped with an ultra-thin window. The results show that although the use of NRA for carbon at 1.75 MeV resonance is feasible, it does not compete with the direct measurement of carbon X-rays. A comparison of elemental maps obtained by PIXE and by NRA in different samples indicates that PIXE provides better statistics and elemental maps of higher quality.