



Agricultural Journals

Czech Journal of

FOOD SCIENCES

[home](#) [page](#) [about us](#) [contact](#)

[us](#)

Table of Contents

IN PRESS

CJFS 2014

CJFS 2013

CJFS 2012

CJFS 2011

CJFS 2010

CJFS 2009

CJFS 2008

CJFS 2007

CJFS 2006

CJFS 2005

CJFS 2004

CJFS 2003

CJFS 2002

CJFS 2001

CJFS Home

Editorial Board

For Authors

- **Authors Declaration**
- **Instruction to Authors**
- **Guide for Authors**
- **Copyright Statement**
- **Submission**

For Reviewers

- **Guide for Reviewers**
- **Reviewers Login**

Subscription

Czech J. Food Sci.

**Česnek J., Dobiáš J.,
Houšová J., Sedláček**

Properties of thin metallic films for microwave susceptors

Czech J. Food Sci., 21 (2003): 34-40

Thin Al films of varying thickness, i.e. 3 to 30 nm, were deposited onto polyethylene-terephthalate film by evaporation in the vacuum of 3×10^{-3} Pa. The dependence of DC (direct current) surface resistance on thickness was measured using a four-point method. The surface resistance exhibits the size effect in accordance with the Fuchs-Sondheimer theory. The microwave absorption properties of the prepared films of various metallization thickness were measured in a microwave field at the microwave power of 1.8 mW. The maximum microwave absorption at 2.45 GHz was found to occur in a layer of optical density of about 0.22.

Keywords:

optical density; DC surface resistance;
microwave absorption

[[fulltext](#)]

© 2011 Czech Academy of Agricultural
Sciences

XHTML1.1 VALID

CSS VALID