Publications

EIS related to Skin Cancer


Electrical impedance of human skin and tissue alterations: Mathematical modeling and measurements Birgersson U, Karolinska Institutet (thesis) Stockholm 2013


Skin cancer as seen by electrical impedance Åberg P. Karolinska Institutet (thesis), Stockholm 2004


EIS related to Other Tissue Alterations


**Effects of pretreatment with a urea-containing emollient on nickel allergic skin reactions** Kuzmina N, Nyrén M, Lodén M, Edlund F, Emtestam L. Acta Dermato-Venereologica 2005; 85: 9-12


**Biophysical aspects of contact dermatitis and its prevention** Kuzmina N. Karolinska Institutet (thesis), Stockholm 2004

**Clinically normal atopic skin versus non-atopic skin as seen through electrical impedance** Nicander I, Ollmar S. Skin Res Technol 2004; 10: 178-183


**Betaine in oral hygiene with special attention to dry and sensitive mucosa (thesis)** Rantanen I. Annales Universitatis Turkuensis 559, Turku, Finland 2003


**Electrical impedance as a potential tool to distinguish between allergic and irritant contact dermatitis** Nyren M, Kuzmina N, Emtestam L. J Am Acad Dermatol 2003;48: 394-400

**The use of different concentrations of betaine as a reducing irritation agent in soaps monitored visually and non-invasively** Nicander I, Åberg P, Ollmar S. Skin Res Technol 2003; 9: 43-49

**The ability of betaine to reduce the irritating effects of detergents assessed visually, histologically and by bioengineering methods** Nicander I, Rantanen I, Lundh Rozell B, Söderling E, Ollmar S. Skin Res Technol 2003; 9: 50-58


Urea and sodium chloride in moisturisers for skin of the elderly - a comparative, double-blind, randomised study Kuzmina N, Hagstromer L, Emtestam L. Skin Pharmacol Appl Skin Physiol 2002; 15: 166-174


Do urea and sodium chloride together increase the efficacy of moisturizers for atopic dermatitis skin? Hagströmer L, Nyren M, Emtestam L. Skin Pharmacol Appl Skin Physiol 2001; 14: 27-33


Electrical impedance measurements at different skin sites related to seasonal variations Nicander I, Ollmar S. Skin Res Technol 2000; 6: 81-86

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Mild and below threshold skin responses to sodium lauryl sulphate assessed by depth controlled electrical impedance Nicander I, Ollmar S. Skin Res Technol 1997; 3: 259-263

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Information in full and reduced data sets of electrical impedance spectra from various skin conditions compared by using a holographic neural network Ollmar S, Nicander I, Ollmar J, Emtestam L. Med Biol Eng Comput 1997; 35: 415-419


Instrumental evaluation of skin irritation Rizwi PY, Morrison BM, Grove MJ, Grove GL. Cosmetics & Toiletries mag 1996; 111, Sept: 39-42

An electrical impedance technique for assessment of wheals Nyrén M, Ollmar S, Nicander I, Emtestam L. Allergy 1996; 51: 923-926

Interpretation of impedance data of stripped skin supported by histological findings Nicander I, Lundh Rozell B, Emtestam L, Ollmar S. Med Biol Eng Comput 1996; 34, Supplement 1, Part 2: 147-148

Quantification of skin and mucosal reactions by electrical impedance Ollmar S. Med Biol Eng Comput 1996; 34, Supplement 1, Part 2: 145-146

Correlation of impedance response patterns to histological findings in irritant skin reactions induced by various surfactants Nicander I, Ollmar S, Eek A, Lundh Rozell B, Emtestam L. Br J Dermatology 1996; 134: 221-228

