

Anwendungen zur Elektroimpulsbehandlung pflanzlicher Zellen – Eine Übersicht über die Arbeiten am Karlsruher Institut für Technologie / Institut für Hochleistungsimpuls- und Mikrowellentechnik

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Electroporation is an innovative method in processing of food and also energy crop to support the extraction of substances from cells. By applying a pulsed electric field to the tissue the cell membranes are charged and pores are formed in the membranes fostering the extraction. Although this principle is common to all electroporation devices, due to the different properties of each material, the devices and processes have to be designed for each application individually. The talk gives an overview on the advantages of electroporation for the processing of crushed grapes, sugar beets, energy crop, and algae and the related processes and electroporation devices.

On request, the talk will be given in English language.