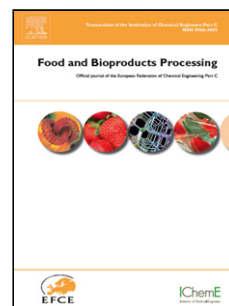


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# Integrated process for purification of capsaicin using aqueous two-phase systems based on ethanol

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## Highlights

- ATPS composed of ethanol and sodium-based salts were developed.
- The phase diagram, tie lines and critical point were determined at 298 K.
- The type of salt, ethanol and salt concentration were investigated.
- Capsaicin from *Capsicum chinense* was purified 5.2-fold with efficiency of 85.6% and antioxidant capacity of  $\approx 80\%$ .

ABSTRACT: Capsaicin is a very powerful alkaloid with important pharmacological effects and pain relief additives. It also aids in cancer prevention and weight reduction,

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