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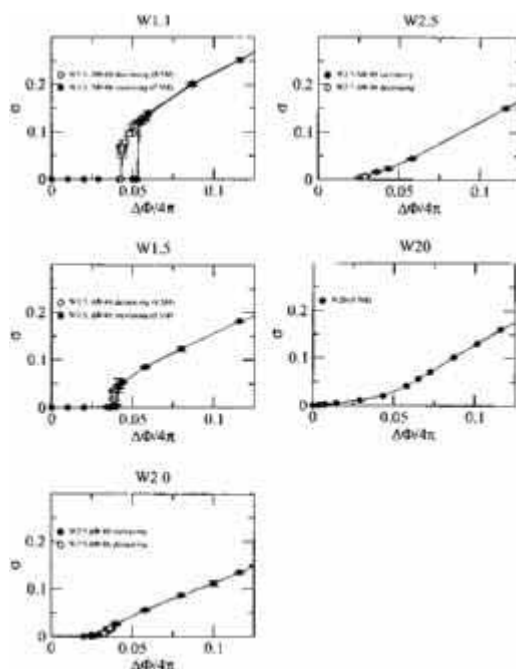
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(54) ELECTROCHEMICAL DEVICE USING POROUS ELECTRODE



(57)Abstract:

PROBLEM TO BE SOLVED: To provide an electrochemical device utilizing properties that express primary phase transition where the amount of ions entering an electrode composed of a porous material through pores and the charge density on the surface of the electrode show discontinuity at a specific voltage.

SOLUTION: The electrochemical device comprises a porous electrode having pores with a diameter in the range of 1-2 times of the size of ions of an electrolyte, and utilizes primary phase transition where the amount of ions entering the porous electrode through the pores and the charge density on the surface of the electrode show discontinuity at

a specific voltage when changing a voltage applied to the porous electrode.