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Erratum

Erratum to "Evolution of stress within a spherical insertion electrode particle under potentiostatic and galvanostatic operation" [Journal of Power Sources 190 (2009) 453–460]

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The authors regret that errors were made in evaluating Eqs. (19) and (28) for Figs. 2 and 4, respectively. Since Fig. 6 used the data contained in Figs. 2 and 4, it also was in error. The corrected Figs. 2, 4 and 6 are as follows.

Fig. 6 shows that the quantity $[(IR/FD)/(C_R - C_0)]^2(E_T^{\text{potentiostatic,max}}/E_T^{\text{galvanostatic,max}})$ is independent of Poisson's ratio. This behavior can now be understood in light of a recently published general expression of elastically stored energy in a spherical particle (see, Eq. (4) in Ref. [1]).

The authors would like to apologize to the readers of the article for any inconvenience these errors may have caused.

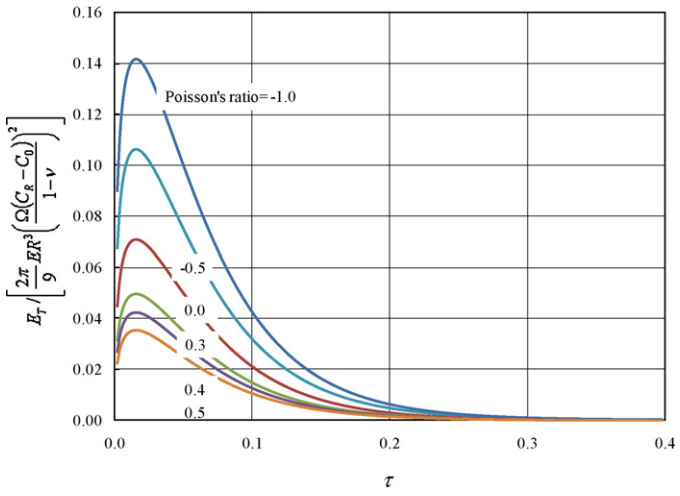

Fig. 2. Total strain energy vs. time for potentiostatic charging. The strain energy increases monotonically with decreasing Poisson ratios.

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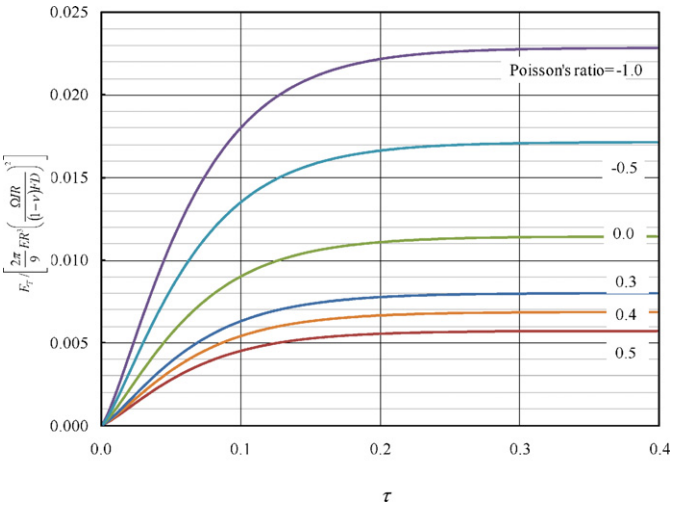

Fig. 4. Total strain energy vs. time for galvanostatic charging. While the strain energy increases monotonically with decreasing Poisson ratios, as is observed in the potentiostatic case (cf. Fig. 2), the evolution of the strain energy during galvanostatic control is quite different from that of potentiostatic control.

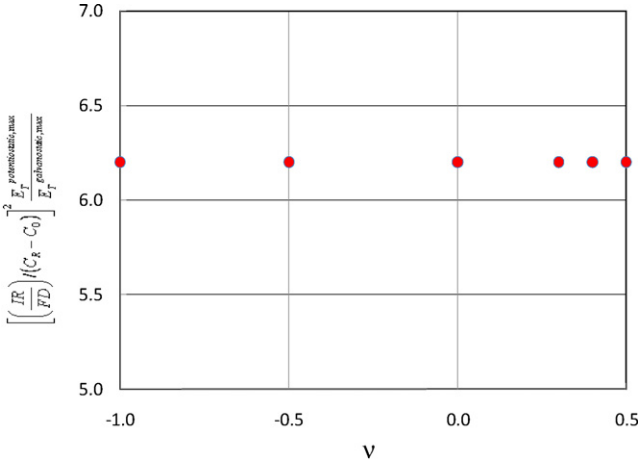

Fig. 6. Ratio of maximum total strain energy as determined by Eqs. (19) and (28).

Reference

[1] Y.-T. Cheng, M.W. Verbrugge, Electrochemical and Solid-State Letters 13 (2010) A128.