

ERRATUM

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# Erratum: Analysis of the physical and photoelectrochemical properties of c-Si(p)/a-SiC:H(p) photocathodes for solar water splitting (2021 *J. Phys. D: Appl. Phys.* **54** 195101)

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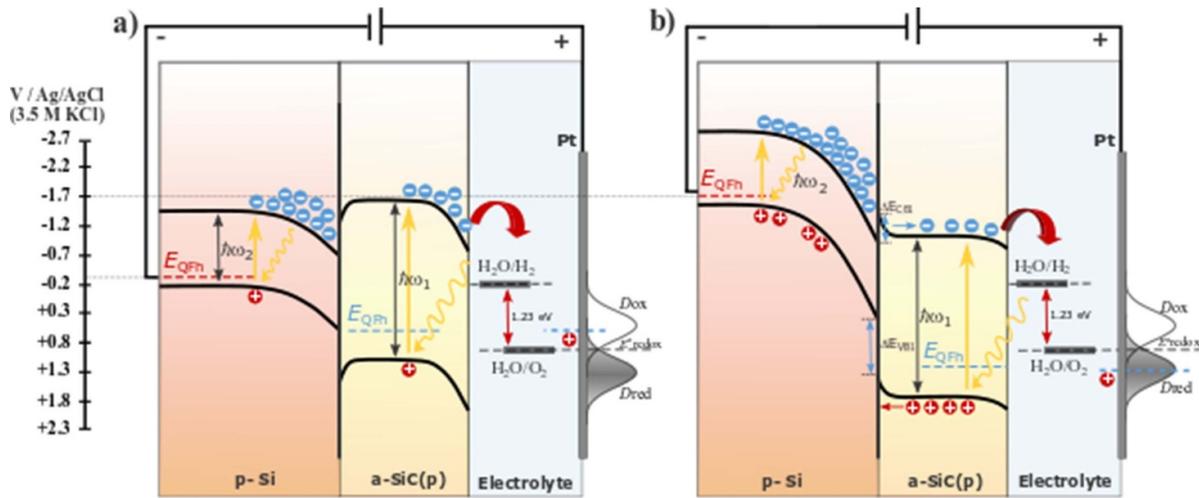
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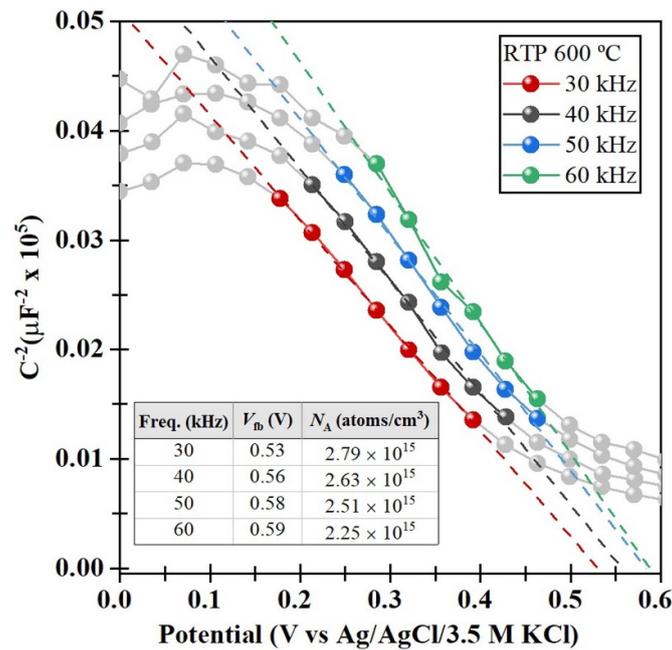
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There was a publishing error regarding the figures of this article. The corrected figures are displayed below.

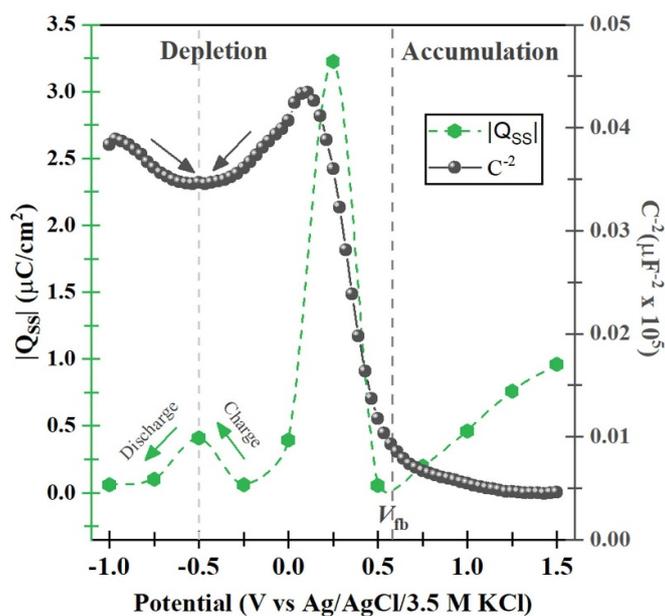
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**Figure 8.** Energy band diagrams of PEC components: c-Si(p)/a-SiC:H(p) photocathode, anode (Pt) and light illumination, at an applied potential of  $-0.88\text{ V}$  ( $-0.3\text{ V}$  vs Ag/AgCl 3.5 M KCl) (a) and under bias at  $-2.85\text{ V}$  ( $-1.7\text{ V}$  vs Ag/AgCl 3.5 M KCl) in the ideal band edge pinned situation (b).  $E_{QFh}$  is the quasi-Fermi energy level of holes, represented in each layer.  $E^0_{redox}$  corresponds to the standard redox potential for OER taking place in the Pt counter electrode, whose fluctuation distribution of energy levels are  $D_{red}$  and  $D_{ox}$ .



**Figure 9.** Mott-Schottky plots for the c-Si(p)/a-SiC:H(p) heterojunction annealed at  $600\text{ }^\circ\text{C}$  at frequencies of 30, 40, 50 and 60 kHz. The inset table shows the flat band potential and carrier concentration values obtained from the linear fits performed for each frequency data.



**Figure 14.** Mott–Schottky plot at frequency of 50 kHz and potential-dependent charge in surface states. Surface states charge distributions centered at  $-0.5$  and  $0.25$  V are correlated to the variation in the SCR electronic capacitance behavior observed in the Mott–Schottky plot.

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