Soft Matter



CORRECTION

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Correction: Chemical conversion of self-assembled hexadecyl monolayers with active oxygen species generated by vacuum ultraviolet irradiation in an atmospheric environment

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Correction for 'Chemical conversion of self-assembled hexadecyl monolayers with active oxygen species generated by vacuum ultraviolet irradiation in an atmospheric environment' by Ahmed I. A. Soliman et al., Soft Matter, 2015, 11, 5678-5687.

The authors regret a mistake during calculating the changes of the chemical constituents of HD-SAMs during different VUV irradiation times, which were presented in Fig. 5 (page 5683 in the published article). These chemical constituents were calculated using mathematical eqn (1), (2), (3) and (4), but the mass concentrations of carbon and oxygen obtained from XPS quantitative analysis were mistakenly used instead of atomic concentrations. The below Fig. 5 shows the correct calculated amounts of the chemical constituents after using the atomic concentrations of carbon and oxygen.

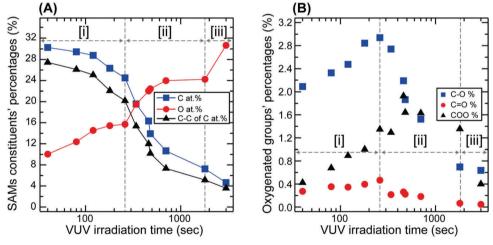


Fig. 5 Chemical constituent changes of HD-SAMs under VUV irradiation. (A) The atomic percentage changes of HD-SAM chemical constituents with VUV irradiation time. (B) The changes of the percentages of polar groups with VUV irradiation time.

On page 5682, the text "At stage [i], the polar groups increased; the percentage of C-O increased from 0% to 1.56%, while C=O increased from 0 to 0.35%. But at stage [ii], percentages of both C-O and C-O groups decreased to 0.35% and 0.02%, respectively, while the increase of COO groups continued up to 460 s. The relatively low percentages of COO groups were attributed to the rapid oxidation of C=O to COO groups. The percentage of COO groups increased rapidly during the first 460 s of VUV irradiation from 0% to 1.02%. After 460 s, the percentage of COO groups decreased to 0.68." should instead read as follows:

"At stage [i], the polar groups increased; the percentage of C-O increased from 0% to 2.94%, while C=O increased from 0 to 0.47%. But at stage [ii], percentages of both C-O and C=O groups decreased to 0.70% and 0.07%, respectively, while the

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increase of COO groups continued up to 460 s. The relatively low percentages of C=O groups were attributed to the rapid oxidation of C=O to COO groups. The percentage of COO groups increased rapidly during the first 460 s of VUV irradiation from 0% to 1.93%. After 460 s, the percentage of COO groups decreased to 0.40%."

On page 5685 in the published article, the text "The percentages of OH groups calculated using F1s % in the HD-SAM were less than 35% of the total C–O calculated from XPS C1s peak deconvolution." should read as follows:

"The percentages of OH groups calculated using F1s % in the HD-SAM were less than 20% of the total C–O calculated from XPS C1s peak deconvolution."

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.