MATERIALS CHEMISTRY
FRONTIERS

CORRECTION

Cite this: *Mater. Chem. Front.*, 2023, **7**, 1153

Correction: Interfacial engineering between SnO_2/$MAPbI_3$ by maleate pheniramine halides toward carbon counter electrode-based perovskite solar cells with 16.21% efficiency

Duoling Cao,†[a] Zuhong Li,†[a] Wenbo Li,[a] Ke Pei,[a] Xu Zhang,*[a] Li Wan,*[a] Li Zhao,[a] Alexey Cherevan,[b] Dominik Eder[b] and Shimin Wang*[a]

DOI: 10.1039/d3qm90014b

rsc.li/frontiers-materials

Correction for 'Interfacial engineering between SnO_2/$MAPbI_3$ by maleate pheniramine halides toward carbon counter electrode-based perovskite solar cells with 16.21% efficiency' by Duoling Cao *et al.*, *Mater. Chem. Front.*, 2023, https://doi.org/10.1039/d2qm01149b.

The authors regret that a number of carboxyl functional groups have been labelled incorrectly in the original article. The corrections and corrected sentences are shown below.

The sentence beginning "Among them...", "(–O–C═O)" has been corrected to "(–COOH)":

"Among them, carboxyl (–COOH)[28–30] and halide (–Cl,[31,32] –Br,[33] *etc.*) groups can coordinate with the undercoordinated interfacial metal atoms, such as Sn and Pb, to regulate the energy levels of SnO_2, passivate the defect density at the SnO_2/perovskite interface, and ultimately improve the device performance."

The sentence beginning "The perovskite...", "(C═O)" has been corrected to "(–COOH)":

"The perovskite film would become more compact and smooth due to the interaction between carboxyl groups (–COOH) and the undercoordinated Pb^{2+}.[34]"

The sentence beginning "On the one hand...", "C═O" has been corrected to "–COOH":

"On the one hand, the –COOH in CHM or BHM can be esterified with –OH on the surface of the SnO_2 film to passivate the defects and avoid the oxidative decomposition of SnO_2, thereby improving the device stability.[38]

The sentence beginning "On the other hand...", "C═O" has been corrected to "–COOH":

"On the other hand, the electron-donating –COOH on CHM or BHM can interact with the undercoordinated Pb^{2+} ions in the $MAPbI_3$ perovskite, promoting the crystallization of the perovskite and passivating the film defects.[25,33,36]"

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

[a] *Key Laboratory for the Green Preparation and Application of Functional Materials, Ministry of Education, Hubei Key Laboratory of Polymer Materials, Hubei Collaborative Innovation Center for Advanced Organic Chemical Materials, Faculty of Materials Science and Engineering, Hubei University, Wuhan 430062, P. R. China. E-mail: xuzhang@hubu.edu.cn, wanli@hubu.edu.cn, wanli1983_3@aliyun.com, shiminwang@126.com*

[b] *Institute of Materials Chemistry, Technische Universität Wien, Getreidemarkt 9/165, 1060 Vienna, Austria*

† These authors contributed equally.