

Erratum to

Sub-gap defect density characterization of molybdenum oxide: An annealing study for solar cell applications (Nano Research, (2020), 13, 12, (3416-3424), 10.1007/s12274-020-3029-9)

Scirè, Daniele; Procel, Paul; Gulino, Antonino; Isabella, Olindo; Zeman, Miro; Crupi, Isodiana

DOI

[10.1007/s12274-022-4222-9](https://doi.org/10.1007/s12274-022-4222-9)

Publication date

2022

Document Version

Final published version

Published in

Nano Research

Citation (APA)

Scirè, D., Procel, P., Gulino, A., Isabella, O., Zeman, M., & Crupi, I. (2022). Erratum to: Sub-gap defect density characterization of molybdenum oxide: An annealing study for solar cell applications (Nano Research, (2020), 13, 12, (3416-3424), 10.1007/s12274-020-3029-9). *Nano Research*, 15(8), 7752-7753. <https://doi.org/10.1007/s12274-022-4222-9>

Important note

To cite this publication, please use the final published version (if applicable).
Please check the document version above.

Copyright

Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

Takedown policy

Please contact us and provide details if you believe this document breaches copyrights.
We will remove access to the work immediately and investigate your claim.

Erratum to: Sub-gap defect density characterization of molybdenum oxide: An annealing study for solar cell applications

Daniele Scirè^{1,2} (✉), Paul Procel², Antonino Gulino³, Olindo Isabella², Miro Zeman², and Isodiana Crupi¹

¹ Department of Engineering, University of Palermo, Palermo 90128, Italy

² Photovoltaic Materials and Devices group, Delft University of Technology, Delft 2628 CD, the Netherlands

³ Department of Chemical Sciences, University of Catania, Catania 95125, Italy

© Tsinghua University Press 2022

Erratum to

Nano Research 2020, 13(12): 3416–3424
https://doi.org/10.1007/s12274-020-3029-9

Ref. [56] was unfortunately wrong,

Instead of

[56] Corless, R. M.; Gonnet, G. H.; Hare, D. E. G.; Jeffrey, D. J.; Knuth, D. E. On the Lambert W function. *Adv. Comput. Math.* **1996**, 5, 329–359.

It should be changed to

Biswas, R. K.; Khan, P.; Mukherjee, S.; Mukhopadhyay, A. K.; Ghosh, J.; Muraleedharan, K. Study of short range structure of amorphous Silica from PDF using Ag radiation in laboratory XRD system, RAMAN and NEXAFS. *J. Non. Cryst. Solids* **2018**, 488, 1–9.

Some entries in Table 2 were unfortunately misprinted.

Instead of

Table 2 DOS parameters extracted from the deconvolution of the absorption coefficient for the 20-nm thick MoOx films annealed at different temperatures and in different annealing ambiances

Temp. (°C)	Atm.	E_{0V} (meV)	E_{0C} (meV)	A_D (eV ⁻¹ ·cm ⁻³)	E_D (eV)	W (meV)	A_P (eV ⁻¹ ·cm ⁻³)	E_P (eV)	E_{op} (meV)
As-deposited		109	84	1.5 E15	1.10	30	2.9 E3	1.57	27
100	Air	89	59	2.73 E15	1.10	20	1.14 E5	1.58	25
130	Air	93	55	4.46 E15	1.10	20	2.19 E5	1.57	28
150	Air	84	43	8.25 E15	1.10	20	3.91 E5	1.58	28
200	Air	88	56	1.18 E16	1.10	20	4.44 E5	1.55	30
250	Air	99	59	1.15 E16	1.10	20	4.88 E5	1.53	27
100	H ₂	91	49	5.18 E15	1.11	20	2.49 E5	1.57	29
130	H ₂	84	35	7.21 E15	1.09	20	3.49 E5	1.57	29
150	H ₂	86	42	1.02 E16	1.09	30	5.31 E5	1.58	32
200	H ₂	93	64	1.42 E16	1.11	30	7.26 E5	1.57	34
250	H ₂	104	65	1.98 E16	1.14	30	1.03 E6	1.56	42
100	Ar	87	51	4.14 E15	1.11	20	1.98 E5	1.57	29
130	Ar	85	52	4.71 E15	1.09	20	2.23 E5	1.58	28
150	Ar	63	59	5.57 E15	1.11	20	3.60 E5	1.61	29
200	Ar	85	38	1.13 E16	1.10	30	5.96 E5	1.57	32
250	Ar	103	65	1.76 E16	1.12	30	8.51 E5	1.56	37

Address correspondence to daniele.scire@unipa.it

It should be changed to

Table 2 DOS parameters extracted from the deconvolution of the absorption coefficient for the 20-nm thick MoO_x films annealed at different temperatures and in different annealing ambiances

Temp. (°C)	Atm.	E_{0V} (meV)	E_{0C} (meV)	A_D (eV ⁻¹ ·cm ⁻³)	E_D (eV)	W (meV)	A_P (eV ⁻¹ ·cm ⁻³)	E_P (eV)	E_{op} (meV)
As-deposited		109	84	9.21E+14	1.10	30	4.32E+03	0.800	50.0
100	Air	89	59	2.69E+15	1.10	20	1.13E+04	0.795	50.3
130	Air	93	55	3.86E+15	1.10	20	2.18E+04	0.810	54.4
150	Air	84	43	6.79E+15	1.10	20	3.95E+04	0.810	62.5
200	Air	88	56	1.15E+16	1.10	20	5.06E+04	0.795	52.9
250	Air	99	59	1.05E+16	1.10	20	4.89E+04	0.785	51.0
100	H ₂	91	49	4.32E+15	1.11	20	2.46E+04	0.805	57.4
130	H ₂	84	35	5.75E+15	1.09	20	3.52E+04	0.810	59.8
150	H ₂	86	42	8.93E+15	1.09	30	4.91E+04	0.810	59.8
200	H ₂	93	64	1.37E+16	1.11	30	6.12E+04	0.800	55.1
250	H ₂	104	65	1.86E+16	1.14	30	7.53E+04	0.805	54.8
100	Ar	87	51	3.71E+15	1.11	20	1.93E+04	0.795	58.1
130	Ar	85	52	3.93E+15	1.09	20	2.25E+04	0.810	57.1
150	Ar	63	59	4.29E+15	1.11	20	3.44E+04	0.825	61.4
200	Ar	85	38	1.09E+16	1.10	30	5.24E+04	0.800	50.0
250	Ar	103	65	1.72E+16	1.12	30	7.01E+04	0.795	66.5

In page 3420 of the original paper, the two data in the last sentence of Section 3.3 were unfortunately misprinted.

Instead of

Finally, E_P and E_{op} resulted unchanged by the annealing conditions, with mean values of 1.57 eV and 30 meV, respectively.

It should be changed to

Finally, E_P and E_{op} resulted unchanged by the annealing conditions, with mean values of 0.80 eV and 55 meV, respectively.

In page 3421 of the original paper, the two data in the first paragraph of Section 4 were unfortunately misprinted.

Instead of

The polaron binding energy resulted in approximately 1.57 eV while the longitudinal-optical phonon energy in 30 meV.

It should be changed to

The polaron binding energy resulted in approximately 0.80 eV while the longitudinal-optical phonon energy in 55 meV.

The online version of the original article can be found at
<https://doi.org/10.1007/s12274-020-3029-9>