


Cite this: *RSC Adv.*, 2020, 10, 32102

## Correction: Tantalum(v) 1,3-propanediolate $\beta$ -diketonate solution as a precursor to sol–gel derived, metal oxide thin films

Christopher Beale,<sup>ab</sup> Stefanie Hamacher,<sup>ab</sup> Alexey Yakushenko,<sup>c</sup> Oumaima Bensaid,<sup>ab</sup> Sabine Willbold,<sup>d</sup> Guillermo Beltramo,<sup>e</sup> Sören Möller,<sup>f</sup> Heinrich Hartmann,<sup>d</sup> Elmar Neumann,<sup>g</sup> Gregor Mussler,<sup>h</sup> Alexander Shkurmanov,<sup>h</sup> Dirk Mayer,<sup>a</sup> Bernhard Wolfrum<sup>ai</sup> and Andreas Offenhäusser<sup>\*a</sup>

DOI: 10.1039/d0ra90092c

[rsc.li/rsc-advances](https://rsc.li/rsc-advances)

Correction for 'Tantalum(v) 1,3-propanediolate  $\beta$ -diketonate solution as a precursor to sol–gel derived, metal oxide thin films' by Christopher Beale *et al.*, *RSC Adv.*, 2020, 10, 13737–13748, DOI: 10.1039/D0RA02558E.

The authors regret that the plasma treatment and printing parameters were reported incorrectly in the subsection “Deposition on a-SiO<sub>2</sub> for UV/Vis spectrophotometry” in the Experimental section of the original article.

Before printing, the substrate for both samples was subjected to an argon plasma treatment for 5 minutes (150 W, 0.6 mbar). The plasma power is now corrected to be the same as stated in the “Deposition on a-SiO<sub>2</sub> for Raman/XRD” subsection, where originally it was incorrectly stated that “the power was set slightly higher” for the Raman/XRD samples. For both the acetylacetone and benzoylacetone inks, the inks were printed on their respective substrates with a 75  $\mu$ m drop pitch having dimensions of 400  $\times$  220 drops to create a uniform layer.

The correct section is as follows:

### Deposition on a-SiO<sub>2</sub> for UV/Vis spectrophotometry

0.5 mm thick a-SiO<sub>2</sub> was chosen as the best substrate for transparency in the near UV range. Before printing, the substrate was subjected to an argon plasma treatment for 5 minutes (150 W, 0.6 mbar) using the NANO plasma oven (Diener electronic GmbH + Co. KG, Germany).

Product from the proposed method with acetylacetone was diluted with DEGEE, with the dilution containing 706 mg of DEGEE (70 wt%) and 308 mg of product (30 wt%). The ink was then printed on the substrate with a 75  $\mu$ m drop pitch having dimensions of 400  $\times$  220 drops to create a uniform layer.

For benzoylacetone, the dilution contained 732 mg DEGEE (69 wt%) and 328 mg of product (31 wt%). The ink was then printed with a drop pitch of 75  $\mu$ m to create uniform layers (the benzoylacetone ink did not spread as well as the acetylacetone ink), having dimensions of 400  $\times$  220 drops to create a uniform layer.

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

<sup>a</sup>IBI-3, Bioelectronics, Forschungszentrum Jülich GmbH, D-52425, Germany. E-mail: a.offenhaeusser@fz-juelich.de

<sup>b</sup>RWTH Aachen University, Templergraben 55, D-52062, Germany

<sup>c</sup>Fraunhofer Research Institute for Microsystems and Solid State Technologies, D-80686 Munich, Germany

<sup>d</sup>ZE4-3, Analytics, Forschungszentrum Jülich GmbH, D-52425, Germany

<sup>e</sup>IBI-2, Mechanobiology, Forschungszentrum Jülich GmbH, D-52425, Germany

<sup>f</sup>IEK-1, Materials Synthesis and Processing, Forschungszentrum Jülich GmbH, D-52425, Germany

<sup>g</sup>Helmholtz Nano Facility, Forschungszentrum Jülich GmbH, D-52425, Germany

<sup>h</sup>PGI-9, Semiconductor Nanoelectronics, Forschungszentrum Jülich GmbH, D-52425, Germany

<sup>i</sup>Neuroelectronics, Munich School of Bioengineering, Department of Electrical and Computer Engineering, Technical University of Munich (TUM), D-85748 Garching, Germany

