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quantitative material decomposition employing gratingbased X-ray phase-contrast CT

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Correction to: Scientific Reports https://doi.org/10.1038/s41598-018-34809-6, published online 06 November

This Article contains typesetting errors.

In the Materials and Methods section, under the subheading 'Munich Compact Light Source',

"The spectrum at the position of the sample was measured with an energy-dispersive Amptek X-123 detector (Amptek Inc., Bedford, Massachusetts) with an 500 m Si sensor and from that a mean energy of $E_{mean} = 24.3 \,\text{keV}$ was calculated."

should read:

"The spectrum at the position of the sample was measured with an energy-dispersive Amptek X-123 detector (Amptek Inc., Bedford, Massachusetts) with an 500 μ m Si sensor and from that a mean energy of $E_{mean} = 24.3 \text{ keV}$ was calculated."

Furthermore, in the Materials and Methods section, under the subheading 'Grating Interferometer',

"The grating interferometer is situated at a distance of about 15 m from the X-ray source point (size: $45 \times 45 \text{ m}^2$ r.m.s., divergence angle: 4 mrad)."

should read:

"The grating interferometer is situated at a distance of about 15 m from the X-ray source point (size: $45 \times 45 \,\mu\text{m}^2$ r.m.s., divergence angle: 4 mrad)."

"The Talbot interferometer is realized with a phase grating (G1) with a period of 4.92 m, duty cycle of 0.5 and a nickel filling height of 4.39 m providing a phase shift of $\pi/2$ for the design energy of 25 keV. Period, duty cycle and gold filling for the absorption grating are $p_2 = 5 \text{ m}$, 0.5 and 70 m."

should read:

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"The Talbot interferometer is realized with a phase grating (G1) with a period of 4.92 μ m, duty cycle of 0.5 and a nickel filling height of 4.39 μ m providing a phase shift of $\pi/2$ for the design energy of 25 keV. Period, duty cycle and gold filling for the absorption grating are $p_2 = 5 \mu$ m, 0.5 and 70 μ m."

"All tomographic images were acquired with a single photon counting Pilatus-200 K detector (*DECTRIS ltd.*, *Baden, Switzerland*) with a 1 mm thick silicon sensor and an effective pixel size of $p_{\text{eff}} = 160 \,\text{m}$."

should read:

"All tomographic images were acquired with a single photon counting Pilatus-200 K detector (*DECTRIS ltd.*, *Baden, Switzerland*) with a 1 mm thick silicon sensor and an effective pixel size of $p_{\rm eff} = 160 \, \mu \text{m}$."

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