

'Electronic Supplementary Information

Avoiding water reservoir effects in functional complex alkali oxides by using O₃ as the oxygen source

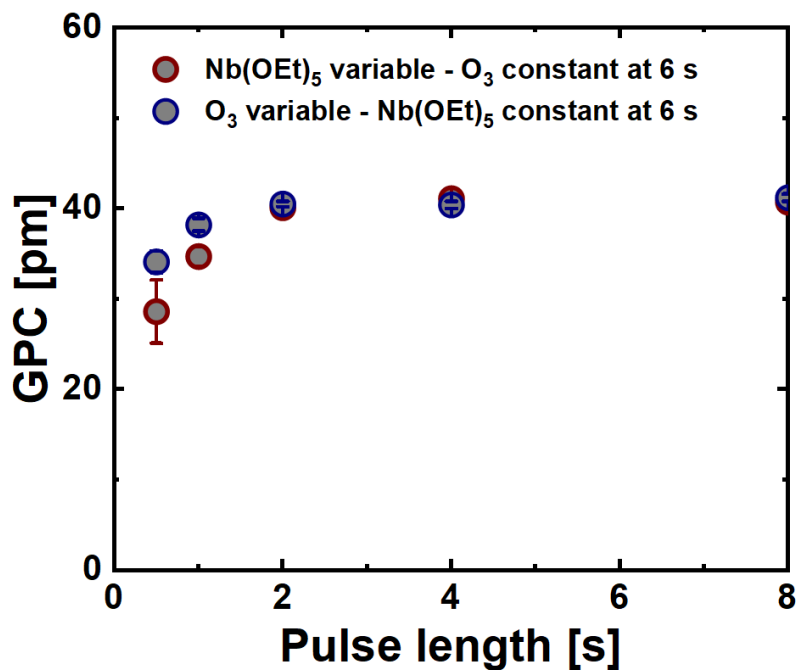
Henrik H. Sønsteby^{a,*}, Veronica A.-L. K. Killi^a, Linn M. Rykkje^a, Justin R. Bickford^b, Eric G. Martin^b, Robert C. Hoffman^b and Ola Nilsen^{a,*}

^a Department of Chemistry, University of Oslo, Blindern, 0315 Oslo, Norway

^b U.S. Army Research Laboratory, 2800 Powder Mill Rd., Adelphi, Maryland 20783, USA

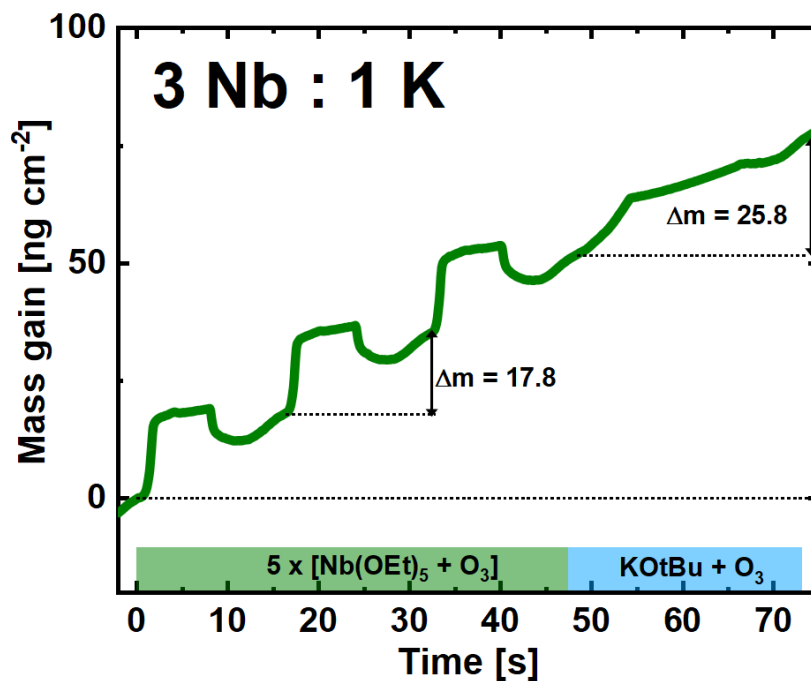
*Corresponding e-mails: henrik.sonsteby@kjemi.uio.no, ola.nilsen@kjemi.uio.no

Supplementary Figure A:



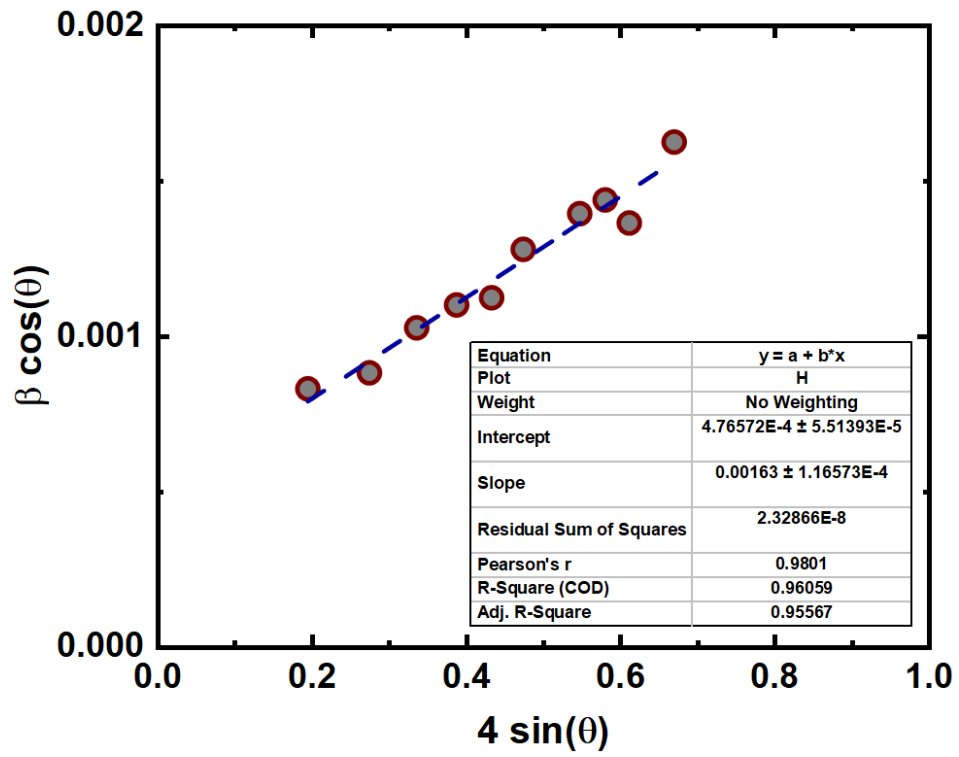
Supplementary Figure A: Growth per cycle (GPC) as a function of pulse length in seconds for Nb(OEt)_5 and O_3 in the ozone based process for Nb_2O_5 .

Supplementary Figure B:



Supplementary Figure B: Quartz crystal microbalance campaign of the 3:1 pulsed Nb:K ratio, showing mass gains for the unique process steps.

Supplementary Figure C:



Supplementary Figure C: Williamson-Hall plot for KTN thin films deposited on MgAl_2O_4 (100).