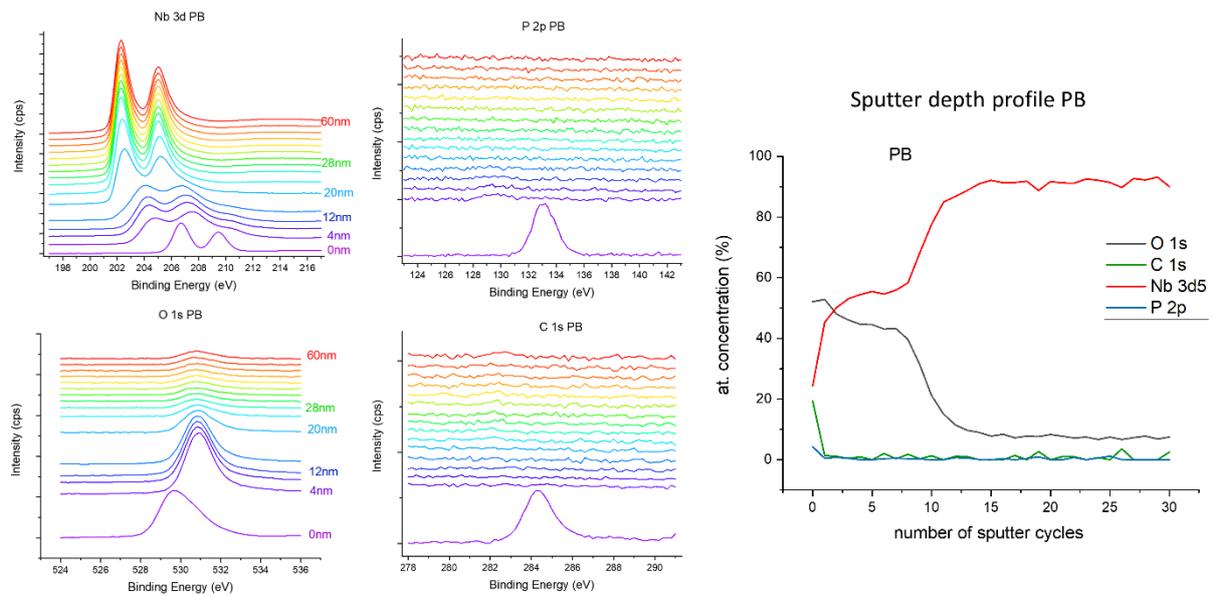
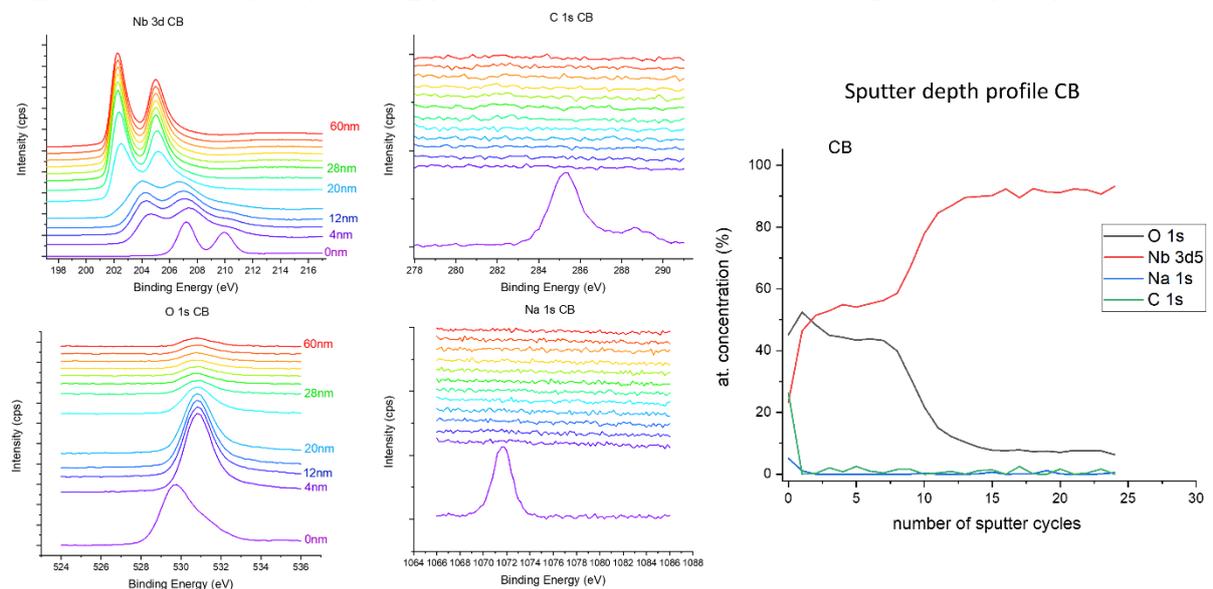


# Impact of electrolyte incorporation in anodized niobium on its resistive switching

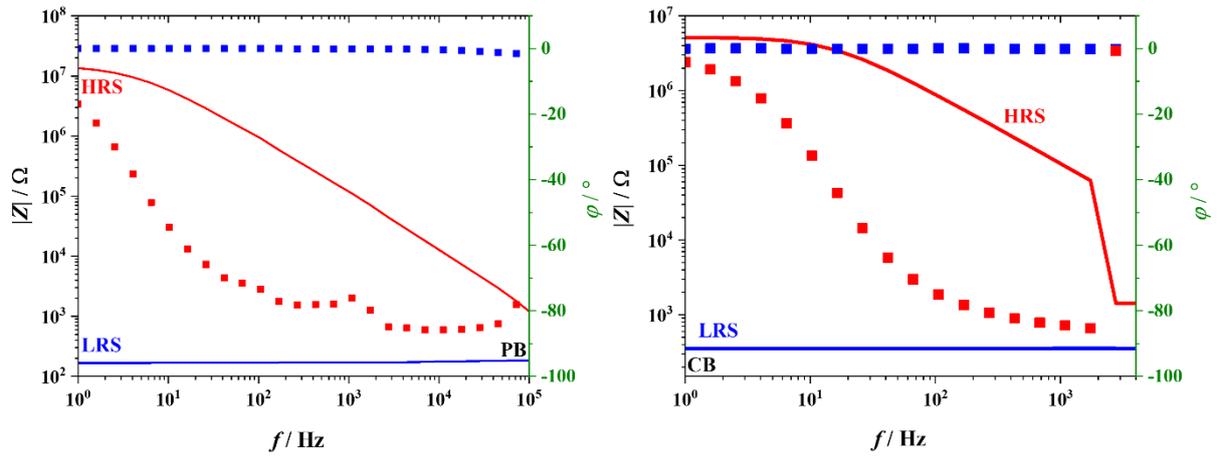
Ivana Zrinski<sup>1</sup>, Marvin Löffler<sup>1</sup>, Janez Zavašnik<sup>2</sup>, Claudia Cancellieri<sup>3</sup>, Lars P.H. Jeurgens<sup>3</sup>, Achim Walter Hassel<sup>1</sup> and Andrei Ionut Mardare<sup>1,\*</sup>



**Figure S1:** XPS depth sputtering profiles for anodic Nb memristors grown in phosphate buffer.



**Figure S2:** XPS depth sputtering profiles for anodic Nb memristors grown in citrate buffer.



**Figure S3:** Impedance spectroscopy Bode plots of memristors grown in different electrolytes switched in LRS and HRS showing their impedance (full lines) and phase shift (dotted lines) dependence on frequency.