

Electrochemical speciation analysis for simultaneous determination of Cr(III) and Cr(VI) using activated glassy carbon electrode

Lukas Richtera^{a,b*}, Hoai Viet Nguyen^{a,b}, David Hynek^{a,b}, Jiri Kudr^{a,b}, Vojtech Adam^{a,b}

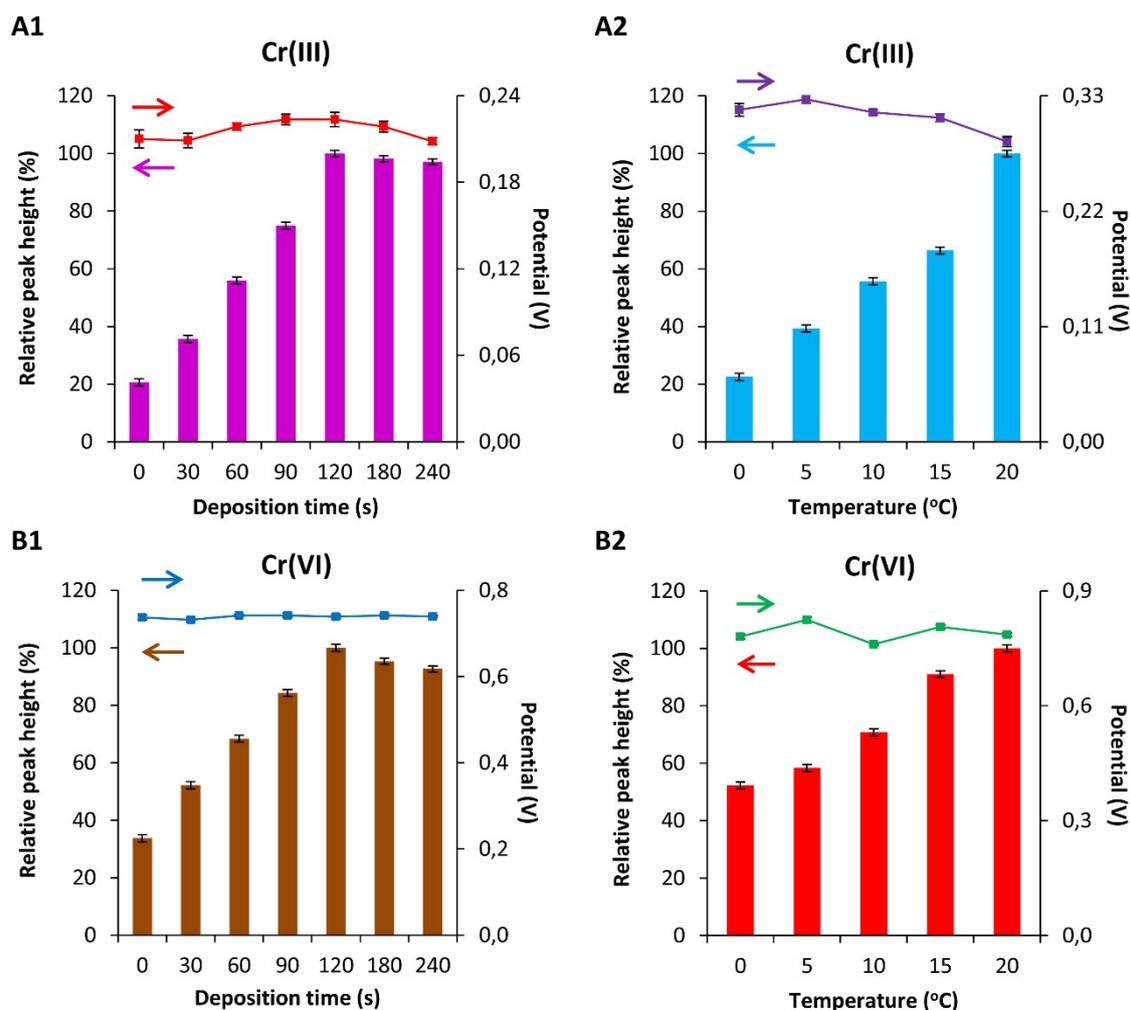


Fig. S1: Electrochemical detection of Cr(III) ion (200 μ M) and Cr(VI) ion (500 μ M) measured by GCE in BR buffer pH 6 (column: relative peak height, square dot: potential). Dependence of relative peak height and potential on deposition time of Cr(III) ion (A1) and Cr(VI) ion (B1). Dependence of relative peak height and potential on temperature of buffer containing Cr(III) ion (A2) and Cr(VI) ion (B2), deposition time of 120 s.

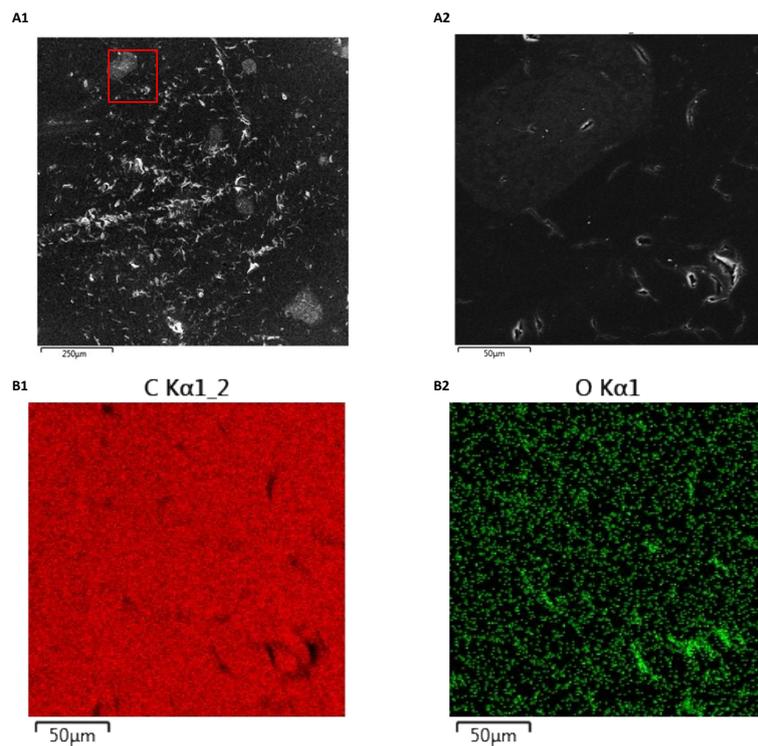


Fig. S2: SEM (A) and SEM elemental mapping for C (B1) and O (B2) of bare GCE. SEM images were recorded with a magnification of 150 x (A1) and 750 x (A2) and an accelerating voltage of 15 kV.

^{a.} Department of Chemistry and Biochemistry, Mendel University in Brno, Zemedelska 1, CZ-613 00 Brno, Czech Republic, European Union

^{b.} Central European Institute of Technology, Brno University of Technology, Technicka 3058/10, CZ-616 00 Brno, Czech Republic, European Union

* E-mail: oliver@centrum.cz