

## Supplementary Information

### Estimating the Time-Dependent Performance of Nanocatalysts in Fuel Cells Based on a Cost-Normalization Approach

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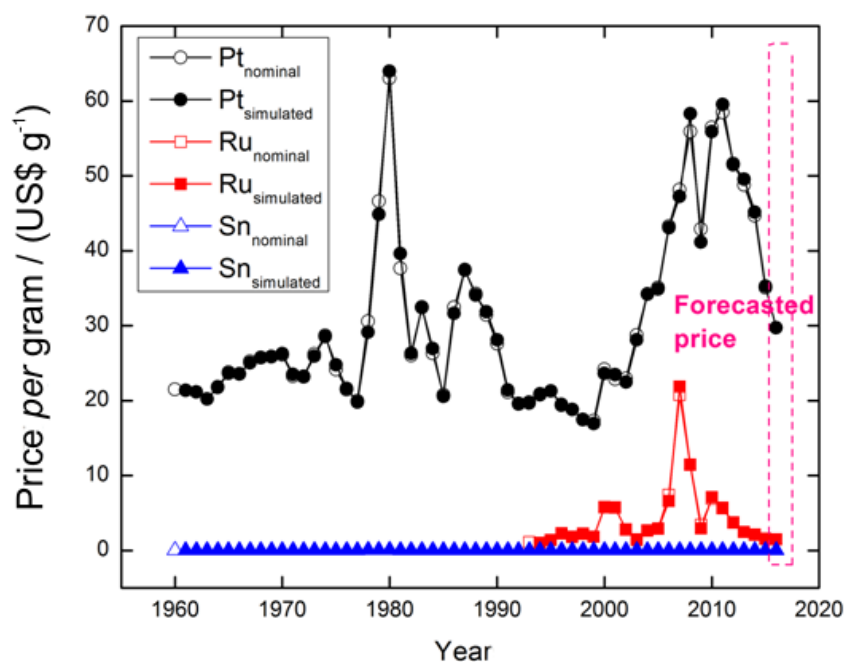
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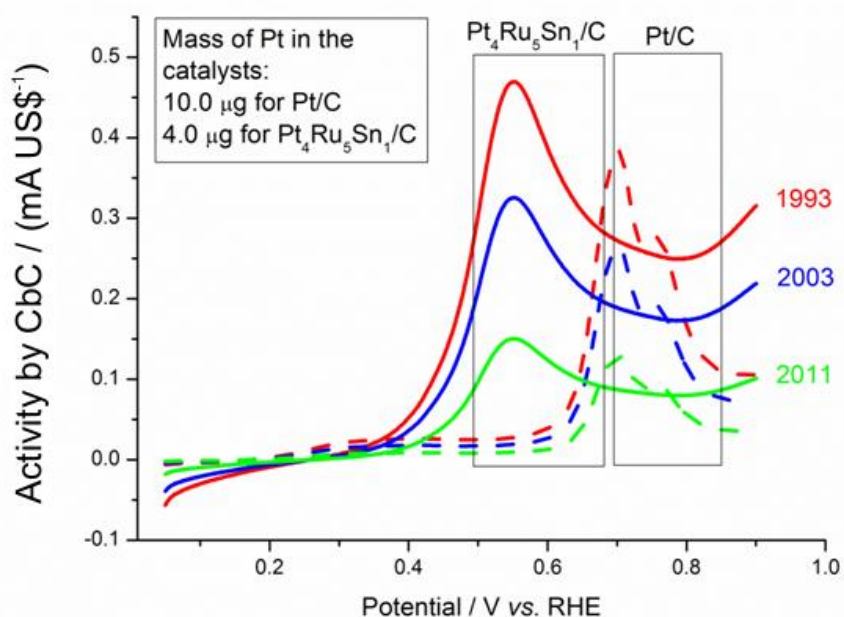
**Table S1.** Approximated composition of ternary catalysts determined by EDX measurements

	Atomic of Pt / %	Atomic of Ru / %	Atomic of Sn / %
Sample 1	40.0	47.4	12.6
Sample 2	41.3	45.7	13.1
Sample 3	42.7	45.5	11.8
Atomic / %	41.3	46.2	12.5
Error	0.9	0.8	0.4

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**Figure S1.** Nominal, simulated and forecasted annual average price *per gram* of Pt, Ru and Sn along the years.



**Figure S2.** Stripping of CO in  $0.1 \text{ mol L}^{-1} \text{ HClO}_4$  on Pt/C (dashed curves) and on  $\text{Pt}_4\text{Ru}_5\text{Sn}_1/\text{C}$  (solid curves) catalysts. The performances of the catalysts are shown in terms of activity by catalyst-based cost (CbC) method in the period of 1993 (red curves), 2003 (blue curves) and 2011 (green curves). The prices were calculated as an annual average for each metal.