Structures of Oxo-bridged Nanoparticles of Palladium(II) and Platinum(II) Formed by Slow Hydrolysis of the Aqua Ions in Acidic Aqueous Solution

Natallia Torapava,^a Lars I. Elding,^b Hugo Mändar,^c Kaspar Roosalu,^c and Ingmar Persson^{a,*}

- ^a Department of Chemistry, Swedish University of Agricultural Sciences, P.O.Box 7015, SE-750 07 Uppsala, Sweden
- ^b Department of Chemistry, Chemical Center, Lund University, P.O. Box 124, SE-221 00 Lund, Sweden.
- ^c Institute of Physics, University of Tartu, 4 Tehä Str., EST-51010 Tartu, Estonia.

Supporting Material

Table S1. Number of Pd···Pd distances per Pd in particles growing in the direction of the a/b and c direction of the unit cell of solid palladium(II) oxide.

No. unit cells	No. of Pd atoms	No. Pd…Pd at 3.03 Å/Pd	No. Pd…Pd at 3.42 Å/Pd
1	6	1.0	2.7
2	10	2.4	3.2
3	14	2.7	3.4
4	18	2.9	3.6
5	22	3.0	3.6
6	26	3.1	3.7

Growth in a or b direction of the unit cell

Growth is	n c	direction	of the	unit cell
-----------	-----	-----------	--------	-----------

No. unit cells	No. of Pd atoms	No. Pd…Pd at 3.03 Å/Pd	No. Pd…Pd at 3.42 Å/Pd
1	6	1.0	2.7
2	10	1.0	3.2
3	14	1.0	4.0
4	18	1.0	4.4
5	22	1.0	4.7
6	26	1.0	4.9

Figure S1. UV-vis spectra of hydrolysed palladium(II) and platinum(II) tetra aqua solutions, aged for ca 15 years (conditions in Experimental).

