

*promoting access to White Rose research papers*



**Universities of Leeds, Sheffield and York**  
**<http://eprints.whiterose.ac.uk/>**

---

These tables and figures support an author produced version of a paper published in **Dental Materials**.

White Rose Research Online URL for this paper:  
<http://eprints.whiterose.ac.uk/11068>

---

**Published paper**

Johnson, A., Shiraishi, T., Al-Salehi, S.K. (2010) *Ion release from experimental Au-Pt-based metal-ceramic alloys*, Dental Materials, 26 (7), pp. 682-687  
<http://dx.doi.org/10.1016/j.dental.2010.03.012>

---

Table 1

Alloys	Au	Pt	In	Fe	Zn	Sn	Rh & Ta
AP10	90.1	9.9	0	0	0	0	0
AP10-In1.0	89.1	9.9	1.0	0	0	0	0
AP10-In1.7	88.4	9.9	1.7	0	0	0	0
AP10-Fe0.8	89.2	10.0	0	0.8	0	0	0
AP10-Fe1.9	88.3	9.8	0	1.9	0	0	0
AP10-Zn1.7	88.5	9.8	0	0	1.7	0	0
AP10-Sn0.9	89.2	9.9	0	0	0	0.9	0
(AP10-In2)- Fe1.0	87.3	9.7	2.0	1.0	0	0	0
(AP10-In2)- Fe1.7	86.6	9.7	2.0	1.7	0	0	0
(AP10-In2)- Zn2.1	86.3	9.6	2.0	0	2.1	0	0
(AP10-In2)- Sn1.0	87.3	9.8	1.9	0	0	1.0	0
BiOcclus 4	83.3	10.8	2.8	0	1.5	0	1.6

Table 2

Elements	Detection limits (ng L <sup>-1</sup> )
Pt, Zn, Sn, Rh, Ta	1
In	3
Fe	5
Au	6

Table 3

Element	Ion Release ( $\mu\text{g}/\text{cm}^2$ )		
	Deionised Water	Sprite Light <sup>®</sup> 5 min	Sprite Light <sup>®</sup> 2 hrs
Au	0.019 (a)	0.017 (b)	0.136 (c)
Pt	0.108 (d)	0.038 (e)	0.116 (f)
In	0.291 (g)	0.341 (h)	0.467 (i)
Fe	43.6 (j)	117.5 (k)	128.7 (l)
Zn	0.733 (m)	2.46 (n)	4 (o)
Sn	0.017 (p)	0.14 (q)	0.088 (r)
Rh	0.005 (s)	0.004 (t)	0.008 (u)
Ta	0.02 (v)	0.02 (w)	0.028 (x)

Figure 1

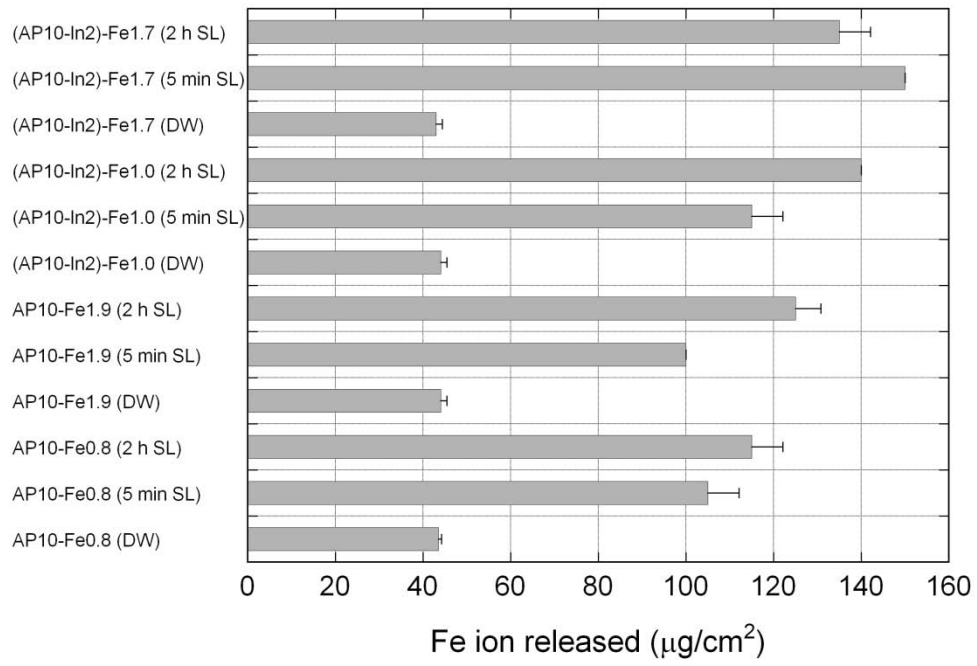


Figure 2

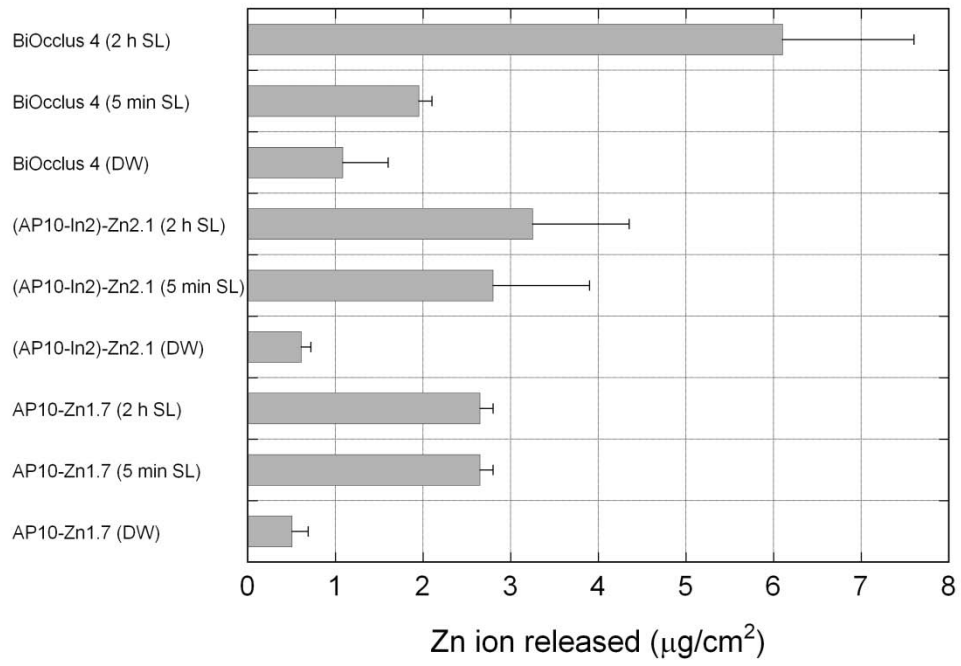


Figure 3

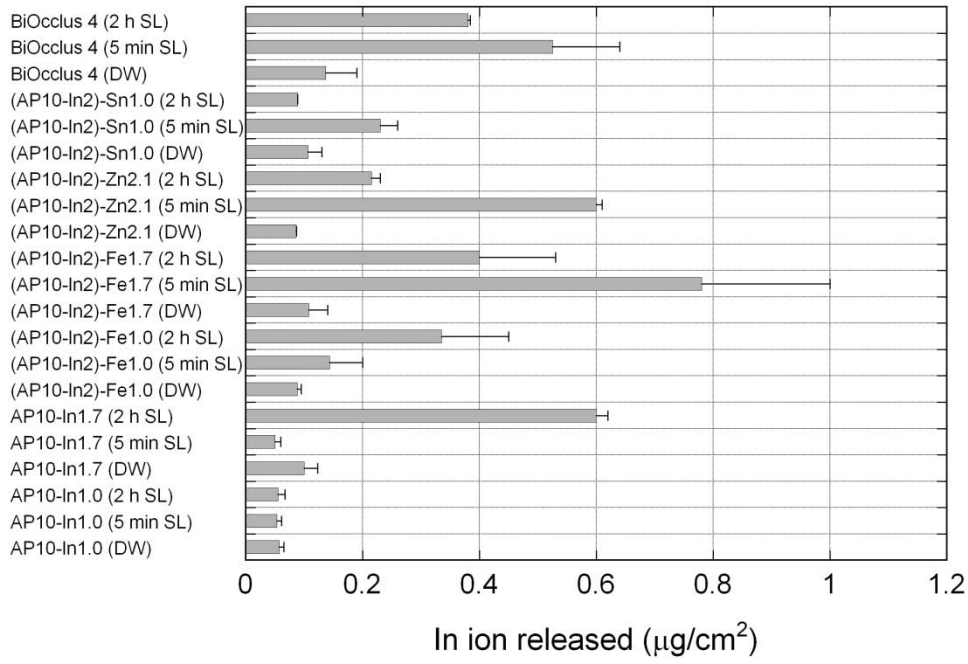


Figure 4

