

Development of Titania Coatings Containing Calcium, Phosphorus, and Silver, Applied via the Sol-Gel Method and Dip-Coating Technique

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1. EDS analyses of fired coatings – selected major elements

Table I.a Results of EDS analyses – Grinding

Coating	Place of analysis	Ti	Elements [hm. %]		
			Ca	P	Ag
TCP	Entire coating	55.05	7.32	0.33	-
	Intercrater area	59.86	7.18	0.30	-
	“crater”	54.34	8.58	0.22	-
TCP05	Entire coating	58.96	7.48	0.36	1.47
	Intercrater area	61.55	7.10	0.51	1.06
	“crater”	49.07	12.77	-	0.64
	Area of silver	11.75	4.00	0.24	67.27
TCP07	Entire coating	58.74	7.24	0.45	2.12
	Intercrater area	64.80	5.17	0.36	0.94
	“crater”	50.76	12.21	0.27	1.63
	Area of silver	31.50	12.59	0.63	29.02

Table I.b Results of EDS analyses – Etching

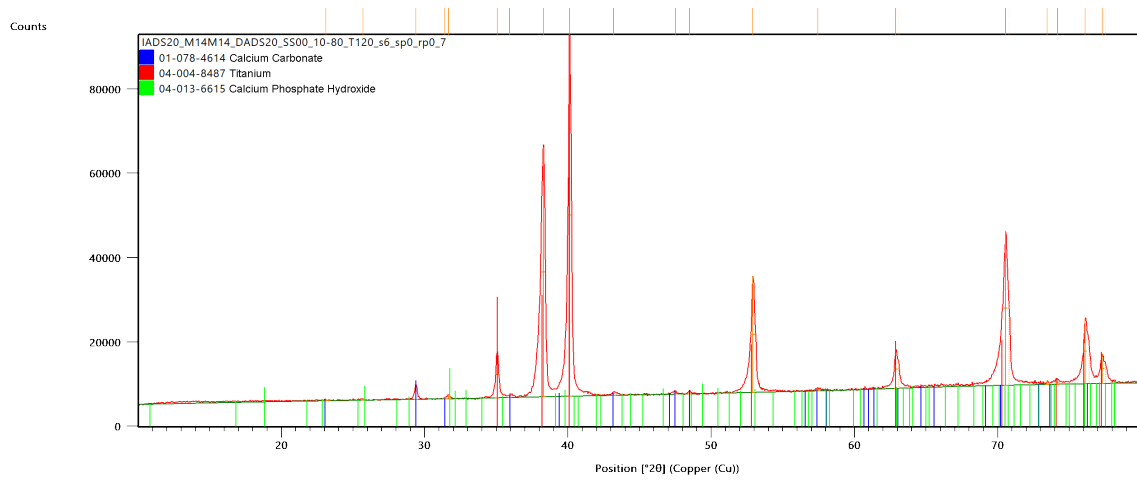
Coating	Place of analysis	Ti	Elements [hm. %]		
			Ca	P	Ag
TCP	Entire coating	39.13	4.88	0.14	-
	Intercrater area	47.51	1.52	0.11	-
	“crater”	45.83	2.18	-	-
TCP05	Entire coating	35.09	7.98	0.17	0.72
	Intercrater area	46.36	1.80	-	0.44
	“crater”	34.52	8.85	0.08	0.86
	Area of silver	4.90	1.68	-	60.74
TCP07	Entire coating	39.99	5.58	0.24	1.27
	Intercrater area	47.49	1.22	-	0.43
	“crater”	38.88	12.89	-	0.79
	Area of silver	36.56	0.64	-	12.81

Table I.c Results of EDS analyses – Blasting

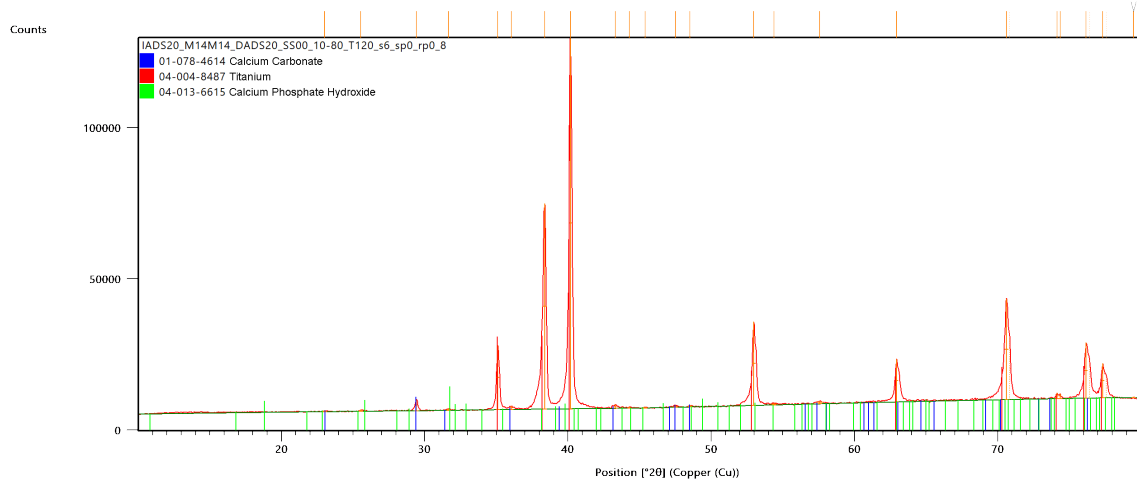
Coating	Place of analysis	Ti	Ca	Elements [hm. %]		
				P	Ag	Al
TCP	Entire coating	50.93	7.85	0.31	-	4.85
	Intercrater area	52.35	7.56	0.54	-	1.45
	“crater”	26.99	21.30	0.46	-	1.51
TCP05	Entire coating	50.86	8.36	0.24	0.96	2.66
	Intercrater area	48.63	9.39	0.23	0.94	0.89
	“crater”	10.01	29.44	0.57	-	0.63
	Area of silver	17.67	1.54	-	58.75	1.20
TCP07	Entire coating	59.42	5.24	0.21	0.81	2.64
	Intercrater area	30.71	14.26	0.59	1.46	17.48
	“crater”	49.96	22.00	0.25	1.70	0.33
	Area of silver	38.94	13.47	0.40	13.95	0.43

2. Diffractograms obtained from measurements of samples after *in vitro* bioactivity tests (XRD)

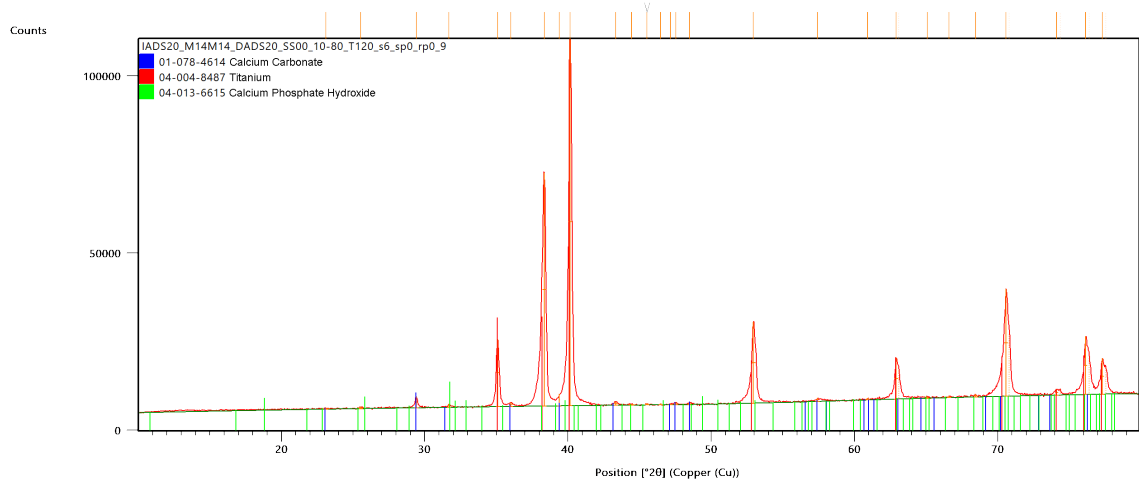
Supplement I.a XRD diffractogram – Blasting TCP (static *in vitro* test)



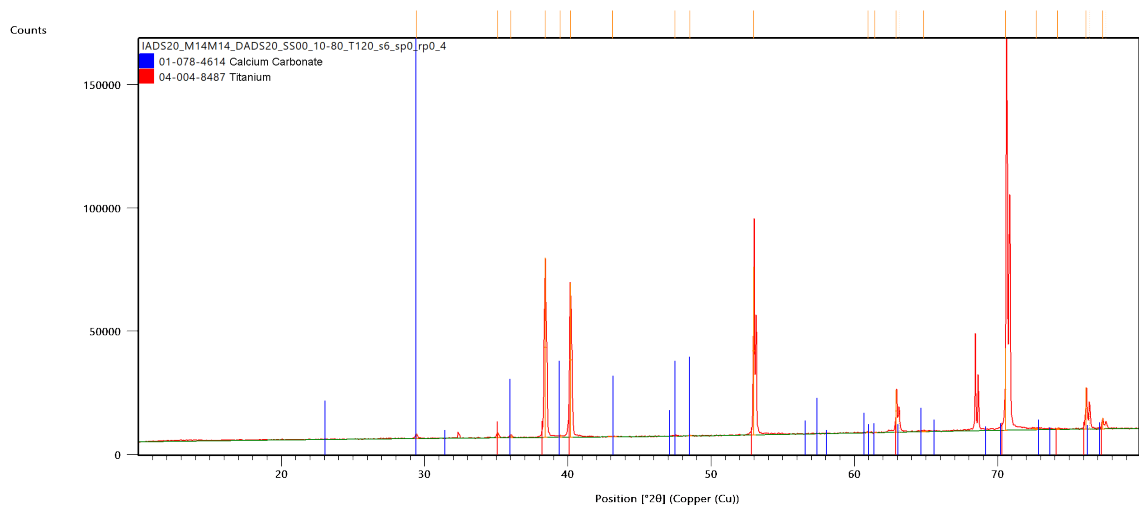
Supplement I.b XRD diffractogram – Blasting TACP05 (static *in vitro* test)



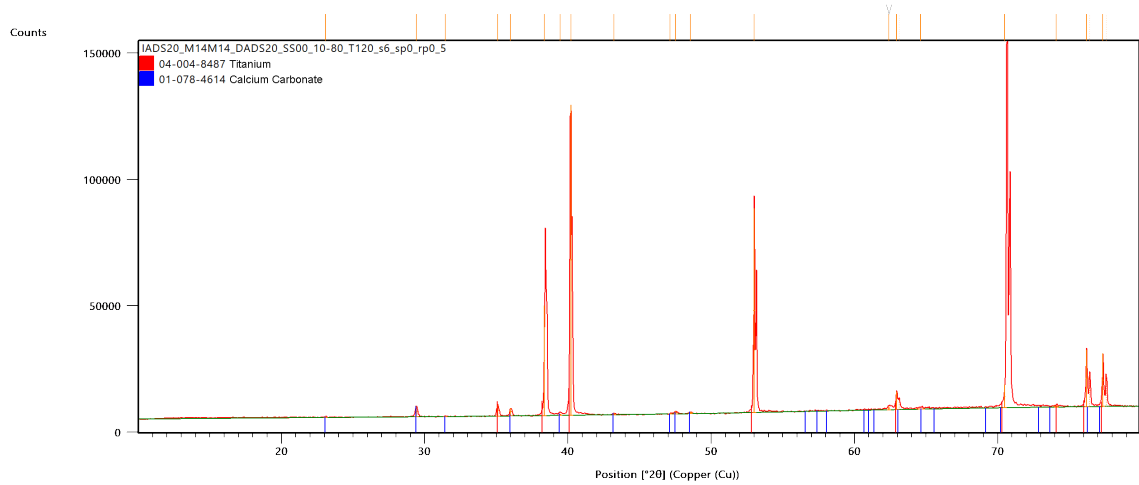
Supplement I.c XRD diffractogram – Blasting TACP07 (static *in vitro* test)



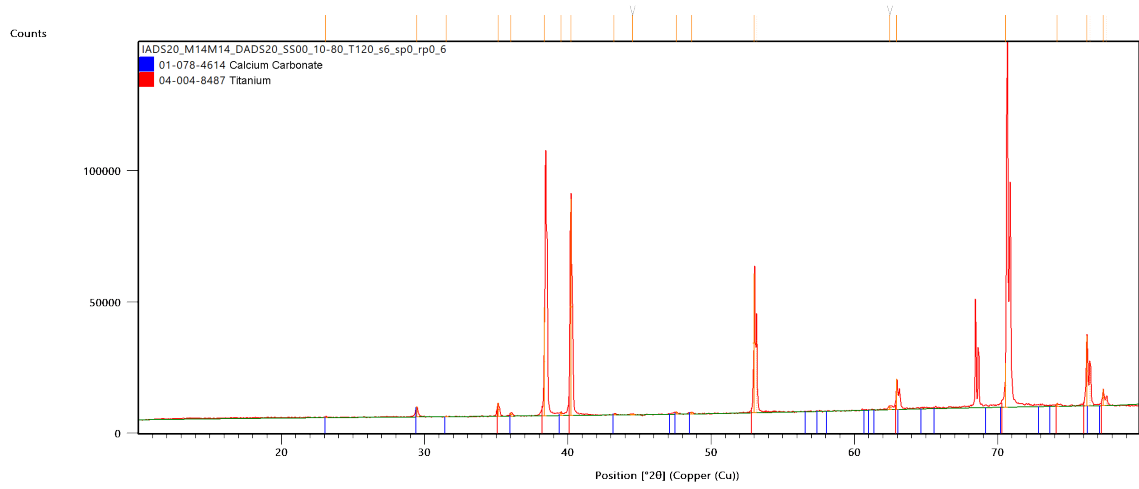
Supplement I.d XRD diffractogram – Etching TCP (static-dynamic *in vitro* test)



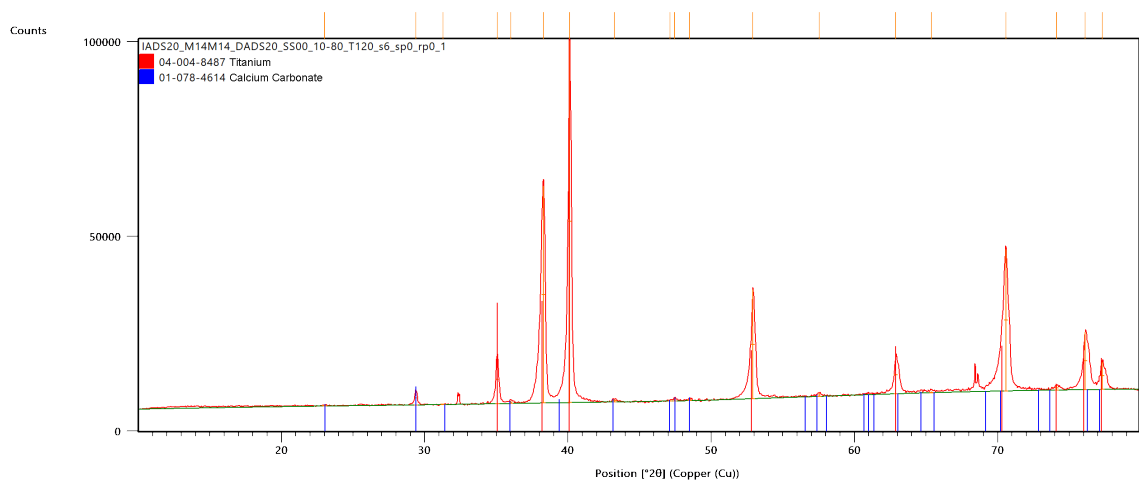
Supplement I.e XRD diffractogram – Etching TACP05 (static-dynamic *in vitro* test)



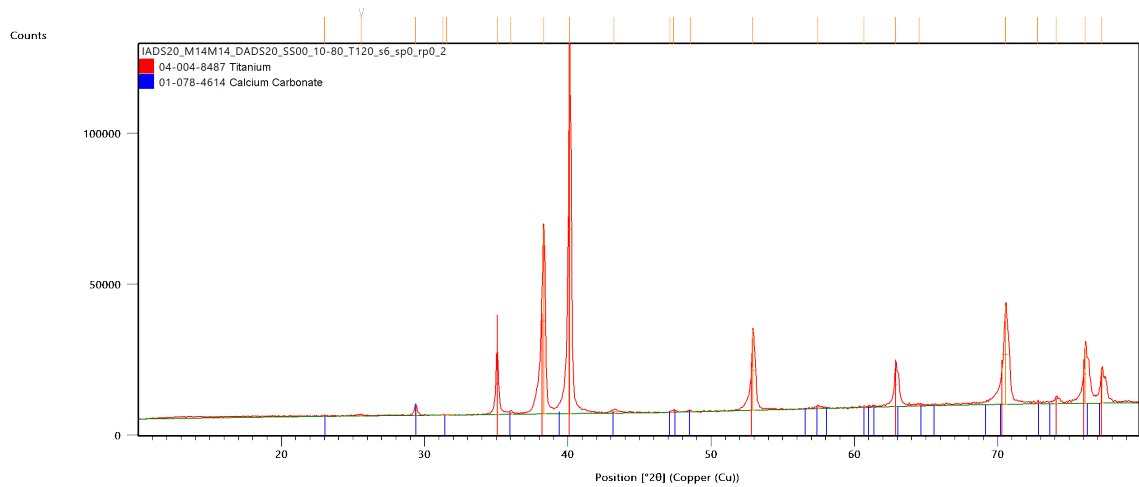
Supplement I.f XRD diffractogram – Etching TACP07 (static-dynamic *in vitro* test)



Supplement I.g XRD diffractogram – Blasting TCP (static-dynamic *in vitro* test)



Supplement I.h XRD diffractogram – Blasting TACP05 (static-dynamic *in vitro* test)



Supplement I.i XRD diffractogram – Blasting TACP07 (static-dynamic *in vitro* test)

