

Article

Incorporation of Hybrid Nanomaterial in Dental Porcelains: Antimicrobial, Chemical, and Mechanical Properties

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Table 1. Chemical elements detected in commercial dental porcelains incorporated with β -AgVO₃ using energy-dispersive X-ray spectroscopy (EDS) (wt.%).

Chemical Element	IPS Inline			Ex-3 Noritake		
	control	2.5%	5%	control	2.5%	5%
C	0.00	0.00	0.00	0.00	0.00	0.00
O	45.46	44.47	44.02	44.88	42.79	43.88
Al	8.51	8.71	8.08	8.14	7.95	7.87
Si	29.20	29.48	28.33	29.16	31.87	29.07
P	0.00	0.00	0.00	0.00	0.02	0.00
S	0.00	0.00	0.00	0.00	0.02	0.00
Cl	0.02	0.00	0.00	0.03	0.00	0.08
K	8.93	8.73	8.65	7.40	6.53	6.98
Ca	0.86	0.83	0.81	0.56	0.69	0.57
Fe	0.05	0.08	0.05	0.04	0.02	0.04
Zn	6.73	7.02	6.90	9.73	9.01	9.07
Ag	0.25	0.40	2.40	0.05	0.53	1.78
V	0.00	0.27	0.75	0.00	0.58	0.64