

Author, year	material	surface treatment		coupling agent adhesive system	luting cement	Test (MPa)	mean	n	SD	L_mean	L_n	I_SD	pooled_SD	p-value_diff_SDs	mean_diff	p-value_mean_diff	Bias_corrected_Hedges				(From Hedges and Olkin p80)					
		aging															eS	SD_eS	lower_esCI	upper_esCI	eS_lowmean	n-2 bias correction factor approx				
Abdou et al (2021) [7]	Katana Avenida	PA 37%	1 week water	Kerr Silane Primer	Nexus 3	µTBS	26.10	5	4.60	26.10	5	4.60	4.60	0.50	0.00	1.00	-6.71	6.71	0.00	0.00	0.63	-1.24	1.24	0.00	2 0.5642 0.571428571	
Abdou et al (2021) [7]	Katana Avenida	PA 37%	1 week water	Kerr Silane Primer	Nexus 3	µTBS	27.70	5	3.80	26.10	5	4.60	4.22	0.36	1.60	0.57	-4.55	7.75	0.38	0.34	0.64	-0.91	1.59	0.35	3 0.7236 0.7272727	
Abdou et al (2021) [7]	Katana Avenida	PA 37%	1 hour water	Kerr Silane Primer	Nexus 3	µTBS	27.20	5	4.10	26.10	5	4.60	4.36	0.41	1.10	0.70	-5.25	7.45	0.25	0.23	0.63	-1.02	1.47	0.24	4 0.7979 0.8	
Abdou et al (2021) [7]	Katana Avenida	PA 37%	1 hour water	Kerr Silane Primer	Nexus 3	µTBS	29.30	5	2.20	26.10	5	4.60	3.61	0.09	3.20	0.20	-2.06	8.46	0.89	0.80	0.66	-0.49	2.09	0.70	5 0.8408 0.842105263	
Abdou et al (2021) [7]	Katana Avenida	Al2O3 50 µm	1 hour water	Clearfil Univ. Bond Quick	Panavia V5	µTBS	48.30	5	4.40	29.30	5	2.40	3.54	0.13	19.00	0.00	13.83	24.17	5.36	4.84	1.25	2.38	7.30	7.92	% confidence interval: 95 7 0.8882 0.888888889	
Abdou et al (2021) [7]	Katana Avenida	Al2O3 50 µm	1 hour water	Clearfil Univ. Bond Quick	Panavia V5	µTBS	39.40	5	2.80	29.30	5	2.40	2.61	0.39	10.10	0.00	6.30	13.90	3.87	3.50	1.01	1.53	5.47	4.21	Z-value: 1.95996 9 0.9139 0.914285714	
Abdou et al (2021) [7]	Katana Avenida	Al2O3 50 µm	1 week water	Clearfil Univ. Bond Quick	Panavia V5	µTBS	37.20	5	1.70	29.30	5	2.40	2.08	0.26	7.90	0.00	4.87	10.93	3.80	3.43	0.99	1.48	5.38	3.29	p: 0.05 8 0.9027 0.903225806	
Abdou et al (2021) [7]	Katana Avenida	Al2O3 50 µm	1 hour water	SB-UA	Rely X Ultimate	µTBS	36.40	5	2.40	27.70	5	3.80	3.18	0.20	8.70	0.00	4.06	13.34	2.74	2.47	0.84	0.83	4.12	2.29	Z-value: 1.95996 9 0.9139 0.914285714	
Abdou et al (2021) [7]	Katana Avenida	Al2O3 50 µm	1 week water	SB-UA	Rely X Ultimate	µTBS	31.30	5	2.50	27.70	5	3.80	3.22	0.22	3.60	0.11	-1.09	8.29	1.12	1.01	0.67	-0.31	2.33	0.95	10 0.9228 0.923076923	
Abdou et al (2021) [7]	Katana Avenida	Al2O3 50 µm	1 hour water	SB-UA	Rely X Ultimate	µTBS	44.00	5	3.40	27.70	5	3.80	3.61	0.42	16.30	0.00	11.04	21.56	4.52	4.08	1.11	1.90	6.26	4.29	11 0.93 0.930232568	
Bayazit et al (2019) [8]	Lava Ultimate	HA 9.5% % + UA	24 hours 37°C water	SB-UA	Rely X U200	µTBS	38.70	15	6.40	17.60	15	4.60	5.57	0.11	21.10	0.00	16.93	25.27	3.79	3.68	0.60	2.51	4.86	4.59	12 0.94 0.936170213	
Bazile et al (2019) [8]	Lava Ultimate	Al2O3 50µm	UA	24 hours 37°C water	SB-UA	Rely X U200	µTBS	31.70	15	4.50	17.60	15	4.60	4.55	0.47	14.10	0.00	10.70	17.50	3.10	3.01	0.53	1.97	4.06	3.07	13 0.941 0.941176471
Bayazit et al (2019) [8]	Lava Ultimate	NO Al2O3	24 hours 37°C water	NO	Rely X U200	µTBS	19.10	15	4.90	17.60	15	4.60	4.75	0.41	1.50	0.39	-2.05	5.05	0.32	0.31	0.37	-0.41	1.03	0.33	14 0.9453 0.945454545	
Bayazit et al (2019) [8]	Vita Enamic	50µm + UA	24 hours 37°C water	SB-UA	Rely X U200	µTBS	30.80	15	5.40	17.60	15	4.60	5.02	0.28	13.20	0.00	9.45	16.95	2.63	2.56	0.49	1.59	3.53	2.87	15 0.949 0.949152542	
Bayazit et al (2019) [8]	Vita Enamic	HA 9.5% % + UA	24 hours 37°C water	SB-UA	Rely X U200	µTBS	23.70	15	4.30	17.60	15	4.60	4.45	0.40	6.10	0.00	2.77	9.43	1.37	1.33	0.40	0.54	2.12	1.33	16 0.9523 0.952380952	
Bayazit et al (2019) [8]	Vita Enamic	Al2O3 50 µm + UA	24 hours 37°C water	SB-UA	Set PP	µTBS	25.30	15	5.00	18.90	15	5.90	5.47	0.27	6.40	0.00	2.31	10.49	1.17	1.14	0.39	0.37	1.91	1.08	17 0.9551 0.955223881	
Bayazit et al (2019) [8]	Vita Enamic	Al2O3 50 µm + UA	24 hours 37°C water	SB-UA	Set PP	µTBS	22.10	15	4.60	18.90	15	5.90	5.29	0.18	3.20	0.11	-0.76	7.16	0.60	0.59	0.37	-0.14	1.32	0.54	18 0.9577 0.957746479	
Bayazit et al (2019) [8]	Vita Enamic	HA 9.5% % + UA	24 hours 37°C water	SB-UA	Set PP	µTBS	28.30	15	4.20	18.90	15	5.90	5.12	0.11	9.40	0.00	5.57	13.23	1.84	1.79	0.43	0.94	2.63	1.59	19 0.9599 0.96	
Bayazit et al (2019) [8]	Vita Enamic	Al2O3 50 µm + UA	24 hours 37°C water	SB-UA	Set PP	µTBS	18.90	15	5.90	18.90	15	5.90	5.90	0.50	0.00	1.00	-4.41	4.41	0.00	0.00	0.37	-0.72	0.72	0.00	20 0.9619 0.962025316	
Bayazit et al (2019) [8]	Vita Enamic	HA 9.5% % + UA	24 hours 37°C water	SB-UA	Set PP	µTBS	20.90	15	3.80	18.90	15	5.90	4.96	0.06	2.00	0.28	-1.71	5.71	0.40	0.39	0.37	-0.33	1.11	0.34	21 0.9638 0.963855422	
Bayazit et al (2019) [8]	Vita Enamic	NO	24 hours 37°C water	SB-UA	Set PP	µTBS	19.80	15	2.80	18.90	15	5.90	4.62	0.00	0.90	0.60	-2.55	4.35	0.19	0.19	0.37	-0.53	0.91	0.15	22 0.9655 0.965517241	
Ceci et al (2016) [9]	Lava Ultimate	Al2O3 50 µm	24 hours water	SB-UA	Rely X Ultimate	µSBS	17.88	5	1.44	9.98	5	1.94	1.71	0.29	7.90	0.00	5.41	10.39	4.62	4.17	1.13	1.96	6.38	4.07	23 0.967 0.967032967	
Ceci et al (2016) [9]	Lava Ultimate	Al2O3 50 µm + 35% PA	24 hours water	SB-UA	Rely X Ultimate	µSBS	11.98	5	2.91	9.98	5	1.94	2.47	0.23	2.00	0.24	-1.61	5.61	0.81	0.73	0.65	-0.55	2.01	1.03	24 0.9684 0.968421053	
Ceci et al (2016) [9]	Lava Ultimate	Al2O3 50 µm	24 hours water	SB-UA	Rely X Ultimate	µSBS	16.58	5	3.87	9.98	5	1.94	3.06	0.10	6.60	0.01	2.14	11.06	2.16	1.95	0.77	0.44	3.45	3.40	25 0.9699 0.96969697	
Elsaka et al (2014) [35]	Lava Ultimate	HF 9%	24 hours water	NO	Bifix SE	µTBS	18.35	3	2.84	11.99	3	2.52	2.68	0.44	6.36	0.04	0.27	12.45	2.37	1.89	0.98	-0.03	3.81	2.52	26 0.9708 0.970873786	
Elsaka et al (2014) [35]	Lava Ultimate	Al2O3 50 µm	30 days water	NO	Bifix SE	µTBS	13.49	3	3.40	11.99	3	2.52	2.99	0.35	1.50	0.57	-5.28	8.28	0.50	0.40	0.82	-1.22	2.02	0.60	27 0.9719 0.97196217	
Elsaka et al (2014) [35]	Lava Ultimate	Al2O3 50 µm	24 hours water	NO	Bifix SE	µTBS	16.93	3	3.66	11.99	3	2.52	3.14	0.32	4.94	0.13	-2.18	12.06	1.57	1.25	0.89	-0.50	3.01	1.96	28 0.9729 0.97297273	
Elsaka et al (2014) [35]	Lava Ultimate	HF 9% + SILANE	24 hours water	Ultradent Silane	Bifix SE	µTBS	19.21	3	3.87	11.99	3	2.52	3.27	0.30	7.22	0.05	-0.18	14.62	2.21	1.76	0.96	-0.12	3.65	2.87	29 0.9739 0.973913043	
Elsaka et al (2014) [35]	Lava Ultimate	HF 9%	30 days water	NO	Bifix SE	µTBS	13.45	3	3.34	11.99	3	2.52	2.96	0.36	1.46	0.58	-5.25	8.17	0.49	0.39	0.82	-1.22	2.01	0.58	30 0.9748 0.974789916	
Elsaka et al (2014) [35]	Lava Ultimate	HF 9% + SILANE	30 days water	Ultradent Silane	Bifix SE	µTBS	14.35	3	2.56	11.99	3	2.52	2.54	0.49	2.36	0.32	-3.40	8.12	0.93	0.74	0.84	-0.91	2.40	0.94	31 0.9756 0.975609756	
Elsaka et al (2014) [35]	Lava Ultimate	Al2O3 50 µm + Silane	30 days water	NO	Bifix SE	µTBS	13.88	3	3.47	11.99	3	2.52	3.03	0.35	1.89	0.49	-4.98	8.76	0.62	0.50	0.83	-1.13	2.12	0.75	32 0.9764 0.976377953	
Elsaka et al (2014) [35]	Lava Ultimate	No treatment	30 days water	NO	Bifix SE	µTBS	8.28	3	1.99	11.99	3	2.52	2.27	0.38	3.71	0.12	-1.44	8.86	1.63	1.30	0.90	-0.46	3.07	1.47	33 0.9771 0.97709237	
Elsaka et al (2014) [35]	Vita Enamic	No treatment	24 hours water	NO	Bifix SE	µTBS	18.67	3	3.10	11.99	3	2.52	2.82	0.40	6.68	0.04	0.28	13.08	2.36	1.89	0.98	-0.04	3.81	2.65	34 0.9778 0.97777778	
Elsaka et al (2014) [35]	Vita Enamic	HF 9% + SILANE	24 hours water	Ultradent Silane	Bifix SE	µTBS	27.47	3	4.28	11.99	3	2.52	3.51	0.26	15.48	0.01	7.52	23.44	4.41	3.52	1.30	0.96	6.07	6.14	35 0.979 0.979020979	

Elsaka et al (2014) [35]	Vita Enamic	HF 9% Al2O3 50 µm + Silane	24 hours water	NO	Bifix SE	µTBS	23.86	3	3.19	11.99	3	2.52	2.87	0.38	11.87	0.01	5.35	18.39	4.13	3.29	1.25	0.84	5.75	4.71		37	0.9796	0.979591837	
Elsaka et al (2014) [35]	Vita Enamic	No treatment	30 days water	Ultradent Silane	Bifix SE	µTBS	19.48	3	3.18	11.99	3	2.52	2.87	0.39	7.49	0.03	0.99	13.99	2.61	2.08	1.01	0.10	4.07	2.97		38	0.9801	0.98013245	
Elsaka et al (2014) [35]	Vita Enamic	HF 9% Al2O3 50 µm + Silane	30 days water	NO	Bifix SE	µTBS	12.67	3	2.13	11.99	3	2.52	2.33	0.42	0.68	0.74	-4.61	5.97	0.29	0.23	0.82	-1.37	1.84	0.27		39	0.9806	0.980645161	
Elsaka et al (2014) [35]	Vita Enamic	HF 9% Al2O3 50 µm + Silane	24 hours water	Ultradent Silane	Bifix SE	µTBS	24.95	3	3.79	11.99	3	2.52	3.22	0.31	12.96	0.01	5.66	20.26	4.03	3.21	1.24	0.79	5.64	5.14		40	0.9811	0.981132075	
Elsaka et al (2014) [35]	Vita Enamic	HF 9% Al2O3 50 µm	30 days water	NO	Bifix SE	µTBS	18.86	3	3.31	11.99	3	2.52	2.94	0.37	6.87	0.05	0.20	13.54	2.34	1.86	0.98	-0.05	3.78	2.73		41	0.9816	0.981595092	
Elsaka et al (2014) [35]	Vita Enamic	Al2O3 50 µm	24 hours water	NO	Bifix SE	µTBS	21.87	3	3.75	11.99	3	2.52	3.19	0.31	9.88	0.02	2.64	17.12	3.09	2.47	1.08	0.34	4.59	3.92		42	0.982	0.982035928	
Elsaka et al (2014) [35]	Vita Enamic	Al2O3 50 µm	30 days water	NO	Bifix SE	µTBS	16.71	3	3.42	11.99	3	2.52	3.00	0.35	4.72	0.13	-2.09	11.53	1.57	1.25	0.89	-0.50	3.00	1.87		43	0.9824	0.98245614	
Elsaka et al (2014) [35]	Vita Enamic	HF 9% + SILANE	30 days water	Ultradent Silane	Bifix SE	µTBS	22.21	3	3.04	11.99	3	2.52	2.79	0.41	10.22	0.01	3.89	16.55	3.66	2.92	1.17	0.62	5.22	4.06		44	0.9828	0.982857143	
Higashi et al (2016) [1]	Katana Avencia	Al2O3 50 µm	No water	NO	Panavia SA	µTBS	66.02	3	10.67	25.03	3	12.34	11.54	0.43	40.99	0.01	14.84	67.14	3.55	2.84	1.16	0.57	5.10	3.32		45	0.9832	0.983240223	
Higashi et al (2016) [1]	Katana Avencia	No treatment	3 months water	NO	Panavia SA	µTBS	26.05	3	7.66	25.03	3	12.34	10.27	0.28	1.02	0.91	-22.26	24.30	0.10	0.08	0.82	-1.52	1.68	0.08		46	0.9836	0.983606557	
Higashi et al (2016) [1]	Katana Avencia	Al2O3 50 µm	3 months water	NO	Panavia SA	µTBS	65.75	3	15.37	25.03	3	12.34	13.94	0.39	40.72	0.02	9.12	72.32	2.92	2.33	1.06	0.26	4.40	3.30		47	0.9839	0.983957219	
Higashi et al (2016) [1]	Katana Avencia	Al2O3 50 µm + Silane	No water	Clearfil Cer. Primer Plus	Panavia SA	µTBS	59.31	3	13.44	25.03	3	12.34	12.90	0.46	34.28	0.03	5.03	63.53	2.66	2.12	1.02	0.12	4.12	2.78		48	0.9843	0.984293194	
Higashi et al (2016) [1]	Katana Avencia	No treatment	No water	NO	Panavia SA	µTBS	40.42	3	11.36	25.03	3	12.34	11.86	0.46	15.39	0.19	11.50	42.28	1.30	1.04	0.87	-0.67	2.74	1.25		49	0.9846	0.984615385	
Higashi et al (2016) [1]	Katana Avencia	Al2O3 50 µm + Silane	3 months water	Clearfil Cer. Primer Plus	Panavia SA	µTBS	60.04	3	15.93	25.03	3	12.34	14.25	0.38	35.01	0.04	2.71	67.31	2.46	1.96	0.99	0.01	3.91	2.84		50	0.9849	0.984924623	
Higashi et al (2016) [1]	Katana Avencia	SILANE	No water	Clearfil Cer. Primer Plus	Panavia SA	µTBS	70.95	3	11.90	25.03	3	12.34	12.12	0.48	45.92	0.01	18.44	73.40	3.79	3.02	1.19	0.68	5.36	3.72		52	0.9855	0.985507246	
Higashi et al (2016) [1]	Katana Avencia	SILANE	3 months water	Clearfil Cer. Primer Plus	Panavia SA	µTBS	55.71	3	9.91	25.03	3	12.34	11.19	0.39	30.68	0.03	5.31	56.05	2.74	2.19	1.03	0.16	4.21	2.49		54	0.986	0.986046512	
Higashi et al (2016) [1]	Katana Avencia	No treatment	1 month water	NO	Panavia SA	µTBS	33.02	3	16.45	25.03	3	12.34	14.54	0.36	7.99	0.54	24.97	40.95	0.55	0.44	0.83	-1.18	2.06	0.65		56	0.9865	0.986547085	
Higashi et al (2016) [1]	Katana Avencia	SILANE	6 months water	Clearfil Cer. Primer Plus	Panavia SA	µTBS	54.24	3	11.44	25.03	3	12.34	11.90	0.46	29.21	0.04	2.24	56.18	2.45	1.96	0.99	0.01	3.91	2.37		58	0.987	0.987012987	
Higashi et al (2016) [1]	Katana Avencia	Al2O3 50 µm + Silane	1 month water	Clearfil Cer. Primer Plus	Panavia SA	µTBS	55.59	3	14.23	25.03	3	12.34	13.32	0.43	30.56	0.05	0.37	60.75	2.29	1.83	0.97	-0.08	3.74	2.48		60	0.9874	0.987447699	
Higashi et al (2016) [1]	Katana Avencia	Al2O3 50 µm	6 months water	NO	Panavia SA	µTBS	59.44	3	20.40	25.03	3	12.34	16.86	0.27	34.41	0.07	-3.81	72.63	2.04	1.63	0.94	-0.22	3.48	2.79		62	0.9879	0.987854251	
Higashi et al (2016) [1]	Katana Avencia	SILANE	1 month water	Clearfil Cer. Primer Plus	Panavia SA	µTBS	64.29	3	15.87	25.03	3	12.34	14.22	0.38	39.26	0.03	7.04	71.48	2.76	2.20	1.04	0.18	4.23	3.18		64	0.9882	0.988235294	
Higashi et al (2016) [1]	Katana Avencia	Al2O3 50 µm	1 month water	NO	Panavia SA	µTBS	68.46	3	19.06	25.03	3	12.34	16.06	0.30	43.43	0.03	7.03	79.83	2.70	2.16	1.03	0.15	4.17	3.52		66	0.9886	0.988593156	
Higashi et al (2016) [1]	Katana Avencia	Al2O3 50 µm + Silane	6 months water	Clearfil Cer. Primer Plus	Panavia SA	µTBS	56.44	3	17.88	25.03	3	12.34	15.36	0.32	31.41	0.07	-3.41	66.23	2.04	1.63	0.94	-0.22	3.48	2.55		68	0.9889	0.988929889	
Higashi et al (2016) [1]	Katana Avencia	Al2O3 50 µm	6 months water	NO	Panavia v5	µTBS	82.41	3	27.64	24.02	3	9.59	20.69	0.11	58.39	0.03	11.49	105.29	2.82	2.25	1.04	0.21	4.30	6.09		70	0.9892	0.989247312	
Higashi et al (2016) [1]	Katana Avencia	No treatment	3 months water	NO	Panavia v5	µTBS	23.15	3	12.39	24.02	3	9.59	11.08	0.37	0.87	0.93	-24.25	25.99	0.08	0.06	0.82	-1.54	1.66	0.09		72	0.9895	0.989547038	
Higashi et al (2016) [1]	Katana Avencia	Al2O3 50 µm	1 month water	NO	Panavia v5	µTBS	63.51	3	13.37	24.02	3	9.59	11.63	0.34	39.49	0.01	13.11	65.87	3.39	2.71	1.13	0.49	4.92	4.12		74	0.9898	0.989830508	
Higashi et al (2016) [1]	Katana Avencia	Al2O3 50 µm + Silane	1 month water	Clearfil Cer. Primer Plus	Panavia v5	µTBS	84.24	3	11.43	24.02	3	9.59	10.55	0.41	60.22	0.00	36.30	84.14	5.71	4.55	1.55	1.52	7.59	6.28		76	0.9901	0.99009901	
Higashi et al (2016) [1]	Katana Avencia	No water	NO	Panavia v5	µTBS	78.40	3	12.65	24.02	3	9.59	11.22	0.36	54.38	0.00	28.93	79.83	4.84	3.87	1.38	1.16	6.58	5.67						
Higashi et al (2016) [1]	Katana Avencia	SILANE	3 months water	Clearfil Cer. Primer Plus	Panavia v5	µTBS	80.73	3	18.22	24.02	3	9.59	14.56	0.22	56.71	0.01	23.71	89.71	3.90	3.11	1.21	0.73	5.49	5.91					
Higashi et al (2016) [1]	Katana Avencia	SILANE	6 months water	Clearfil Cer. Primer Plus	Panavia v5	µTBS	59.60	3	13.10	24.02	3	9.59	11.48	0.35	35.58	0.02	9.56	61.60	3.10	2.47	1.08	0.35	4.60	3.71					
Higashi et al (2016) [1]	Katana Avencia	No water	Clearfil Cer. Primer Plus	Panavia v5	µTBS	86.98	3	6.40	24.02	3	9.59	8.15	0.31	62.96	0.00	44.48	81.44	7.72	6.16	1.96	2.33	10.00	6.57						
Higashi et al (2016) [1]	Katana Avencia	SILANE	3 months water	Clearfil Cer. Primer Plus	Panavia v5	µTBS	66.73	3	13.65	24.02	3	9.59	11.80	0.33	42.71	0.01	15.97	69.45	3.62	2.89	1.17	0.60	5.18	4.45					
Higashi et al (2016) [1]	Katana Avencia	Al2O3 50 µm + Silane	6 months water	Clearfil Cer. Primer Plus	Panavia v5	µTBS	79.42	3	11.42	24.02	3	9.59	10.54	0.41	55.40	0.00	31.50	79.30	5.25	4.19	1.46	1.33	7.05	5.78					
Higashi et al (2016) [1]	Katana Avencia	SILANE	No water	Clearfil Cer. Primer Plus	Panavia v5	µTBS	82.51	3	12.36	24.02	3	9.59	11.06	0.38	58.49	0.00	33.41	83.57	5.29	4.22	1.47	1.35	7.09	6.10					
Higashi et al (2016) [1]	Katana Avencia	SILANE	1 month water	Clearfil Cer. Primer Plus	Panavia v5	µTBS	78.59	3	13.57	24.02	3	9.59	11.75	0.33	54.57	0.00	27.93	81.21	4.64	3.71	1.35	1.07	6.34	5.69					
Higashi et al (2016) [1]	Katana Avencia	No treatment	No water	NO	Panavia v5	µTBS	37.19	3	13.33	24.02	3	9.59	11.61	0.34	13.17	0.24	-13.15	39.49	1.13	0.90	0.86	-0.78	2.59	1.37					
Higashi et al (2016) [1]	Katana Avencia	No treatment	6 months water	NO	Panavia v5	µTBS	25.10	3	13.57	24.02	3	9.59	11.75	0.33	1.08	0.92	-25.56	27.72	0.09	0.07	0.82	-1.53	1.67	0.11					
Higashi et al (2016) [1]	Katana Avencia	Al2O3 50 µm	3 months water	NO	Panavia v5	µTBS	76.18	3	15.53	24.02	3	9.59	12.91	0.28	52.16	0.01	22.90	81.42	4.04	3.22	1.24	0.80	5.65	5.44					
Kawaguchi et al (2016) [10]	Katana Avencia	PA 40%	6 months water	Clearfil Cer. Primer Plus	Panavia SA	µTBS	46.10	3	14.30	46.70	3	10.90	12.71	0.37	0.60	0.96	-	28.22	29.42	0.05	0.04	0.82	-1.56	1.64	0.06				

Kawaguchi et al (2016) [10]	Katana Avencia	Ultrass. cleaning + PA 40%	No water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	63.90	3	10.90	46.70	3	10.90	10.90	0.50	17.20	0.13	-7.51	41.91	1.58	1.26	0.89	-0.49	3.01	1.58	
Kawaguchi et al (2016) [10]	Katana Avencia	Ultrass. cleaning	1 month water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	55.30	3	9.40	46.70	3	10.90	10.18	0.43	8.60	0.36	-14.47	31.67	0.84	0.67	0.84	-0.97	2.32	0.79	
Kawaguchi et al (2016) [10]	Katana Avencia	PA 40%	1 month water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	62.40	3	8.20	46.70	3	10.90	9.64	0.36	15.70	0.12	-6.16	37.56	1.63	1.30	0.90	-0.46	3.06	1.44	
Kawaguchi et al (2016) [10]	Katana Avencia	PA 40% No cleaning treatment	No water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	62.60	3	9.90	46.70	3	10.90	10.41	0.45	15.90	0.13	-7.70	39.50	1.53	1.22	0.89	-0.52	2.96	1.46	
Kawaguchi et al (2016) [10]	Katana Avencia	No cleaning treatment	3 months water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	54.00	3	10.90	46.70	3	10.90	10.90	0.50	7.30	0.46	-17.41	32.01	0.67	0.53	0.83	-1.09	2.16	0.67	
Kawaguchi et al (2016) [10]	Katana Avencia	No cleaning treatment	6 months water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	48.80	3	10.00	46.70	3	10.90	10.46	0.46	2.10	0.82	21.61	25.81	0.20	0.16	0.82	-1.44	1.76	0.19	
Kawaguchi et al (2016) [10]	Katana Avencia	Ultrass. cleaning	3 months water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	55.80	3	11.30	46.70	3	10.90	11.10	0.48	9.10	0.37	-	34.27	0.82	0.65	0.84	-0.99	2.30	0.83	
Kawaguchi et al (2016) [10]	Katana Avencia	PA 40% Ultrass. cleaning +	3 months water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	49.50	3	16.50	46.70	3	10.90	13.98	0.30	2.80	0.82	28.90	34.50	0.20	0.16	0.82	-1.44	1.76	0.26	
Kawaguchi et al (2016) [10]	Katana Avencia	PA 40% No cleaning treatment	1 month water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	62.90	3	12.50	46.70	3	10.90	11.73	0.43	16.20	0.17	10.39	42.79	1.38	1.10	0.88	-0.62	2.82	1.49	
Kawaguchi et al (2016) [10]	Katana Avencia	No cleaning treatment	1 month water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	60.90	3	11.00	46.70	3	10.90	10.95	0.50	14.20	0.19	-	10.62	39.02	1.30	1.03	0.87	-0.67	2.74	1.30
Kawaguchi et al (2016) [10]	Katana Avencia	Ultrass. cleaning	No water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	62.60	3	9.90	46.70	3	10.90	10.41	0.45	15.90	0.13	-7.70	39.50	1.53	1.22	0.89	-0.52	2.96	1.46	
Kawaguchi et al (2016) [10]	Katana Avencia	Ultrass. cleaning + Ultrass. cleaning +	6 months water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	48.80	3	10.50	46.70	3	10.90	10.70	0.48	2.10	0.82	22.16	26.36	0.20	0.16	0.82	-1.45	1.76	0.19	
Kawaguchi et al (2016) [10]	Katana Avencia	PA 40% No cleaning treatment	6 months water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	46.70	3	13.10	46.70	3	10.90	12.05	0.41	0.00	1.00	-	27.32	0.00	0.00	0.82	-1.60	1.60	0.00	
Kawaguchi et al (2016) [10]	Katana Avencia	No water	Clearfil Cer. Primer Plus	Panavia SA	μ TBS	62.70	3	10.40	46.70	3	10.90	10.65	0.48	16.00	0.14	-8.15	40.15	1.50	1.20	0.89	-0.54	2.94	1.47		
Kawaguchi et al (2016) [10]	Katana Avencia	PA 40% No cleaning treatment	No water	Clearfil Cer. Primer Plus	Panavia v5	μ TBS	81.10	3	7.60	70.00	3	13.90	11.20	0.23	11.10	0.29	-	14.29	36.49	0.99	0.79	0.85	-0.87	2.45	0.80
Kawaguchi et al (2016) [10]	Katana Avencia	PA 40% Ultrass. cleaning +	6 months water	Clearfil Cer. Primer Plus	Panavia v5	μ TBS	65.90	3	14.60	70.00	3	13.90	14.25	0.48	4.10	0.74	28.21	36.41	0.29	0.23	0.82	-1.38	1.84	0.29	
Kawaguchi et al (2016) [10]	Katana Avencia	PA 40% Ultrass. cleaning + PA 40%	3 months water	Clearfil Cer. Primer Plus	Panavia v5	μ TBS	70.10	3	10.00	70.00	3	13.90	12.11	0.34	0.10	0.99	-	27.35	27.55	0.01	0.01	0.82	-1.59	1.61	0.01
Kawaguchi et al (2016) [10]	Katana Avencia	PA 40% Ultrass. cleaning	3 months water	Clearfil Cer. Primer Plus	Panavia v5	μ TBS	69.60	3	13.90	70.00	3	13.90	13.90	0.50	0.40	0.97	-	31.11	31.91	0.03	0.02	0.82	-1.58	1.62	0.03
Kawaguchi et al (2016) [10]	Katana Avencia	PA 40% Ultrass. cleaning	6 months water	Clearfil Cer. Primer Plus	Panavia v5	μ TBS	64.60	3	9.00	70.00	3	13.90	11.71	0.30	5.40	0.60	-	21.14	31.94	0.46	0.37	0.82	-1.25	1.98	0.39
Kawaguchi et al (2016) [10]	Katana Avencia	PA 40% Ultrass. cleaning + PA 40%	1 month water	Clearfil Cer. Primer Plus	Panavia v5	μ TBS	70.10	3	11.60	70.00	3	13.90	12.80	0.41	0.10	0.99	-	28.92	29.12	0.01	0.01	0.82	-1.59	1.61	0.01
Kawaguchi et al (2016) [10]	Katana Avencia	Ultrass. cleaning	3 months water	Clearfil Cer. Primer Plus	Panavia v5	μ TBS	72.70	3	10.40	70.00	3	13.90	12.28	0.36	2.70	0.80	-	25.13	30.53	0.22	0.18	0.82	-1.43	1.78	0.19
Kawaguchi et al (2016) [10]	Katana Avencia	UC + AC	No water	Clearfil Cer. Primer Plus	Panavia v5	μ TBS	82.90	3	11.70	70.00	3	13.90	12.85	0.41	12.90	0.29	-	16.22	42.02	1.00	0.80	0.85	-0.86	2.46	0.93
Kawaguchi et al (2016) [10]	Katana Avencia	Ultrass. cleaning	1 month water	Clearfil Cer. Primer Plus	Panavia v5	μ TBS	60.00	3	9.30	70.00	3	13.90	11.83	0.31	10.00	0.36	-	16.81	36.81	0.85	0.67	0.84	-0.97	2.32	0.72
Kawaguchi et al (2016) [10]	Katana Avencia	Ultrass. cleaning No cleaning treatment	No water	Clearfil Cer. Primer Plus	Panavia v5	μ TBS	87.60	3	8.90	70.00	3	13.90	11.67	0.29	17.60	0.14	-8.86	44.06	1.51	1.20	0.89	-0.54	2.94	1.27	
Kawaguchi et al (2016) [10]	Katana Avencia	No cleaning treatment	No water	Clearfil Cer. Primer Plus	Panavia v5	μ TBS	96.50	3	10.30	70.00	3	13.90	12.23	0.35	26.50	0.06	-	1.23	54.23	2.17	1.73	0.96	-0.15	3.60	1.91
Kawaguchi et al (2016) [10]	Katana Avencia	No cleaning treatment	6 months water	Clearfil Cer. Primer Plus	Panavia v5	μ TBS	78.00	3	14.40	70.00	3	13.90	14.15	0.48	8.00	0.53	-	24.08	40.08	0.57	0.45	0.83	-1.17	2.07	0.58
Kawaguchi et al (2016) [10]	Katana Avencia	No cleaning treatment	3 months water	Clearfil Cer. Primer Plus	Panavia v5	μ TBS	89.70	3	11.80	70.00	3	13.90	12.89	0.42	19.70	0.13	-	9.53	48.93	1.53	1.22	0.89	-0.52	2.96	1.42
Liebemann et al (2013) [2]	ArtBlock temp	Al2O3 50 μ m	24 h water + 5000 cycles	Visiolink	Clearfil SA	TBS	17.30	20	5.30	7.10	20	7.80	6.67	0.05	10.20	0.00	5.93	14.47	1.53	1.50	0.36	0.80	2.20	1.31	
Liebemann et al (2013) [2]	ArtBlock temp	Al2O3 50 μ m	24 h water + 5000 cycles	VP Connect	Clearfil SA	TBS	17.90	20	4.60	7.10	20	7.80	6.40	0.01	10.80	0.00	6.70	14.90	1.69	1.65	0.37	0.94	2.37	1.38	
Liebemann et al (2013) [2]	ArtBlock temp	Al2O3 50 μ m	24 h water + 5000 cycles	Visiolink	Clearfil SA	TBS	28.80	20	6.30	7.10	20	7.80	7.09	0.18	21.70	0.00	-	17.16	26.24	3.06	3.00	0.46	2.10	3.90	2.78
Liebemann et al (2013) [2]	ArtBlock temp	Al2O3 50 μ m	24 h water + 5000 cycles	VP Connect	Clearfil SA	TBS	25.60	20	4.30	7.10	20	7.80	6.30	0.01	18.50	0.00	-	14.47	22.53	2.94	2.88	0.45	1.99	3.76	2.37
Liebemann et al (2013) [2]	ArtBlock temp	Al2O3 50 μ m	24 h water + 5000 cycles	Visiolink	Rely X Unicem	TBS	29.00	20	6.30	2.00	20	6.20	6.25	0.47	27.00	0.00	-	23.00	31.00	4.32	4.23	0.57	3.12	5.35	4.35
Liebemann et al (2013) [2]	ArtBlock temp	Al2O3 50 μ m	24 h water + 5000 cycles	NO	Rely X Unicem	TBS	10.20	20	11.90	2.00	20	6.20	9.49	0.00	8.20	0.01	-	2.13	14.27	0.86	0.85	0.33	0.20	1.49	1.32
Liebemann et al (2013) [2]	ArtBlock temp	Al2O3 50 μ m	24 h water + 5000 cycles	Visiolink	Rely X Unicem	TBS	17.60	20	4.10	2.00	20	6.20	5.26	0.04	15.60	0.00	-	12.24	18.96	2.97	2.91	0.45	2.02	3.80	2.52
Liebemann et al (2013) [2]	ArtBlock temp	Al2O3 50 μ m	24 h water + 5000 cycles	VP Connect	Rely X Unicem	TBS	2.10	20	4.10	2.00	20	6.20	5.26	0.04	0.10	0.95	-	3.26	3.46	0.02	0.02	0.32	-0.60	0.64	0.02
Malysa et al (2022) [37]	Empress CAD	HF 5%	No Thermal Cycling	NO	Maxcem	SBS	15.48	12	1.16	2.06	12	0.45	0.88	0.00	13.42	0.00	-	12.68	14.16	15.30	14.77	2.17	10.52	19.03	30.16

Malysa et al (2022) [37]	IPS CAD	HF 5%	Thermal Cycling	NO	Maxcem	SBS	3.37	12	0.23	2.06	12	0.45	0.35	0.02	1.31	0.00	1.01	1.61	3.71	3.58	0.66	2.29	4.87	2.95
Malysa et al (2022) [37]	IPS CAD	HF 5%	.	NO	Maxcem	SBS	12.11	12	1.27	2.06	12	0.45	0.95	0.00	10.05	0.00	9.24	10.86	10.53	10.17	1.52	7.18	13.16	22.59
Malysa et al (2022) [37]	Zircad IPS e max.	HF 5%	Thermal Cycling	NO	Maxcem	SBS	2.32	12	0.18	2.06	12	0.45	0.34	0.00	0.26	0.07	-0.03	0.55	0.77	0.74	0.42	-0.08	1.57	0.59
Malysa et al (2022) [37]	Zircad IPS e max.	HF 5%	No Thermal Cycling	NO	Maxcem	SBS	13.29	12	1.19	2.06	12	0.45	0.90	0.00	11.23	0.00	10.47	11.99	12.55	12.12	1.80	8.60	15.64	25.24
Malysa et al (2022) [37]	Zircad HF 5%	.	NO	Maxcem	SBS	10.97	12	1.21	2.06	12	0.45	0.91	0.00	8.91	0.00	8.14	9.68	9.76	9.42	1.42	6.64	12.21	20.03	
Malysa et al (2022) [37]	IPS e.max CAD	HF 5% + PA 37%	No Thermal Cycling	NO	Maxcem	SBS	8.43	12	0.87	2.06	12	0.45	0.69	0.02	6.37	0.00	5.79	6.95	9.24	8.93	1.35	6.28	11.57	14.31
Malysa et al (2022) [37]	IPS e.max CAD	HF 5% + PA 37%	.	NO	Maxcem	SBS	6.37	12	0.74	2.06	12	0.45	0.61	0.05	4.31	0.00	3.80	4.83	7.07	6.83	1.07	4.74	8.92	9.69
Malysa et al (2022) [37]	Empress IPS	HF 5%	.	NO	Panavia SA	SBS	13.96	12	1.92	2.55	12	0.55	1.41	0.00	11.41	0.00	10.21	12.61	8.06	7.79	1.20	5.44	10.13	20.75
Malysa et al (2022) [37]	Empress CAD IPS	HF 5%	Thermal Cycling	NO	Panavia SA	SBS	2.98	12	0.67	2.55	12	0.55	0.61	0.27	0.43	0.10	-0.09	0.95	0.70	0.68	0.42	-0.14	1.50	0.78
Malysa et al (2022) [37]	Empress CAD IPS e max.	HF 5%	No Thermal cycling	NO	Panavia SA	SBS	16.94	12	1.53	2.55	12	0.55	1.15	0.00	14.39	0.00	13.41	15.37	12.50	12.06	1.79	8.56	15.57	26.16
Malysa et al (2022) [37]	Zircad IPS e max.	HF 5%	.	NO	Panavia SA	SBS	15.77	12	1.42	2.55	12	0.55	1.08	0.00	13.22	0.00	12.31	14.13	12.25	11.82	1.75	8.39	15.26	24.04
Malysa et al (2022) [37]	Zircad HF 5%	.	NO	Panavia SA	SBS	18.31	12	1.36	2.55	12	0.55	1.04	0.00	15.76	0.00	14.88	16.64	15.22	14.70	2.16	10.46	18.93	28.65	
Malysa et al (2022) [37]	IPS e.max CAD	HF 5% + PA 37%	.	NO	Panavia SA	SBS	6.68	12	1.16	2.55	12	0.55	0.91	0.01	4.13	0.00	3.36	4.90	4.54	4.39	0.75	2.91	5.86	7.51
Malysa et al (2022) [37]	IPS e.max CAD	HF 5% + PA 37%	No Thermal cycling	NO	Panavia SA	SBS	9.89	12	0.93	2.55	12	0.55	0.76	0.05	7.34	0.00	6.69	7.98	9.64	9.30	1.40	6.55	12.05	13.34
Malysa et al (2022) [37]	IPS e.max CAD	HF 5% + PA 37%	Thermal Cycling	NO	Panavia SA	SBS	3.21	12	0.59	2.55	12	0.55	0.57	0.41	0.66	0.01	0.18	1.14	1.16	1.12	0.44	0.26	1.98	1.20
Malysa et al (2022) [37]	Empress CAD IPS	HF 5%	Thermal Cycling	NO	Panavia V5	SBS	16.84	12	0.84	3.06	12	0.95	0.90	0.35	13.78	0.00	13.02	14.54	15.32	14.79	2.17	10.53	19.05	14.48
Malysa et al (2022) [37]	Empress CAD IPS	HF 5%	No Thermal cycling	NO	Panavia V5	SBS	20.33	12	0.79	3.06	12	0.95	0.87	0.27	17.27	0.00	16.53	18.01	19.77	19.09	2.79	13.63	24.55	18.14
Malysa et al (2022) [37]	Empress CAD IPS e max.	HF 5%	.	NO	Panavia V5	SBS	3.49	12	1.04	3.06	12	0.95	1.00	0.39	0.43	0.30	-0.42	1.27	0.43	0.42	0.41	-0.39	1.22	0.45
Malysa et al (2022) [37]	Zircad IPS e max.	HF 5%	.	NO	Panavia V5	SBS	3.63	12	0.88	3.06	12	0.95	0.91	0.39	0.57	0.14	-0.20	1.35	0.63	0.61	0.42	-0.21	1.42	0.60
Malysa et al (2022) [37]	Zircad IPS e max.	HF 5%	Thermal Cycling	NO	Panavia V5	SBS	7.60	12	0.77	3.06	12	0.95	0.86	0.24	4.54	0.00	3.81	5.27	5.26	5.08	0.84	3.43	6.72	4.77
Malysa et al (2022) [37]	Zircad IPS e max.	HF 5%	No Thermal cycling	NO	Panavia V5	SBS	11.23	12	0.48	3.06	12	0.95	0.75	0.01	8.17	0.00	7.53	8.81	10.86	10.49	1.57	7.41	13.56	8.58
Malysa et al (2022) [37]	IPS e.max CAD	HF 5% + PA 37%	No Thermal cycling	NO	Panavia V5	SBS	22.50	12	0.69	3.06	12	0.95	0.83	0.15	19.44	0.00	18.74	20.14	23.38	22.58	3.28	16.14	29.01	20.42
Malysa et al (2022) [37]	IPS e.max CAD	HF 5% + PA 37%	Thermal Cycling	NO	Panavia V5	SBS	19.45	12	0.56	3.06	12	0.95	0.78	0.05	16.39	0.00	15.73	17.05	20.95	20.23	2.95	14.45	26.00	17.22
Malysa et al (2022) [37]	Empress CAD IPS	HF 5%	.	NO	Rely X U200	SBS	11.77	12	1.90	1.95	12	0.52	1.39	0.00	9.82	0.00	8.64	11.00	7.07	6.82	1.07	4.73	8.91	18.88
Malysa et al (2022) [37]	Empress CAD IPS	HF 5%	No Thermal cycling	NO	Rely X U200	SBS	15.14	12	1.95	1.95	12	0.52	1.43	0.00	13.19	0.00	11.98	14.40	9.23	8.91	1.35	6.27	11.56	25.37
Malysa et al (2022) [37]	Empress CAD IPS e max.	HF 5%	Thermal Cycling	NO	Rely X U200	SBS	3.36	12	0.26	1.95	12	0.52	0.41	0.02	1.41	0.00	1.06	1.76	3.43	3.31	0.63	2.08	4.54	2.71
Malysa et al (2022) [37]	Zircad IPS e max.	HF 5% + PA 37%	No Thermal cycling	NO	Rely X U200	SBS	22.73	12	1.15	1.95	12	0.52	0.89	0.01	20.78	0.00	20.03	21.53	23.32	22.51	3.28	16.09	28.93	39.96
Malysa et al (2022) [37]	Zircad HF 5%	.	NO	Rely X U200	SBS	20.78	12	1.20	1.95	12	0.52	0.92	0.01	18.83	0.00	18.05	19.61	20.42	19.71	2.87	14.08	25.35	36.21	
Malysa et al (2022) [37]	IPS e.max CAD	HF 5% + PA 37%	.	NO	Rely X U200	SBS	5.09	12	0.91	1.95	12	0.52	0.74	0.04	3.14	0.00	2.52	3.77	4.25	4.10	0.72	2.69	5.51	6.04
Malysa et al (2022) [37]	IPS e.max CAD	HF 5% + PA 37%	Thermal Cycling	NO	Rely X U200	SBS	3.14	12	0.60	1.95	12	0.52	0.56	0.33	1.19	0.00	0.71	1.66	2.12	2.05	0.50	1.06	3.04	2.28
Malysa et al (2022) [37]	IPS e.max CAD	HF 5% + PA 37%	No Thermal cycling	NO	Rely X U200	SBS	8.23	12	0.70	1.95	12	0.52	0.61	0.17	6.28	0.00	5.76	6.80	10.22	9.87	1.48	6.96	12.77	12.07
Oda et al (2021) [25]	Katana Avencia	Al2O3 50 µm	24 hours water	Clearfil Cer. Primer Plus	Panavia SA Plus	µTBS	37.20	5	8.30	14.70	5	5.70	7.12	0.24	22.50	0.00	12.12	32.88	3.16	2.85	0.90	1.09	4.61	3.95
Oda et al (2021) [25]	Katana Avencia	Al2O3 50 µm	24 hours water	Clearfil Cer. Primer Plus	Panavia SA Plus	µTBS	17.00	5	3.70	14.70	5	5.70	4.81	0.21	2.30	0.47	-4.71	9.31	0.48	0.43	0.64	-0.82	1.69	0.40
Oda et al (2021) [25]	Katana Avencia	Al2O3 50 µm	24 hours water	Clearfil Cer. Primer Plus	Panavia SA Plus	µTBS	40.30	5	9.80	14.70	5	5.70	8.02	0.16	25.60	0.00	13.91	37.29	3.19	2.88	0.90	1.11	4.65	4.49
Oda et al (2021) [25]	Katana Avencia	Al2O3 50 µm	24 hours water	Clearfil Cer. Primer Plus	Panavia SA Plus	µTBS	23.90	5	6.80	14.70	5	5.70	6.27	0.37	9.20	0.05	0.05	18.35	1.47	1.32	0.70	-0.04	2.69	1.61
Oda et al (2021) [25]	Katana Avencia	Al2O3 50 µm	24 hours water	Clearfil Cer. Primer Plus	Panavia SA Univ.	µTBS	24.50	5	6.20	14.70	5	5.70	5.96	0.44	9.80	0.03	1.11	18.49	1.65	1.49	0.71	0.09	2.89	1.72
Oda et al (2021) [25]	Katana Avencia	Al2O3 50 µm	24 hours water	Clearfil Cer. Primer Plus	Panavia SA Univ.	µTBS	34.20	5	8.10	14.70	5	5.70	7.00	0.26	19.50	0.00	9.29	29.71	2.78	2.51	0.85	0.86	4.17	3.42
Oda et al (2021) [25]	Katana Avencia	Al2O3 50 µm	24 hours water	Clearfil Cer. Primer Plus	Panavia SA Univ.	µTBS	29.50	5	7.00	14.70	5	5.70	6.38	0.35	14.80	0.01	5.49	24.11	2.32	2.09	0.79	0.55	3.64	2.60
Poggio et al (2016) [6]	Lava Ultimate	No treatment	24h water	SB-UA	Rely X Ultimate	SBS	16.58	10	3.87	11.98	10	2.91	3.42	0.20	4.60	0.01	1.38	7.82	1.34	1.29	0.49	0.32	2.25	1.58

Takahashi et al (2022) [42]	Estelite block	Al2O3 50 µm	Thermocycling 30 000 cycles	HC Primer	Block HC Cem	SBS	31.30	10	3.60	21.60	10	2.50	3.10	0.15	9.70	0.00	6.79	12.61	3.13	3.00	0.65	1.72	4.27	3.88
Takahashi et al (2022) [42]	Estelite block	Al2O3 50 µm	Thermocycling 10 000 cycles	HC Primer	Block HC Cem	SBS	34.80	10	3.30	21.60	10	2.50	2.93	0.21	13.20	0.00	10.45	15.95	4.51	4.32	0.82	2.72	5.92	5.28
Takahashi et al (2022) [42]	Estelite block	Al2O3 50 µm	24h water	HC Primer	Block HC Cem	SBS	24.10	10	2.30	21.60	10	2.50	2.40	0.40	2.50	0.03	0.24	4.76	1.04	1.00	0.47	0.07	1.93	1.00
Takahashi et al (2022) [42]	Estelite block	Al2O3 50 µm	15 min water	HC Primer	Block HC Cem	SBS	24.50	10	1.00	21.60	10	2.50	1.90	0.01	2.90	0.00	1.11	4.69	1.52	1.46	0.50	0.47	2.44	1.16
Takahashi et al (2022) [42]	Katana Avencia	Al2O3 50 µm	Thermocycling 10 000 cycles	HC Primer	Block HC Cem	SBS	23.50	10	2.90	21.60	10	2.50	2.71	0.33	1.90	0.13	-0.64	4.44	0.70	0.67	0.46	-0.23	1.57	0.76
Takahashi et al (2022) [42]	Katana Avencia	Al2O3 50 µm	24h water	HC Primer	Block HC Cem	SBS	24.60	10	3.00	21.60	10	2.50	2.76	0.30	3.00	0.03	0.41	5.59	1.09	1.04	0.48	0.11	1.97	1.20
Takahashi et al (2022) [42]	Katana Avencia	Al2O3 50 µm	15 min water	HC Primer	Block HC Cem	SBS	24.30	10	3.00	21.60	10	2.50	2.76	0.30	2.70	0.04	0.11	5.29	0.98	0.94	0.47	0.01	1.86	1.08
Takahashi et al (2022) [42]	Shofu Block HC	Al2O3 50 µm	15 min water	HC Primer	Block HC Cem	SBS	25.50	10	2.50	21.60	10	2.50	2.50	0.50	3.90	0.00	1.55	6.25	1.56	1.49	0.51	0.50	2.49	1.56
Takahashi et al (2022) [42]	Shofu Block HC	Al2O3 50 µm	24h water	HC Primer	Block HC Cem	SBS	29.30	10	2.50	21.60	10	2.50	2.50	0.50	7.70	0.00	5.35	10.05	3.08	2.95	0.65	1.68	4.22	3.08
Takahashi et al (2022) [42]	Shofu Block HC	Al2O3 50 µm	Thermocycling 30 000 cycles	HC Primer	Block HC Cem	SBS	19.70	10	2.70	21.60	10	2.50	2.60	0.41	1.90	0.12	-0.54	4.34	0.73	0.70	0.46	-0.20	1.60	0.76
Takahashi et al (2022) [42]	Shofu Block HC	Al2O3 50 µm	Thermocycling 10 000 cycles	HC Primer	Block HC Cem	SBS	26.50	10	3.50	21.60	10	2.50	3.04	0.17	4.90	0.00	2.04	7.76	1.61	1.54	0.51	0.54	2.54	1.96
Takahashi et al (2022) [42]	Estelite block	Al2O3 50 µm	Thermocycling 30 000 cycles	HC Primer	Panavia SA Univ.	SBS	14.70	10	3.00	12.10	10	1.20	2.28	0.01	2.60	0.02	0.45	4.75	1.14	1.09	0.48	0.15	2.03	2.17
Takahashi et al (2022) [42]	Estelite block	Al2O3 50 µm	Thermocycling 10 000 cycles	HC Primer	Panavia SA Univ.	SBS	17.70	10	3.40	12.10	10	1.20	2.55	0.00	5.60	0.00	3.20	8.00	2.20	2.10	0.56	1.01	3.20	4.67
Takahashi et al (2022) [42]	Estelite block	Al2O3 50 µm	15 min water	HC Primer	Panavia SA Univ.	SBS	12.10	10	1.20	12.10	10	1.20	1.20	0.50	0.00	1.00	-1.13	1.13	0.00	0.00	0.45	-0.88	0.88	0.00
Takahashi et al (2022) [42]	Estelite block	Al2O3 50 µm	24h water	HC Primer	Panavia SA Univ.	SBS	17.90	10	3.40	12.10	10	1.20	2.55	0.00	5.80	0.00	3.40	8.20	2.27	2.18	0.56	1.07	3.29	4.83
Takahashi et al (2022) [42]	Katana Avencia	Al2O3 50 µm	Thermocycling 30 000 cycles	HC Primer	Panavia SA Univ.	SBS	18.60	10	2.20	12.10	10	1.20	1.77	0.04	6.50	0.00	4.84	8.16	3.67	3.51	0.71	2.12	4.91	5.42
Takahashi et al (2022) [42]	Katana Avencia	Al2O3 50 µm	24h water	HC Primer	Panavia SA Univ.	SBS	19.90	10	1.80	12.10	10	1.20	1.53	0.12	7.80	0.00	6.36	9.24	5.10	4.88	0.89	3.13	6.63	6.50
Takahashi et al (2022) [42]	Katana Avencia	Al2O3 50 µm	15 min water	HC Primer	Panavia SA Univ.	SBS	15.60	10	1.90	12.10	10	1.20	1.59	0.09	3.50	0.00	2.01	4.99	2.20	2.11	0.56	1.02	3.20	2.92
Takahashi et al (2022) [42]	Katana Avencia	Al2O3 50 µm	Thermocycling 10 000 cycles	HC Primer	Panavia SA Univ.	SBS	19.80	10	1.90	12.10	10	1.20	1.59	0.09	7.70	0.00	6.21	9.19	4.85	4.64	0.86	2.96	6.32	6.42
Takahashi et al (2022) [42]	Shofu Block HC	Al2O3 50 µm	15 min water	HC Primer	Panavia SA Univ.	SBS	14.50	10	1.50	12.10	10	1.20	1.36	0.26	2.40	0.00	1.12	3.68	1.77	1.69	0.52	0.67	2.71	2.00
Takahashi et al (2022) [42]	Shofu Block HC	Al2O3 50 µm	Thermocycling 10 000 cycles	HC Primer	Panavia SA Univ.	SBS	19.80	10	3.50	12.10	10	1.20	2.62	0.00	7.70	0.00	5.24	10.16	2.94	2.82	0.63	1.58	4.06	6.42
Takahashi et al (2022) [42]	Shofu Block HC	Al2O3 50 µm	Thermocycling 30 000 cycles	HC Primer	Panavia SA Univ.	SBS	18.50	10	2.70	12.10	10	1.20	2.09	0.01	6.40	0.00	4.44	8.36	3.06	2.93	0.64	1.67	4.20	5.33
Takahashi et al (2022) [42]	Shofu Block HC	Al2O3 50 µm	24h water	HC Primer	Panavia SA Univ.	SBS	16.10	10	1.80	12.10	10	1.20	1.53	0.12	4.00	0.00	2.56	5.44	2.61	2.50	0.60	1.33	3.67	3.33
Ustun et al (2021) [27]	Cerasmart	HF 5%	Thermal aging	Ultradent Silane	Rely X U200	µSBS	5.62	7	0.29	4.69	7	0.21	0.25	0.23	0.93	0.00	0.64	1.22	3.67	3.45	0.84	1.80	5.11	4.43
Ustun et al (2021) [27]	Cerasmart	HF 5%	No Thermal aging	Ultradent Silane	Rely X U200	µSBS	7.48	7	0.32	4.69	7	0.21	0.27	0.16	2.79	0.00	2.47	3.11	10.31	9.69	1.91	5.95	13.43	13.29
Ustun et al (2021) [27]	Vita Enamic	HF 5%	No Thermal aging	Ultradent Silane	Rely X U200	µSBS	7.14	7	0.45	4.69	7	0.21	0.35	0.04	2.45	0.00	2.04	2.86	6.98	6.56	1.35	3.91	9.20	11.67
Ustun et al (2021) [27]	Vita suprinity	HF 5%	No Thermal aging	Ultradent Silane	Rely X U200	µSBS	10.27	7	0.54	4.69	7	0.21	0.41	0.02	5.58	0.00	5.10	6.06	13.62	12.80	2.48	7.95	17.66	26.57
Ustun et al (2021) [27]	Vita suprinity	HF 5%	Thermal aging	Ultradent Silane	Rely X U200	µSBS	8.46	7	0.33	4.69	7	0.21	0.28	0.15	3.77	0.00	3.45	4.09	13.63	12.81	2.48	7.95	17.67	17.95
Ustun et al (2021) [27]	Cerasmart	HF 5%	Thermal aging	Ultradent Silane	Rely X Ultimate	µSBS	7.57	7	0.37	4.59	7	0.41	0.39	0.40	2.98	0.00	2.53	3.43	7.63	7.17	1.46	4.32	10.03	7.27
Ustun et al (2021) [27]	Cerasmart	HF 5%	No Thermal aging	Ultradent Silane	Rely X Ultimate	µSBS	9.89	7	0.32	4.59	7	0.41	0.37	0.28	5.30	0.00	4.87	5.73	14.41	13.55	2.62	8.42	18.67	12.93
Ustun et al (2021) [27]	Cerasmart	PA 37%	No Thermal aging	Ultradent Silane	Rely X Ultimate	µSBS	8.05	7	0.26	4.59	7	0.41	0.34	0.15	3.46	0.00	3.06	3.86	10.08	9.47	1.87	5.81	13.14	8.44
Ustun et al (2021) [27]	Cerasmart	PA 37%	Thermal aging	Ultradent Silane	Rely X Ultimate	µSBS	6.29	7	0.33	4.59	7	0.41	0.37	0.31	1.70	0.00	1.27	2.13	4.57	4.29	0.97	2.39	6.20	4.15
Ustun et al (2021) [27]	Vita Enamic	PA 37%	No Thermal aging	Ultradent Silane	Rely X Ultimate	µSBS	7.14	7	0.12	4.59	7	0.41	0.30	0.00	2.55	0.00	2.20	2.90	8.44	7.94	1.59	4.81	11.06	6.22
Ustun et al (2021) [27]	Vita Enamic	HF 5%	Thermal aging	Ultradent Silane	Rely X Ultimate	µSBS	6.37	7	0.33	4.59	7	0.41	0.37	0.31	1.78	0.00	1.35	2.21	4.78	4.50	1.00	2.53	6.46	4.34
Ustun et al (2021) [27]	Vita Enamic	HF 5%	No Thermal aging	Ultradent Silane	Rely X Ultimate	µSBS	8.54	7	0.31	4.59	7	0.41	0.36	0.26	3.95	0.00	3.53	4.37	10.87	10.22	2.00	6.29	14.14	9.63
Ustun et al (2021) [27]	Vita suprinity	PA 37%	Thermal aging	SB-UA	Rely X Ultimate	µSBS	8.34	7	0.30	4.59	7	0.41	0.36	0.23	3.75	0.00	3.33	4.17	10.44	9.81	1.93	6.03	13.60	9.15
Ustun et al (2021) [27]	Vita suprinity	PA 37%	No Thermal aging	Ultradent Silane	Rely X Ultimate	µSBS	10.90	7	0.34	4.59	7	0.41	0.38	0.33	6.31	0.00	5.87	6.75	16.75	15.75	3.02	9.82	21.68	15.39
Ustun et al (2021) [27]	Vita suprinity	HF 5%	Thermal aging	Ultradent Silane	Rely X Ultimate	µSBS	5.48	7	0.35	4.59	7	0.41	0.38	0.36	0.89	0.00	0.45	1.33	2.33	2.19	0.68	0.87	3.52	2.17
Ustun et al (2021) [27]	Vita suprinity	HF 5%	No Thermal aging	Ultradent Silane	Rely X Ultimate	µSBS	7.47	7	0.46	4.59	7	0.41	0.44	0.39	2.88	0.00	2.37	3.39	6.61	6.21	1.29	3.68	8.74	7.02