

Supplementary file 1

Tables

Table S1. Summary of Citation Metrics for Scientific Production in Laser Application in Dentistry over the Last Decade

Number of documents	Number of citations	H index	Citation per document
3578	44705	72	12/49

Table S2. Top Ten Productive Countries and Institutions in the field of Laser Applications in Dentistry (2014-2023)

Rank	Country/territory			Institutions/Affiliation			
	Name	No. of documents	% of 3,578 documents	Name	No. of documents	% of 3,578 documents	Country
1	BRAZIL	575	16.070	UNIVERSIDADE DE SAO PAULO	204	5.702	Brazil
2	USA	561	15.679	UNIVERSIDADE ESTADUAL PAULISTA	109	3.046	Brazil
3	PEOPLES R CHINA	369	10.313	EGYPTIAN KNOWLEDGE BANK EKB	100	2.795	Egypt
4	TURKEY	285	7.965	TOKYO MEDICAL DENTAL UNIVERSITY TMDU	78	2.180	Japan
5	ITALY	283	7.909	UNIVERSIDADE ESTADUAL DE CAMPINAS	72	2.012	Brazil
6	GERMANY	233	6.512	SICHUAN UNIVERSITY	67	1.873	China
7	JAPAN	232	6.484	PEKING UNIVERSITY	56	1.565	China
8	ENGLAND	158	4.416	HARVARD UNIVERSITY	48	1.342	United States
9	INDIA	154	4.304	UNIVERSITY OF MILAN	48	1.342	Italy
10	IRAN	139	3.885	UNIVERSITY OF HONG KONG	47	1.314	China

Table S3. Top Ten Authors in the Field of Laser Applications in Dentistry (2014-2023)

Rank	Author's name	No. of documents	% of 3,578 documents	Affiliation	Country
1	Tagami, Junji	31	0.866	Tokyo Medical & Dental University	JAPAN
2	Duarte, Marco Antônio Húngaro (MAH)	22	0.615	University of São Paulo	Brazil
3	Guarnieri, Renzo	21	0.587	Private Periodontal Implant Practice	Italy

4	Palma-dibb, Regina Guenka	21	0.587	Universidade de Sao Paulo	Brazil
5	Shimada, Yasushi	21	0.587	Tokyo Medical and Dental University	Japan
6	Aoki , Akira	20	0.559	Tokyo Medical & Dental University	Japan
7	Wang, Hom-Lay	20	0.559	University of Michigan	USA
8	Wang, Yong	19	0.531	University of Missouri-Kansas City	USA
9	Shen, Ya	18	0.503	University of British Columbia	Canada
10	Palaia, Gaspare	17	0.475	Sapienza University of Rome	Italy

Table S4. Twenty frequent keywords of articles related to the application of lasers in dentistry (2014-2023)

Rank	Label	Cluster	Links	Total link strength	Occurrences
1	lasers	1	139	575	346
2	low level laser therapy	1	72	286	198
3	biofilms	2	76	308	170
4	dental implants	3	75	283	162
5	diode laser	4	73	161	111
6	peri-implantitis	3	55	188	92
7	periodontitis	1	42	152	86
8	laser therapy	1	53	143	83
9	enterococcus faecalis	2	49	162	79
10	systematic review	1	57	142	77
11	photobiomodulation	1	40	117	70
12	confocal laser scanning microscopy	2	44	106	69
13	titanium	3	47	138	60
14	pain	1	35	116	57
15	dentin	5	50	100	56
16	endodontics	2	47	118	55
17	Er: YAG laser	4	46	76	54
18	sodium hypochlorite	2	39	120	52
19	photodynamic therapy	1	48	97	52
20	shear bond strength	4	33	75	48

Figures

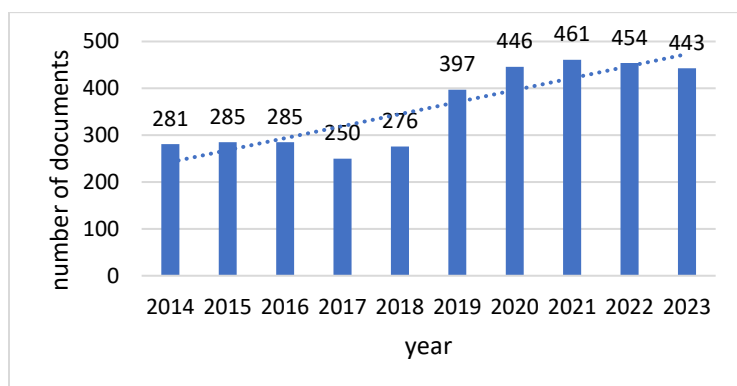


Figure S1. Distribution of the frequency of published documents in the field of laser application in dentistry (2023–2014)

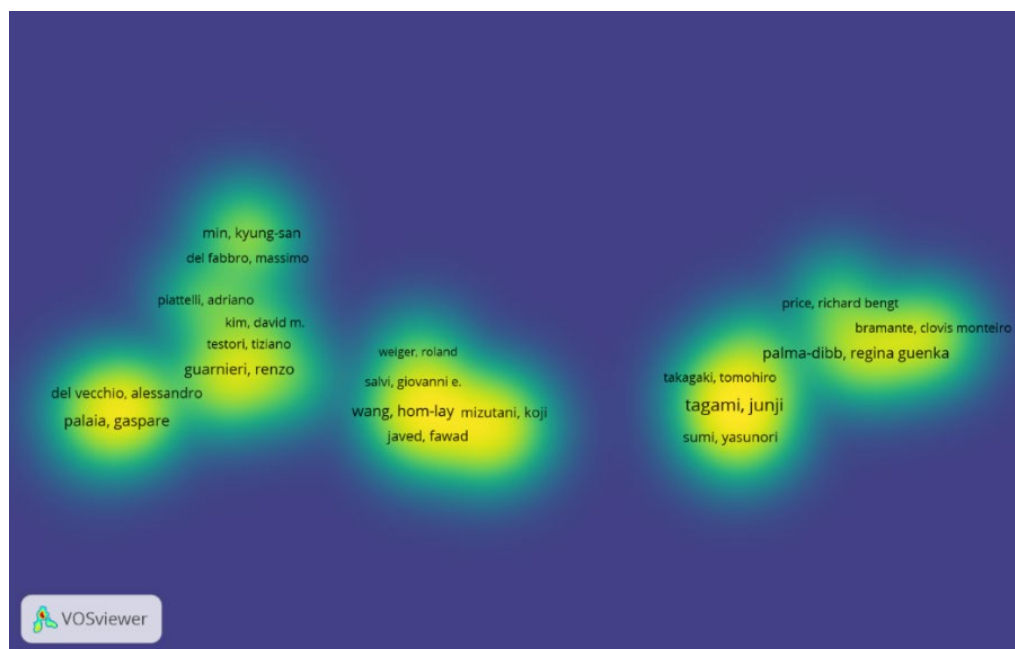


Figure S2. Co-authorship network of authors on laser applications in dentistry (2014–2023)

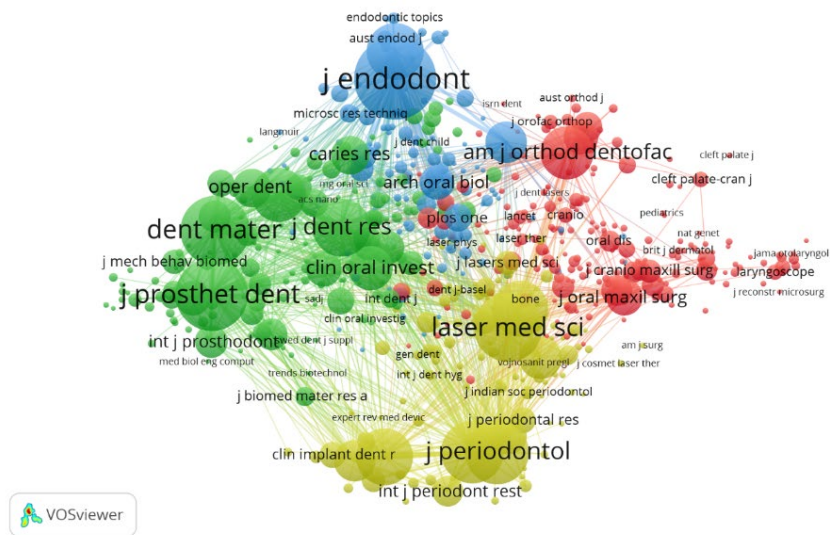


Figure S5. Co-Citation Map of Sources Cited in Laser Applications in Dentistry Articles (2014-2023)

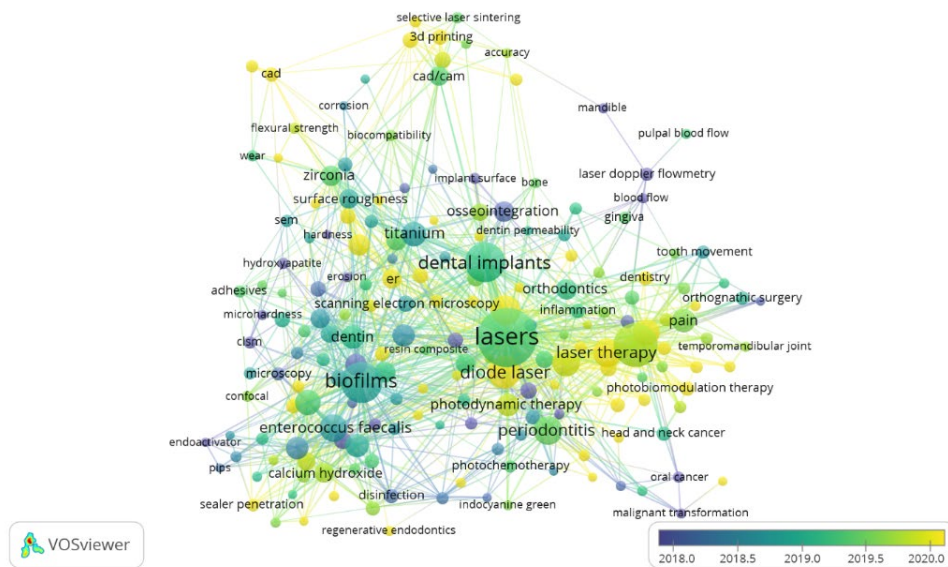


Figure S6. Chronological map (based on time) of frequently used keywords of articles related to the use of lasers in dentistry (2014-2023)