Infrared laser bone ablation

Lasers in Surgery and Medicine
8, 381-391
DOI: 10.1002/lsm.1900080408

Citation Report

#	Article	IF	Citations
2	Performance of a Broadband Free-Electron Laser and Preliminary Studies on Its Application to Biology and Medicine. Journal of Laser Applications, 1989, 1, 49-58.	0.8	11
4	Er:YAG laser ablation of tissue: Effect of pulse duration and tissue type on thermal damage. Lasers in Surgery and Medicine, 1989, 9, 314-326.	1.1	486
5	Er:YAG laser ablation of tissue: Measurement of ablation rates. Lasers in Surgery and Medicine, 1989, 9, 327-337.	1.1	339
6	Experimental studies of the application of the Er:YAG laser on dental hard substances: I. Measurement of the ablation rate. Lasers in Surgery and Medicine, 1989, 9, 338-344.	1.1	762
7	Experimental studies of the application of the Er:YAG laser on dental hard substances: II. Light microscopic and SEM investigations. Lasers in Surgery and Medicine, 1989, 9, 345-351.	1.1	507
8	Mid-infrared erbium:YAG laser ablation of bone: The effect of laser osteotomy on bone healing. Lasers in Surgery and Medicine, 1989, 9, 362-374.	1.1	138
9	Laser Use in Foot Surgery. Foot & Ankle, 1989, 10, 110-114.	0.6	6
10	Effect of pulse repetition rate on erbium laser ablation of soft and hard tissues. , 1990, , .		6
11	Pulsed 2-94-mum erbium-YAG laser skin ablation-experimental results and first clinical application. Clinical and Experimental Dermatology, 1990, 15, 389-393.	0.6	117
12	Comparison of the Erbium-Yttrium Aluminum Garnet and Carbon Dioxide Lasers for In Vitro Bone and Cartilage Ablation. Laryngoscope, 1990, 100, 14???17.	1.1	48
13	Erbium-YAG and holmium-YAG laser ablation of bone. Lasers in Medical Science, 1990, 5, 365-373.	1.0	51
14	Quantitative study of the morphological changes in the thyroid gland following IR laser radiation. Lasers in Medical Science, 1990, 5, 77-80.	1.0	10
15	Acute and chronic effects of bone ablation with a pulsed holmium laser. Lasers in Surgery and Medicine, 1990, 10, 384-388.	1.1	105
16	Laser assisted fixation of ear prostheses after stapedectomy. Lasers in Surgery and Medicine, 1990, 10, 444-447.	1.1	31
17	Pulsed holmium:yttrium-aluminum-garnet (Ho:YAG) laser ablation of fibrocartilage and articular cartilage. American Journal of Sports Medicine, 1990, 18, 316-320.	1.9	113
18	Ablation of calcified biological tissue using pulsed hydrogen fluoride laser radiation. IEEE Journal of Quantum Electronics, 1990, 26, 2261-2270.	1.0	60
19	Comparison of tissue ablation with pulsed holmium and thulium lasers. IEEE Journal of Quantum Electronics, 1990, 26, 2271-2275.	1.0	59
20	‹title›Erbium laser ablation of bone: effect of water content‹/title›. , 1991, 1427, 27.		5

#	Article	IF	Citations
21	<title>Comparison of the excimer laser with the erbium yttrium aluminum garnet laser for applications in osteotomy</title>. , 1991, , .		0
22	Pulsed CO 2 laser for intra-articular cartilage vaporization and subchondral bone perforation in horses. , 1991, , .		0
23	Comparison of the ablation of polymethylmethacrylate by two fiber-optic-compatible infrared lasers. , 1991, , .		2
24	<title>Photoablation using the Holmium:YAG laser: a laboratory and clinical study</title>. , 1991, , .		1
25	Infrared laser stapedotomy. European Archives of Oto-Rhino-Laryngology, 1991, 248, 449-451.	0.8	34
26	Holmium YAG Laser Coronary Angioplasty with Multifiber Catheters. Journal of Interventional Cardiology, 1991, 4, 171-179.	0.5	6
27	Mid-Infrared Laser Ablation of Stratum Corneum Enhances In Vitro Percutaneous Transport of Drugs. Journal of Investigative Dermatology, 1991, 97, 874-879.	0.3	87
28	Holmium. Laryngoscope, 1991, 101, 142???149.	1.1	42
29	Pulsed Carbon Dioxide Laser for Cartilage Vaporization and Subchondral Bone Perforation in Horses Part I: Technique and Clinical Results. Veterinary Surgery, 1991, 20, 190-199.	0.5	10
30	Pulsed Carbon Dioxide Laser for Cartilage Vaporization and Subchondral Bone Perforation in Horses Part II: Morphologic and Histochemical Reactions. Veterinary Surgery, 1991, 20, 200-208.	0.5	11
31	Effects of CO2 laser beam on cortical bone. Lasers in Surgery and Medicine, 1991, 11, 58-61.	1.1	19
32	Co:MgF2 laser ablation of tissue: Effect of wavelength on ablation threshold and thermal damage. Lasers in Surgery and Medicine, 1991, 11, 141-151.	1.1	72
33	Wavelength dependence of pulsed laser ablation of calcified tissue. Lasers in Surgery and Medicine, 1991, 11, 238-249.	1.1	52
34	Endoscopic Holmium Laser Laryngotracheoplasty in Animal Models. Annals of Otology, Rhinology and Laryngology, 1991, 100, 503-507.	0.6	10
35	Removal of dental filling materials by Er:YAG laser radiation. , 1991, , .		30
36	Effect of Er:YAG Laser Irradiation on Human Extracted Teeth. Photomedicine and Laser Surgery, 1991, 9, 147-150.	1.1	47
37	The Effects of Low-Level Energy Density Nd:YAG Irradiation on Calculus Removal. Photomedicine and Laser Surgery, 1992, 10, 343-347.	1.1	14
38	Infrared Laser Tissue Ablation: Holmium: YAG Laser Surgery. Orl, 1992, 54, 259-263.	0.6	1

#	Article	IF	Citations
39	Soft tissue surgery with combined FEL and conventional laser beams. , 1992, , .		0
40	Q-switched laser ablation of tissue: plume dynamics and the effect of tissue mechanical properties. , 1992, 1646, 242.		9
41	Comparative laser-tissue interaction effects at 1.96 and 2.01 um of Cr; Tm:YAG laser. , 1992, 1646, 30.		1
42	Vascular injury and time course of smooth muscle cell proliferation after experimental holmium laser angioplasty.. Circulation, 1992, 86, 1575-1583.	1.6	29
43	Preliminary investigation of the histological effects of laser endodontic treatment on the periradicular tissues in dogs. Journal of Endodontics, 1992, 18, 47-51.	1.4	88
44	Holmium: YAG laser arthroscopy of the temporomandibular joint. Journal of Oral and Maxillofacial Surgery, 1992, 50, 931-934.	0.5	34
46	Proposal of a computerized algorithm for continuous wave CO2 laser on-line control during orthopaedic surgery. Phase I: Theoretical introduction and firstin vitro trials. Journal of Clinical Monitoring and Computing, 1992, 9, 31-44.	0.3	11
47	Holmium: Yttrium Aluminum Garnet Laser-Assisted Endoscopic Sinus Surgery: Clinical Experience. Laryngoscope, 1992, 102, 1177-1180.	1.1	27
48	Bone ablation with Er:YAG and CO2 laser: Study of thermal and acoustic effects. Lasers in Surgery and Medicine, 1992, 12, 79-85.	1.1	109
49	Mechanical effects of erbium:YAG laser bone ablation. Lasers in Surgery and Medicine, 1992, 12, 125-130.	1.1	96
50	Erb:YAG and Hol:YAG laser ablation of meniscus and intervertebral discs. Lasers in Surgery and Medicine, 1992, 12, 375-381.	1.1	44
51	Effects of coaxial CO2/Nd:YAG irradiation on periodontal wound healing. Lasers in Surgery and Medicine, 1992, 12, 401-409.	1.1	14
52	Percutaneous laser discectomy with the Ho:YAG laser. Lasers in Surgery and Medicine, 1992, 12, 621-624.	1.1	33
53	In vitro decalcification of aortic valve leaflets with the Er:YSGG laser, Ho:YAG laser, and the cavitron ultrasound surgical aspirator. Lasers in Surgery and Medicine, 1993, 13, 421-428.	1.1	12
54	Ablation of polymethylmethacrylate by Ho:YAG, Nd:YAG, and Erb:YAG lasers. Lasers in Surgery and Medicine, 1993, 13, 638-646.	1.1	8
55	Active and passive Q-switching of a 2.79 Î¼m Er: Cr: YSGG laser. Optics Communications, 1993, 103, 398-404.	1.0	54
56	Bone-ablation mechanism using CO2 lasers of different pulse duration and wavelength. Applied Physics B, Photophysics and Laser Chemistry, 1993, 56, 104-112.	1.5	73
57	Use of the Holmium:Yttrium Aluminum Garnet (Ho:YAG) Laser for Cranial Nerve Decompression. Laryngoscope, 1993, 103, 631???636.	1.1	4

#	Article	IF	Citations
58	Infrared laser soft tissue ablation versus ultraviolet excimer laser. Oral Surgery, Oral Medicine, and Oral Pathology, 1993, 76, 425-432.	0.6	4
59	Tissue tearing caused by pulsed laser-induced ablation pressure. Applied Optics, 1993, 32, 494.	2.1	37
60	Effects of CO2 Laser Irradiation in vivo on Rat Alveolar Bone and Incisor Enamel, Dentin, and Pulp. Journal of Dental Research, 1993, 72, 1406-1417.	2.5	26
61	Effect of varying laser parameters on pulsed Ho:YAG ablation of bovine knee joint tissues. Arthroscopy - Journal of Arthroscopic and Related Surgery, 1993, 9, 96-102.	1.3	29
62	Effects of holmium: YAG laser on equine articular cartilage and subchondral bone adjacent to traumatic lesions: A histopathological assessment. Arthroscopy - Journal of Arthroscopic and Related Surgery, 1993, 9, 536-545.	1.3	47
63	Untersuchung laserinduzierter Gewebeeffekte als Grundlage bei der Entwicklung minimal invasiver chirurgischer Eingriffe. Biomedizinische Technik, 1993, 38, 273-276.	0.9	0
64	<title>Effect of varying laser parameters on in-vitro ablation of porcine sclera with Ho:YAG laser</title>. , 1993, , .		0
65	Holmium: YAG Endonasal Laser Dacryocystorhinostomy. American Journal of Ophthalmology, 1993, 116, 1-10.	1.7	205
66	Efficiency of bone ablation with a Nd:Yag laser beam delivered with a cooling spray: an in-vitro study. , 1993, , .		0
67	In Vitro Studies on Laser Scaling of Subgingival Calculus With an Erbium:YAG Laser. Journal of Periodontology, 1994, 65, 1097-1106.	1.7	207
68	<title>Bone microsurgery with IR lasers: a comparative study of thermal action at different wavelengths</title>. , 1994, , .		14
69	<title>Lasers in oral surgery</title>. , 1994, , .		1
72	Scanning electron microscopy of otic capsule and calvarial bone ablated by a holmium-YAG laser. Lasers in Medical Science, 1994, 9, 249-260.	1.0	8
73	Fibre-end micro-lens system for endoscopic erbium-laser surgery applications. Applied Physics B: Lasers and Optics, 1994, 58, 309-315.	1.1	13
74	Erbium-YAG and holmium-YAG laser ablation of the lens. Lasers in Surgery and Medicine, 1994, 15, 74-82.	1.1	27
75	Erb:YAG and Hol:YAG Laser Osteotomy: The Effect of Laser Ablation on Bone Healing. Lasers in Surgery and Medicine, 1994, 15, 373-381.	1.1	61
76	Holmium: YAG laser surgery in obliterated cochleas: an experimental study in human cadaver temporal bones. European Archives of Oto-Rhino-Laryngology, 1994, 251, 165-9.	0.8	4
77	Endoscopic Laser Dacryocystorhinostomy. Laryngoscope, 1994, 104, 269???274.	1.1	160

#	Article	IF	Citations
78	<title>Infrared laser ablation of hard tissue</title>. , 1994, 2077, 62.		1
79	<title>New approach to determining laser effects on bone</title>. , 1994, , .		1
80	<title>Ablation of brain by erbium laser: study of dynamic behavior and tissue damage</title>. , 1994, , .		2
81	<title>Thulium:YAG laser for stapes surgery: preliminary observations</title>. , 1994, 2128, 23.		10
82	<title>Erbium laser in middle ear surgery: laboratory study</title>. , 1994, , .		3
83	Effects of CO 2 , thulium, and erbium lasers on middle ear synthetic implants. , 1995, , .		0
85	<title>Microsurgery of ureteral strictures using pulsed mid-IR lasers</title>. , 1995, , .		3
86	Hard tissue laser ablation mechanisms. Lasers in Medical Science, 1995, 10, 173-179.	1.0	10
87	Holmium-YAG Laser ablation characteristics in calvarial lamellar and cortical bone: The role of water and tissue micro-architecture. Lasers in Medical Science, 1995, 10, 181-188.	1.0	7
88	Lasers in periodontal therapy. Periodontology 2000, 1995, 9, 150-164.	6.3	65
89	Wound Healing after Laser Surgery. Otolaryngologic Clinics of North America, 1995, 28, 969-986.	0.5	49
90	Suitability of Different Lasers for Operations Ranging from the Tympanic Membrane to the Base of the Stapes. Advances in Oto-Rhino-Laryngology, 1995, 49, 87-94.	1.6	17
91	Rapid Communication: In Vitro Light and Scanning Electron Microscopic Study Involving Erbium:YAG Laser Irradiation of Temporomandibular Joint Tissue. Photomedicine and Laser Surgery, 1995, 13, 23-26.	1.1	4
92	The Holmium:YAG Laser-Assisted Otolaryngologic Procedures. JAMA Otolaryngology, 1995, 121, 1162-1166.	1.5	44
93	Arthroscopic shoulder surgeyr with three different laser systems: An evaluation of laser applications. Arthroscopy - Journal of Arthroscopic and Related Surgery, 1995, 11, 696-700.	1.3	15
94	Ultrashort pulse lasers for hard tissue ablation. IEEE Journal of Selected Topics in Quantum Electronics, 1996, 2, 790-800.	1.9	114
95	Analysis of cavitation dynamics during pulsed laser tissue ablation by optical on-line monitoring. IEEE Journal of Selected Topics in Quantum Electronics, 1996, 2, 826-835.	1.9	28
96	Laser-Tissue Interactions. , 1996, , .		180

#	Article	IF	Citations
97	Laser Decompression Of The Facial Nerve. Otolaryngologic Clinics of North America, 1996, 29, 1049-1061.	0.5	5
98	Thermal and noise level characteristics of hard dental tissue ablation with 350-fs pulse laser. , 1996, , .		7
99	Combination of erbium and holmium laser radiation for tissue ablation. , 1996, , .		2
100	<title>Applications of ultrashort-pulse lasers for hard tissue surgery</title>. , 1996, , .		5
101	Holmium. Laryngoscope, 1996, 106, 1-18.	1.1	28
102	Erbium Laser in Middle Ear Surgery: In Vitro and In Vivo Animal Study. Laryngoscope, 1996, 106, 418-422.	1.1	32
103	Effect of Er: YAG laser holes on osteoinduction in demineralized rat calvarial allografts. Journal of Orthopaedic Research, 1996, 14, 108-113.	1.2	22
104	Temperature and pressure effects during erbium laser stapedotomy. , 1996, 18, 100-108.		60
105	Erbium laser ablation of dental hard tissue: Effect of water cooling. , 1996, 18, 294-300.		186
106	Use of the Er:YAG laser for improved plating in maxillofacial surgery: Comparison of bone healing in laser and drill osteotomies. , 1996, 19, 40-45.		92
107	<title>Short-pulse laser beam interactions with biocompatible polymer materials and tissue</title>. , 1996, , .		0
108	Excimer Laser Ablation Of Human Tooth Enamel. , 0, , .		0
109	Effects of Irradiation of an Erbium: YAG Laser on Root Surfaces. Journal of Periodontology, 1997, 68, 1151-1155.	1.7	144
110	Laser Irradiation of Bone. I. An In Vitro Study Concerning the Effects of the CO₂ Laser on Oral Mucosa and Subjacent Bone. Journal of Periodontology, 1997, 68, 872-880.	1.7	57
111	Proposal of a computerized algorithm for continuous wave CO2 laser on-line control during orthopaedic surgery. Journal of Clinical Monitoring and Computing, 1997, 14, 199-206.	0.3	2
112	Transcanalicular Neodymium: YAG Laser for Revision of Dacryocystorhinostomy. Ophthalmology, 1997, 104, 1191-1197.	2.5	66
113	Interaction of holmium laser radiation and cortical bone: ablation and thermal damage in a turbid medium. Applied Optics, 1997, 36, 32.	2.1	17
114	Knochenchirurgie mit dem Er:YAG-laser. Lasermedizin, 1997, 13, 31-36.	0.3	8

#	Article	IF	Citations
115	Erbium:YAG and Holmium:YAG Laser Root Resection of Extracted Human Teeth. Photomedicine and Laser Surgery, 1997, 15, 9-13.	1.1	38
116	The effects of C02, Nd: YAG and Er: YAG lasers with and without surface coolant on tooth root surfaces. An in vitro study. Journal of Clinical Periodontology, 1997, 24, 595-602.	2.3	144
117	Study of mechanical and thermal damage in brain tissue after ablation by Erbium-YAG laser. Lasers in Medical Science, 1997, 12, 21-30.	1.0	12
118	Experimental in vivo fenestration of guinea pig cochlea using 2.79 Îœm laser radiation. Lasers in Medical Science, 1997, 12, 123-130.	1.0	5
119	Improved osteoinduction of cortical bone allografts: A study of the effects of laser perforation and partial demineralization. Journal of Orthopaedic Research, 1997, 15, 748-756.	1.2	30
120	Soft-tissue effects of the holmium:YAG laser: An ultrastructural study on oral mucosa. , 1997, 20, 265-271.		8
121	The Er:YAG laser in ear surgery: First clinical results. , 1997, 21, 79-87.		38
122	Effects of pulsed laser systems on stapes footplate. , 1997, 21, 341-350.		25
123	Prospective randomized comparison of external dacryocystorhinostomy and endonasal laser dacryocystorhinostomy,. Ophthalmology, 1998, 105, 1106-1113.	2.5	229
124	Comparison between Er:YAG Laser and Conventional Technique for Root Caries Treatment in vitro. Journal of Dental Research, 1998, 77, 1404-1414.	2.5	286
125	Fundamental Studies of Fiber-Guided Soft Tissue Cutting by Means of Pulsed Midinfrared Lasers and their Application in Ureterotomy. Journal of Biomedical Optics, 1998, 3, 85.	1.4	6
126	A Study on the Morphological Changes of the Rat Mandibular Bone with TEA CO₂ Laser. Photomedicine and Laser Surgery, 1999, 17, 211-215.	1.1	4
127	Effects of Copper Vapor Laser Irradiation in Human Enamel and Dentin: Ablation and Morphological Studies. Photomedicine and Laser Surgery, 1999, 17, 249-253.	1.1	4
128	Advantages and Dangers of Erbium Laser Application in Stapedotomy. Acta Oto-Laryngologica, 1999, 119, 207-213.	0.3	60
129	Morphological Changes of Human Teeth with Er:YAG Laser Irradiation. Photomedicine and Laser Surgery, 1999, 17, 7-12.	1.1	76
130	Effects of Q-switched Nd:YAG Laser on Calcified Tissues. Lasers in Medical Science, 1999, 14, 221-227.	1.0	3
131	Photoablation of bone by excimer laser radiation. , 1999, 25, 153-158.		20
132	Comparison of cortical bone ablations by using infrared laser wavelengths 2.9 to 9.2 ?m. , 1999, 25, 421-434.		77

#	Article	IF	Citations
133	External dacryocystorhinostomy versus endonasal laser dacryocystorhinostomy: Authors' reply. Ophthalmology, 1999, 106, 648-649.	2.5	1
134	Ho:YAG Laser Treatment of Hyperplastic Inferior Nasal Turbinates. Laryngoscope, 1999, 109, 1690-1695.	1.1	41
135	Laser Irradiation of Bone: II. Healing Response Following Treatment by CO2and Nd:YAG Lasers. Journal of Periodontology, 1999, 70, 75-83.	1.7	66
136	Ablation Depths and Morphological Changes in Human Enamel and Dentin after Er:YAG Laser Irradiation with or without Water Mist. Photomedicine and Laser Surgery, 1999, 17, 105-109.	1.1	128
137	Effects of Er,Cr:YSGG Laser Irradiation in Human Enamel and Dentin: Ablation and Morphological Studies. Photomedicine and Laser Surgery, 1999, 17, 155-159.	1.1	141
138	Laser ablation of skull tissue using transverse excited 9.6-Î¼m CO 2 lasers with pulse durations of 1-100 Î¼s. , 2000, , .		0
139	Preliminary investigation of CTH:YAG laser for cochlear implantation. , 2000, , .		0
140	Laser-Assisted Endoscopic Stapedectomy: A Prospective Study. Laryngoscope, 2000, 110, 1-30.	1.1	79
141	Estudo morfolÃ³gico de superfÃcies Ã³sseas apÃ³s secÃ§Ã£o por pontas diamantadas ou laser de Ã©rbio: YAG. Pesquisa Odontologica Brasileira = Brazilian Oral Research, 2000, 14, 145-149.	0.3	1
142	Effects of Erbium, Chromium:YSGG Laser Irradiation on Canine Mandibular Bone. Journal of Periodontology, 2001, 72, 1178-1182.	1.7	82
144	KTP-532-Laser-Assisted Tympanoplasty. Oto-rhino-laryngologia Nova, 2001, 11, 157-161.	0.0	3
145	Comparison of Er:YAG and 9.6-?m TE CO2 lasers for ablation of skull tissue. Lasers in Surgery and Medicine, 2001, 28, 335-343.	1.1	49
146	Safety of the Erbium:Yttrium-Aluminum-Garnet Laser in Stapes Surgery in Otosclerosis. Otology and Neurotology, 2002, 23, 21-24.	0.7	21
147	Morphological Changes of Bovine Mandibular Bone Irradiated by Er,Cr:YSGG Laser: Anin VitroStudy. Photomedicine and Laser Surgery, 2002, 20, 245-250.	1.1	43
148	Laser-Tissue Interactions. , 2002, , .		71
149	Scanning Electron Microscopy and Fourier Transformed Infrared Spectroscopy Analysis of Bone Removal Using Er:YAG and CO2Lasers. Journal of Periodontology, 2002, 73, 643-652.	1.7	93
150	Ultrastructural analysis of bone tissue irradiated by Er:YAG Laser. Lasers in Surgery and Medicine, 2002, 31, 322-332.	1.1	108
151	Ablation of Bone, Cartilage, and Facet Joint Capsule Using Ho:YAG Laser. Photomedicine and Laser Surgery, 2002, 20, 251-255.	1.1	15

#	Article	IF	Citations
152	Synovial regeneration in the equine carpus after arthroscopic mechanical or carbon dioxide laser synovectomy. Veterinary Surgery, 2002, 31, 331-343.	0.5	23
153	New Developments in CO2 Laser Stapedotomy. Medical Laser Application: International Journal for Laser Treatment and Research, 2002, 17, 202-213.	0.4	4
154	Osteotomy with 80-?s CO2 laser pulses ? histological results. Lasers in Medical Science, 2003, 18, 119-124.	1.0	73
155	Soft and hard tissue ablation with short-pulse high peak power and continuous thulium-silica fibre lasers. Lasers in Medical Science, 2003, 18, 139-147.	1.0	65
156	Effects of 2.94 Âµm Er:YAG Laser Radiation on Root Surfaces Treated In Situ: A Histological Study. Journal of Periodontology, 2003, 74, 360-365.	1.7	28
159	An Er:YAG laser bone cutting manipulator for precise rotational acetabular osteotomy. , 2004, 2004, 2750-3.		2
161	Histological and TEM Examination of Early Stages of Bone Healing after Er:YAG Laser Irradiation. Photomedicine and Laser Surgery, 2004, 22, 342-350.	2.1	116
162	Erbium lasers in dentistry. Dental Clinics of North America, 2004, 48, 1017-1059.	0.8	144
163	Removal of partially erupted third molars using an Erbium (Er):YAG laser: a randomised controlled clinical trial. British Journal of Oral and Maxillofacial Surgery, 2004, 42, 203-208.	0.4	40
164	The clinical application of Ho:YAG laser. , 2005, , .		2
165	Optimization Overlapping Ratio of Erbium: YAG Laser Irradiation for Less Thermal damaged Bone Cutting with Water Cooling. Journal of Japan Society of Computer Aided Surgery, 2005, 6, 477-482.	0.1	0
166	Ablation of hard bone tissue with pulsed CO2 lasers. Medical Laser Application: International Journal for Laser Treatment and Research, 2005, 20, 13-23.	0.4	70
167	Prospective Clinical Study on Cochlear Function after Erbium:Yttrium-Aluminum-Garnet Laser Stapedotomy. Laryngoscope, 2005, 115, 1627-1631.	1.1	15
168	In vivo animal trials with a scanning CO2 laser osteotome. Lasers in Surgery and Medicine, 2005, 37, 144-148.	1.1	45
169	In vivo study of the healing processes that occur in the jaws of rabbits following perforation by an Er,Cr:YSGG laser. Lasers in Medical Science, 2005, 20, 21-27.	1.0	84
170	Experimental Study of FEL Irradiation onto Human Enamel and Dentin. Journal of Hard Tissue Biology, 2005, 14, 82-83.	0.2	0
171	Erbium: Yttrium-Aluminum-Garnet Laser Application in Stapedotomy. Otolaryngology - Head and Neck Surgery, 2005, 133, 923-928.	1.1	15
172	System development and clinical studies with a scanning CO 2 laser osteotome. , 2006, , .		1

#	Article	IF	Citations
173	Laser-Tissue Interactions. Biological and Medical Physics Series, 2007, , .	0.3	235
174	Comparative histological analysis of bone healing of standardized bone defects performed with the Er:YAG laser and steel burs. Lasers in Medical Science, 2008, 23, 253-260.	1.0	60
175	Computer-Guided CO₂-Laser Osteotomy of the Sheep Tibia: Technical Prerequisites and First Results. Photomedicine and Laser Surgery, 2008, 26, 129-136.	2.1	41
176	Effect of Pulse Duration of Er: YAG Laser on Dentin Ablation. Dental Materials Journal, 2008, 27, 433-439.	0.8	35
177	Application of lasers in periodontics: true innovation or myth?. Periodontology 2000, 2009, 50, 90-126.	6.3	161
178	Long-Term Histologic Analysis of Bone Tissue Alteration and Healing Following Er:YAG Laser Irradiation Compared to Electrosurgery. Journal of Periodontology, 2009, 80, 82-92.	1.7	43
179	Advances in bone surgery: the Er:YAG laser in oral surgery and implant dentistry. Clinical, Cosmetic and Investigational Dentistry, 0, Volume 2, 47-62.	0.7	48
181	Laser machining of biomaterials. , 2011, , 125-146.		0
182	Platelet Derived Growth Factor Secretion and Bone Healing After Er:YAG Laser Bone Irradiation. Journal of Oral Implantology, 2011, 37, 195-204.	0.4	37
183	Influence of the pulse frequency and water cooling on the femtosecond laser ablation of bovine cortical bone. Applied Surface Science, 2013, 283, 1012-1017.	3.1	17
184	The dawn of computer-assisted robotic osteotomy with ytterbium-doped fiber laser. Lasers in Medical Science, 2014, 29, 1125-1129.	1.0	25
185	Advanced Applications of the Er:YAG Laser in Oral and Maxillofacial Surgery. , 2015, , .		1
186	Ultrashort pulse laser interactions with cortical bone tissue for applications in orthopaedic surgery. , 2015, , .		5
187	Periodontal and periâ€implant wound healing following laser therapy. Periodontology 2000, 2015, 68, 217-269.	6.3	256
188	Automated 3D bone ablation with 1,070â€‰nm ytterbiumâ€doped fiber laser enabled by inline coherent imaging. Lasers in Surgery and Medicine, 2016, 48, 288-298.	1.1	4
189	Removal of Dental Implants Using the Erbium,Chromium:Yttrium-Scandium-Gallium-Garnet Laser and the Conventional Trephine Bur: An in Vitro Comparative Study. Photomedicine and Laser Surgery, 2016, 34, 61-67.	2.1	11
190	A review of the physiological and histological effects of laser osteotomy. Journal of Medical Engineering and Technology, 2017, 41, 1-12.	0.8	35
191	Enhanced ~3 Î¼m mid-infrared emissions of Ho³⁺ via Yb³⁺ sensitization and Pr³⁺ deactivation in Lu₃Al₅O₁₂ crystal. Optical Materials Express, 2018, 8, 1882.	1.6	11

#	Article	IF	Citations
192	Comparison of an Er: YAG laser osteotome versus a conventional drill for the use in osteoâ€• odontoâ€keratoprosthesis (OOKP). Lasers in Surgery and Medicine, 2019, 51, 531-537.	1.1	10
193	Laser-Tissue Interactions. , 2019, , .		125
194	Characterization of Ablated Bone and Muscle for Long-Pulsed Laser Ablation in Dry and Wet Conditions. Materials, 2019, 12, 1338.	1.3	16
195	Closed-Loop Control of a Magnetically Actuated Fiber-Coupled Laser for Computer-Assisted Laser Microsurgery. , 2019, , .		3
196	Evaluation of bone healing following Er:YAG laser ablation in rat calvaria compared with bur drilling. Journal of Biophotonics, 2019, 12, e201800245.	1.1	27
197	Femtosecond lasers for high-precision orthopedic surgery. Lasers in Medical Science, 2020, 35, 1263-1270.	1.0	17
199	Quantification of local zinc and tungsten deposits in bone with LA-ICP-MS using novel hydroxyapatiteâ€“collagen calibration standards. Journal of Analytical Atomic Spectrometry, 2021, 36, 2431-2438.	1.6	3
202	Laser-Assisted Therapy for Peri-implant Diseases. , 2020, , 123-137.		1
203	Laser in Bone Surgery. , 2020, , 99-109.		3
204	Bone Healing After Erbium:YAG Laser Osteotomy of Sheep Tibia. , 2001, , 75-80.		3
205	Pulsed UV and Mid-infrared Laser Skin Ablation: Experimental and First Clinical Results. , 1991, , 130-146.		3
206	Morphological Changes of Rat Mandibular Bone with ArF Excimer Laser in Vivo. Photomedicine and Laser Surgery, 1999, 17, 145-149.	1.1	7
207	<title>Use of 3-um laser radiation in middle ear surgery</title>. , 1995, , .		4
208	Optimizing deep bone ablation by means of a microsecond Er:YAG laser and a novel water microjet irrigation system. Biomedical Optics Express, 2020, 11, 7253.	1.5	20
209	The use of lasers in orthopaedic procedures.. Journal of Bone and Joint Surgery - Series A, 1993, 75, 768-776.	1.4	79
210	Time-resolved Spectroscopy of Luminescence Generated by KrF Excimer Laser Ablation of Treated and Untreated Bones.. The Review of Laser Engineering, 1994, 22, 402-408.	0.0	1
211	High-speed Imaging Study of Excimer Laser Ablation of Bone.. The Review of Laser Engineering, 1994, 22, 552-558.	0.0	3
212	Histopathological and Clinical Examination of an Immediate Canal Filling after Vital Pulp Extirpation in Combination with the Pulsed Nd: YAG Laser. Journal of Japanese Society for Laser Dentistry, 1994, 5, 91-101.	0.1	11

#	Article	IF	Citations
213	The Morphological Changes of the Rat's Mandibula by Er. Journal of Japanese Society for Laser Dentistry, 1995, 6, 8-15.	0.1	1
214	The Morphological Changes of Deciduous Tooth Structure by Er: YAG Laser Irradiation. Journal of Japanese Society for Laser Dentistry, 1996, 7, 6-11.	0.1	3
215	Observation of Cervical Enamel and Root Dentin of Treated Cavity after Root Caries Removal Using Er: YAG, Laser. Journal of Japanese Society for Laser Dentistry, 1997, 8, 31-37.	0.1	2
217	Laserchirurgie in der Otologie. , 2001, , 65-105.		0
218	Cardiovascular Applications of Lasers. , 2001, , 247-286.		0
219	Histologic Evaluation of the Effects of Er:YAG Laser on Bone Ablation. Journal of Contemporary Dental Practice, 2009, 10, 69-75.	0.2	4
220	Femtosecond laser ablation of bovine cortical bone. , 2013, , .		0
221	Comparison of Experimental Laser Systems for In Vitro Osteotomy of Human Bone. , 1990, , 67-75.		0
222	Fundamentals of Pulsed UV and Mid-infrared Laser Skin Ablation. , 1991, , 102-115.		3
223	Mid-infrared Laser Coronary Angioplasty â€" Experimental Study. , 1991, , 43-47.		2
224	Coronary Laser Angioplasty: Clinical Experience. , 1991, , 67-73.		0
225	What have We Learned about the Atherosclerotic Plaque Using Laser Radiation?. , 1991, , 81-89.		0
226	Photoablation of Brain Tumor Tissue Using the Erbiumi:YAG and the Holmium:YAG Laser. , 1992, , 191-193.		0
227	Photoablation of Bone and Intravertebral Discs. , 1992, , 188-190.		0
228	Application of Erbium: YAG Laser in Dentistry. Nippon Laser Igakkaishi, 1994, 15, 455-462.	0.0	0
230	The Role of Lasers in Pediatric Oral and Maxillofacial Surgery. Oral and Maxillofacial Surgery Clinics of North America, 1994, 6, 69-77.	0.4	0
231	Trimedyne OmniPulse 2.1 Î¼m Holmium:YAG Laser for Arthroscopic Laser Surgery. , 1995, , 147-161.		0
232	Lasers for Treatment of Occlusive Vascular Disease. Contemporary Perspectives in Neurosurgery, 1995, , 77-83.	0.0	0

#	Article	IF	Citations
234	2.1 Î¼m Holmium:YAG Arthroscopic Laser Partial Meniscectomy: 226 Cases. , 1995, , 259-261.		0
235	Advanced Laser Therapy. Laser Application for Clinical Dental Use.. The Review of Laser Engineering, 1996, 24, 886-892.	0.0	0
236	Investigating ultrashort laser pulses as a LASer Scalpel for Orthopedic Surgery (LASSOS). , 2016, , .		0
237	Optimization of laser osteotomy at 1064 nm using a graphite topical absorber and a nitrogen assist gas jet. Biomedical Optics Express, 2019, 10, 3114.	1.5	0
238	Advances in bone surgery: the Er:YAG laser in oral surgery and implant dentistry. Clinical, Cosmetic and Investigational Dentistry, 2010, 2, 47-62.	0.7	17
239	Orthopedics-Related Applications of Ultrafast Laser and Its Recent Advances. Applied Sciences (Switzerland), 2022, 12, 3957.	1.3	10
240	HARD TISSUE LASER PROCEDURES. Dental Clinics of North America, 2000, 44, 931-953.	0.8	19