Hyun Wook Kang

List of Publications by Year
in descending order

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113 papers	1,694 citations	304368 22 h-index	360668 35 g-index
113 all docs	113 docs citations	113 times ranked	1701 citing authors

#	Article	IF	Citations
1	Dependence of calculus retropulsion on pulse duration during HO: YAG laser lithotripsy. Lasers in Surgery and Medicine, 2006, 38, 762-772.	1.1	104
2	Laser ablation in a liquid-confined environment using a nanosecond laser pulse. Journal of Applied Physics, 2008, 103, .	1.1	69
3	Engineering pharmaceutical nanocarriers for photodynamic therapy on wound healing: Review. Materials Science and Engineering C, 2019, 105, 110110.	3.8	66
4	Laser Vaporization of Bovine Prostate: A Quantitative Comparison of Potassium-Titanyl-Phosphate and Lithium Triborate Lasers. Journal of Urology, 2008, 180, 2675-2680.	0.2	58
5	Photoselective Vaporization Prostatectomy: Experience With a Novel 180 W 532 nm Lithium Triborate Laser and Fiber Delivery System in Living Dogs. Journal of Urology, 2011, 185, 712-718.	0.2	56
6	Astaxanthin-alpha tocopherol nanoemulsion formulation by emulsification methods: Investigation on anticancer, wound healing, and antibacterial effects. Colloids and Surfaces B: Biointerfaces, 2018, 172, 170-179.	2.5	53
7	Urinary calculus fragmentation during Ho: YAG and Er:YAG lithotripsy. Lasers in Surgery and Medicine, 2006, 38, 39-51.	1.1	52
8	Fabrication of multifunctional chitosan-based nanocomposite film with rapid healing and antibacterial effect for wound management. International Journal of Biological Macromolecules, 2018, 118, 1713-1725.	3.6	50
9	Ultrasound-mediated fucoxanthin rich oil nanoemulsions stabilized by Î²-carrageenan: Process optimization, bio-accessibility and cytotoxicity. Ultrasonics Sonochemistry, 2019, 55, 105-116.	3.8	49
10	Enhancement of Bovine Bone Ablation Assisted by a Transparent Liquid Layer on a Target Surface. IEEE Journal of Quantum Electronics, 2006, 42, 633-642.	1.0	47
11	Doxorubicin-fucoidan-gold nanoparticles composite for dual-chemo-photothermal treatment on eye tumors. Oncotarget, 2017, 8, 113719-113733.	0.8	44
12	Hypericin-assisted photodynamic therapy against anaplastic thyroid cancer. Photodiagnosis and Photodynamic Therapy, 2018, 24, 15-21.	1.3	43
13	Fucoidan-loaded hydrogels facilitates wound healing using photodynamic therapy by in vitro and in vivo evaluation. Carbohydrate Polymers, 2020, 247, 116624.	5.1	43
14	Greenlight Photoselective 120-Watt 532-nm Lithium Triborate Laser Vaporization Prostatectomy in Living Canines. Journal of Endourology, 2009, 23, 837-845.	1.1	40
15	In vitro antitumor potential of astaxanthin nanoemulsion against cancer cells via mitochondrial mediated apoptosis. International Journal of Pharmaceutics, 2019, 560, 334-346.	2.6	38
16	Temperature feedback-controlled photothermal treatment with diffusing applicator: theoretical and experimental evaluations. Biomedical Optics Express, 2016, 7, 1932.	1.5	34
17	Circumferential irradiation for interstitial coagulation of urethral stricture. Optics Express, 2015, 23, 20829.	1.7	33
18	A new alternative insight of nanoemulsion conjugated with Î²-carrageenan for wound healing study in diabetic mice: In vitro and in vivo evaluation. European Journal of Pharmaceutical Sciences, 2019, 133, 236-250.	1.9	33

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19	Real-time temperature monitoring with fiber Bragg grating sensor during diffuser-assisted laser-induced interstitial thermotherapy. Journal of Biomedical Optics, 2017, 22, 045008.	1.4	31
20	Phloroglucinol-Gold and -Zinc Oxide Nanoparticles: Antibiofilm and Antivirulence Activities towards Pseudomonas aeruginosa PAO1. Marine Drugs, 2021, 19, 601.	2.2	26
21	Epidermal growth factor receptor conjugated fucoidan/alginates loaded hydrogel for activating EGFR/AKT signaling pathways in colon cancer cells during targeted photodynamic therapy. International Journal of Biological Macromolecules, 2020, 158, 1163-1174.	3.6	24
22	In vivo photoacoustic monitoring using 700-nm region Raman source for targeting Prussian blue nanoparticles in mouse tumor model. Scientific Reports, 2018, 8, 2000.	1.6	23
23	Nanoengineered chlorin e6 conjugated with hydrogel for photodynamic therapy on cancer. Colloids and Surfaces B: Biointerfaces, 2019, 181, 778-788.	2.5	23
24	The Effect of Laser-Fiber Sweeping Speed on the Efficiency of Photoselective Vaporization of the Prostate in anEx VivoBovine Model. Journal of Endourology, 2009, 23, 1429-1435.	1.1	22
25	Laser vaporization of the prostate in vivo: Experience with the 150â€W 980â€nm diode laser in living canines. Lasers in Surgery and Medicine, 2010, 42, 736-742.	1.1	22
26	Intravascular ultrasonicâ€“photoacoustic (IVUP) endoscope with 2.2-mm diameter catheter for medical imaging. Computerized Medical Imaging and Graphics, 2015, 45, 57-62.	3.5	19
27	In vitro investigation of wavelengthâ€dependent tissue ablation: Laser prostatectomy between 532â€‰nm and 2.01â€‰Âµm. Lasers in Surgery and Medicine, 2010, 42, 237-244.	1.1	18
28	Quantitative Evaluation of High Power Effect on 532 nm Laser Vaporization of Bovine Prostate In Vitro. Journal of Urology, 2010, 184, 1211-1215.	0.2	18
29	EGFR-conjugated hydrogel accelerates wound healing on ulcer-induced burn wounds by targeting collagen and inflammatory cells using photoimmunomodulatory inhibition. Materials Science and Engineering C, 2021, 118, 111541.	3.8	18
30	Biocompatible astaxanthin as a novel marine-oriented agent for dual chemo-photothermal therapy. PLoS ONE, 2017, 12, e0174687.	1.1	18
31	Feasibility study on photoacoustic guidance for high-intensity focused ultrasound-induced hemostasis. Journal of Biomedical Optics, 2014, 19, 105010.	1.4	17
32	Rabbit model of tracheal stenosis induced by prolonged endotracheal intubation using a segmented tube. International Journal of Pediatric Otorhinolaryngology, 2015, 79, 2384-2388.	0.4	17
33	Fabrication and biological activity of polycaprolactone/phlorotannin endotracheal tube to prevent tracheal stenosis: An in vitro and in vivo study. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 1046-1056.	1.6	17
34	Laser-induced optical breakdown effects of micro-lens arrays and diffractive optical elements on ex vivo porcine skin after 1064â€…nm picosecond laser irradiation. Biomedical Optics Express, 2020, 11, 7286.	1.5	17
35	Defining Optimal Laser-Fiber Sweeping Angle for Effective Tissue Vaporization Using 180â€‰W 532â€‰nm Lithium Triborate Laser. Journal of Endourology, 2012, 26, 313-317.	1.1	16
36	Biocompatible astaxanthin as novel contrast agent for biomedical imaging. Journal of Biophotonics, 2017, 10, 1053-1061.	1.1	16

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37	Spatial effect of conical angle on optical-thermal distribution for circumferential photocoagulation. Biomedical Optics Express, 2017, 8, 5663.	1.5	14
38	Feasibility of photoacoustic evaluations on dualâ€thermal treatment of ex vivo bladder tumors. Journal of Biophotonics, 2017, 10, 577-588.	1.1	13
39	Antibacterial activity of Staphylococcus aureus biofilm under combined exposure of glutaraldehyde, near-infrared light, and 405-nm laser. PLoS ONE, 2018, 13, e0202821.	1.1	13
40	Multifunctional heteropolysaccharide hydrogel under photobiomodulation for accelerated wound regeneration. Ceramics International, 2020, 46, 7268-7278.	2.3	13
41	Enhanced photocoagulation with catheter-based diffusing optical device. Journal of Biomedical Optics, 2012, 17, 118001.	1.4	12
42	Cellulose nanocrystals/nanofibrils loaded astaxanthin nanoemulsion for the induction of apoptosis via ROS-dependent mitochondrial dysfunction in cancer cells under photobiomodulation. International Journal of Biological Macromolecules, 2020, 149, 165-177.	3.6	12
43	Integration of optical applicator with balloon catheter for photothermal treatment of biliary stricture. Lasers in Surgery and Medicine, 2017, 49, 781-786.	1.1	11
44	The Influence of Astaxanthin on the Proliferation of Adipose-derived Mesenchymal Stem Cells in Gelatin-Methacryloyl (GelMA) Hydrogels. Materials, 2019, 12, 2416.	1.3	11
45	3D printingâ€assisted fabrication of doubleâ€layered optical tissue phantoms for laser tattoo treatments. Lasers in Surgery and Medicine, 2016, 48, 392-399.	1.1	10
46	Rabbit model of tracheal stenosis using cylindrical diffuser. Lasers in Surgery and Medicine, 2017, 49, 372-379.	1.1	10
47	Computational analysis of linear energy modulation for laser thermal coagulation. Biomedical Optics Express, 2018, 9, 2575.	1.5	10
48	Endoscopic ultrasound (EUS)-guided cylindrical interstitial laser ablation (CILA) on in vivo porcine pancreas. Biomedical Optics Express, 2021, 12, 4423.	1.5	10
49	Endoscopic Ultrasound-Guided Laser Ablation Using a Diffusing Applicator for Locally Advanced Pancreatic Cancer Treatment. Cancers, 2022, 14, 2274.	1.7	10
50	Real-time monitoring of mono- and dual-species biofilm formation and eradication using microfluidic platform. Scientific Reports, 2022, 12, .	1.6	10
51	Water content contribution in calculus phantom ablation during Q-switched Tm:YAG laser lithotripsy. Journal of Biomedical Optics, 2015, 20, 128001.	1.4	9
52	Concentric photothermal coagulation with basketâ€integrated optical device for treatment of tracheal stenosis. Journal of Biophotonics, 2018, 11, e201700073.	1.1	9
53	Effect of spatial light distribution on the thermal response of vascular tissue. Biomedical Optics Express, 2018, 9, 3037.	1.5	9
54	Development of temperature controller-integrated portable HIFU driver for thermal coagulation. BioMedical Engineering OnLine, 2019, 18, 77.	1.3	9

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55	Application of Ultrasound Thermal Imaging for Monitoring Laser Ablation in Ex Vivo Cardiac Tissue. Lasers in Surgery and Medicine, 2020, 52, 218-227.	1.1	9
56	Computational analysis of endometrial photocoagulation with diffusing optical device. Biomedical Optics Express, 2013, 4, 2450.	1.5	8
57	Combined treatment of lowâ€level laser therapy and phloroglucinol for inhibition of fibrosis. Lasers in Surgery and Medicine, 2020, 52, 276-285.	1.1	8
58	Transoral Lowâ€Level Laser Therapy Via a Cylindrical Device to Treat Oral Ulcers in a Rodent Model. Lasers in Surgery and Medicine, 2020, 52, 647-652.	1.1	8
59	Dependence of laserâ€induced optical breakdown on skin type during 1064â€‰nm picosecond laser treatment. Journal of Biophotonics, 2021, 14, e202100129.	1.1	8
60	A phlorotanninsâ€loaded homogeneous acellular matrix film modulates postâ€implantation inflammatory responses. Journal of Tissue Engineering and Regenerative Medicine, 2022, 16, 51-62.	1.3	8
61	Comparative evaluations of hypertrophic scar formation in in vivo models. Lasers in Surgery and Medicine, 2018, 50, 661-668.	1.1	7
62	In vitro anti-tumor effect of high-fluence low-power laser light on apoptosis of human colorectal cancer cells. Lasers in Medical Science, 2021, 36, 513-520.	1.0	7
63	Deep Learning for Analysis of Collagen Fiber Organization in Scar Tissue. IEEE Access, 2021, 9, 101755-101764.	2.6	7
64	Synthesis of nanohydroxyapatite/collagen-loaded fucoidan-based composite hydrogel for drug delivery to gastrointestinal cancer cells. Colloids and Surfaces B: Biointerfaces, 2021, 203, 111769.	2.5	7
65	Development of a reproducible in vivo laser-induced scar model for wound healing study and management. Biomedical Optics Express, 2019, 10, 1965.	1.5	7
66	Effect of optical energy modulation on the thermal response of biological tissue: computational and experimental validations. Biomedical Optics Express, 2020, 11, 6905.	1.5	7
67	Memristive states in vanadium-dioxide-based planar devices stimulated by 966 nm infrared laser pulses. Japanese Journal of Applied Physics, 2015, 54, 102601.	0.8	6
68	Ex vivolaser lipolysis assisted with radially diffusing optical applicator. Journal of Biomedical Optics, 2016, 21, 058001.	1.4	6
69	Coating Chitosan Thin Shells: A Facile Technique to Improve Dispersion Stability of Magnetoliposomes. Journal of Nanoscience and Nanotechnology, 2018, 18, 583-590.	0.9	6
70	The use of a 532-nm laser fitted with a balloon and a cylindrical light diffuser to treat benign biliary stricture: a pilot study. Lasers in Medical Science, 2021, 36, 25-31.	1.0	6
71	Near-infrared Transillumination and Photodynamic Therapy Using Hypericin in Animal Laryngeal Tumors. Tissue Engineering and Regenerative Medicine, 2021, 18, 941-951.	1.6	6
72	Characterization on ablation performance of various surgical fibers. Lasers in Medical Science, 2014, 29, 273-277.	1.0	5

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73	Dualâ€wavelengthâ€assisted thermal hemostasis for treatment of benign prostate hyperplasia. Journal of Biophotonics, 2018, 11, e201700192.	1.1	5
74	Evaluations on laser ablation of ex vivo porcine stomach tissue for development of Ho:YAG-assisted endoscopic submucosal dissection (ESD). Lasers in Medical Science, 2021, 36, 1437-1444.	1.0	5
75	Automated Structural Analysis and Quantitative Characterization of Scar Tissue Using Machine Learning. Diagnostics, 2022, 12, 534.	1.3	5
76	Update On Erbium:YAG lithotripsy. AIP Conference Proceedings, 2007, , .	0.3	4
77	Effect of multipleâ€sweeping on ablation performance during ex vivo laser nephrectomy. Lasers in Surgery and Medicine, 2016, 48, 616-623.	1.1	4
78	Bidirectional laser triggering in highly-resistive vanadium-dioxide thin films by using a 966-nm pump laser diode. Journal of the Korean Physical Society, 2016, 68, 323-328.	0.3	4
79	Endoluminal application of glass-capped diffuser for ex vivo endovenous photocoagulation. Journal of Biophotonics, 2017, 10, 997-1007.	1.1	4
80	Multivariate Analysis of Laser-Induced Tissue Ablation: Ex Vivo Liver Testing. Applied Sciences (Switzerland), 2017, 7, 974.	1.3	4
81	Feasibility study of endoscopic thermal coagulation with circumferential laser irradiation for treating esophageal tissue. Lasers in Medical Science, 2020, 35, 893-900.	1.0	4
82	Quantitative Monitoring of Tattoo Contrast Variations after 755-nm Laser Treatments in In Vivo Tattoo Models. Sensors, 2020, 20, 285.	2.1	4
83	Multiple cylindrical interstitial laser ablations (CILAs) of porcine pancreas in ex vivo and inÂvivo models. International Journal of Hyperthermia, 2021, 38, 1313-1321.	1.1	4
84	Multi-Lens Arrays (MLA)-Assisted Photothermal Effects for Enhanced Fractional Cancer Treatment: Computational and Experimental Validations. Cancers, 2021, 13, 1146.	1.7	4
85	Phloroglucinol-Combined Photobiomodulation for Minimizing Burn-Induced Skin Fibrosis. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-9.	1.9	4
86	Laser ablation of pancreatic cancer using a cylindrical light diffuser. Lasers in Medical Science, 2022, 37, 2615-2621.	1.0	4
87	Temperature-monitored optical treatment for radial tissue expansion. Lasers in Medical Science, 2017, 32, 993-999.	1.0	3
88	In vitro anti-tumor effect of low-power laser irradiation (LPLI) on gastroenterological carcinoma cells. Lasers in Medical Science, 2020, 35, 677-685.	1.0	3
89	Enhanced precision of real-time control photothermal therapy using cost-effective infrared sensor array and artificial neural network. Computers in Biology and Medicine, 2022, 141, 104960.	3.9	3
90	Enhancement of gold nanorodsâ€assisted photothermal treatment on cancer with laser power in stepwise modulation. Lasers in Surgery and Medicine, 2022, 54, 841-850.	1.1	3

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91	Investigation on safety aspects of forward light propagation during laser surgery. Lasers in Medical Science, 2013, 28, 1315-1321.	1.0	2
92	Thermoelastic displacement measured by DP-OCT for detecting vulnerable plaques. Biomedical Optics Express, 2014, 5, 474.	1.5	2
93	Polarimetric Fiber Vibration Sensor Based on Polarization-Diversified Loop Using Short Polarization-Maintaining Photonic Crystal Fiber. Journal of Nanoscience and Nanotechnology, 2017, 17, 8307-8312.	0.9	2
94	Dependence of Photothermal Responses on Wavelengths. Journal of the Korean Physical Society, 2019, 74, 224-230.	0.3	2
95	Dependence of laser-induced tissue ablation on optical fiber movements for laser prostatectomy. World Journal of Urology, 2020, 38, 2253-2259.	1.2	2
96	Opto-chemical treatment for enhanced high-level disinfection of mature bacterial biofilm in a Teflon-based endoscope model. Biomedical Optics Express, 2021, 12, 5736.	1.5	2
97	Enhanced photothermal hemostasis using dual wavelengths in an in vivo leporine kidney model. Biomedical Optics Express, 2019, 10, 5198.	1.5	2
98	Collective bacterial disinfection by opto-chemical treatment on mature biofilm in clinical endoscope. Journal of Photochemistry and Photobiology B: Biology, 2022, 226, 112367.	1.7	2
99	Impact of residual air trap in balloon on laser treatment of tubular tissue. Lasers in Surgery and Medicine, 2022, 54, 767-778.	1.1	2
100	Stimulatory effects of wavelength-dependent photobiomodulation on proliferation and angiogenesis of colorectal cancer. Journal of Photochemistry and Photobiology B: Biology, 2022, 234, 112527.	1.7	2
101	Optical feedback-induced light modulation for fiber-based laser ablation. Lasers in Medical Science, 2014, 29, 1919-1925.	1.0	1
102	Enhanced coupling of optical energy during liquid-confined metal ablation. Journal of Applied Physics, 2015, 118, 153101.	1.1	1
103	Feasibility study on a short-pulsed IR wavelength for effective calculus fragmentation. Journal of the Korean Physical Society, 2015, 66, 1623-1626.	0.3	1
104	Application of double-layered skin phantoms for optical flow imaging during laser tattoo treatments. Journal of the Korean Physical Society, 2016, 68, 1137-1141.	0.3	1
105	Effect of the pulse repetition rate on fiber-assisted tissue ablation. Journal of the Korean Physical Society, 2016, 69, 152-156.	0.3	1
106	Temporal modulation of optical energy for enhanced photothermal hemostasis of intraoperative bleeding during laser treatment. Journal of Biophotonics, 2020, 13, e202000086.	1.1	1
107	In Vivo Investigation of Noncontact Rapid Photothermal Hemostasis on Venous and Arterial Bleeding. IEEE Transactions on Biomedical Engineering, 2021, 68, 2689-2697.	2.5	1
108	Universal Convolutional Neural Network for Histology-Independent Analysis of Collagen Fiber Organization in Scar Tissue. IEEE Access, 2022, 10, 34379-34392.	2.6	1

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109	Making unpolarized light sensitive to polarization-sensitive devices. Applied Physics B: Lasers and Optics, 2017, 123, 1.	1.1	0
110	Effect of multi-wavelength irradiation on color characterization with light-emitting diodes (LEDs). Journal of the Korean Physical Society, 2017, 70, 1011-1015.	0.3	0
111	Feasibility Study of Cylindrically Diffusing 532 nm Wavelength for Treatment of Pancreatic Cancer. Journal of the Korean Physical Society, 2018, 73, 1619-1624.	0.3	0
112	Feasibility of LED-Assisted CMOS Camera: Contrast Estimation for Laser Tattoo Treatment. Applied Sciences (Switzerland), 2018, 8, 661.	1.3	0
113	Contrast-Enhancing Optical Probe for Near-Infrared Fluorescence Imaging Under Surgical Light Illumination. Journal of the Korean Physical Society, 2019, 74, 568-573.	0.3	0