Oliver D Kripfgans

List of Publications by Year in Descending Order

109 papers	2,816 citations	25 h-index	51 g-index
136 ext. papers	3,396 ext. citations	4.3 avg, IF	4.96 L-index

#	Paper	IF	Citations
109	Three-Dimensional Ultrasound Imaging of the Jawbone for Ridge Width Determination: A Pre-clinical Ex-Vivo Porcine Study. *Journal of Dentistry*, **2022**, 104167	4.8	
108	Ultrasonic Imaging: Physics and Mechanism **2021**, 1-38		1
107	Ultrasound Indications in Implant Related and Other Oral Surgery **2021**, 143-160		
106	Ultrasonic Imaging for Evaluating Peri-Implant Diseases **2021**, 161-175		0
105	Ultrasonography for Wound Healing Evaluation of Implant-Related Surgeries **2021**, 177-196		
104	Prevalence and risk indicators of midfacial peri-implant soft tissue dehiscence at single site in the esthetic zone: A cross-sectional clinical and ultrasonographic study. *Journal of Periodontology*, **2021**,	4.6	2
103	Multi-class deep learning segmentation and automated measurements in periodontal sonograms of a porcine model. *Dentomaxillofacial Radiology*, **2021**, 20210363	3.9	1
102	Stable and transient bubble formation in acoustically-responsive scaffolds by acoustic droplet vaporization: theory and application in sequential release. *Ultrasonics Sonochemistry*, **2021**, 72, 105430	8.9	8
101	Comprehensive peri-implant tissue evaluation with ultrasonography and cone-beam computed tomography: A pilot study. *Clinical Oral Implants Research*, **2021**, 32, 777-785	4.8	2
100	Front-End Architecture Design for Low-Complexity 3-D Ultrasound Imaging Based on Synthetic Aperture Sequential Beamforming. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, **2021**, 29, 333-346	2.6	
99	Comparison of Variations Between Spectral Doppler and Gaussian Surface Integration Methods for Umbilical Vein Blood Volume Flow. *Journal of Ultrasound in Medicine*, **2021**, 40, 369-376	2.9	1
98	Ultrasonographic tissue perfusion analysis at implant and palatal donor sites following soft tissue augmentation: A clinical pilot study. *Journal of Clinical Periodontology*, **2021**, 48, 602-614	7.7	6
97	Ultrasonographic evaluation of edentulous crestal bone topography: A proof-of-principle retrospective study. *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology*, **2021**,	2	1
96	Ultrasonography for noninvasive and real-time evaluation of peri-implant soft and hard tissue: a case series. *International Journal of Implant Dentistry*, **2021**, 7, 95	2.8	0
95	Release of basic fibroblast growth factor from acoustically-responsive scaffolds promotes therapeutic angiogenesis in the hind limb ischemia model. *Journal of Controlled Release*, **2021**, 338, 773-783	11.7	2
94	Facial mucosal level of single immediately placed implants with either immediate provisionalization or delayed restoration: An intermediate-term study. *Journal of Periodontology*, **2021**, 92, 1213-1221	4.6	1
93	Spatiotemporal control of micromechanics and microstructure in acoustically-responsive scaffolds using acoustic droplet vaporization. *Soft Matter*, **2020**, 16, 6501-6513	3.6	7

92	Spatially-directed cell migration in acoustically-responsive scaffolds through the controlled delivery of basic fibroblast growth factor. *Acta Biomaterialia*, **2020**, 113, 217-227	10.8	9
91	Three-dimensional US for Quantification of Volumetric Blood Flow: Multisite Multisystem Results from within the Quantitative Imaging Biomarkers Alliance. *Radiology*, **2020**, 296, 662-670	20.5	2
90	Ultrasonographic characterization of lingual structures pertinent to oral, periodontal, and implant surgery. *Clinical Oral Implants Research*, **2020**, 31, 352-359	4.8	16
89	Ultrasonography for diagnosis of peri-implant diseases and conditions: a detailed scanning protocol and case demonstration. *Dentomaxillofacial Radiology*, **2020**, 49, 20190445	3.9	15
88	Standing wave-assisted acoustic droplet vaporization for single and dual payload release in acoustically-responsive scaffolds. *Ultrasonics Sonochemistry*, **2020**, 66, 105109	8.9	10
87	Ultrasonography for chairside evaluation of periodontal structures: A pilot study. *Journal of Periodontology*, **2020**, 91, 890-899	4.6	21
86	Tetris: Using Software/Hardware Co-Design to Enable Handheld, Physics-Limited 3D Plane-Wave Ultrasound Imaging. *IEEE Transactions on Computers*, **2020**, 69, 1209-1220	2.5	0
85	Partial Volume Effect and Correction for 3-D Color Flow Acquisition of Volumetric Blood Flow. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2019**, 66, 1749-1759	3.2	1
84	Parametric Study of Acoustic Droplet Vaporization Thresholds and Payload Release From Acoustically-Responsive Scaffolds. *Ultrasound in Medicine and Biology*, **2019**, 45, 2471-2484	3.5	15
83	Tetris **2019**,		2
82	Controlled delivery of basic fibroblast growth factor (bFGF) using acoustic droplet vaporization stimulates endothelial network formation. *Acta Biomaterialia*, **2019**, 97, 409-419	10.8	17
81	Three-dimensional US Fractional Moving Blood Volume: Validation of Renal Perfusion Quantification. *Radiology*, **2019**, 293, 460-468	20.5	10
80	Acoustic Droplet Vaporization in Acoustically Responsive Scaffolds: Effects of Frequency of Excitation, Volume Fraction and Threshold Determination Method. *Ultrasound in Medicine and Biology*, **2019**, 45, 3246-3260	3.5	8
79	Spatiotemporally-controlled transgene expression in hydroxyapatite-fibrin composite scaffolds using high intensity focused ultrasound. *Biomaterials*, **2019**, 194, 14-24	15.6	10
78	Error analysis of speed of sound reconstruction in ultrasound limited angle transmission tomography. *Ultrasonics*, **2018**, 88, 174-184	3.5	0
77	Preliminary Clinical Experience with a Combined Automated Breast Ultrasound and Digital Breast Tomosynthesis System. *Ultrasound in Medicine and Biology*, **2018**, 44, 734-742	3.5	8
76	Sequential Payload Release from Acoustically-Responsive Scaffolds Using Focused Ultrasound. *Ultrasound in Medicine and Biology*, **2018**, 44, 2323-2335	3.5	18
75	Ultrasonic Cavitation-Enabled Treatment for Therapy of Hypertrophic Cardiomyopathy: Proof of Principle. *Ultrasound in Medicine and Biology*, **2018**, 44, 1439-1450	3.5	7

74	Evaluation of Umbilical Vein Blood Volume Flow in Preeclampsia by Angle-Independent 3D Sonography. *Journal of Ultrasound in Medicine*, **2018**, 37, 1633-1640	2.9	5
73	Updates on ultrasound research in implant dentistry: a systematic review of potential clinical indications. *Dentomaxillofacial Radiology*, **2018**, 47, 20180076	3.9	20
72	Ultrasonography for noninvasive and real-time evaluation of peri-implant tissue dimensions. *Journal of Clinical Periodontology*, **2018**, 45, 986-995	7.7	20
71	High-Volume-Rate 3-D Ultrasound Imaging Based on Synthetic Aperture Sequential Beamforming With Chirp-Coded Excitation. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 1346-1358	3.2	3
70	Non-ionizing real-time ultrasonography in implant and oral surgery: A feasibility study. *Clinical Oral Implants Research*, **2017**, 28, 341-347	4.8	33
69	Controlled release of basic fibroblast growth factor for angiogenesis using acoustically-responsive scaffolds. *Biomaterials*, **2017**, 140, 26-36	15.6	50
68	Temperature imaging with ultrasonic transmission tomography for treatment control **2017**,		1
67	Low-Cost 3-D Flow Estimation of Blood With Clutter. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2017**, 64, 772-784	3.2	3
66	Limited angle breast ultrasound tomography with a priori information and artifact removal **2017**,		1
65	Multiple ultrasound cavitation-enabled treatments for myocardial reduction. *Journal of Therapeutic Ultrasound*, **2017**, 5, 29		3
64	Adaptive optimization on ultrasonic transmission tomography-based temperature image for biomedical treatment. *Chinese Physics B*, **2017**, 26, 064301	1.2	3
63	Passive Microlesion Detection and Mapping for Treatment of Hypertrophic Cardiomyopathy. *AIP Conference Proceedings*, **2017**, 1816,	0	1
62	Non-invasive evaluation of facial crestal bone with ultrasonography. *PLoS ONE*, **2017**, 12, e0171237	3.7	27
61	Acoustic beam anomalies in automated breast imaging. *Journal of Medical Imaging*, **2017**, 4, 045001	2.6	1
60	Maturation of Lesions Induced by Myocardial Cavitation-Enabled Therapy. *Ultrasound in Medicine and Biology*, **2016**, 42, 1541-50	3.5	2
59	Design and Characterization of Fibrin-Based Acoustically Responsive Scaffolds for Tissue Engineering Applications. *Ultrasound in Medicine and Biology*, **2016**, 42, 257-71	3.5	28
58	Nucleation pressure threshold in acoustic droplet vaporization. *Journal of Applied Physics*, **2016**, 120, 034903	2.5	26
57	Acoustic attenuation imaging of tissue bulk properties with a priori information. *Journal of the Acoustical Society of America*, **2016**, 140, 2113	2.2	6

56	Low Complexity 3D Ultrasound Imaging Using Synthetic Aperture Sequential Beamforming **2016**,		2
55	In vitro and in vivo assessment of controlled release and degradation of acoustically responsive scaffolds. *Acta Biomaterialia*, **2016**, 46, 221-233	10.8	30
54	Automated Breast Ultrasound: Dual-Sided Compared with Single-Sided Imaging. *Ultrasound in Medicine and Biology*, **2016**, 42, 2072-82	3.5	11
53	Volumetric blood flow in transjugular intrahepatic portosystemic shunt revision using 3-dimensional Doppler sonography. *Journal of Ultrasound in Medicine*, **2015**, 34, 257-66	2.9	11
52	Quantitative assessment of damage during MCET: a parametric study in a rodent model. *Journal of Therapeutic Ultrasound*, **2015**, 3, 18		6
51	Temperature imaging with speed of ultrasonic transmission tomography for medical treatment control: A physical model-based method. *Chinese Physics B*, **2015**, 24, 104303	1.2	
50	Use of Theranostic Strategies in Myocardial Cavitation-Enabled Therapy. *Ultrasound in Medicine and Biology*, **2015**, 41, 1865-75	3.5	12
49	**2015**,		7
48	Characterization of macrolesions induced by myocardial cavitation-enabled therapy. *IEEE Transactions on Biomedical Engineering*, **2015**, 62, 717-27	5	8
47	Initial nucleation site formation due to acoustic droplet vaporization. *Applied Physics Letters*, **2014**, 104, 063703	3.4	43
46	Patterning expression of regenerative growth factors using high intensity focused ultrasound. *Tissue Engineering - Part C: Methods*, **2014**, 20, 769-79	2.9	16
45	Timing of high-intensity pulses for myocardial cavitation-enabled therapy. *Journal of Therapeutic Ultrasound*, **2014**, 2, 20		5
44	Acceleration of ultrasound thermal therapy by patterned acoustic droplet vaporization. *Journal of the Acoustical Society of America*, **2014**, 135, 537-44	2.2	25
43	Formation of toroidal bubbles from acoustic droplet vaporization. *Applied Physics Letters*, **2014**, 104, 063706	3.4	9
42	High volume rate, high resolution 3D plane wave imaging **2014**,		5
41	Improved digital breast tomosynthesis images using automated ultrasound. *Medical Physics*, **2014**, 41, 061911	4.4	2
40	CMUT-in-CMOS 2D arrays with advanced multiplexing and time-gain control **2014**,		6
39	High throughput production of uniformly-sized fluorocarbon emulsions for ultrasonic therapy using a silicon-based microfluidic system **2014**,		2

38	Characterization of acoustic droplet vaporization and inertial cavitation thresholds in acoustically-responsive tissue scaffolds **2014**,		1
37	Optimization of ultrasound parameters of myocardial cavitation microlesions for therapeutic application. *Ultrasound in Medicine and Biology*, **2014**, 40, 1228-36	3.5	17
36	Assessment of the biodistribution of an [(18) F]FDG-loaded perfluorocarbon double emulsion using dynamic micro-PET in rats. *Contrast Media and Molecular Imaging*, **2013**, 8, 366-74	3.2	12
35	Three-dimensional sonographic measurement of blood volume flow in the umbilical cord. *Journal of Ultrasound in Medicine*, **2012**, 31, 1927-34	2.9	11
34	Ultrasound-induced hyperthermia for the spatio-temporal control of gene expression in bone repair **2012**,		1
33	A 32 x 32 capacitive micromachined ultrasonic transducer array manufactured in standard CMOS. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2012**, 59, 1521-36	3.2	18
32	Image Processing and Registration of Opposed View 3D Breast Ultrasound. *Lecture Notes in Computer Science*, **2012**, 666-672	0.9	1
31	Acoustic droplet vaporization for enhancement of thermal ablation by high intensity focused ultrasound. *Academic Radiology*, **2011**, 18, 1123-32	4.3	82
30	A tissue-mimicking ultrasound test object using droplet vaporization to create point targets. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2011**, 58, 2013-25	3.2	14
29	Bubble evolution in acoustic droplet vaporization at physiological temperature via ultra-high speed imaging. *Soft Matter*, **2011**, 7, 4009	3.6	71
28	WE-E-220-08: Image Based Microwave Focusing for Transcutaneous Therapy in Combination with Focused Ultrasound Heating. *Medical Physics*, **2011**, 38, 3825-3825	4.4	
27	Initial investigation of acoustic droplet vaporization for occlusion in canine kidney. *Ultrasound in Medicine and Biology*, **2010**, 36, 1691-703	3.5	95
26	**2010**,		1
25	**2010**,		1
24	Delivery of water-soluble drugs using acoustically triggered perfluorocarbon double emulsions. *Pharmaceutical Research*, **2010**, 27, 2753-65	4.5	105
23	Delivery of chlorambucil using an acoustically-triggered perfluoropentane emulsion. *Ultrasound in Medicine and Biology*, **2010**, 36, 1364-75	3.5	114
22	Acoustic Droplet Vaporization for the Enhancement of Ultrasound Thermal Therapy. *Proceedings IEEE Ultrasonics Symposium*, **2010**, 2010, 221-224		3
21	Generalized shot noise model for time-reversal in multiple-scattering media allowing for arbitrary inputs and windowing. *Journal of the Acoustical Society of America*, **2009**, 125, 3129-40	2.2	5

20	CMUT-in-CMOS ultrasonic transducer arrays with on-chip electronics **2009**,		13
19	Mean volume flow estimation in pulsatile flow conditions. *Ultrasound in Medicine and Biology*, **2009**, 35, 1880-91	3.5	15
18	The role of inertial cavitation in acoustic droplet vaporization. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2009**, 56, 1006-17	3.2	162
17	The role of inertial cavitation in acoustic droplet vaporization **2008**,		1
16	Initial growth and coalescence of acoustically vaporized perfluorocarbon microdroplets **2008**,		3
15	Ultrasound of the fingers for human identification using biometrics. *Ultrasound in Medicine and Biology*, **2008**, 34, 392-9	3.5	8
14	Towards aberration correction of transcranial ultrasound using acoustic droplet vaporization. *Ultrasound in Medicine and Biology*, **2008**, 34, 435-45	3.5	66
13	SU-GG-J-196: Vascular Occlusion by Acoustically Vaporized Droplets for Potential Targeted Enhancement of Thermal Therapies. *Medical Physics*, **2008**, 35, 2724-2725	4.4	
12	Acoustic droplet vaporization threshold: effects of pulse duration and contrast agent. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2007**, 54, 933-46	3.2	99
11	Gravity-driven microfluidic particle sorting device with hydrodynamic separation amplification. *Analytical Chemistry*, **2007**, 79, 1369-76	7.8	228
10	Spatial control of gas bubbles and their effects on acoustic fields. *Ultrasound in Medicine and Biology*, **2006**, 32, 95-106	3.5	36
9	Measurement of volumetric flow. *Journal of Ultrasound in Medicine*, **2006**, 25, 1305-11	2.9	24
8	Vector Doppler imaging of a spinning disc ultrasound Doppler phantom. *Ultrasound in Medicine and Biology*, **2006**, 32, 1037-46	3.5	29
7	Acoustic droplet vaporization for temporal and spatial control of tissue occlusion: a kidney study. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2005**, 52, 1101-10	3.2	81
6	Functional imaging with intraoperative ultrasound: detection of somatosensory cortex in dogs with color-duplex sonography. *Neurosurgery*, **2005**, 56, 355-63; discussion 355-63	3.2	2
5	On the acoustic vaporization of micrometer-sized droplets. *Journal of the Acoustical Society of America*, **2004**, 116, 272-81	2.2	171
4	In vivo droplet vaporization for occlusion therapy and phase aberration correction. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2002**, 49, 726-38	3.2	99
3	Acoustic droplet vaporization for therapeutic and diagnostic applications. *Ultrasound in Medicine and Biology*, **2000**, 26, 1177-89	3.5	405

2	Cavitation nucleation agents for nonthermal ultrasound therapy. *Journal of the Acoustical Society of America*, **2000**, 107, 3480-6	2.2	38
1	Interlaboratory comparison of ultrasonic backscatter, attenuation, and speed measurements. *Journal of Ultrasound in Medicine*, **1999**, 18, 615-31	2.9	141