Mickael Tanter

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

450 papers	23,807 citations	79 h-index	144 g-index
546 ext. papers	30,026 ext. citations	5.5 avg, IF	7.11 L-index

#	Paper	IF	Citations
450	Ret kinase-mediated mechanical induction of colon stem cells by tumor growth pressure stimulates cancer progression in vivo.. *Communications Biology*, **2022**, 5, 137	6.7	0
449	Ultrasound localization microscopy and functional ultrasound imaging reveal atypical features of the trigeminal ganglion vasculature.. *Communications Biology*, **2022**, 5, 330	6.7	0
448	Ultrafast Doppler imaging and ultrasound localization microscopy reveal the complexity of vascular rearrangement in chronic spinal lesion.. *Scientific Reports*, **2022**, 12, 6574	4.9	0
447	In vivo whole brain microvascular imaging in mice using transcranial 3D Ultrasound Localization Microscopy.. *EBioMedicine*, **2022**, 79, 103995	8.8	3
446	Intensity distribution segmentation in ultrafast Doppler combined with scanning laser confocal microscopy for assessing vascular changes associated with ageing in murine hippocampi.. *Scientific Reports*, **2022**, 12, 6784	4.9	
445	Covariations between pupil diameter and supplementary eye field activity suggest a role in cognitive effort implementation. *PLoS Biology*, **2022**, 20, e3001654	9.7	0
444	Megalencephalic leukoencephalopathy with subcortical cysts is a developmental disorder of the gliovascular unit. *ELife*, **2021**, 10,	8.9	3
443	Large-scale functional ultrasound imaging of the spinal cord reveals in-depth spatiotemporal responses of spinal nociceptive circuits in both normal and inflammatory states. *Pain*, **2021**, 162, 1047-1059	8	5
442	Transcranial ultrafast ultrasound localization microscopy of brain vasculature in patients. *Nature Biomedical Engineering*, **2021**, 5, 219-228	19	35
441	Feasibility and Performance of Noninvasive Ultrasound Therapy in Patients With Severe Symptomatic Aortic Valve Stenosis: A First-in-Human Study. *Circulation*, **2021**, 143, 968-970	16.7	5
440	Endothelial Zeb2 preserves the hepatic angioarchitecture and protects against liver fibrosis. *Cardiovascular Research*, **2021**,	9.9	7
439	Single-trial decoding of movement intentions using functional ultrasound neuroimaging. *Neuron*, **2021**, 109, 1554-1566.e4	13.9	11
438	Functional ultrasound imaging of the spreading activity following optogenetic stimulation of the rat visual cortex. *Scientific Reports*, **2021**, 11, 12603	4.9	4
437	Von Willebrand factor multimers during non-invasive ultrasound therapy for aortic valve stenosis. *Angiogenesis*, **2021**, 24, 715-717	10.6	1
436	Dealiasing High-Frame-Rate Color Doppler Using Dual-Wavelength Processing. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2021**, 68, 2117-2128	3.2	0
435	Carotid Plaque Vulnerability Assessed by Combined Shear Wave Elastography and Ultrafast Doppler Compared to Histology. *Translational Stroke Research*, **2021**, 1	7.8	1
434	Wall Shear Stress Measurement by Ultrafast Vector Flow Imaging for´Atherosclerotic Carotid Stenosis. *Ultraschall in Der Medizin*, **2021**, 42, 297-305	3.8	12

433	Comparison Between Ray-Tracing and Full-Wave Simulation for Transcranial Ultrasound Focusing on a Clinical System Using the Transfer Matrix Formalism. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2021**, 68, 2554-2565	3.2	2
432	Whole-Brain 3D Activation and Functional Connectivity Mapping in Mice using Transcranial Functional Ultrasound Imaging. *Journal of Visualized Experiments*, **2021**,	1.6	3
431	Bedside functional monitoring of the dynamic brain connectivity in human neonates. *Nature Communications*, **2021**, 12, 1080	17.4	10
430	A functional ultrasound brain GPS for automatic vascular-based neuronavigation. *Scientific Reports*, **2021**, 11, 15197	4.9	3
429	Functional Ultrasound Imaging: A New Imaging Modality for Neuroscience. *Neuroscience*, **2021**, 474, 110-121	3.3	11
428	New Mechanistic Insights, Novel Treatment Paradigms, and Clinical Progress in Cerebrovascular Diseases. *Frontiers in Aging Neuroscience*, **2021**, 13, 623751	5.3	9
427	XDoppler: Cross-Correlation of Orthogonal Apertures for 3D Blood Flow Imaging. *IEEE Transactions on Medical Imaging*, **2021**, 40, 3358-3368	11.7	1
426	Quantitative imaging of coronary flows using 3D ultrafast Doppler coronary angiography. *Physics in Medicine and Biology*, **2020**, 65, 105013	3.8	4
425	Flow Rate and Low Hematocrit Measurements for In Vitro Blood Processing With Doppler Ultrasound. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2020**, 67, 1293-1302	3.2	2
424	The SVD Beamformer: Physical Principles and Application to Ultrafast Adaptive Ultrasound. *IEEE Transactions on Medical Imaging*, **2020**, 39, 3100-3112	11.7	11
423	Computationally Efficient Transcranial Ultrasonic Focusing: Taking Advantage of the High Correlation Length of the Human Skull. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2020**, 67, 1993-2002	3.2	8
422	Transfer functions linking neural calcium to single voxel functional ultrasound signal. *Nature Communications*, **2020**, 11, 2954	17.4	26
421	Functional imaging evidence for task-induced deactivation and disconnection of a major default mode network hub in the mouse brain. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 15270-15280	11.5	25
420	Functional ultrasound imaging of deep visual cortex in awake nonhuman primates. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 14453-14463	11.5	20
419	Concurrent imaging of vascularization and metabolism in a mouse model of paraganglioma under anti-angiogenic treatment. *Theranostics*, **2020**, 10, 3518-3532	12.1	8
418	Ultrafast Ultrasound Imaging for Super-Resolution Preclinical Cardiac PET. *Molecular Imaging and Biology*, **2020**, 22, 1342-1352	3.8	3
417	Ultrafast ultrasound imaging pattern analysis reveals distinctive dynamic brain states and potent sub-network alterations in arthritic animals. *Scientific Reports*, **2020**, 10, 10485	4.9	10
416	Super-resolution Ultrasound Imaging. *Ultrasound in Medicine and Biology*, **2020**, 46, 865-891	3.5	83

415	Circulating tPA contributes to neurovascular coupling by a mechanism involving the endothelial NMDA receptors. *Journal of Cerebral Blood Flow and Metabolism*, **2020**, 40, 2038-2054	7.3	10
414	Ultrafast Radial Modulation Imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2020**, 67, 598-611	3.2	2
413	4D Functional Imaging of the Rat Brain Using a Large Aperture Row-Column Array. *IEEE Transactions on Medical Imaging*, **2020**, 39, 1884-1893	11.7	12
412	Ultrafast Ultrasound Imaging in Pediatric´and Adult Cardiology: Techniques, Applications, and Perspectives. *JACC: Cardiovascular Imaging*, **2020**, 13, 1771-1791	8.4	17
411	Acoustic biomolecules enhance hemodynamic functional ultrasound imaging of neural activity. *NeuroImage*, **2020**, 209, 116467	7.9	14
410	Non-invasive ultrasonic modulation of visual evoked response by GABA delivery through the blood brain barrier. *Journal of Controlled Release*, **2020**, 318, 223-231	11.7	12
409	Early Ultrafast Ultrasound Imaging of Cerebral Perfusion correlates with Ischemic Stroke outcomes and responses to treatment in Mice. *Theranostics*, **2020**, 10, 7480-7491	12.1	12
408	Feasibility and safety of non-invasive ultrasound therapy (NIUT) on porcine aortic valve. *Physics in Medicine and Biology*, **2020**,	3.8	4
407	Non-invasive recanalization of deep venous thrombosis by high frequency ultrasound in a swine model with follow-up. *Journal of Thrombosis and Haemostasis*, **2020**, 18, 2889-2898	15.4	2
406	Pharmaco-fUS: Quantification of pharmacologically-induced dynamic changes in brain perfusion and connectivity by functional ultrasound imaging in awake mice. *NeuroImage*, **2020**, 222, 117231	7.9	14
405	4D Ultrafast Ultrasound Imaging of Naturally Occurring Shear Waves in the Human Heart. *IEEE Transactions on Medical Imaging*, **2020**, 39, 4436-4444	11.7	4
404	Adaptive modulation of brain hemodynamics across stereotyped running episodes. *Nature Communications*, **2020**, 11, 6193	17.4	6
403	Steering Capabilities of an Acoustic Lens for Transcranial Therapy: Numerical and Experimental Studies. *IEEE Transactions on Biomedical Engineering*, **2020**, 67, 27-37	5	16
402	4D functional ultrasound imaging of whole-brain activity in rodents. *Nature Methods*, **2019**, 16, 994-997	21.6	63
401	4D simultaneous tissue and blood flow Doppler imaging: revisiting cardiac Doppler index with single heart beat 4D ultrafast echocardiography. *Physics in Medicine and Biology*, **2019**, 64, 085013	3.8	9
400	Functional ultrasound imaging of the brain reveals propagation of task-related brain activity in behaving primates. *Nature Communications*, **2019**, 10, 1400	17.4	49
399	Ultrafast 3D Ultrasound Localization Microscopy Using a 32 □32 Matrix Array. *IEEE Transactions on Medical Imaging*, **2019**, 38, 2005-2015	11.7	33
398	Microvascular flow dictates the compromise between spatial resolution and acquisition time in Ultrasound Localization Microscopy. *Scientific Reports*, **2019**, 9, 2456	4.9	49

397	Mapping Biological Current Densities With Ultrafast Acoustoelectric Imaging: Application to the Beating Rat Heart. *IEEE Transactions on Medical Imaging*, **2019**, 38, 1852-1857	11.7	9
396	Controlled mechanical vibration and impacts on skin biology. *Skin Research and Technology*, **2019**, 25, 881-889	1.9	1
395	The EFSUMB Guidelines and Recommendations for the Clinical Practice of Elastography in Non-Hepatic Applications: Update 2018. *Ultraschall in Der Medizin*, **2019**, 40, 425-453	3.8	97
394	3-D Longitudinal Imaging of Tumor Angiogenesis in Mice in Vivo Using Ultrafast Doppler Tomography. *Ultrasound in Medicine and Biology*, **2019**, 45, 1284-1296	3.5	10
393	Ultrasonic Adaptive Sound Speed Estimation for the Diagnosis and Quantification of Hepatic Steatosis: A Pilot Study. *Ultraschall in Der Medizin*, **2019**, 40, 722-733	3.8	23
392	Arterial Stiffness Assessment by Shear Wave Elastography and Ultrafast Pulse Wave Imaging: Comparison with Reference Techniques in Normotensives and Hypertensives. *Ultrasound in Medicine and Biology*, **2019**, 45, 758-772	3.5	22
391	Oxytocin receptor agonist reduces perinatal brain damage by targeting microglia. *Glia*, **2019**, 67, 345-359	9	34
390	Arterial Stiffening with Ultrafast Ultrasound Imaging Gives New´Insight into Arterial Phenotype of Vascular Ehlers-Danlos Mouse´Models. *Ultraschall in Der Medizin*, **2019**, 40, 734-742	3.8	8
389	Ultrafast Doppler for neonatal brain imaging. *NeuroImage*, **2019**, 185, 851-856	7.9	22
388	Myocardial Stiffness Evaluation Using Noninvasive Shear Wave Imaging in Healthy and Hypertrophic Cardiomyopathic Adults. *JACC: Cardiovascular Imaging*, **2019**, 12, 1135-1145	8.4	50
387	Simultaneous positron emission tomography and ultrafast ultrasound for hybrid molecular, anatomical and functional imaging. *Nature Biomedical Engineering*, **2018**, 2, 85-94	19	29
386	Adaptive Spatiotemporal SVD Clutter Filtering for Ultrafast Doppler Imaging Using Similarity of Spatial Singular Vectors. *IEEE Transactions on Medical Imaging*, **2018**, 37, 1574-1586	11.7	92
385	Non-invasive Evaluation of Aortic Stiffness Dependence with Aortic Blood Pressure and Internal Radius by Shear Wave Elastography and Ultrafast Imaging. *Irbm*, **2018**, 39, 9-17	4.8	
384	Potential impact of thermal effects during ultrasonic neurostimulation: retrospective numerical estimation of temperature elevation in seven rodent setups. *Physics in Medicine and Biology*, **2018**, 63, 025003	3.8	43
383	Myocardial Stiffness Assessment Using Shear Wave Imaging in Pediatric Hypertrophic Cardiomyopathy. *JACC: Cardiovascular Imaging*, **2018**, 11, 779-781	8.4	19
382	Spatiotemporal matrix image formation for programmable ultrasound scanners. *Physics in Medicine and Biology*, **2018**, 63, 03NT03	3.8	13
381	Functional ultrasound neuroimaging: a review of the preclinical and clinical state of the art. *Current Opinion in Neurobiology*, **2018**, 50, 128-135	7.6	76
380	Multi-scale mapping along the auditory hierarchy using high-resolution functional UltraSound in the awake ferret. *ELife*, **2018**, 7,	8.9	29

379	Self-adaptive ultrasonic beam amplifiers: application to transcostal shock wave therapy. *Physics in Medicine and Biology*, **2018**, 63, 175014	3.8	2
378	Performance evaluation of the PET component of a hybrid PET/CT-ultrafast ultrasound imaging instrument. *Physics in Medicine and Biology*, **2018**, 63, 19NT01	3.8	6
377	Inside/outside the brain binary cavitation localization based on the lowpass filter effect of the skull on the harmonic content: a proof of concept study. *Physics in Medicine and Biology*, **2018**, 63, 135012	3.8	8
376	An Isotropic Minimal Path Based Framework for Segmentation and Quantification of Vascular Networks. *Lecture Notes in Computer Science*, **2018**, 499-513	0.9	2
375	3D-printed adaptive acoustic lens as a disruptive technology for transcranial ultrasound therapy using single-element transducers. *Physics in Medicine and Biology*, **2018**, 63, 025026	3.8	43
374	Noninvasive Imaging of the Coronary Vasculature Using Ultrafast Ultrasound. *JACC: Cardiovascular Imaging*, **2018**, 11, 798-808	8.4	23
373	Quantitative Cardiac Output Assessment Using 4D Ultrafast Doppler Imaging: An in Vitro Study **2018**,		1
372	2D and 3D real-time passive cavitation imaging of pulsed cavitation ultrasound therapy in moving tissues. *Physics in Medicine and Biology*, **2018**, 63, 235028	3.8	2
371	Local hippocampal fast gamma rhythms precede brain-wide hyperemic patterns during spontaneous rodent REM sleep. *Nature Communications*, **2018**, 9, 5364	17.4	41
370	Ultrafast 4D Doppler Imaging of the Rat Brain with a Large Aperture Row Column Addressed Probe **2018**,		2
369	Multi-parametric functional ultrasound imaging of cerebral hemodynamics in a cardiopulmonary resuscitation model. *Scientific Reports*, **2018**, 8, 16436	4.9	7
368	Ultrasonic fat fraction quantification using in vivo adaptive sound speed estimation. *Physics in Medicine and Biology*, **2018**, 63, 215013	3.8	14
367	A large aperture row column addressed probe for in vivo 4D ultrafast doppler ultrasound imaging. *Physics in Medicine and Biology*, **2018**, 63, 215012	3.8	18
366	Adaptive Spatiotemporal Filtering for Coronary Ultrafast Doppler Angiography. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 2201-2204	3.2	7
365	Harmonic Shear Wave Elastography **2018**, 238-249		
364	Theory of Ultrasound Physics and Imaging **2018**, 7-28		
363	Transient Elastography: From Research to Noninvasive Assessment of Liver Fibrosis Using Fibroscan **2018**, 295-317		
362	Transverse Wave Propagation in Anisotropic Media **2018**, 82-89		

361	Transverse Wave Propagation in Bounded Media **2018**, 90-104		
360	Rheological Model-based Methods for Estimating Tissue Viscoelasticity **2018**, 105-117		
359	Wave Propagation in Viscoelastic Materials **2018**, 118-127		1
358	Supersonic Shear Imaging **2018**, 357-367		
357	Current and Future Clinical Applications of Elasticity Imaging Techniques **2018**, 471-491		
356	Musculoskeletal Applications of Supersonic Shear Imaging **2018**, 534-544		1
355	A versatile and robust microfluidic device for capillary-sized simple or multiple emulsions production. *Biomedical Microdevices*, **2018**, 20, 94	3.7	4
354	Viscoelastic Creep Imaging **2018**, 171-188		3
353	Intrinsic Cardiovascular Wave and Strain Imaging **2018**, 189-226		
352	Harmonic Motion Imaging **2018**, 264-283		
351	Shear Wave Dispersion Ultrasound Vibrometry **2018**, 284-294		
350	From Time Reversal to Natural Shear Wave Imaging **2018**, 318-333		
349	Acoustic Radiation Force Impulse Ultrasound **2018**, 334-356		
348	Single Tracking Location Shear Wave Elastography **2018**, 368-387		
347	Comb-push Ultrasound Shear Elastography **2018**, 388-397		
346	Anisotropic Shear Wave Elastography **2018**, 399-421		
345	Application of Guided Waves for Quantifying Elasticity and Viscoelasticity of Boundary Sensitive Organs **2018**, 422-441		
344	Nonlinear Shear Elasticity **2018**, 451-469		1

343	Abdominal Applications of Shear Wave Ultrasound Vibrometry and Supersonic Shear Imaging **2018**, 492-503		
342	Acoustic Radiation Force-based Ultrasound Elastography for Cardiac Imaging Applications **2018**, 504-519		
341	Cardiovascular Application of Shear Wave Elastography **2018**, 520-533		
340	Breast Shear Wave Elastography **2018**, 545-556		
339	Thyroid Shear Wave Elastography **2018**, 557-566		
338	Historical Growth of Ultrasound Elastography and Directions for the Future **2018**, 567-579		
337	3D elastic tensor imaging in weakly transversely isotropic soft tissues. *Physics in Medicine and Biology*, **2018**, 63, 155005	3.8	9
336	Ultrasound Localization Microscopy and Super-Resolution: A State of the Art. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 1304-1320	3.2	85
335	Feasibility of Imaging and Treatment Monitoring of Breast Lesions with Three-Dimensional Shear Wave Elastography. *Ultraschall in Der Medizin*, **2017**, 38, 51-59	3.8	19
334	A 3D time reversal cavity for the focusing of high-intensity ultrasound pulses over a large volume. *Physics in Medicine and Biology*, **2017**, 62, 810-824	3.8	5
333	Testicular Shear Wave Elastography in Normal and Infertile Men: A Prospective Study on 601 Patients. *Ultrasound in Medicine and Biology*, **2017**, 43, 782-789	3.5	23
332	A diffraction correction for storage and loss moduli imaging using radiation force based elastography. *Physics in Medicine and Biology*, **2017**, 62, 91-106	3.8	28
331	Light controls cerebral blood flow in naive animals. *Nature Communications*, **2017**, 8, 14191	17.4	88
330	In vivo real-time cavitation imaging in moving organs. *Physics in Medicine and Biology*, **2017**, 62, 843-857	3.8	17
329	A 200-1380-kHz Quadrifrequency Focused Ultrasound Transducer for Neurostimulation in Rodents and Primates: Transcranial In Vitro Calibration and Numerical Study of the Influence of Skull Cavity. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2017**, 64, 717-724	3.2	33
328	Robust sound speed estimation for ultrasound-based hepatic steatosis assessment. *Physics in Medicine and Biology*, **2017**, 62, 3582-3598	3.8	61
327	Ex vivo optimisation of a heterogeneous speed of sound model of the human skull for non-invasive transcranial focused ultrasound at 1 MHz. *International Journal of Hyperthermia*, **2017**, 33, 635-645	3.7	41
326	Subwavelength motion-correction for ultrafast ultrasound localization microscopy. *Ultrasonics*, **2017**, 77, 17-21	3.5	47

325	3D functional ultrasound imaging of the cerebral visual system in rodents. *NeuroImage*, **2017**, 149, 267-274	7.9	42
324	4D in vivo ultrafast ultrasound imaging using a row-column addressed matrix and coherently-compounded orthogonal plane waves. *Physics in Medicine and Biology*, **2017**, 62, 4571-4588	3.8	23
323	Toward Noninvasive Assessment of CVP Variations Using Real-Time and Quantitative Liver Stiffness Estimation. *JACC: Cardiovascular Imaging*, **2017**, 10, 1285-1286	8.4	4
322	Transcranial Functional Ultrasound Imaging in Freely Moving Awake Mice and Anesthetized Young Rats without Contrast Agent. *Ultrasound in Medicine and Biology*, **2017**, 43, 1679-1689	3.5	48
321	An integrated and highly sensitive ultrafast acoustoelectric imaging system for biomedical applications. *Physics in Medicine and Biology*, **2017**, 62, 5808-5822	3.8	13
320	Pulsed Cavitational Ultrasound Softening: a new non-invasive therapeutic approach of calcified bioprosthetic valve stenosis. *JACC Basic To Translational Science*, **2017**, 2, 372-383	8.7	7
319	In Vivo Multiparametric Ultrasound Imaging of Structural and Functional Tumor Modifications during Therapy. *Ultrasound in Medicine and Biology*, **2017**, 43, 2000-2012	3.5	12
318	In situ targeted activation of an anticancer agent using ultrasound-triggered release of composite droplets. *European Journal of Medicinal Chemistry*, **2017**, 142, 2-7	6.8	5
317	Contrast enhanced ultrasound by real-time spatiotemporal filtering of ultrafast images. *Physics in Medicine and Biology*, **2017**, 62, 31-42	3.8	33
316	Non-invasive Myocardial Shear Wave Elastography Device for Clinical Applications in Cardiology. *Irbm*, **2017**, 38, 357-362	4.8	2
315	Functional ultrasound imaging of brain activity in human newborns. *Science Translational Medicine*, **2017**, 9,	17.5	78
314	Pulsed cavitational therapy using high-frequency ultrasound for the treatment of deep vein thrombosis in an in vitro model of human blood clot. *Physics in Medicine and Biology*, **2017**, 62, 9282-9294	3.8	4
313	Disruptive Technologies Shaping the Law of the Future. *Perspectives in Law, Business and Innovation* , **2017**, 1-14	0.4	1
312	Intraoperative Functional Ultrasound Imaging of Human Brain Activity. *Scientific Reports*, **2017**, 7, 7304	4.9	44
311	3D Imaging with a Time Reversal Cavity: Towards Transcostal Focusing for Shock Wave Therapy. *Irbm*, **2017**, 38, 234-237	4.8	3
310	A semi-analytical model of a time reversal cavity for high-amplitude focused ultrasound applications. *Physics in Medicine and Biology*, **2017**, 62, 7471-7481	3.8	3
309	Transcranial ultrasonic stimulation modulates single-neuron discharge in macaques performing an antisaccade task. *Brain Stimulation*, **2017**, 10, 1024-1031	5.1	76
308	[PP.25.43] CHANGES OF INTRINSIC STIFFNESS OF THE CAROTID ARTERIAL WALL DURING THE CARDIAC CYCLE MEASURED BY SHEAR WAVE ELASTOGRAPHY IN HYPERTENSIVES COMPARED TO NORMOTENSIVES. *Journal of Hypertension*, **2017**, 35, e305	1.9	

307	Imaging the dynamics of cardiac fiber orientation in vivo using 3D Ultrasound Backscatter Tensor Imaging. *Scientific Reports*, **2017**, 7, 830	4.9	25
306	Evaluation of Antivascular Combretastatin A4 P Efficacy Using Supersonic Shear Imaging Technique of Ectopic Colon Carcinoma´CT26. *Ultrasound in Medicine and Biology*, **2017**, 43, 2352-2361	3.5	8
305	Feasibility and Diagnostic Accuracy of Supersonic Shear-Wave Elastography for the Assessment of Liver Stiffness and Liver Fibrosis in Children: A Pilot Study of 96 Patients. *Radiology*, **2016**, 278, 554-62	20.5	83
304	Lumbar annulus fibrosus biomechanical characterization in healthy children by ultrasound shear wave elastography. *European Radiology*, **2016**, 26, 1213-7	8	19
303	Ultrafast acousto-optic imaging with ultrasonic plane waves. *Optics Express*, **2016**, 24, 3774-89	3.3	13
302	Ultrasensitive Doppler based neuronavigation system for preclinical brain imaging applications **2016**,		3
301	Functional ultrasound imaging of the human brain activity: An intraoperative pilot study for cortical functional mapping **2016**,		3
300	Shear Wave Measurements for Evaluation of Tendon Diseases. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2016**, 63, 1906-1921	3.2	12
299	A new method to assess the deformations of internal organs of the abdomen during impact. *Traffic Injury Prevention*, **2016**, 17, 821-6	1.8	5
298	4D microvascular imaging based on ultrafast Doppler tomography. *NeuroImage*, **2016**, 127, 472-483	7.9	70
297	Transcranial functional ultrasound imaging of the brain using microbubble-enhanced ultrasensitive Doppler. *NeuroImage*, **2016**, 124, 752-761	7.9	64
296	Ultrafast Harmonic Coherent Compound (UHCC) Imaging for High Frame Rate Echocardiography and Shear-Wave Elastography. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control* , **2016**, 63, 420-31	3.2	40
295	In Vivo Quantification of the Nonlinear Shear Modulus in Breast Lesions: Feasibility Study. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2016**, 63, 101-9	3.2	30
294	In vivo quantification of the shear modulus of the human Achilles tendon during passive loading using shear wave dispersion analysis. *Physics in Medicine and Biology*, **2016**, 61, 2485-96	3.8	48
293	Supersonic Shear Wave Elastography of Response to Anti-cancer Therapy in a Xenograft Tumor Model. *Ultrasound in Medicine and Biology*, **2016**, 42, 924-30	3.5	12
292	In Vivo Measurement of Brain Tumor Elasticity Using Intraoperative Shear Wave Elastography. *Ultraschall in Der Medizin*, **2016**, 37, 584-590	3.8	74
291	MR-Guided Transcranial Focused Ultrasound. *Advances in Experimental Medicine and Biology*, **2016**, 880, 97-111	3.6	24
290	Functional Ultrasound Imaging of the thalamo-cortical auditory tract in awake ferrets using ultrafast Doppler imaging **2016**,		1

289	Subwavelength far-field ultrasound drug-delivery. *Applied Physics Letters*, **2016**, 109, 194102	3.4	8
288	In-vivo 4D Ultrafast vector flow imaging: Quantitative assessment of arterial blood flow **2016**,		3
287	4D ultrafast ultrasound flow imaging: in vivo quantification of arterial volumetric flow rate in a single heartbeat. *Physics in Medicine and Biology*, **2016**, 61, L48-L61	3.8	56
286	Shear Wave Imaging of Passive Diastolic´Myocardial Stiffness: Stunned Versus Infarcted Myocardium. *JACC: Cardiovascular Imaging*, **2016**, 9, 1023-1030	8.4	37
285	Transcriptomic regulations in oligodendroglial and microglial cells related to brain damage following fetal growth restriction. *Glia*, **2016**, 64, 2306-2320	9	41
284	Ultrasound-based imaging methods of the kidney-recent developments. *Kidney International*, **2016**, 90, 1199-1210	9.9	46
283	Pulsed cavitational ultrasound for non-invasive chordal cutting guided by real-time 3D echocardiography. *European Heart Journal Cardiovascular Imaging*, **2016**, 17, 1101-7	4.1	5
282	Viscoelasticity in Achilles tendonopathy: quantitative assessment by using real-time shear-wave elastography. *Radiology*, **2015**, 274, 821-9	20.5	107
281	Random calibration for accelerating MR-ARFI guided ultrasonic focusing in transcranial therapy. *Physics in Medicine and Biology*, **2015**, 60, 1069-85	3.8	8
280	A fast and switchable microfluidic mixer based on ultrasound-induced vaporization of perfluorocarbon. *Lab on A Chip*, **2015**, 15, 2025-9	7.2	13
279	4-D ultrafast shear-wave imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2015**, 62, 1059-65	3.2	54
278	EEG and functional ultrasound imaging in mobile rats. *Nature Methods*, **2015**, 12, 831-4	21.6	80
277	Modelling the impulse diffraction field of shear waves in transverse isotropic viscoelastic medium. *Physics in Medicine and Biology*, **2015**, 60, 3639-54	3.8	20
276	Reliable protocol for shear wave elastography of lower limb muscles at rest and during passive stretching. *Ultrasound in Medicine and Biology*, **2015**, 41, 2284-91	3.5	66
275	Out-of-plane Doppler imaging based on ultrafast plane wave imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2015**, 62, 625-36	3.2	10
274	Spatiotemporal Clutter Filtering of Ultrafast Ultrasound Data Highly Increases Doppler and fUltrasound Sensitivity. *IEEE Transactions on Medical Imaging*, **2015**, 34, 2271-85	11.7	357
273	Mechanical induction of the tumorigenic □catenin pathway by tumour growth pressure. *Nature*, **2015**, 523, 92-5	50.4	201
272	Ultrafast ultrasound localization microscopy for deep super-resolution vascular imaging. *Nature*, **2015**, 527, 499-502	50.4	482

271	Resolution limits of ultrafast ultrasound localization microscopy. *Physics in Medicine and Biology*, **2015**, 60, 8723-40	3.8	57
270	Effects of pressure on the shear modulus, mass and thickness of the perfused porcine kidney. *Journal of Biomechanics*, **2015**, 48, 30-7	2.9	12
269	Investigating liver stiffness and viscosity for fibrosis, steatosis and activity staging using shear wave elastography. *Journal of Hepatology*, **2015**, 62, 317-24	13.4	134
268	Quantification of elasticity changes in the myometrium during labor using Supersonic Shear Imaging: a feasibility study. *Ultrasonics*, **2015**, 56, 183-8	3.5	15
267	Multi-modal acousto-optic/ultrasound imaging of ex vivo liver tumors at 790 nm using a Sn2 P2 S6 wavefront adaptive holographic setup. *Journal of Biophotonics*, **2015**, 8, 429-36	3.1	7
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5	â□Onlineâ□modulation of brain hemodynamics despite stereotyped running		1
4	Single Trial Decoding of Movement Intentions Using Functional Ultrasound Neuroimaging		1
3	Multi-scale mapping along the auditory hierarchy using high-resolution functional UltraSound in the awake ferret		2
2	Functional ultrasound imaging of deep visual cortex in awake non-human primates		1

List of Publications

1 The Supplementary Eye Field Tracks Cognitive Efforts 1