Mathias Fink

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.

574	36,525	99	179
papers	citations	h-index	g-index
719 ext. papers	43,837 ext. citations	4.6 avg, IF	7.52 L-index

#	Paper	IF	Citations
574	Optical phase modulation by natural eye movements: application to time-domain FF-OCT image retrieval <i>Biomedical Optics Express</i> , 2022 , 13, 902-920	3.5	
573	Physicists in a World of Wireless Communications: A Noisy Connection? [Industry Activities]. <i>IEEE Antennas and Propagation Magazine</i> , 2022 , 64, 89-94	1.7	
572	Manifestation of aberrations in full-field optical coherence tomography. <i>Optics Express</i> , 2021 , 29, 2204	4-3.306	53
571	Fourier transform acousto-optic imaging with off-axis holographic detection. <i>Applied Optics</i> , 2021 , 60, 7107-7112	1.7	0
570	Passive imaging of water pipelines using ambient turbulence noise. <i>Mechanical Systems and Signal Processing</i> , 2021 , 160, 107882	7.8	2
569	Time Reversal Precoding at SubTHz Frequencies: Experimental Results on Spatiotemporal Focusing 2021 ,		1
568	Reflection Matrix Approach for Quantitative Imaging of Scattering Media. <i>Physical Review X</i> , 2020 , 10,	9.1	10
567	Functional ultrasound imaging of deep visual cortex in awake nonhuman primates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 14453-14463	11.5	20
566	Distortion matrix approach for ultrasound imaging of random scattering media. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 14645-14656	11.5	12
565	Reconfigurable Intelligent Surfaces vs. Relaying: Differences, Similarities, and Performance Comparison. <i>IEEE Open Journal of the Communications Society</i> , 2020 , 1, 798-807	6.7	221
564	Reversible Hardware for Acoustic Communications. <i>IEEE Communications Magazine</i> , 2020 , 58, 55-61	9.1	26
563	Real-time non-contact cellular imaging and angiography of human cornea and limbus with common-path full-field/SD OCT. <i>Nature Communications</i> , 2020 , 11, 1868	17.4	13
562	Coherence gate shaping for wide field high-resolution in vivo retinal imaging with full-field OCT. <i>Biomedical Optics Express</i> , 2020 , 11, 4928-4941	3.5	6
561	Curved-field optical coherence tomography: large-field imaging of human corneal cells and nerves. <i>Optica</i> , 2020 , 7, 872	8.6	8
560	Experimental reconstruction of extreme sea waves by time reversal principle. <i>Journal of Fluid Mechanics</i> , 2020 , 884,	3.7	5
559	How a moving passive observer can perceive its environment? The Unruh effect revisited. <i>Wave Motion</i> , 2020 , 93, 102462	1.8	1
558	Distortion matrix concept for deep optical imaging in scattering media. Science Advances, 2020, 6, eaay	71703	16

(2018-2020)

557	Dynamic full-field optical coherence tomography: 3D live-imaging of retinal organoids. <i>Light: Science and Applications</i> , 2020 , 9, 140	16.7	17	
556	Smart radio environments empowered by reconfigurable AI meta-surfaces: an idea whose time has come. Eurasip Journal on Wireless Communications and Networking, 2019,	3.2	580	
555	Time-Reversal by Time-Dependent Perturbations. SIAM Journal on Applied Mathematics, 2019, 79, 754-	78:0 8	5	
554	Drastic slowdown of the Rayleigh-like wave in unjammed granular suspensions. <i>Physical Review E</i> , 2019 , 99, 042902	2.4	2	
553	Phase-conjugate mirror for water waves driven by the Faraday instability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 8809-8814	11.5	12	
552	Left-handed band in an electromagnetic metamaterial induced by sub-wavelength multiple scattering. <i>Applied Physics Letters</i> , 2019 , 114, 111101	3.4	11	
551	Precision resonance energy scans with the PANDA experiment at FAIR. <i>European Physical Journal A</i> , 2019 , 55, 1	2.5	21	
550	Active Control of the Spoof Plasmon Propagation in Time Varying and Non-reciprocal Metamaterial. <i>Scientific Reports</i> , 2019 , 9, 2368	4.9	2	
549	Probing dynamic processes in the eye at multiple spatial and temporal scales with multimodal full field OCT. <i>Biomedical Optics Express</i> , 2019 , 10, 731-746	3.5	16	
548	Choroidal vasculature imaging with laser Doppler holography. <i>Biomedical Optics Express</i> , 2019 , 10, 995-	1 <u>9.1,</u> 2	11	
547	Waveform analysis of human retinal and choroidal blood flow with laser Doppler holography. <i>Biomedical Optics Express</i> , 2019 , 10, 4942-4963	3.5	9	
546	Controlling light in complex media beyond the acoustic diffraction-limit using the acousto-optic transmission matrix. <i>Nature Communications</i> , 2019 , 10, 717	17.4	17	
545	Observation of the Talbot effect with water waves. American Journal of Physics, 2019, 87, 38-43	0.7	5	
544	Optimally diverse communication channels in disordered environments with tuned randomness. <i>Nature Electronics</i> , 2019 , 2, 36-41	28.4	50	
543	Technical design report for the \$overline{{rm{P}}}mathrm{ANDA}\$ Barrel DIRC detector. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2019 , 46, 045001	2.9	17	
542	Layer potential approach for fast eigenvalue characterization of the Helmholtz equation with mixed boundary conditions. <i>Computational and Applied Mathematics</i> , 2018 , 37, 4675-4685		2	
541	Dynamic Metasurface Aperture as Smart Around-the-Corner Motion Detector. <i>Scientific Reports</i> , 2018 , 8, 6536	4.9	20	
540	Towards anti-causal Greenâß function for three-dimensional sub-diffraction focusing. <i>Nature Physics</i> , 2018 , 14, 608-612	16.2	30	

539	Effect of microstructural elongation on backscattered field: Intensity measurement and multiple scattering estimation with a linear transducer array. <i>Ultrasonics</i> , 2018 , 82, 379-389	3.5	4
538	high resolution human corneal imaging using full-field optical coherence tomography. <i>Biomedical Optics Express</i> , 2018 , 9, 557-568	3.5	56
537	In vivo high-resolution human retinal imaging with wavefront-correctionless full-field OCT. <i>Optica</i> , 2018 , 5, 409	8.6	26
536	Precise Localization of Multiple Noncooperative Objects in a Disordered Cavity by Wave Front Shaping. <i>Physical Review Letters</i> , 2018 , 121, 063901	7.4	37
535	Classical analog of the Unruh effect. <i>Physical Review A</i> , 2018 , 98,	2.6	13
534	Airborne ultrasound surface motion camera: Application to seismocardiography. <i>Applied Physics Letters</i> , 2018 , 112, 213702	3.4	7
533	Shaping reverberating sound fields with an actively tunable metasurface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 6638-6643	11.5	69
532	Towards a quantum time mirror for non-relativistic wave packets. <i>New Journal of Physics</i> , 2018 , 20, 033	013)	3
531	Non-Contact Surface Wave Elastography Using 40 kHz Airborne Ultrasound Surface Motion Camera 2018 ,		1
530	Measuring Dirac Cones in a Subwavelength Metamaterial. <i>Physical Review Letters</i> , 2018 , 121, 267601	7.4	4
529	laser Doppler holography of the human retina. Biomedical Optics Express, 2018, 9, 4113-4129	3.5	14
528	3D functional ultrasound imaging of the cerebral visual system in rodents. <i>NeuroImage</i> , 2017 , 149, 267-	·2 7 .	42
527	Time reversal of ultrasound in granular media. European Physical Journal: Special Topics, 2017, 226, 148	7 <u>-1</u> 4 97	4
526	Non-contact and through-clothing measurement of the heart rate using ultrasound vibrocardiography. <i>Medical Engineering and Physics</i> , 2017 , 50, 96-102	2.4	14
525	Full-Field Optical Coherence Tomography as a Diagnosis Tool: Recent Progress with Multimodal Imaging. <i>Applied Sciences (Switzerland)</i> , 2017 , 7, 236	2.6	13
524	Cell Motility as Contrast Agent in Retinal Explant Imaging With Full-Field Optical Coherence Tomography 2017 , 58, 4605-4615		16
523	Manipulating light at subwavelength scale by exploiting defect-guided spoof plasmon modes. <i>Physical Review B</i> , 2017 , 96,	3.3	3
522	Relation of short-range and long-range lithium ion dynamics in glass-ceramics: Insights from Li7 NMR field-cycling and field-gradient studies. <i>Physical Review B</i> , 2017 , 96,	3.3	19

Experimental study of multiple scattering in anisotropic titanium alloys 2017, 521 1 Crystalline metamaterials for topological properties at subwavelength scales. Nature 520 17.4 135 Communications, 2017, 8, 16023 Topological acoustic polaritons: robust sound manipulation at the subwavelength scale. New 519 2.9 103 Journal of Physics, **2017**, 19, 075003 Feasibility study for the measurement of N transition distribution amplitudes at PIANDA in 518 12 4.9 p[p-l/0. *Physical Review D*, **2017**, 95, Dirac quantum time mirror. Physical Review B, 2017, 95, 517 3.3 7 Soda Cans Metamaterial: Homogenization and Beyond. World Scientific Series in Nanoscience and 516 0.1 Nanotechnology, **2017**, 205-250 Dynamic multimodal full-field optical coherence tomography and fluorescence structured 20 515 3.5 illumination microscopy. Journal of Biomedical Optics, 2017, 22, 26004 Imaging the dynamics of cardiac fiber orientation in vivo using 3D Ultrasound Backscatter Tensor 514 4.9 25 Imaging. Scientific Reports, 2017, 7, 830 From the time-reversal mirror to the instantaneous time mirror. European Physical Journal: Special 2.3 513 3 Topics, 2017, 226, 1477-1486 A resolution insensitive to geometrical aberrations by using incoherent illumination and 512 2.3 interference imaging. European Physical Journal: Special Topics, 2017, 226, 1603-1621 Shaping Microwave Fields Using Nonlinear Unsolicited Feedback: Application to Enhance Energy 511 12 4.3 Harvesting. Physical Review Applied, 2017, 8, 510 Slow waves in locally resonant metamaterials line defect waveguides. Scientific Reports, 2017, 7, 15105 4.9 Crystalline Soda Can Metamaterial exhibiting Graphene-like Dispersion at subwavelength scale. 509 4.9 10 Scientific Reports, 2017, 7, 15359 Multiple scattering limit in optical microscopy. Optics Express, 2017, 25, 28914 508 3.3 25 Subwavelength focusing and imaging from the far field using time reversal in subwavelength 507 1 scaled resonant media 2017, Ambient noise correlation-based imaging with moving sensors. *Inverse Problems and Imaging*, **2017**, 506 2.1 11, 477-500 Smart optical coherence tomography for ultra-deep imaging through highly scattering media 2017, 505 1 Beating the Diffraction Limit with Positive Refraction: The Resonant Metalens Approach 2017, 33-90 504

503	Full-field spatially incoherent illumination interferometry: a spatial resolution almost insensitive to aberrations. <i>Optics Letters</i> , 2016 , 41, 3920-3	3	26
502	Exploiting spatiotemporal degrees of freedom for far-field subwavelength focusing using time reversal in fractals. <i>Physical Review B</i> , 2016 , 93,	3.3	4
501	High speed optical holography of retinal blood flow. <i>Optics Letters</i> , 2016 , 41, 3503-6	3	8
500	Smart optical coherence tomography for ultra-deep imaging through highly scattering media. <i>Science Advances</i> , 2016 , 2, e1600370	14.3	84
499	Feasibility studies of time-like proton electromagnetic form factors at (overline{rm P})ANDA at FAIR. <i>European Physical Journal A</i> , 2016 , 52, 1	2.5	22
498	An optical tomography PSF almost insensitive to aberrations: the benefit of a spatial incoherent illumination (Conference Presentation) 2016 ,		2
497	Time-reversal of nonlinear waves: Applicability and limitations. <i>Physical Review Fluids</i> , 2016 , 1,	2.8	6
496	Soda Cans Metamaterial: A Subwavelength-Scaled Phononic Crystal. <i>Crystals</i> , 2016 , 6, 82	2.3	28
495	3D airborne ultrasound vibrometer for the detection of skin surface heterogeneities 2016 ,		1
494	Spatio-temporal imaging of light transport in highly scattering media under white light illumination. <i>Optica</i> , 2016 , 3, 1160	8.6	7
493	Time reversal and holography with spacetime transformations. <i>Nature Physics</i> , 2016 , 12, 972-977	16.2	85
492	Chapter 12 Time Reversal of Linear and Nonlinear Water Waves 2016 , 401-436		
491	Diffuse shear wave imaging: toward passive elastography using low-frame rate spectral-domain optical coherence tomography. <i>Journal of Biomedical Optics</i> , 2016 , 21, 126013	3.5	23
490	From Loschmidt daemons to time-reversed waves. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016 , 374,	3	8
489	Adaptive optics full-field optical coherence tomography. <i>Journal of Biomedical Optics</i> , 2016 , 21, 121505	3.5	9
488	Spatiotemporal Wave Front Shaping in a Microwave Cavity. <i>Physical Review Letters</i> , 2016 , 117, 134302	7.4	27
487	Experimental access to Transition Distribution Amplitudes with the P ANDA experiment at FAIR. <i>European Physical Journal A</i> , 2015 , 51, 1	2.5	21
486	Wave-Field Shaping in Cavities: Waves Trapped in a Box with Controllable Boundaries. <i>Physical Review Letters</i> , 2015 , 115, 017701	7.4	47

(2014-2015)

485	Negative refractive index and acoustic superlens from multiple scattering in single negative metamaterials. <i>Nature</i> , 2015 , 525, 77-81	50.4	350
484	Subwavelength focusing in bubbly media using broadband time reversal. <i>Physical Review B</i> , 2015 , 91,	3.3	34
483	Acoustic imaging with time reversal methods: From medicine to NDT 2015 ,		2
482	Carotid stiffness change over the cardiac cycle by ultrafast ultrasound imaging in healthy volunteers and vascular Ehlers-Danlos syndrome. <i>Journal of Hypertension</i> , 2015 , 33, 1890-6; discussion 1896	1.9	33
481	Super-resolution in time-reversal focusing on a moving source. Wave Motion, 2015, 53, 80-93	1.8	16
480	Scanning-free imaging through a single fiber by random spatio-spectral encoding. <i>Optics Letters</i> , 2015 , 40, 534-7	3	23
479	Retrieving time-dependent Green's functions in optics with low-coherence interferometry. <i>Physical Review Letters</i> , 2015 , 114, 023901	7.4	10
478	Retrieving time-dependent Greenâß functions in optics with low-coherence interferometry 2015 ,		1
477	Ultrafast imaging in biomedical ultrasound. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 102-19	3.2	325
476	Use of shear wave elastography for monitoring enzymatic milk coagulation. <i>Journal of Food Engineering</i> , 2014 , 136, 73-79	6	5
476 475		6 7·4	5 8
	Using subwavelength diffraction gratings to design open electromagnetic cavities. <i>Physical Review</i>	7.4	
475	Using subwavelength diffraction gratings to design open electromagnetic cavities. <i>Physical Review Letters</i> , 2014 , 112, 043902 Controlling light in scattering media non-invasively using the photoacoustic transmission matrix.	7.4	8
475 474	Using subwavelength diffraction gratings to design open electromagnetic cavities. <i>Physical Review Letters</i> , 2014 , 112, 043902 Controlling light in scattering media non-invasively using the photoacoustic transmission matrix. <i>Nature Photonics</i> , 2014 , 8, 58-64 Cancellation of Doppler intrinsic spectral broadening using ultrafast Doppler imaging. <i>IEEE</i>	7·4 33·9	8
475 474 473	Using subwavelength diffraction gratings to design open electromagnetic cavities. <i>Physical Review Letters</i> , 2014 , 112, 043902 Controlling light in scattering media non-invasively using the photoacoustic transmission matrix. <i>Nature Photonics</i> , 2014 , 8, 58-64 Cancellation of Doppler intrinsic spectral broadening using ultrafast Doppler imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 1396-1408 Non-invasive single-shot imaging through scattering layers and around corners via speckle	7·4 33·9 3·2	8 159 8
475 474 473 472	Using subwavelength diffraction gratings to design open electromagnetic cavities. <i>Physical Review Letters</i> , 2014 , 112, 043902 Controlling light in scattering media non-invasively using the photoacoustic transmission matrix. <i>Nature Photonics</i> , 2014 , 8, 58-64 Cancellation of Doppler intrinsic spectral broadening using ultrafast Doppler imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 1396-1408 Non-invasive single-shot imaging through scattering layers and around corners via speckle correlations. <i>Nature Photonics</i> , 2014 , 8, 784-790	7·4 33·9 3·2	8 159 8 494
475 474 473 472 471	Using subwavelength diffraction gratings to design open electromagnetic cavities. <i>Physical Review Letters</i> , 2014 , 112, 043902 Controlling light in scattering media non-invasively using the photoacoustic transmission matrix. <i>Nature Photonics</i> , 2014 , 8, 58-64 Cancellation of Doppler intrinsic spectral broadening using ultrafast Doppler imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 1396-1408 Non-invasive single-shot imaging through scattering layers and around corners via speckle correlations. <i>Nature Photonics</i> , 2014 , 8, 784-790 Acoustic metamaterials: Nearly perfect sound absorbers. <i>Nature Materials</i> , 2014 , 13, 848-9 Subwavelength far-field imaging at visible and ultraviolet wavelengths using broadband surface	7·4 33·9 3·2 27	8 159 8 494 8

467	High-contrast ultrafast imaging of the heart. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 288-301	3.2	137
466	Shaping complex microwave fields in reverberating media with binary tunable metasurfaces. <i>Scientific Reports</i> , 2014 , 4, 6693	4.9	105
465	3D ultrafast ultrasound imaging in vivo. <i>Physics in Medicine and Biology</i> , 2014 , 59, L1-L13	3.8	181
464	Ultrafast Imaging in Biomedical Ultrasound. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 102-119	3.2	296
463	Ultrafast Doppler reveals the mapping of cerebral vascular resistivity in neonates. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014 , 34, 1009-17	7.3	48
462	Hybridized resonances to design tunable binary phase metasurface unit cells. <i>Optics Express</i> , 2014 , 22, 18881-8	3.3	39
461	In vivo evidence of porcine cornea anisotropy using supersonic shear wave imaging 2014 , 55, 7545-52		41
460	Ultrafast acoustoelectric imaging 2014 ,		3
459	Non-invasive ultrasonic surgery of the brain in non-human primates. <i>Journal of the Acoustical Society of America</i> , 2013 , 134, 1632-9	2.2	24
45 ⁸	Increasing the modal density in plates for mono-element focusing in air. <i>Journal of the Acoustical Society of America</i> , 2013 , 134, 1049-54	2.2	3
457	Technical design report for the (overline{P})ANDA (AntiProton Annihilations at Darmstadt) Straw Tube Tracker. <i>European Physical Journal A</i> , 2013 , 49, 1	2.5	60
456	Transverse localization of sound. <i>Physical Review B</i> , 2013 , 88,	3.3	1
455	Ultrasound elastography: principles and techniques. <i>Diagnostic and Interventional Imaging</i> , 2013 , 94, 487-95	5.4	491
454	Influence of the pressure field distribution in transcranial ultrasonic neurostimulation. <i>Medical Physics</i> , 2013 , 40, 082902	4.4	123
453	Wave propagation control at the deep subwavelength scale in metamaterials. <i>Nature Physics</i> , 2013 , 9, 55-60	16.2	219
452	ងៃstographie ultrasonore : principes et procds. <i>Diagnostic and Interventional Imaging</i> , 2013 , 94, 504-513		1
451	Subwavelength focusing inside an open disordered medium by time reversal at a single point antenna. <i>Physical Review A</i> , 2013 , 87,	2.6	21
450	Ultra small mode volume defect cavities in spatially ordered and disordered metamaterials. <i>Applied Physics Letters</i> , 2013 , 102, 144104	3.4	35

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448	Subwavelength Focussing in Metamaterials Using Far Field Time Reversal. <i>Springer Series in Materials Science</i> , 2013 , 141-168	0.9	1
447	Functional ultrasound imaging of the brain: theory and basic principles. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2013 , 60, 492-506	3.2	146
446	EFSUMB guidelines and recommendations on the clinical use of ultrasound elastography. Part 2: Clinical applications. <i>Ultraschall in Der Medizin</i> , 2013 , 34, 238-53	3.8	608
445	Analysis of the time reversal operator for a scatterer undergoing small displacements. <i>Journal of the Acoustical Society of America</i> , 2013 , 133, 94-107	2.2	8
444	EFSUMB guidelines and recommendations on the clinical use of ultrasound elastography. Part 1: Basic principles and technology. <i>Ultraschall in Der Medizin</i> , 2013 , 34, 169-84	3.8	709
443	From supersonic shear wave imaging to full-field optical coherence shear wave elastography. Journal of Biomedical Optics, 2013 , 18, 121514	3.5	42
442	Sono-activated ultrasound localization microscopy. <i>Applied Physics Letters</i> , 2013 , 103, 174107	3.4	93
441	Composite media mixing Bragg and local resonances for highly attenuating and broad bandgaps. <i>Scientific Reports</i> , 2013 , 3, 3240	4.9	48
440	Green's function retrieval and passive imaging from correlations of wideband thermal radiations. <i>Physical Review Letters</i> , 2013 , 110, 203901	7.4	24
439	In vivo transthoracic ultrafast Doppler imaging of left intraventricular blood flow pattern 2013,		1
438	Towards backscatter tensor imaging (BTI): Analysis of the spatial coherence of ultrasonic speckle in anisotropic soft tissues 2013 ,		3
437	Global approach for transient shear wave inversion based on the adjoint method: a comprehensive 2D simulation study. <i>Physics in Medicine and Biology</i> , 2013 , 58, 6765-78	3.8	6
436	Transcranial high intensity focused ultrasound therapy guided by 7 TESLA MRI in a rat brain tumour model: a feasibility study. <i>International Journal of Hyperthermia</i> , 2013 , 29, 598-608	3.7	14
435	Targeting accuracy of transcranial magnetic resonance-guided high-intensity focused ultrasound brain therapy: a fresh cadaver model. <i>Journal of Neurosurgery</i> , 2013 , 118, 1046-52	3.2	55
434	Application of 1-D transient elastography for the shear modulus assessment of thin-layered soft tissue: comparison with supersonic shear imaging technique. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2012 , 59, 703-14	3.2	16
433	Mapping myocardial fiber orientation using echocardiography-based shear wave imaging. <i>IEEE Transactions on Medical Imaging</i> , 2012 , 31, 554-62	11.7	100
432	Acoustic imaging device with one transducer. <i>Journal of the Acoustical Society of America</i> , 2012 , 131, EL395-9	2.2	10

431	Time-reversal method and cross-correlation techniques by normal mode theory: a three-point problem. <i>Geophysical Journal International</i> , 2012 , 191, 637-652	2.6	9
430	The variance of quantitative estimates in shear wave imaging: theory and experiments. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2012 , 59, 2390-410	3.2	52
429	Aberration correction by time reversal of moving speckle noise. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2012 , 59, 1575-83	3.2	9
428	Shear Wave Imaging of the heart using a cardiac phased array with coherent spatial compound 2012 ,		7
427	Time reversal of water waves. <i>Physical Review Letters</i> , 2012 , 109, 064501	7.4	39
426	Far field subwavelength imaging of magnetic patterns. <i>Applied Physics Letters</i> , 2012 , 101, 111102	3.4	14
425	Tunable time-reversal cavity for high-pressure ultrasonic pulses generation: A tradeoff between transmission and time compression. <i>Applied Physics Letters</i> , 2012 , 101, 064104	3.4	11
424	A polychromatic approach to far-field superlensing at visible wavelengths. <i>Nature Communications</i> , 2012 , 3, 889	17.4	82
423	Imaging changes in scattering media from Time Reversal of the Coda wave Difference (TRECOD). Waves in Random and Complex Media, 2012 , 22, 109-120	1.9	1
422	Controlling waves in space and time for imaging and focusing in complex media. <i>Nature Photonics</i> , 2012 , 6, 283-292	33.9	793
421	Numerical prediction of frequency dependent 3D maps of mechanical index thresholds in ultrasonic brain therapy. <i>Medical Physics</i> , 2012 , 39, 455-67	4.4	26
420	Optimal spatiotemporal focusing through complex scattering media. <i>Physical Review E</i> , 2012 , 85, 01660) 5 .4	9
419	Ultrasound contrast plane wave imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2012 , 59, 2676-83	3.2	97
418	Monitoring of cornea elastic properties changes during UV-A/riboflavin-induced corneal collagen cross-linking using supersonic shear wave imaging: a pilot study 2012 , 53, 5948-54		48
417	Hybridization band gap based smart antennas: Deep subwavelength yet directional and strongly decoupled MIMO antennas 2012 ,		4
416	Ultrafast plane wave imaging: Doppler frequency distribution 2012,		1
415	MR-guided adaptive focusing of therapeutic ultrasound beams in the human head. <i>Medical Physics</i> , 2012 , 39, 1141-9	4.4	8o
414	Optimal transcostal high-intensity focused ultrasound with combined real-time 3D movement tracking and correction. <i>Physics in Medicine and Biology</i> , 2011 , 56, 7061-80	3.8	48

413	Functional ultrasound imaging of the brain. <i>Nature Methods</i> , 2011 , 8, 662-4	21.6	336
412	Ultrafast compound Doppler imaging: providing full blood flow characterization. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2011 , 58, 134-47	3.2	267
411	Combined passive detection and ultrafast active imaging of cavitation events induced by short pulses of high-intensity ultrasound. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2011 , 58, 517-32	3.2	83
410	Acoustic resonators for far-field control of sound on a subwavelength scale. <i>Physical Review Letters</i> , 2011 , 107, 064301	7.4	164
409	Revisiting the wire medium: an ideal resonant metalens. <i>Waves in Random and Complex Media</i> , 2011 , 21, 591-613	1.9	46
408	In Vivo Quantitative Mapping of Myocardial Stiffening and Transmural Anisotropy During the Cardiac Cycle. <i>IEEE Transactions on Medical Imaging</i> , 2011 , 30, 295-305	11.7	165
407	In vivo mapping of brain elasticity in small animals using shear wave imaging. <i>IEEE Transactions on Medical Imaging</i> , 2011 , 30, 550-8	11.7	46
406	Far-field sub-wavelength imaging and focusing using a wire medium based resonant metalens. Waves in Random and Complex Media, 2011 , 21, 614-627	1.9	41
405	In vivo bubble nucleation probability in sheep brain tissue. <i>Physics in Medicine and Biology</i> , 2011 , 56, 70	0 13. 85	62
404	Ultrafast imaging of the arterial pulse wave. <i>Irbm</i> , 2011 , 32, 106-108	4.8	37
403	Noninvasive in vivo liver fibrosis evaluation using supersonic shear imaging: a clinical study on 113 hepatitis C virus patients. <i>Ultrasound in Medicine and Biology</i> , 2011 , 37, 1361-73	3.5	318
402	Exploiting the time-reversal operator for adaptive optics, selective focusing, and scattering pattern analysis. <i>Physical Review Letters</i> , 2011 , 107, 263901	7.4	57
401	Microbubble ultrasound super-localization imaging (MUSLI) 2011,		45
400	Time reversal of speckle noise. <i>Physical Review Letters</i> , 2011 , 106, 054301	7.4	25
399	Controlling light through optical disordered media: transmission matrix approach. <i>New Journal of Physics</i> , 2011 , 13, 123021	2.9	140
398	Time Reversal in Subwavelength-Scaled Resonant Media: Beating the Diffraction Limit. <i>International Journal of Microwave Science and Technology</i> , 2011 , 2011, 1-14		6
397	Effects of nonlinear ultrasound propagation on high intensity brain therapy. <i>Medical Physics</i> , 2011 , 38, 1207-16	4.4	52
396	A Multiwave Imaging Approach for Elastography. <i>Current Medical Imaging</i> , 2011 , 7, 340-349	1.2	6

395	Quantitative assessment of arterial wall biomechanical properties using shear wave imaging. <i>Ultrasound in Medicine and Biology</i> , 2010 , 36, 1662-76	3.5	216
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