

# Mathias Fink

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/6460527/mathias-fink-publications-by-citations.pdf>

**Version:** 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

574  
papers

36,525  
citations

99  
h-index

179  
g-index

719  
ext. papers

43,837  
ext. citations

4.6  
avg, IF

7.52  
L-index

| #   | Paper   | IF   | Citations |
|-----|---|------|-----------|
| 574 | Supersonic shear imaging: a new technique for soft tissue elasticity mapping. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2004</b> , 51, 396-409                        | 3.2  | 1610      |
| 573 | Time reversal of ultrasonic fields. I. Basic principles. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1992</b> , 39, 555-66  | 3.2  | 939       |
| 572 | Coherent plane-wave compounding for very high frame rate ultrasonography and transient elastography. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2009</b> , 56, 489-506 | 3.2  | 873       |
| 571 | Measuring the transmission matrix in optics: an approach to the study and control of light propagation in disordered media. <i>Physical Review Letters</i> , <b>2010</b> , 104, 100601                          | 7.4  | 825       |
| 570 | Controlling waves in space and time for imaging and focusing in complex media. <i>Nature Photonics</i> , <b>2012</b> , 6, 283-292   | 33.9 | 793       |
| 569 | EFSUMB guidelines and recommendations on the clinical use of ultrasound elastography. Part 1: Basic principles and technology. <i>Ultraschall in Der Medizin</i> , <b>2013</b> , 34, 169-84                     | 3.8  | 709       |
| 568 | EFSUMB guidelines and recommendations on the clinical use of ultrasound elastography. Part 2: Clinical applications. <i>Ultraschall in Der Medizin</i> , <b>2013</b> , 34, 238-53                               | 3.8  | 608       |
| 567 | Time Reversed Acoustics. <i>Physics Today</i> , <b>1997</b> , 50, 34-40   | 0.9  | 588       |
| 566 | Smart radio environments empowered by reconfigurable AI meta-surfaces: an idea whose time has come. <i>Eurasip Journal on Wireless Communications and Networking</i> , <b>2019</b> , 2019,                      | 3.2  | 580       |
| 565 | Quantitative assessment of breast lesion viscoelasticity: initial clinical results using supersonic shear imaging. <i>Ultrasound in Medicine and Biology</i> , <b>2008</b> , 34, 1373-86                        | 3.5  | 535       |
| 564 | Non-invasive single-shot imaging through scattering layers and around corners via speckle correlations. <i>Nature Photonics</i> , <b>2014</b> , 8, 784-790  | 33.9 | 494       |
| 563 | Ultrasound elastography: principles and techniques. <i>Diagnostic and Interventional Imaging</i> , <b>2013</b> , 94, 487-95   | 5.4  | 491       |
| 562 | Time-reversed acoustics. <i>Reports on Progress in Physics</i> , <b>2000</b> , 63, 1933-1995  | 14.4 | 461       |
| 561 | Focusing beyond the diffraction limit with far-field time reversal. <i>Science</i> , <b>2007</b> , 315, 1120-2  | 33.3 | 454       |
| 560 | Viscoelastic and anisotropic mechanical properties of in vivo muscle tissue assessed by supersonic shear imaging. <i>Ultrasound in Medicine and Biology</i> , <b>2010</b> , 36, 789-801                         | 3.5  | 453       |
| 559 | Breast lesions: quantitative elastography with supersonic shear imaging--preliminary results. <i>Radiology</i> , <b>2010</b> , 256, 297-303   | 20.5 | 404       |
| 558 | Time reversal of electromagnetic waves. <i>Physical Review Letters</i> , <b>2004</b> , 92, 193904   | 7.4  | 402       |

|     |  |      |     |
|-----|--|------|-----|
| 557 | Image transmission through an opaque material. <i>Nature Communications</i> , <b>2010</b> , 1, 81  | 17.4 | 368 |
| 556 | Viscoelastic shear properties of in vivo breast lesions measured by MR elastography. <i>Magnetic Resonance Imaging</i> , <b>2005</b> , 23, 159-65  | 3.3  | 363 |
| 555 | Negative refractive index and acoustic superlens from multiple scattering in single negative metamaterials. <i>Nature</i> , <b>2015</b> , 525, 77-81   | 50.4 | 350 |
| 554 | Functional ultrasound imaging of the brain. <i>Nature Methods</i> , <b>2011</b> , 8, 662-4   | 21.6 | 336 |
| 553 | Experimental demonstration of noninvasive transskull adaptive focusing based on prior computed tomography scans. <i>Journal of the Acoustical Society of America</i> , <b>2003</b> , 113, 84-93                | 2.2  | 333 |
| 552 | Ultrafast imaging in biomedical ultrasound. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2014</b> , 61, 102-19  | 3.2  | 325 |
| 551 | Robust Acoustic Time Reversal with High-Order Multiple Scattering. <i>Physical Review Letters</i> , <b>1995</b> , 75, 4206-4209  | 7.4  | 320 |
| 550 | 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> , <b>2011</b> , 37, 1361-73        | 3.5  | 318 |
| 549 | Quantitative viscoelasticity mapping of human liver using supersonic shear imaging: preliminary in vivo feasibility study. <i>Ultrasound in Medicine and Biology</i> , <b>2009</b> , 35, 219-29                | 3.5  | 304 |
| 548 | Shear elasticity probe for soft tissues with 1-D transient elastography. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2002</b> , 49, 436-46                             | 3.2  | 299 |
| 547 | Ultrafast Imaging in Biomedical Ultrasound. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2014</b> , 61, 102-119   | 3.2  | 296 |
| 546 | Decomposition of the time reversal operator: Detection and selective focusing on two scatterers. <i>Journal of the Acoustical Society of America</i> , <b>1996</b> , 99, 2067-2076                             | 2.2  | 287 |
| 545 | Shear modulus imaging with 2-D transient elastography. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2002</b> , 49, 426-35   | 3.2  | 285 |
| 544 | Shear wave spectroscopy for in vivo quantification of human soft tissues visco-elasticity. <i>IEEE Transactions on Medical Imaging</i> , <b>2009</b> , 28, 313-22  | 11.7 | 283 |
| 543 | Imaging anisotropic and viscous properties of breast tissue by magnetic resonance-elastography. <i>Magnetic Resonance in Medicine</i> , <b>2005</b> , 53, 372-87   | 4.4  | 281 |
| 542 | Measuring of viscoelastic properties of homogeneous soft solid using transient elastography: an inverse problem approach. <i>Journal of the Acoustical Society of America</i> , <b>2004</b> , 116, 3734-41     | 2.2  | 272 |
| 541 | Ultrafast compound imaging for 2-D motion vector estimation: application to transient elastography. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2002</b> , 49, 1363-74 | 3.2  | 272 |
| 540 | Eigenmodes of the time reversal operator: A solution to selective focusing in multiple-target media. <i>Wave Motion</i> , <b>1994</b> , 20, 151-163  | 1.8  | 271 |

|     |  |      |     |
|-----|--|------|-----|
| 539 | Ultrafast compound Doppler imaging: providing full blood flow characterization. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2011</b> , 58, 134-47  | 3.2  | 267 |
| 538 | Recovering the Green's function from field-field correlations in an open scattering medium. <i>Journal of the Acoustical Society of America</i> , <b>2003</b> , 113, 2973-6  | 2.2  | 266 |
| 537 | Time-Reversed Acoustics. <i>Scientific American</i> , <b>1999</b> , 281, 91-97   | 0.5  | 260 |
| 536 | MR elastography of breast lesions: understanding the solid/liquid duality can improve the specificity of contrast-enhanced MR mammography. <i>Magnetic Resonance in Medicine</i> , <b>2007</b> , 58, 1135-44                         | 4.4  | 244 |
| 535 | Time-reversal of ultrasonic fields. III. Theory of the closed time-reversal cavity. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1992</b> , 39, 579-92  | 3.2  | 240 |
| 534 | In vivo breast tumor detection using transient elastography. <i>Ultrasound in Medicine and Biology</i> , <b>2003</b> , 29, 1387-96   | 3.5  | 238 |
| 533 | Acoustic time-reversal mirrors. <i>Inverse Problems</i> , <b>2001</b> , 17, R1-R38   | 2.3  | 229 |
| 532 | Reconfigurable Intelligent Surfaces vs. Relaying: Differences, Similarities, and Performance Comparison. <i>IEEE Open Journal of the Communications Society</i> , <b>2020</b> , 1, 798-807   | 6.7  | 221 |
| 531 | Time reversal and the inverse filter. <i>Journal of the Acoustical Society of America</i> , <b>2000</b> , 108, 223-34  | 2.2  | 221 |
| 530 | Wave propagation control at the deep subwavelength scale in metamaterials. <i>Nature Physics</i> , <b>2013</b> , 9, 55-60  | 16.2 | 219 |
| 529 | Quantitative assessment of arterial wall biomechanical properties using shear wave imaging. <i>Ultrasound in Medicine and Biology</i> , <b>2010</b> , 36, 1662-76  | 3.5  | 216 |
| 528 | Ultrasonic beam focusing through tissue inhomogeneities with a time reversal mirror: application to transskull therapy. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1996</b> , 43, 1122-1129 | 3.2  | 209 |
| 527 | A solution to diffraction biases in sonoelasticity: the acoustic impulse technique. <i>Journal of the Acoustical Society of America</i> , <b>1999</b> , 105, 2941-50   | 2.2  | 205 |
| 526 | One-Channel Time Reversal of Elastic Waves in a Chaotic 2D-Silicon Cavity. <i>Physical Review Letters</i> , <b>1997</b> , 79, 407-410  | 7.4  | 199 |
| 525 | Transient elastography in anisotropic medium: application to the measurement of slow and fast shear wave speeds in muscles. <i>Journal of the Acoustical Society of America</i> , <b>2003</b> , 114, 536-41                          | 2.2  | 192 |
| 524 | The van Cittert-Zernike theorem in pulse echo measurements. <i>Journal of the Acoustical Society of America</i> , <b>1991</b> , 90, 2718-2727  | 2.2  | 183 |
| 523 | 3D ultrafast ultrasound imaging in vivo. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, L1-L13   | 3.8  | 181 |
| 522 | Time reversal of ultrasonic fields. II. Experimental results. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1992</b> , 39, 567-78  | 3.2  | 179 |

|     |   |      |     |
|-----|---|------|-----|
| 521 | Focusing and steering through absorbing and aberrating layers: application to ultrasonic propagation through the skull. <i>Journal of the Acoustical Society of America</i> , <b>1998</b> , 103, 2403-10                    | 2.2  | 176 |
| 520 | How to estimate the Green's function of a heterogeneous medium between two passive sensors? Application to acoustic waves. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 3054-3056                                     | 3.4  | 174 |
| 519 | Overcoming the diffraction limit in wave physics using a time-reversal mirror and a novel acoustic sink. <i>Physical Review Letters</i> , <b>2002</b> , 89, 124301  | 7.4  | 174 |
| 518 | Resonant metalenses for breaking the diffraction barrier. <i>Physical Review Letters</i> , <b>2010</b> , 104, 203901  | 7.4  | 168 |
| 517 | The role of viscosity in the impulse diffraction field of elastic waves induced by the acoustic radiation force. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2004</b> , 51, 1523-36 | 3.2  | 166 |
| 516 | In Vivo Quantitative Mapping of Myocardial Stiffening and Transmural Anisotropy During the Cardiac Cycle. <i>IEEE Transactions on Medical Imaging</i> , <b>2011</b> , 30, 295-305   | 11.7 | 165 |
| 515 | High-resolution quantitative imaging of cornea elasticity using supersonic shear imaging. <i>IEEE Transactions on Medical Imaging</i> , <b>2009</b> , 28, 1881-93   | 11.7 | 165 |
| 514 | Acoustic resonators for far-field control of sound on a subwavelength scale. <i>Physical Review Letters</i> , <b>2011</b> , 107, 064301   | 7.4  | 164 |
| 513 | Time-resolved pulsed elastography with ultrafast ultrasonic imaging. <i>Ultrasonic Imaging</i> , <b>1999</b> , 21, 259-72   | 9    | 164 |
| 512 | Controlling light in scattering media non-invasively using the photoacoustic transmission matrix. <i>Nature Photonics</i> , <b>2014</b> , 8, 58-64  | 33.9 | 159 |
| 511 | Real-time visualization of muscle stiffness distribution with ultrasound shear wave imaging during muscle contraction. <i>Muscle and Nerve</i> , <b>2010</b> , 42, 438-41   | 3.4  | 156 |
| 510 | Self focusing in inhomogeneous media with time reversal acoustic mirrors  |      | 156 |
| 509 | The iterative time reversal process: Analysis of the convergence. <i>Journal of the Acoustical Society of America</i> , <b>1995</b> , 97, 62-71   | 2.2  | 154 |
| 508 | High power transcranial beam steering for ultrasonic brain therapy. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, 2577-89  | 3.8  | 153 |
| 507 | Time-reversed Lamb waves. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1998</b> , 45, 1032-43  | 3.2  | 151 |
| 506 | Functional ultrasound imaging of the brain: theory and basic principles. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2013</b> , 60, 492-506   | 3.2  | 146 |
| 505 | Taking advantage of multiple scattering to communicate with time-reversal antennas. <i>Physical Review Letters</i> , <b>2003</b> , 90, 014301   | 7.4  | 146 |
| 504 | Optimal focusing by spatio-temporal inverse filter. I. Basic principles. <i>Journal of the Acoustical Society of America</i> , <b>2001</b> , 110, 37-47   | 2.2  | 146 |

|     |   |      |     |
|-----|---|------|-----|
| 503 | Time-reversal acoustics in biomedical engineering. <i>Annual Review of Biomedical Engineering</i> , <b>2003</b> , 5, 465-97   | 12   | 145 |
| 502 | The iterative time reversal mirror: A solution to self-focusing in the pulse echo mode. <i>Journal of the Acoustical Society of America</i> , <b>1991</b> , 90, 1119-1129   | 2.2  | 142 |
| 501 | Controlling light through optical disordered media: transmission matrix approach. <i>New Journal of Physics</i> , <b>2011</b> , 13, 123021  | 2.9  | 140 |
| 500 | High-contrast ultrafast imaging of the heart. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2014</b> , 61, 288-301  | 3.2  | 137 |
| 499 | Imaging from one-bit correlations of wideband diffuse wave fields. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 8393-8399  | 2.5  | 137 |
| 498 | Crystalline metamaterials for topological properties at subwavelength scales. <i>Nature Communications</i> , <b>2017</b> , 8, 16023   | 17.4 | 135 |
| 497 | Non-invasive transcranial ultrasound therapy based on a 3D CT scan: protocol validation and in vitro results. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 2597-613                                     | 3.8  | 134 |
| 496 | Human muscle hardness assessment during incremental isometric contraction using transient elastography. <i>Journal of Biomechanics</i> , <b>2005</b> , 38, 1543-50  | 2.9  | 131 |
| 495 | Adaptive focusing in scattering media through sound-speed inhomogeneities: The van Cittert Zernike approach and focusing criterion. <i>Journal of the Acoustical Society of America</i> , <b>1994</b> , 96, 3721-3732 | 2.2  | 131 |
| 494 | Ultrasonic pulse compression with one-bit time reversal through multiple scattering. <i>Journal of Applied Physics</i> , <b>1999</b> , 85, 6343-6352  | 2.5  | 126 |
| 493 | Time-reversal mirrors. <i>Journal Physics D: Applied Physics</i> , <b>1993</b> , 26, 1333-1350  | 3    | 125 |
| 492 | Influence of the pressure field distribution in transcranial ultrasonic neurostimulation. <i>Medical Physics</i> , <b>2013</b> , 40, 082902   | 4.4  | 123 |
| 491 | In solid localization of finger impacts using acoustic time-reversal process. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 204104   | 3.4  | 123 |
| 490 | Acoustoelasticity in soft solids: assessment of the nonlinear shear modulus with the acoustic radiation force. <i>Journal of the Acoustical Society of America</i> , <b>2007</b> , 122, 3211-9                        | 2.2  | 122 |
| 489 | One-channel time-reversal in chaotic cavities: Theoretical limits. <i>Journal of the Acoustical Society of America</i> , <b>1999</b> , 105, 611-617   | 2.2  | 121 |
| 488 | Time-reversal imaging of seismic sources and application to the great Sumatra earthquake. <i>Geophysical Research Letters</i> , <b>2006</b> , 33,   | 4.9  | 119 |
| 487 | Electrical Impedance Tomography by Elastic Deformation. <i>SIAM Journal on Applied Mathematics</i> , <b>2008</b> , 68, 1557-1573  | 1.8  | 115 |
| 486 | Diffraction field of a low frequency vibrator in soft tissues using transient elastography. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1999</b> , 46, 1013-9                 | 3.2  | 115 |

|     |   |      |     |
|-----|---|------|-----|
| 485 | Early detection of steatohepatitis in fatty rat liver by using MR elastography. <i>Radiology</i> , <b>2009</b> , 253, 90-7  | 20.5 | 113 |
| 484 | Ultrasonic signal processing for in vivo attenuation measurement: short time Fourier analysis. <i>Ultrasonic Imaging</i> , <b>1983</b> , 5, 117-35                                  | 1.9  | 111 |
| 483 | One-channel time-reversal in chaotic cavities: Experimental results. <i>Journal of the Acoustical Society of America</i> , <b>1999</b> , 105, 618-625                               | 2.2  | 109 |
| 482 | Shaping complex microwave fields in reverberating media with binary tunable metasurfaces. <i>Scientific Reports</i> , <b>2014</b> , 4, 6693   | 4.9  | 105 |
| 481 | Diffraction Effects in Pulse-Echo Measurement. <i>IEEE Transactions on Sonics and Ultrasonics</i> , <b>1984</b> , 31, 313-329   |      | 104 |
| 480 | Topological acoustic polaritons: robust sound manipulation at the subwavelength scale. <i>New Journal of Physics</i> , <b>2017</b> , 19, 075003                                     | 2.9  | 103 |
| 479 | Time-Dependent Coherent Backscattering of Acoustic Waves. <i>Physical Review Letters</i> , <b>1997</b> , 79, 3637-3639  | 3.4  | 102 |
| 478 | Mapping myocardial fiber orientation using echocardiography-based shear wave imaging. <i>IEEE Transactions on Medical Imaging</i> , <b>2012</b> , 31, 554-62                        | 11.7 | 100 |
| 477 | Temperature estimation using ultrasonic spatial compound imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2004</b> , 51, 606-615        | 3.2  | 99  |
| 476 | Assessment of elastic parameters of human skin using dynamic elastography. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2004</b> , 51, 980-9 | 3.2  | 99  |
| 475 | In vivo transcranial brain surgery with an ultrasonic time reversal mirror. <i>Journal of Neurosurgery</i> , <b>2007</b> , 106, 1061-6  | 3.2  | 98  |
| 474 | 3-D real-time motion correction in high-intensity focused ultrasound therapy. <i>Ultrasound in Medicine and Biology</i> , <b>2004</b> , 30, 1239-49                                 | 3.5  | 98  |
| 473 | Simulation of intracranial acoustic fields in clinical trials of sonothrombolysis. <i>Ultrasound in Medicine and Biology</i> , <b>2009</b> , 35, 1148-58                            | 3.5  | 97  |
| 472 | Ultrasound contrast plane wave imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2012</b> , 59, 2676-83                                  | 3.2  | 97  |
| 471 | Design and characterization of bubble phononic crystals. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 171904  | 3.4  | 97  |
| 470 | Temperature dependence of the shear modulus of soft tissues assessed by ultrasound. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 1701-18                              | 3.8  | 95  |
| 469 | Monitoring thermally-induced lesions with supersonic shear imaging. <i>Ultrasonic Imaging</i> , <b>2004</b> , 26, 71-84   | 1.9  | 95  |
| 468 | Random multiple scattering of ultrasound. II. Is time reversal a self-averaging process?. <i>Physical Review E</i> , <b>2001</b> , 64, 036606                                       | 2.4  | 95  |

|     |  |      |    |
|-----|--|------|----|
| 467 | Sono-activated ultrasound localization microscopy. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 174107  | 3.4  | 93 |
| 466 | Time reversal in a waveguide: study of the temporal and spatial focusing. <i>Journal of the Acoustical Society of America</i> , <b>2000</b> , 107, 2418-29   | 2.2  | 92 |
| 465 | Theory of the time reversal cavity for electromagnetic fields. <i>Optics Letters</i> , <b>2007</b> , 32, 3107-9  | 3    | 90 |
| 464 | Transcostal high-intensity-focused ultrasound: ex vivo adaptive focusing feasibility study. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 2937-51   | 3.8  | 85 |
| 463 | Time reversal of wideband microwaves. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 154101  | 3.4  | 85 |
| 462 | Time reversal and holography with spacetime transformations. <i>Nature Physics</i> , <b>2016</b> , 12, 972-977   | 16.2 | 85 |
| 461 | Smart optical coherence tomography for ultra-deep imaging through highly scattering media. <i>Science Advances</i> , <b>2016</b> , 2, e1600370   | 14.3 | 84 |
| 460 | Theory of Electromagnetic Time-Reversal Mirrors. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2010</b> , 58, 3139-3149  | 4.9  | 84 |
| 459 | Time-reversal acoustics in complex environments. <i>Geophysics</i> , <b>2006</b> , 71, SI151-SI164   | 3.1  | 84 |
| 458 | 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> , <b>2011</b> , 58, 517-32 | 3.2  | 83 |
| 457 | A polychromatic approach to far-field superlensing at visible wavelengths. <i>Nature Communications</i> , <b>2012</b> , 3, 889   | 17.4 | 82 |
| 456 | MR-guided adaptive focusing of therapeutic ultrasound beams in the human head. <i>Medical Physics</i> , <b>2012</b> , 39, 1141-9   | 4.4  | 80 |
| 455 | Time reversal techniques in ultrasonic nondestructive testing of scattering media. <i>Inverse Problems</i> , <b>2002</b> , 18, 1761-1773   | 2.3  | 80 |
| 454 | Observation of shock transverse waves in elastic media. <i>Physical Review Letters</i> , <b>2003</b> , 91, 164301  | 7.4  | 79 |
| 453 | Optimal focusing by spatio-temporal inverse filter. II. Experiments. Application to focusing through absorbing and reverberating media. <i>Journal of the Acoustical Society of America</i> , <b>2001</b> , 110, 48-58                       | 2.2  | 78 |
| 452 | Time reversal processing in ultrasonic nondestructive testing. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1995</b> , 42, 1087-1098  | 3.2  | 78 |
| 451 | Compensating for bone interfaces and respiratory motion in high-intensity focused ultrasound. <i>International Journal of Hyperthermia</i> , <b>2007</b> , 23, 141-51  | 3.7  | 77 |
| 450 | Measurement of elastic nonlinearity of soft solid with transient elastography. <i>Journal of the Acoustical Society of America</i> , <b>2003</b> , 114, 3087-91  | 2.2  | 77 |



|     |   |      |    |
|-----|---|------|----|
| 449 | Green's function estimation using secondary sources in a shallow water environment. <i>Journal of the Acoustical Society of America</i> , <b>2003</b> , 113, 1406-16  | 2.2  | 77 |
| 448 | Highly resolved detection and selective focusing in a waveguide using the D.O.R.T. method. <i>Journal of the Acoustical Society of America</i> , <b>1999</b> , 105, 2634-2642   | 2.2  | 75 |
| 447 | Time-reversal in an ultrasonic waveguide. <i>Applied Physics Letters</i> , <b>1997</b> , 70, 1811-1813  | 3.4  | 74 |
| 446 | Time reversal focusing applied to lithotripsy. <i>Ultrasonic Imaging</i> , <b>1996</b> , 18, 106-21   | 1.9  | 73 |
| 445 | Time-reversal generation of rogue waves. <i>Physical Review Letters</i> , <b>2014</b> , 112, 124101   | 7.4  | 71 |
| 444 | Ultrafast imaging of ultrasound contrast agents. <i>Ultrasound in Medicine and Biology</i> , <b>2009</b> , 35, 1908-16  | 3.5  | 70 |
| 443 | Shaping reverberating sound fields with an actively tunable metasurface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 6638-6643  | 11.5 | 69 |
| 442 | Sonic boom in soft materials: The elastic Cerenkov effect. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 2202-2204   | 3.4  | 69 |
| 441 | Separation of interfering acoustic scattered signals using the invariants of the time-reversal operator. Application to Lamb waves characterization. <i>Journal of the Acoustical Society of America</i> , <b>1998</b> , 104, 801-807 | 2.2  | 68 |
| 440 | Sound focusing in rooms: the time-reversal approach. <i>Journal of the Acoustical Society of America</i> , <b>2003</b> , 113, 1533-43   | 2.2  | 67 |
| 439 | Multiple scattering of sound. <i>Waves in Random and Complex Media</i> , <b>2000</b> , 10, R31-R60  |      | 67 |
| 438 | Multiwave imaging and super resolution. <i>Physics Today</i> , <b>2010</b> , 63, 28-33  | 0.9  | 64 |
| 437 | Random multiple scattering of ultrasound. I. Coherent and ballistic waves. <i>Physical Review E</i> , <b>2001</b> , 64, 036605  | 2.4  | 64 |
| 436 | MR-guided transcranial brain HIFU in small animal models. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 365-388  | 3.8  | 62 |
| 435 | In vivo bubble nucleation probability in sheep brain tissue. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 7001-85   | 3.85 | 62 |
| 434 | Phononic crystals. <i>Physica Status Solidi (B): Basic Research</i> , <b>2004</b> , 241, 3454-3462  | 1.3  | 62 |
| 433 | Technical design report for the (overline{P})ANDA (AntiProton Annihilations at Darmstadt) Straw Tube Tracker. <i>European Physical Journal A</i> , <b>2013</b> , 49, 1  | 2.5  | 60 |
| 432 | Assessment of the mechanical properties of the musculoskeletal system using 2-D and 3-D very high frame rate ultrasound. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2008</b> , 55, 2177-90   | 3.2  | 59 |

|     |   |      |    |
|-----|---|------|----|
| 431 | Transport parameters for an ultrasonic pulsed wave propagating in a multiple scattering medium. <i>Journal of the Acoustical Society of America</i> , <b>2000</b> , 108, 503-12                   | 2.2  | 58 |
| 430 | Exploiting the time-reversal operator for adaptive optics, selective focusing, and scattering pattern analysis. <i>Physical Review Letters</i> , <b>2011</b> , 107, 263901                        | 7.4  | 57 |
| 429 | high resolution human corneal imaging using full-field optical coherence tomography. <i>Biomedical Optics Express</i> , <b>2018</b> , 9, 557-568  | 3.5  | 56 |
| 428 | Targeting accuracy of transcranial magnetic resonance-guided high-intensity focused ultrasound brain therapy: a fresh cadaver model. <i>Journal of Neurosurgery</i> , <b>2013</b> , 118, 1046-52  | 3.2  | 55 |
| 427 | Coherent backscattering of an elastic wave in a chaotic cavity. <i>Physical Review Letters</i> , <b>2000</b> , 84, 1693-5   | 7.4  | 55 |
| 426 | Real time inverse filter focusing through iterative time reversal. <i>Journal of the Acoustical Society of America</i> , <b>2004</b> , 115, 768-75  | 2.2  | 54 |
| 425 | The role of the coupling term in transient elastography. <i>Journal of the Acoustical Society of America</i> , <b>2004</b> , 115, 73-83   | 2.2  | 54 |
| 424 | The variance of quantitative estimates in shear wave imaging: theory and experiments. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2012</b> , 59, 2390-410 | 3.2  | 52 |
| 423 | Manipulating spatiotemporal degrees of freedom of waves in random media. <i>Physical Review Letters</i> , <b>2009</b> , 103, 173902   | 7.4  | 52 |
| 422 | Effects of nonlinear ultrasound propagation on high intensity brain therapy. <i>Medical Physics</i> , <b>2011</b> , 38, 1207-16   | 4.4  | 52 |
| 421 | Theory of the time-reversal process in solids. <i>Journal of the Acoustical Society of America</i> , <b>1997</b> , 102, 1289-1295   | 2.2  | 51 |
| 420 | Transcranial ultrasonic therapy based on time reversal of acoustically induced cavitation bubble signature. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2010</b> , 57, 134-44         | 5    | 50 |
| 419 | Time reversal in acoustics. <i>Contemporary Physics</i> , <b>1996</b> , 37, 95-109  | 3.3  | 50 |
| 418 | Optimally diverse communication channels in disordered environments with tuned randomness. <i>Nature Electronics</i> , <b>2019</b> , 2, 36-41   | 28.4 | 50 |
| 417 | Focusing in transmit-receive mode through inhomogeneous media: The time reversal matched filter approach. <i>Journal of the Acoustical Society of America</i> , <b>1995</b> , 98, 1155-1162       | 2.2  | 49 |
| 416 | Ultrafast Doppler reveals the mapping of cerebral vascular resistivity in neonates. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2014</b> , 34, 1009-17                              | 7.3  | 48 |
| 415 | Composite media mixing Bragg and local resonances for highly attenuating and broad bandgaps. <i>Scientific Reports</i> , <b>2013</b> , 3, 3240  | 4.9  | 48 |
| 414 | Optimal transcostal high-intensity focused ultrasound with combined real-time 3D movement tracking and correction. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 7061-80             | 3.8  | 48 |

|     |   |      |    |
|-----|---|------|----|
| 413 | Monitoring of cornea elastic properties changes during UV-A/riboflavin-induced corneal collagen cross-linking using supersonic shear wave imaging: a pilot study <b>2012</b> , 53, 5948-54                                |      | 48 |
| 412 | Wave-Field Shaping in Cavities: Waves Trapped in a Box with Controllable Boundaries. <i>Physical Review Letters</i> , <b>2015</b> , 115, 017701   | 7.4  | 47 |
| 411 | Building three-dimensional images using a time-reversal chaotic cavity. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2005</b> , 52, 1489-97  | 3.2  | 47 |
| 410 | Generation of very high pressure pulses with 1-bit time reversal in a solid waveguide. <i>Journal of the Acoustical Society of America</i> , <b>2001</b> , 110, 2849-2857   | 2.2  | 47 |
| 409 | The laser-generated ultrasonic phased array: Analysis and experiments. <i>Journal of the Acoustical Society of America</i> , <b>1993</b> , 94, 1934-1943  | 2.2  | 47 |
| 408 | Ultrasonic signal processing for ? attenuation measurement: Short time Fourier analysis. <i>Ultrasonic Imaging</i> , <b>1983</b> , 5, 117-135   | 1.9  | 47 |
| 407 | Revisiting the wire medium: an ideal resonant metalens. <i>Waves in Random and Complex Media</i> , <b>2011</b> , 21, 591-613  | 1.9  | 46 |
| 406 | In vivo mapping of brain elasticity in small animals using shear wave imaging. <i>IEEE Transactions on Medical Imaging</i> , <b>2011</b> , 30, 550-8  | 11.7 | 46 |
| 405 | Limits of time-reversal focusing through multiple scattering: long-range correlation. <i>Journal of the Acoustical Society of America</i> , <b>2000</b> , 107, 2987-98  | 2.2  | 46 |
| 404 | Microbubble ultrasound super-localization imaging (MUSLI) <b>2011</b> ,   |      | 45 |
| 403 | Time reversal of electromagnetic waves and telecommunication. <i>Radio Science</i> , <b>2005</b> , 40, n/a-n/a  | 1.4  | 45 |
| 402 | Ultrasonic focusing through the ribs using the DORT method. <i>Medical Physics</i> , <b>2009</b> , 36, 3495-503   | 4.4  | 44 |
| 401 | Ultrasonic nondestructive testing of scattering media using the decomposition of the time-reversal operator. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2002</b> , 49, 1103-1113 | 3.2  | 44 |
| 400 | The Aharonov-Bohm Effect Revisited by an Acoustic Time-Reversal Mirror. <i>Physical Review Letters</i> , <b>1997</b> , 79, 3170-3173  | 7.4  | 43 |
| 399 | Experimental detection and focusing in shallow water by decomposition of the time reversal operator. <i>Journal of the Acoustical Society of America</i> , <b>2007</b> , 122, 761-8                                       | 2.2  | 43 |
| 398 | 3D functional ultrasound imaging of the cerebral visual system in rodents. <i>NeuroImage</i> , <b>2017</b> , 149, 267-274   |      | 42 |
| 397 | From supersonic shear wave imaging to full-field optical coherence shear wave elastography. <i>Journal of Biomedical Optics</i> , <b>2013</b> , 18, 121514  | 3.5  | 42 |
| 396 | Focusing with plane time-reversal mirrors: An efficient alternative to closed cavities. <i>Journal of the Acoustical Society of America</i> , <b>1993</b> , 94, 2373-2386   | 2.2  | 42 |

|     |  |     |    |
|-----|--|-----|----|
| 395 | In vivo evidence of porcine cornea anisotropy using supersonic shear wave imaging <b>2014</b> , 55, 7545-52  |     | 41 |
| 394 | Far-field sub-wavelength imaging and focusing using a wire medium based resonant metalens. <i>Waves in Random and Complex Media</i> , <b>2011</b> , 21, 614-627  | 1.9 | 41 |
| 393 | Revisiting iterative time reversal processing: application to detection of multiple targets. <i>Journal of the Acoustical Society of America</i> , <b>2004</b> , 115, 776-84   | 2.2 | 41 |
| 392 | MR-guided adaptive focusing of ultrasound. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2010</b> , 57, 1734-7   | 3.2 | 40 |
| 391 | âUltrasonic starsâFor time-reversal focusing using induced cavitation bubbles. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 034102   | 3.4 | 40 |
| 390 | Ultrafast imaging of in vivo muscle contraction using ultrasound. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 184103  | 3.4 | 40 |
| 389 | Breaking of time reversal invariance in nonlinear acoustics. <i>Physical Review E</i> , <b>2001</b> , 64, 016602   | 2.4 | 40 |
| 388 | Hybridized resonances to design tunable binary phase metasurface unit cells. <i>Optics Express</i> , <b>2014</b> , 22, 18881-8   | 3.3 | 39 |
| 387 | Time reversal of water waves. <i>Physical Review Letters</i> , <b>2012</b> , 109, 064501   | 7.4 | 39 |
| 386 | Acoustic impact localization in plates: properties and stability to temperature variation. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2007</b> , 54, 378-85                                   | 3.2 | 39 |
| 385 | Adaptive focusing for transcranial ultrasound imaging using dual arrays. <i>Journal of the Acoustical Society of America</i> , <b>2006</b> , 120, 2737-45  | 2.2 | 39 |
| 384 | Ultrafast two-dimensional ultrasonic speckle velocimetry: A tool in flow imaging. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 1155-1157   | 3.4 | 39 |
| 383 | Time Reversal Focusing Applied to Lithotripsy. <i>Ultrasonic Imaging</i> , <b>1996</b> , 18, 106-121   | 1.9 | 39 |
| 382 | Improved imaging rate through simultaneous transmission of several ultrasound beams <b>1992</b> , 1733, 120  |     | 39 |
| 381 | Green's function estimation in speckle using the decomposition of the time reversal operator: application to aberration correction in medical imaging. <i>Journal of the Acoustical Society of America</i> , <b>2008</b> , 123, 866-77 | 2.2 | 38 |
| 380 | Precise Localization of Multiple Noncooperative Objects in a Disordered Cavity by Wave Front Shaping. <i>Physical Review Letters</i> , <b>2018</b> , 121, 063901   | 7.4 | 37 |
| 379 | Ultrafast imaging of the arterial pulse wave. <i>Irbm</i> , <b>2011</b> , 32, 106-108  | 4.8 | 37 |
| 378 | Transfer and Green functions based on modal analysis for Lamb waves generation. <i>Journal of the Acoustical Society of America</i> , <b>2000</b> , 107, 2370-8  | 2.2 | 37 |

|     |   |      |    |
|-----|---|------|----|
| 377 | Ultrasonic beam steering through inhomogeneous layers with a time reversal mirror. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1996</b> , 43, 167-175                         | 3.2  | 37 |
| 376 | Application of DENSE-MR-elastography to the human heart. <i>Magnetic Resonance in Medicine</i> , <b>2009</b> , 62, 1155-63  | 4.4  | 36 |
| 375 | Nonlinear shear wave interaction in soft solids. <i>Journal of the Acoustical Society of America</i> , <b>2007</b> , 122, 1917-26   | 2.2  | 36 |
| 374 | Slow waves in locally resonant metamaterials line defect waveguides. <i>Scientific Reports</i> , <b>2017</b> , 7, 15105   | 4.9  | 35 |
| 373 | Ultra small mode volume defect cavities in spatially ordered and disordered metamaterials. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 144104   | 3.4  | 35 |
| 372 | Ultrasound shock wave generator with one-bit time reversal in a dispersive medium, application to lithotripsy. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 897-899   | 3.4  | 35 |
| 371 | Subwavelength focusing in bubbly media using broadband time reversal. <i>Physical Review B</i> , <b>2015</b> , 91,  | 3.3  | 34 |
| 370 | Inverse scattering analysis with an acoustic time-reversal mirror. <i>Physical Review Letters</i> , <b>1994</b> , 72, 637-640   | 4.0  | 34 |
| 369 | Carotid stiffness change over the cardiac cycle by ultrafast ultrasound imaging in healthy volunteers and vascular Ehlers-Danlos syndrome. <i>Journal of Hypertension</i> , <b>2015</b> , 33, 1890-6; discussion 1896 | 1.9  | 33 |
| 368 | Transient optoelastography in optically diffusive media. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 174111  | 3.4  | 33 |
| 367 | Field fluctuation spectroscopy in a reverberant cavity with moving scatterers. <i>Physical Review Letters</i> , <b>2003</b> , 90, 094302  | 7.4  | 33 |
| 366 | Self-focusing and time recompression of Lamb waves using a time reversal mirror. <i>Ultrasonics</i> , <b>1998</b> , 36, 179-186   | 3.5  | 31 |
| 365 | Time reversal kaleidoscope: A smart transducer for three-dimensional ultrasonic imaging. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 3879-3881   | 3.4  | 31 |
| 364 | Time reversal of noise sources in a reverberation room. <i>Journal of the Acoustical Society of America</i> , <b>2005</b> , 117, 2866-72  | 2.2  | 31 |
| 363 | Towards anti-causal Green's function for three-dimensional sub-diffraction focusing. <i>Nature Physics</i> , <b>2018</b> , 14, 608-612  | 16.2 | 30 |
| 362 | Focusing properties of near-field time reversal. <i>Physical Review A</i> , <b>2007</b> , 76,   | 2.6  | 30 |
| 361 | Experimental Evidence in Acoustics of the Violation of Time-Reversal Invariance Induced by Vorticity. <i>Europhysics Letters</i> , <b>1995</b> , 32, 25-29  | 1.6  | 30 |
| 360 | Time reversal of photoacoustic waves. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 184108   | 3.4  | 29 |

|     |   |     |    |
|-----|---|-----|----|
| 359 | Imaging in the presence of grain noise using the decomposition of the time reversal operator. <i>Journal of the Acoustical Society of America</i> , <b>2003</b> , 113, 1230-40                          | 2.2 | 29 |
| 358 | Sensitivity to perturbations of a time-reversed acoustic wave in a multiple scattering medium. <i>Physical Review Letters</i> , <b>2001</b> , 87, 274301  | 7.4 | 29 |
| 357 | Time-reversal waves and super resolution. <i>Journal of Physics: Conference Series</i> , <b>2008</b> , 124, 012004  | 0.3 | 28 |
| 356 | Real-time focusing using an ultrasonic one channel time-reversal mirror coupled to a solid cavity. <i>Journal of the Acoustical Society of America</i> , <b>2004</b> , 115, 1955-1960                   | 2.2 | 28 |
| 355 | Soda Cans Metamaterial: A Subwavelength-Scaled Phononic Crystal. <i>Crystals</i> , <b>2016</b> , 6, 82  | 2.3 | 28 |
| 354 | Self-defocusing in ultrasonic hyperthermia: Experiment and simulation. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 3062-3064   | 3.4 | 27 |
| 353 | Optical probing of pulsed, focused ultrasonic fields using a heterodyne interferometer. <i>Applied Physics Letters</i> , <b>1992</b> , 61, 153-155  | 3.4 | 27 |
| 352 | Spatiotemporal Wave Front Shaping in a Microwave Cavity. <i>Physical Review Letters</i> , <b>2016</b> , 117, 134302   | 7.4 | 27 |
| 351 | Temperature estimation using ultrasonic spatial compound imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2004</b> , 51, 606-15                             | 3.2 | 27 |
| 350 | Reversible Hardware for Acoustic Communications. <i>IEEE Communications Magazine</i> , <b>2020</b> , 58, 55-61  | 9.1 | 26 |
| 349 | Full-field spatially incoherent illumination interferometry: a spatial resolution almost insensitive to aberrations. <i>Optics Letters</i> , <b>2016</b> , 41, 3920-3                                   | 3   | 26 |
| 348 | In vivo high-resolution human retinal imaging with wavefront-correctionless full-field OCT. <i>Optica</i> , <b>2018</b> , 5, 409  | 8.6 | 26 |
| 347 | Numerical prediction of frequency dependent 3D maps of mechanical index thresholds in ultrasonic brain therapy. <i>Medical Physics</i> , <b>2012</b> , 39, 455-67                                       | 4.4 | 26 |
| 346 | Resolution enhancement and separation of reverberation from target echo with the time reversal operator decomposition. <i>Journal of the Acoustical Society of America</i> , <b>2003</b> , 113, 3155-60 | 2.2 | 26 |
| 345 | Vortex dynamics investigation using an acoustic technique. <i>Physics of Fluids</i> , <b>1999</b> , 11, 3380-3389   | 4.4 | 26 |
| 344 | Imaging the dynamics of cardiac fiber orientation in vivo using 3D Ultrasound Backscatter Tensor Imaging. <i>Scientific Reports</i> , <b>2017</b> , 7, 830  | 4.9 | 25 |
| 343 | Multiple scattering limit in optical microscopy. <i>Optics Express</i> , <b>2017</b> , 25, 28914  | 3.3 | 25 |
| 342 | Time reversal of speckle noise. <i>Physical Review Letters</i> , <b>2011</b> , 106, 054301  | 7.4 | 25 |

|     |   |     |    |
|-----|---|-----|----|
| 341 | Time reversal operator decomposition with focused transmission and robustness to speckle noise: Application to microcalcification detection. <i>Journal of the Acoustical Society of America</i> , <b>2006</b> , 119, 3848-3859             | 2.2 | 25 |
| 340 | Non-invasive ultrasonic surgery of the brain in non-human primates. <i>Journal of the Acoustical Society of America</i> , <b>2013</b> , 134, 1632-9   | 2.2 | 24 |
| 339 | Green's function retrieval and passive imaging from correlations of wideband thermal radiations. <i>Physical Review Letters</i> , <b>2013</b> , 110, 203901   | 7.4 | 24 |
| 338 | Focusing and amplification of electromagnetic waves by time reversal in a leaky reverberation chamber. <i>Comptes Rendus Physique</i> , <b>2010</b> , 11, 37-43   | 1.4 | 24 |
| 337 | Characterization of subwavelength elastic cylinders with the decomposition of the time-reversal operator: theory and experiment. <i>Journal of the Acoustical Society of America</i> , <b>2005</b> , 117, 789-98                            | 2.2 | 24 |
| 336 | Ultrasound backscatter tensor imaging (BTI): analysis of the spatial coherence of ultrasonic speckle in anisotropic soft tissues. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2014</b> , 61, 986-96 | 3.2 | 23 |
| 335 | Scanning-free imaging through a single fiber by random spatio-spectral encoding. <i>Optics Letters</i> , <b>2015</b> , 40, 534-7  | 3   | 23 |
| 334 | INFLUENCE OF NOISE ON SUBWAVELENGTH IMAGING OF TWO CLOSE SCATTERERS USING TIME REVERSAL METHOD: THEORY AND EXPERIMENTS. <i>Progress in Electromagnetics Research</i> , <b>2009</b> , 98, 333-358  | 3.8 | 23 |
| 333 | Energy-based adaptive focusing of waves: application to noninvasive aberration correction of ultrasonic wavefields. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2009</b> , 56, 2388-99              | 3.2 | 23 |
| 332 | Optimal precision in ultrasound attenuation estimation and application to the detection of Duchenne muscular dystrophy carriers. <i>Ultrasonic Imaging</i> , <b>1987</b> , 9, 1-17  | 1.9 | 23 |
| 331 | Diffuse shear wave imaging: toward passive elastography using low-frame rate spectral-domain optical coherence tomography. <i>Journal of Biomedical Optics</i> , <b>2016</b> , 21, 126013   | 3.5 | 23 |
| 330 | Feasibility studies of time-like proton electromagnetic form factors at (overline{rm P})ANDA at FAIR. <i>European Physical Journal A</i> , <b>2016</b> , 52, 1  | 2.5 | 22 |
| 329 | Nonlinear viscoelastic properties of tissue assessed by ultrasound. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2006</b> , 53, 2009-18  | 3.2 | 22 |
| 328 | Time reversal versus phase conjugation in a multiple scattering environment. <i>Ultrasonics</i> , <b>2002</b> , 40, 275-80  | 3.5 | 22 |
| 327 | Telecommunication in a disordered environment with iterative time reversal. <i>Waves in Random and Complex Media</i> , <b>2004</b> , 14, 287-302  |     | 22 |
| 326 | Precision resonance energy scans with the PANDA experiment at FAIR. <i>European Physical Journal A</i> , <b>2019</b> , 55, 1  | 2.5 | 21 |
| 325 | Experimental access to Transition Distribution Amplitudes with the P ANDA experiment at FAIR. <i>European Physical Journal A</i> , <b>2015</b> , 51, 1  | 2.5 | 21 |
| 324 | Subwavelength focusing inside an open disordered medium by time reversal at a single point antenna. <i>Physical Review A</i> , <b>2013</b> , 87,  | 2.6 | 21 |

|     |  |      |    |
|-----|--|------|----|
| 323 | Fourth-order shear elastic constant assessment in quasi-incompressible soft solids. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 101912  | 3.4  | 21 |
| 322 | Eigenvalue distributions of correlated multichannel transfer matrices in strongly scattering systems. <i>Physical Review B</i> , <b>2008</b> , 78,   | 3.3  | 21 |
| 321 | The random phase transducer: a new technique for incoherent processing-basic principles and theory. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1990</b> , 37, 54-69 | 3.2  | 21 |
| 320 | 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> , <b>2020</b> , 117, 14453-14463      | 11.5 | 20 |
| 319 | Dynamic Metasurface Aperture as Smart Around-the-Corner Motion Detector. <i>Scientific Reports</i> , <b>2018</b> , 8, 6536   | 4.9  | 20 |
| 318 | Dynamic multimodal full-field optical coherence tomography and fluorescence structured illumination microscopy. <i>Journal of Biomedical Optics</i> , <b>2017</b> , 22, 26004                                | 3.5  | 20 |
| 317 | Suppression of tissue harmonics for pulse-inversion contrast imaging using time reversal. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, 5469-80   | 3.8  | 20 |
| 316 | Time deconvolution of diffraction effects—Application to calibration and prediction of transducer waveforms. <i>Journal of the Acoustical Society of America</i> , <b>1988</b> , 84, 1073-1085               | 2.2  | 20 |
| 315 | 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> , <b>2017</b> , 96,                  | 3.3  | 19 |
| 314 | Experimental validation of time reversal ultra wide-band communication system for high data rates. <i>IET Microwaves, Antennas and Propagation</i> , <b>2010</b> , 4, 643                                    | 1.6  | 19 |
| 313 | Perspectives on Attenuation Estimation from Pulse-Echo Signals. <i>IEEE Transactions on Sonics and Ultrasonics</i> , <b>1984</b> , 31, 352-361   |      | 19 |
| 312 | Photoacoustic guidance of high intensity focused ultrasound with selective optical contrasts and time-reversal. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 054102                                    | 3.4  | 18 |
| 311 | Potential of MRI and Ultrasound Radiation Force in Elastography: Applications to Diagnosis and Therapy. <i>Proceedings of the IEEE</i> , <b>2008</b> , 96, 490-499   | 14.3 | 18 |
| 310 | Ultrafast imaging of the heart using circular wave synthetic imaging with phased arrays <b>2009</b> ,  |      | 17 |
| 309 | Ultrafast imaging of beamformed shear waves induced by the acoustic radiation force. Application to transient elastography <b>2002</b> ,   |      | 17 |
| 308 | Ultrasound puts materials to the test. <i>Physics World</i> , <b>1998</b> , 11, 41-46  | 0.5  | 17 |
| 307 | Self-focusing Rayleigh wave using a time reversal mirror. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 161-163   | 3.4  | 17 |
| 306 | Dynamic full-field optical coherence tomography: 3D live-imaging of retinal organoids. <i>Light: Science and Applications</i> , <b>2020</b> , 9, 140   | 16.7 | 17 |



|     |   |      |    |
|-----|---|------|----|
| 305 | Controlling light in complex media beyond the acoustic diffraction-limit using the acousto-optic transmission matrix. <i>Nature Communications</i> , <b>2019</b> , 10, 717  | 17.4 | 17 |
| 304 | Technical design report for the $\overline{\text{P}}\text{AND}\text{A}$ Barrel DIRC detector. <i>Journal of Physics G: Nuclear and Particle Physics</i> , <b>2019</b> , 46, 045001  | 2.9  | 17 |
| 303 | Probing dynamic processes in the eye at multiple spatial and temporal scales with multimodal full field OCT. <i>Biomedical Optics Express</i> , <b>2019</b> , 10, 731-746   | 3.5  | 16 |
| 302 | Cell Motility as Contrast Agent in Retinal Explant Imaging With Full-Field Optical Coherence Tomography <b>2017</b> , 58, 4605-4615   |      | 16 |
| 301 | 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> , <b>2012</b> , 59, 703-14 | 3.2  | 16 |
| 300 | Super-resolution in time-reversal focusing on a moving source. <i>Wave Motion</i> , <b>2015</b> , 53, 80-93   | 1.8  | 16 |
| 299 | Time-reversed waves and super-resolution. <i>Comptes Rendus Physique</i> , <b>2009</b> , 10, 447-463  | 1.4  | 16 |
| 298 | Time-reversal acoustics. <i>Journal of Physics: Conference Series</i> , <b>2008</b> , 118, 012001   | 0.3  | 16 |
| 297 | Gaussian beams and Legendre polynomials as invariants of the time reversal operator for a large rigid cylinder. <i>Journal of the Acoustical Society of America</i> , <b>2006</b> , 120, 2746-2754  | 2.2  | 16 |
| 296 | Time-reversed acoustics in random media and in chaotic cavities. <i>Nonlinearity</i> , <b>2002</b> , 15, R1-R18   | 1.7  | 16 |
| 295 | Acoustical imaging through a multiple scattering medium using a time-reversal mirror. <i>Journal of the Acoustical Society of America</i> , <b>2000</b> , 107, L7-12  | 2.2  | 16 |
| 294 | Time-reversal focusing through a plane interface separating two fluids. <i>Journal of the Acoustical Society of America</i> , <b>1994</b> , 96, 3145-3154   | 2.2  | 16 |
| 293 | Specular reflector noise: effect and correction for in vivo attenuation estimation. <i>Ultrasonic Imaging</i> , <b>1985</b> , 7, 277-92   | 1.9  | 16 |
| 292 | Distortion matrix concept for deep optical imaging in scattering media. <i>Science Advances</i> , <b>2020</b> , 6, eaay7170   | 14.9 | 16 |
| 291 | In-vivo non-invasive motion tracking and correction in high intensity focused ultrasound therapy. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2006</b> , 2006, 688-91   |      | 15 |
| 290 | Relation between time reversal focusing and coherent backscattering in multiple scattering media: a diagrammatic approach. <i>Physical Review E</i> , <b>2004</b> , 70, 046601  | 2.4  | 15 |
| 289 | Weak localization and time reversal of ultrasound in a rotational flow. <i>Physical Review Letters</i> , <b>2005</b> , 95, 074301   | 7.4  | 15 |
| 288 | Investigating a stretched vortex with ultrafast two-dimensional ultrasonic speckle velocimetry. <i>Physics of Fluids</i> , <b>2001</b> , 13, 1683-1690  | 4.4  | 15 |

|     |  |      |    |
|-----|--|------|----|
| 287 | Boosting sonoluminescence with a high-intensity ultrasonic pulse focused on the bubble by an adaptive array. <i>Physical Review Letters</i> , <b>2002</b> , 88, 074302   | 7.4  | 15 |
| 286 | Non-contact and through-clothing measurement of the heart rate using ultrasound vibrocardiography. <i>Medical Engineering and Physics</i> , <b>2017</b> , 50, 96-102   | 2.4  | 14 |
| 285 | Far field subwavelength imaging of magnetic patterns. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 111102   | 3.4  | 14 |
| 284 | 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> , <b>2013</b> , 29, 598-608          | 3.7  | 14 |
| 283 | Acoustic source localization model using in-skull reverberation and time reversal. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 063902   | 3.4  | 14 |
| 282 | Time reversal acoustics <b>2004</b> ,  |      | 14 |
| 281 | Laser-generated elastic waves in carbon-epoxy composite. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1993</b> , 40, 710-6  | 3.2  | 14 |
| 280 | Specular reflector noise: Effect and correction for in vivo attenuation estimation. <i>Ultrasonic Imaging</i> , <b>1985</b> , 7, 277-292   | 1.9  | 14 |
| 279 | laser Doppler holography of the human retina. <i>Biomedical Optics Express</i> , <b>2018</b> , 9, 4113-4129  | 3.5  | 14 |
| 278 | Real-time non-contact cellular imaging and angiography of human cornea and limbus with common-path full-field/SD OCT. <i>Nature Communications</i> , <b>2020</b> , 11, 1868                                      | 17.4 | 13 |
| 277 | Full-Field Optical Coherence Tomography as a Diagnosis Tool: Recent Progress with Multimodal Imaging. <i>Applied Sciences (Switzerland)</i> , <b>2017</b> , 7, 236   | 2.6  | 13 |
| 276 | Classical analog of the Unruh effect. <i>Physical Review A</i> , <b>2018</b> , 98,   | 2.6  | 13 |
| 275 | DETECTION AND IMAGING OF HUMAN BEINGS BEHIND A WALL USING THE DORT METHOD. <i>Progress in Electromagnetics Research</i> , <b>2010</b> , 110, 353-369   | 3.8  | 13 |
| 274 | The time-reversal operator with virtual transducers: application to far-field aberration correction. <i>Journal of the Acoustical Society of America</i> , <b>2008</b> , 124, 3659-68                            | 2.2  | 13 |
| 273 | Spatio-temporal coding in complex media for optimum beamforming: the iterative time-reversal approach. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2005</b> , 52, 220-30 | 3.2  | 13 |
| 272 | Resonant tunneling of acoustic waves through a double barrier consisting of two phononic crystals. <i>Europhysics Letters</i> , <b>2005</b> , 71, 63-69  | 1.6  | 13 |
| 271 | Chaos and Time-Reversed Acoustics. <i>Physica Scripta</i> , <b>2001</b> , T90, 268   | 2.6  | 13 |
| 270 | Acoustic Time-Reversal Mirrors <b>2002</b> , 17-43   |      | 13 |

|     |   |      |    |
|-----|---|------|----|
| 269 | Acoustic time reversal with mode conversion at a solid-fluid interface. <i>Applied Physics Letters</i> , <b>1998</b> , 72, 1567-1569  | 3.4  | 13 |
| 268 | Spatial coherence of ultrasonic speckle in composites. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1993</b> , 40, 666-75                                      | 3.2  | 13 |
| 267 | Directivity patterns of a moving thermoelastic source in solid media. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1992</b> , 39, 285-92                       | 3.2  | 13 |
| 266 |   |      | 13 |
| 265 | 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> , <b>2019</b> , 116, 8809-8814       | 11.5 | 12 |
| 264 | 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> , <b>2020</b> , 117, 14645-14656 | 11.5 | 12 |
| 263 | Feasibility study for the measurement of $\pi$ transition distribution amplitudes at PANDA in pPb/Pb. <i>Physical Review D</i> , <b>2017</b> , 95,  | 4.9  | 12 |
| 262 | Shaping Microwave Fields Using Nonlinear Unsolicited Feedback: Application to Enhance Energy Harvesting. <i>Physical Review Applied</i> , <b>2017</b> , 8,  | 4.3  | 12 |
| 261 | Time reversal of ultrasound through a phononic crystal. <i>Physical Review Letters</i> , <b>2006</b> , 96, 104301   | 7.4  | 12 |
| 260 | Characterization of a large vortex using acoustic time-reversal mirrors. <i>European Physical Journal B</i> , <b>1999</b> , 9, 545-549  | 1.2  | 12 |
| 259 |   |      | 12 |
| 258 | Left-handed band in an electromagnetic metamaterial induced by sub-wavelength multiple scattering. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 111101   | 3.4  | 11 |
| 257 | Tunable time-reversal cavity for high-pressure ultrasonic pulses generation: A tradeoff between transmission and time compression. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 064104         | 3.4  | 11 |
| 256 | ShearWaveElastography A new real time imaging mode for assessing quantitatively soft tissue viscoelasticity <b>2008</b> ,   |      | 11 |
| 255 | Time-reversal breaking of acoustic waves in a cavity. <i>American Journal of Physics</i> , <b>2004</b> , 72, 1308-1311  | 0.7  | 11 |
| 254 | Sound focusing in rooms. II. The spatio-temporal inverse filter. <i>Journal of the Acoustical Society of America</i> , <b>2003</b> , 114, 3044-52   | 2.2  | 11 |
| 253 | Shear-wave focusing with a laser-ultrasound phased-array. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1995</b> , 42, 981-988                                  | 3.2  | 11 |
| 252 | Diffraction correction for focused transducers in attenuation measurements ?. <i>Ultrasonic Imaging</i> , <b>1987</b> , 9, 248-259  | 1.9  | 11 |

|     |  |      |    |
|-----|--|------|----|
| 251 | Choroidal vasculature imaging with laser Doppler holography. <i>Biomedical Optics Express</i> , <b>2019</b> , 10, 995-1012   | 10.5 | 11 |
| 250 | Characterization of an elastic cylinder and an elastic sphere with the time-reversal operator: application to the sub-resolution limit. <i>Inverse Problems</i> , <b>2008</b> , 24, 025014                                   | 2.3  | 11 |
| 249 | Reflection Matrix Approach for Quantitative Imaging of Scattering Media. <i>Physical Review X</i> , <b>2020</b> , 10,  | 9.1  | 10 |
| 248 | Crystalline Soda Can Metamaterial exhibiting Graphene-like Dispersion at subwavelength scale. <i>Scientific Reports</i> , <b>2017</b> , 7, 15359   | 4.9  | 10 |
| 247 | Retrieving time-dependent Green's functions in optics with low-coherence interferometry. <i>Physical Review Letters</i> , <b>2015</b> , 114, 023901  | 7.4  | 10 |
| 246 | Acoustic imaging device with one transducer. <i>Journal of the Acoustical Society of America</i> , <b>2012</b> , 131, EL395-9  | 2.2  | 10 |
| 245 | The prolate spheroidal wave functions as invariants of the time reversal operator for an extended scatterer in the Fraunhofer approximation. <i>Journal of the Acoustical Society of America</i> , <b>2009</b> , 125, 218-26 | 2.2  | 10 |
| 244 | Partial coherence of transient ultrasonic fields in anisotropic random media: Application to coherent echo detection. <i>Journal of the Acoustical Society of America</i> , <b>1997</b> , 101, 690-704                       | 2.2  | 10 |
| 243 | Time reversal in multiply scattering media. <i>Ultrasonics</i> , <b>1998</b> , 36, 443-447   | 3.5  | 10 |
| 242 | The spatial focusing of a leaky time reversal chaotic cavity. <i>Waves in Random and Complex Media</i> , <b>2007</b> , 17, 67-83   | 1.9  | 10 |
| 241 | Dual-arrays brain imaging prototype: experimental in vitro results <b>2005</b> ,   |      | 10 |
| 240 | Detection of cracks in a thin air-filled hollow cylinder by application of the DORT method to elastic components of the echo. <i>Ultrasonics</i> , <b>2002</b> , 40, 715-20  | 3.5  | 10 |
| 239 | Time-reversal mirrors and rough surfaces: Theory. <i>Journal of the Acoustical Society of America</i> , <b>1999</b> , 106, 716-723   | 2.2  | 10 |
| 238 | . <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1995</b> , 42, 135-143   | 3.2  | 10 |
| 237 | Optimal precision in ultrasound attenuation estimation and application to the detection of Duchenne Muscular Dystrophy carriers. <i>Ultrasonic Imaging</i> , <b>1987</b> , 9, 1-17   | 1.9  | 10 |
| 236 | Subwavelength far-field imaging at visible and ultraviolet wavelengths using broadband surface plasmon waves. <i>Physical Review B</i> , <b>2014</b> , 89,   | 3.3  | 9  |
| 235 | Time-reversal method and cross-correlation techniques by normal mode theory: a three-point problem. <i>Geophysical Journal International</i> , <b>2012</b> , 191, 637-652  | 2.6  | 9  |
| 234 | Aberration correction by time reversal of moving speckle noise. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2012</b> , 59, 1575-83   | 3.2  | 9  |

|     |  |     |   |
|-----|--|-----|---|
| 233 | Optimal spatiotemporal focusing through complex scattering media. <i>Physical Review E</i> , <b>2012</b> , 85, 016605.4  | 2.4 | 9 |
| 232 | Characterization of an elastic target in a shallow water waveguide by decomposition of the time-reversal operator. <i>Journal of the Acoustical Society of America</i> , <b>2008</b> , 124, 779-87                               | 2.2 | 9 |
| 231 | Multiple scattering between two elastic cylinders and invariants of the time-reversal operator: Theory and experiment. <i>Journal of the Acoustical Society of America</i> , <b>2006</b> , 120, 875-883                          | 2.2 | 9 |
| 230 | The Stokes relations linking time reversal and the inverse filter. <i>Journal of the Acoustical Society of America</i> , <b>2006</b> , 119, 1335-1346  | 2.2 | 9 |
| 229 | Ultra high speed imaging of elasticity <b>2002</b> ,   |     | 9 |
| 228 | Waveform analysis of human retinal and choroidal blood flow with laser Doppler holography. <i>Biomedical Optics Express</i> , <b>2019</b> , 10, 4942-4963  | 3.5 | 9 |
| 227 | Adaptive optics full-field optical coherence tomography. <i>Journal of Biomedical Optics</i> , <b>2016</b> , 21, 121505  | 3.5 | 9 |
| 226 | Short Time Fourier Analysis and Diffraction Effect in Biological Tissue Characterization. <i>Acoustical Imaging</i> , <b>1982</b> , 493-503  |     | 9 |
| 225 | High speed optical holography of retinal blood flow. <i>Optics Letters</i> , <b>2016</b> , 41, 3503-6  | 3   | 8 |
| 224 | Using subwavelength diffraction gratings to design open electromagnetic cavities. <i>Physical Review Letters</i> , <b>2014</b> , 112, 043902   | 7.4 | 8 |
| 223 | Cancellation of Doppler intrinsic spectral broadening using ultrafast Doppler imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2014</b> , 61, 1396-1408                              | 3.2 | 8 |
| 222 | Acoustic metamaterials: Nearly perfect sound absorbers. <i>Nature Materials</i> , <b>2014</b> , 13, 848-9  | 27  | 8 |
| 221 | Analysis of the time reversal operator for a scatterer undergoing small displacements. <i>Journal of the Acoustical Society of America</i> , <b>2013</b> , 133, 94-107   | 2.2 | 8 |
| 220 | Time-reversal focusing of therapeutic ultrasound on targeted microbubbles. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 173901   | 3.4 | 8 |
| 219 | Non-invasive transcranial ultrasound therapy guided by CT-scans. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2006</b> , 2006, 683-7                                      |     | 8 |
| 218 | Ultrasonic imaging using spatio-temporal matched field (STMF) processing--applications to liquid and solid waveguides. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2001</b> , 48, 374-86 | 3.2 | 8 |
| 217 | Correlation length of ultrasonic speckle in anisotropic random media: Application to coherent echo detection. <i>Journal of the Acoustical Society of America</i> , <b>1998</b> , 103, 73-82                                     | 2.2 | 8 |
| 216 | Transient elastic wave generation by an array of thermoelastic sources. <i>Applied Physics Letters</i> , <b>1993</b> , 63, 3276-3278   | 3.4 | 8 |

|     |   |     |   |
|-----|---|-----|---|
| 215 | The notion of coherence in optics and its application to acoustics. <i>European Journal of Physics</i> , <b>1994</b> , 15, 81-90  | 0.8 | 8 |
| 214 | Curved-field optical coherence tomography: large-field imaging of human corneal cells and nerves. <i>Optica</i> , <b>2020</b> , 7, 872  | 8.6 | 8 |
| 213 | From Loschmidt daemons to time-reversed waves. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2016</b> , 374,                        | 3   | 8 |
| 212 | Airborne ultrasound surface motion camera: Application to seismocardiography. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 213702  | 3.4 | 7 |
| 211 | Dirac quantum time mirror. <i>Physical Review B</i> , <b>2017</b> , 95,   | 3.3 | 7 |
| 210 | Shear Wave Imaging of the heart using a cardiac phased array with coherent spatial compound <b>2012</b> ,   |     | 7 |
| 209 | Evaluation of local arterial stiffness using ultrafast imaging: A comparative study using local arterial pulse wave velocity estimation and shear wave imaging <b>2010</b> ,            |     | 7 |
| 208 | Study of viscous and elastic properties of soft tissues using supersonic shear imaging <b>2003</b> ,  |     | 7 |
| 207 | Adaptive instant record signals applied to detection with time reversal operator decomposition. <i>Journal of the Acoustical Society of America</i> , <b>2005</b> , 117, 3757-65        | 2.2 | 7 |
| 206 | Influence of boundary conditions on time-reversal focusing through heterogeneous media. <i>Applied Physics Letters</i> , <b>1998</b> , 72, 2511-2513                                    | 3.4 | 7 |
| 205 | Time-reversal mirrors and rough surfaces: Experiment. <i>Journal of the Acoustical Society of America</i> , <b>1999</b> , 106, 724-732  | 2.2 | 7 |
| 204 | Diffraction correction for focused transducers in attenuation measurements in vivo. <i>Ultrasonic Imaging</i> , <b>1987</b> , 9, 248-59   | 1.9 | 7 |
| 203 | Diffraction Correction in Pulse-Echo Attenuation Measurements <b>1983</b> ,   |     | 7 |
| 202 | Spatio-temporal imaging of light transport in highly scattering media under white light illumination. <i>Optica</i> , <b>2016</b> , 3, 1160   | 8.6 | 7 |
| 201 | Theoretical Study of Pulsed Echographic Focusing Procedures. <i>Acoustical Imaging</i> , <b>1982</b> , 437-453  |     | 7 |
| 200 | Global approach for transient shear wave inversion based on the adjoint method: a comprehensive 2D simulation study. <i>Physics in Medicine and Biology</i> , <b>2013</b> , 58, 6765-78 | 3.8 | 6 |
| 199 | Time Reversal in Subwavelength-Scaled Resonant Media: Beating the Diffraction Limit. <i>International Journal of Microwave Science and Technology</i> , <b>2011</b> , 2011, 1-14        |     | 6 |
| 198 | Ultrasons focalisés de forte intensité pour la thérapie transcrânienne du cerveau. <i>Irbm</i> , <b>2010</b> , 31, 87-91  | 4.8 | 6 |

|     |   |     |   |
|-----|---|-----|---|
| 197 | Measurement of Shear Elastic Moduli in Quasi-Incompressible Soft Solids. <i>AIP Conference Proceedings</i> , <b>2008</b> ,  | o   | 6 |
| 196 | High power phased array prototype for clinical high intensity focused ultrasound : applications to transcostal and transcranial therapy. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2007</b> , 2007, 234-7 |     | 6 |
| 195 | 3D ultrasound-based dynamic and transient elastography: first in vitro results  |     | 6 |
| 194 | Adaptive Focusing For Ultrasonic Transcranial Brain Therapy: First In Vivo Investigation On 22 Sheep. <i>AIP Conference Proceedings</i> , <b>2005</b> ,   | o   | 6 |
| 193 | Scattering of sound by a vorticity filament: an experimental and numerical investigation. <i>Physical Review E</i> , <b>2001</b> , 63, 036607   | 2.4 | 6 |
| 192 | 2D Transient Elastography <b>2000</b> , 485-492   |     | 6 |
| 191 | Dynamic time reversal of randomly backscattered acoustic waves. <i>Europhysics Letters</i> , <b>1999</b> , 47, 175-181  | 1.6 | 6 |
| 190 | Optical generation and detection of elastic waves in solids. <i>European Physical Journal Special Topics</i> , <b>1994</b> , 04, C7-673-C7-684  |     | 6 |
| 189 |   |     | 6 |
| 188 | Mechanical displacement induced in a piezoelectric structure: Experimental measurement by laser interferometry and simulation by a finite element method. <i>Journal of the Acoustical Society of America</i> , <b>1988</b> , 84, 11-19                             | 2.2 | 6 |
| 187 | Time-reversal of nonlinear waves: Applicability and limitations. <i>Physical Review Fluids</i> , <b>2016</b> , 1,   | 2.8 | 6 |
| 186 | Coherence gate shaping for wide field high-resolution in vivo retinal imaging with full-field OCT. <i>Biomedical Optics Express</i> , <b>2020</b> , 11, 4928-4941   | 3.5 | 6 |
| 185 | A Multiwave Imaging Approach for Elastography. <i>Current Medical Imaging</i> , <b>2011</b> , 7, 340-349  | 1.2 | 6 |
| 184 | Sound Speed Fluctuations in Medical Ultrasound Imaging Comparison between Different Correction Algorithms. <i>Acoustical Imaging</i> , <b>1992</b> , 213-218  |     | 6 |
| 183 | Time-Reversal by Time-Dependent Perturbations. <i>SIAM Journal on Applied Mathematics</i> , <b>2019</b> , 79, 754-780   | 3.8 | 5 |
| 182 | Use of shear wave elastography for monitoring enzymatic milk coagulation. <i>Journal of Food Engineering</i> , <b>2014</b> , 136, 73-79   | 6   | 5 |
| 181 | ULTRAFast COMPOUND DOPPLER IMAGING: A NEW APPROACH OF DOPPLER FLOW ANALYSIS <b>2010</b> ,   |     | 5 |
| 180 | Focusing and amplification of electromagnetic waves by time-reversal in an leaky reverberation chamber. <i>Digest / IEEE Antennas and Propagation Society International Symposium</i> , <b>2009</b> ,   |     | 5 |

|     |  |     |   |
|-----|--|-----|---|
| 179 | Theory of the Time-Reversal Operator for a Dielectric Cylinder Using Separate Transmit and Receive Arrays. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2009</b> , 57, 2331-2340                                    | 4.9 | 5 |
| 178 | Optimal adaptive focusing through heterogeneous media with the minimally invasive inverse filter. <i>Journal of the Acoustical Society of America</i> , <b>2007</b> , 122, 2715-24   | 2.2 | 5 |
| 177 | 8C-6 Anisotropic Viscoelastic Properties of the Corpus Callosum - Application of High-Resolution 3D MR-Elastography to an Alzheimer Mouse Model. <i>Proceedings IEEE Ultrasonics Symposium</i> , <b>2007</b> ,                   |     | 5 |
| 176 | Ultrasonic transcranial brain therapy: first in vivo clinical investigation on 22 sheep using adaptive focusing <b>2004</b> ,  |     | 5 |
| 175 | Prediction of the skull overheating during high intensity focused ultrasound transcranial brain therapy <b>2004</b> ,  |     | 5 |
| 174 | The D.O.R.T. method applied to detection and imaging in plates using Lamb waves. <i>AIP Conference Proceedings</i> , <b>2001</b> ,   | 0   | 5 |
| 173 | NUMERICAL AND EXPERIMENTAL TIME-REVERSAL OF ACOUSTIC WAVES IN RANDOM MEDIA. <i>Journal of Computational Acoustics</i> , <b>2001</b> , 09, 993-1003   |     | 5 |
| 172 | Depth and range shifting of a focal spot using a time-reversal mirror in an acoustic waveguide. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 3647-3649   | 3.4 | 5 |
| 171 | Experimental validation of 3D finite differences simulations of ultrasonic wave propagation through the skull <b>2001</b> ,  |     | 5 |
| 170 | Selective focusing through inhomogeneous media: the DORT method  |     | 5 |
| 169 |  |     | 5 |
| 168 | Echographic diffraction filters and the diffraction function for random media through an instantaneous time-frequency approach. <i>Journal of the Acoustical Society of America</i> , <b>1991</b> , 90, 1074-1084 <sup>2,2</sup> |     | 5 |
| 167 |  |     | 5 |
| 166 |  |     | 5 |
| 165 | Ultrasonic Focusing with Time Reversal Mirrors <b>1996</b> , 219-251   |     | 5 |
| 164 | Experimental reconstruction of extreme sea waves by time reversal principle. <i>Journal of Fluid Mechanics</i> , <b>2020</b> , 884,  | 3.7 | 5 |
| 163 | Observation of the Talbot effect with water waves. <i>American Journal of Physics</i> , <b>2019</b> , 87, 38-43  | 0.7 | 5 |
| 162 | Time Reversal Mirrors. <i>Acoustical Imaging</i> , <b>1995</b> , 1-15  |     | 5 |



|     |  |       |
|-----|--|-------|
| 161 | Time reversal of ultrasound in granular media. <i>European Physical Journal: Special Topics</i> , <b>2017</b> , 226, 1487-1497   | 4     |
| 160 | Effect of microstructural elongation on backscattered field: Intensity measurement and multiple scattering estimation with a linear transducer array. <i>Ultrasonics</i> , <b>2018</b> , 82, 379-389               | 3.5 4 |
| 159 | Exploiting spatiotemporal degrees of freedom for far-field subwavelength focusing using time reversal in fractals. <i>Physical Review B</i> , <b>2016</b> , 93,  | 3.3 4 |
| 158 | Thickness or phase velocity measurements using the Green's function comparison method. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2010</b> , 57, 1804-12                  | 3.2 4 |
| 157 | Spatio-temporal invariants of the time reversal operator. <i>Journal of the Acoustical Society of America</i> , <b>2010</b> , 127, 2904-12   | 2.2 4 |
| 156 | Real time quantitative elastography using Supersonic Shear wave Imaging <b>2010</b> ,  | 4     |
| 155 | Construction of the temporal invariants of the time-reversal operator. <i>Journal of the Acoustical Society of America</i> , <b>2009</b> , 126, EL8-13   | 2.2 4 |
| 154 | Hybridization band gap based smart antennas: Deep subwavelength yet directional and strongly decoupled MIMO antennas <b>2012</b> ,   | 4     |
| 153 | Ultrasound-inducible fluorescent particles for internal tattooing <b>2009</b> ,  | 4     |
| 152 | Energy-based adaptive focusing of waves: Application to ultrasonic imaging and therapy <b>2008</b> ,   | 4     |
| 151 | 8C-5 Full 3D Inversion of the Viscoelasticity Wave Propagation Problem for 3D Ultrasound Elastography in Breast Cancer Diagnosis. <i>Proceedings IEEE Ultrasonics Symposium</i> , <b>2007</b> ,                    | 4     |
| 150 | 7B-2 Nonlinear Shear Elastic Moduli in Quasi-Incompressible Soft Solids. <i>Proceedings IEEE Ultrasonics Symposium</i> , <b>2007</b> ,   | 4     |
| 149 | Application of the DORT method to the detection and characterization of two targets in a shallow water wave-guide <b>2005</b> ,  | 4     |
| 148 | Time-resolved 2D pulsed elastography: experiments on tissue-equivalent phantoms and breast in vivo <b>2001</b> ,   | 4     |
| 147 | Observation of a coherent backscattering effect with a dipolar source for elastic waves: highlight of the role played by the source. <i>Physical Review E</i> , <b>2001</b> , 64, 066604                           | 2.4 4 |
| 146 | Publisher's Note: Overcoming the Diffraction Limit in Wave Physics using a Time-Reversal Mirror and a Novel Acoustic Sink [Phys. Rev. Lett. 89, 124301 (2002)]. <i>Physical Review Letters</i> , <b>2002</b> , 89, | 7.4 4 |
| 145 | Reduction of the thermo-acoustic lens effect during ultrasound-based temperature estimation <b>2002</b> ,  | 4     |
| 144 | Ultrasound-based noninvasive shear elasticity probe for soft tissues <b>2000</b> ,   | 4     |

|     |  |     |   |
|-----|--|-----|---|
| 143 | Optimisation of time reversal processing in titanium inspections   |     | 4 |
| 142 | Characterization of extended objects with the D.O.R.T. method  |     | 4 |
| 141 | Focusing through skull with time reversal mirrors. Application to hyperthermia <b>1996</b> ,   |     | 4 |
| 140 | Phase aberration correction with ultrasonic time reversal mirrors <b>1994</b> ,  |     | 4 |
| 139 | Self focusing on extended objects with time reversal mirror, applications to lithotripsy <b>1994</b> ,   |     | 4 |
| 138 | Partially coherent transducers: The random phase transducer approach. <i>Ultrasonic Imaging</i> , <b>1990</b> , 12, 205-228  | 1.9 | 4 |
| 137 | Partially coherent transducers: the random phase transducer approach. <i>Ultrasonic Imaging</i> , <b>1990</b> , 12, 205-28   | 1.9 | 4 |
| 136 | The random phase transducer: a new technique for incoherent processing-experimental results. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>1990</b> , 37, 70-8 | 3.2 | 4 |
| 135 | Time Reversing Waves For Biomedical Applications. <i>Lecture Notes in Mathematics</i> , <b>2009</b> , 73-97  | 0.4 | 4 |
| 134 | Measuring Dirac Cones in a Subwavelength Metamaterial. <i>Physical Review Letters</i> , <b>2018</b> , 121, 267601  | 7.4 | 4 |
| 133 | New Arrangements for Fresnel Focusing. <i>Acoustical Imaging</i> , <b>1980</b> , 65-73   |     | 4 |
| 132 | Fresnel Zone Focusing of Linear Arrays Applied to B and C Echography <b>1977</b> , 509-522   |     | 4 |
| 131 | Increasing the modal density in plates for mono-element focusing in air. <i>Journal of the Acoustical Society of America</i> , <b>2013</b> , 134, 1049-54  | 2.2 | 3 |
| 130 | Manipulating light at subwavelength scale by exploiting defect-guided spoof plasmon modes. <i>Physical Review B</i> , <b>2017</b> , 96,  | 3.3 | 3 |
| 129 | From the time-reversal mirror to the instantaneous time mirror. <i>European Physical Journal: Special Topics</i> , <b>2017</b> , 226, 1477-1486  | 2.3 | 3 |
| 128 | A resolution insensitive to geometrical aberrations by using incoherent illumination and interference imaging. <i>European Physical Journal: Special Topics</i> , <b>2017</b> , 226, 1603-1621       | 2.3 | 3 |
| 127 | Ultrafast acoustoelectric imaging <b>2014</b> ,  |     | 3 |
| 126 | Towards backscatter tensor imaging (BTI): Analysis of the spatial coherence of ultrasonic speckle in anisotropic soft tissues <b>2013</b> ,  |     | 3 |

|     |   |          |
|-----|---|----------|
| 125 | Experimental Study of the Invariants of the Time-Reversal Operator for a Dielectric Cylinder Using Separate Transmit and Receive Arrays. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2010</b> , 58, 1349-1358 | 4.9<br>3 |
| 124 | <b>2010</b> ,   | 3        |
| 123 | Ultrasonic mapping of temperature in hyperthermia: the thermal lens effect  | 3        |
| 122 | 4J-3 A New Rheological Model Based on Fractional Derivatives for Biological Tissues <b>2006</b> ,   | 3        |
| 121 | Design of a time reversal mirror for medium scale experiments <b>2005</b> ,   | 3        |
| 120 | Time reversal and phase conjugation with acoustic waves: industrial and medical applications <b>2005</b> ,  | 3        |
| 119 | Time reversal telecommunications in complex environments. <i>Comptes Rendus Physique</i> , <b>2006</b> , 7, 816-822   | 1.4<br>3 |
| 118 | The time reversal kaleidoscope: a new concept of smart transducers for 3D imaging <b>2003</b> ,   | 3        |
| 117 | Complex pulsing schemes for high frame rate imaging   | 3        |
| 116 | Selective focusing in multiple-target media: the transfer matrix method <b>1993</b> ,   | 3        |
| 115 | Improvement in contactless generation of ultrasound with an array of thermoelastic sources <b>1993</b> ,  | 3        |
| 114 |   | 3        |
| 113 |   | 3        |
| 112 |   | 3        |
| 111 |   | 3        |
| 110 | Attenuation Estimation and Speckle Reduction with Random Phase Transducers <b>1987</b> ,  | 3        |
| 109 | Manifestation of aberrations in full-field optical coherence tomography. <i>Optics Express</i> , <b>2021</b> , 29, 22044-22063  | 3        |
| 108 | Towards a quantum time mirror for non-relativistic wave packets. <i>New Journal of Physics</i> , <b>2018</b> , 20, 033013   | 3        |

|     |   |     |   |
|-----|---|-----|---|
| 107 | Drastic slowdown of the Rayleigh-like wave in unjammed granular suspensions. <i>Physical Review E</i> , <b>2019</b> , 99, 042902  | 2.4 | 2 |
| 106 | Active Control of the Spoof Plasmon Propagation in Time Varying and Non-reciprocal Metamaterial. <i>Scientific Reports</i> , <b>2019</b> , 9, 2368  | 4.9 | 2 |
| 105 | Layer potential approach for fast eigenvalue characterization of the Helmholtz equation with mixed boundary conditions. <i>Computational and Applied Mathematics</i> , <b>2018</b> , 37, 4675-4685    |     | 2 |
| 104 | An optical tomography PSF almost insensitive to aberrations: the benefit of a spatial incoherent illumination (Conference Presentation) <b>2016</b> ,   |     | 2 |
| 103 | Acoustic imaging with time reversal methods: From medicine to NDT <b>2015</b> ,   |     | 2 |
| 102 | Quantitative imaging of myocardium elasticity using supersonic shear imaging <b>2009</b> ,  |     | 2 |
| 101 | Flaw detection in solid with the D.O.R.T. method  |     | 2 |
| 100 | Comparison between time reversal focusing in absorbing medium and inverse filtering   |     | 2 |
| 99  | Radiation force localization of HIFU therapeutic beams coupled with magnetic resonance-elastography treatment monitoring in vivo application to the rat brain <b>2008</b> ,                           |     | 2 |
| 98  | âUltrasonic starsâFor time reversal focusing using induced cavitation bubbles. <i>AIP Conference Proceedings</i> , <b>2006</b> ,  | 0   | 2 |
| 97  | A0 mode interaction with a plate free edge: theory and experiments at very low frequency by thickness product. <i>Journal of the Acoustical Society of America</i> , <b>2007</b> , 122, 711-4         | 2.2 | 2 |
| 96  | Non-Invasive Transcranial Brain Therapy Guided by CT Scans: an In Vivo Monkey Study. <i>AIP Conference Proceedings</i> , <b>2007</b> ,  | 0   | 2 |
| 95  | Decomposition of the time-reversal operator applied to quantitative characterization of small elastic cylinders   |     | 2 |
| 94  | Local inversion of transient shear wave propagation for elasticity and viscosity mapping in soft tissues: theoretical and experimental analysis   |     | 2 |
| 93  | Reflection and time-reversal of ultrasonic waves in the vicinity of the Rayleigh angle at a fluid-solid interface. <i>Journal of the Acoustical Society of America</i> , <b>2005</b> , 118, 3145-3153 | 2.2 | 2 |
| 92  | First tests of the DORT method at 12 kHz in a shallow water waveguide <b>2005</b> ,   |     | 2 |
| 91  | ULTRASOUND PROPAGATION THROUGH A ROTATIONAL FLOW: NUMERICAL METHODS COMPARED TO EXPERIMENTS. <i>Journal of Computational Acoustics</i> , <b>2001</b> , 09, 841-852                                    |     | 2 |
| 90  | Detection and imaging in complex media with the D.O.R.T. method   |     | 2 |

|    |  |     |   |
|----|--|-----|---|
| 89 | Surface and sub-surface flaws detection using Rayleigh wave time reversal mirrors  |     | 2 |
| 88 | Visualization of surface displacement and transmitted field of piezocomposite transducers by optical probing <b>1993</b> ,   |     | 2 |
| 87 | Inverse problem in wave scattering with an acoustic time-reversal mirror <b>1993</b> ,   |     | 2 |
| 86 | Focusing and steering of ultrasonic waves generated by a sixteen-laser source array <b>1992</b> , 1733, 239  |     | 2 |
| 85 |  |     | 2 |
| 84 | Characterization of modified lead titanate piezoceramics. Application to the design of array transducers. <i>Sensors and Actuators</i> , <b>1988</b> , 13, 351-363   |     | 2 |
| 83 |  |     | 2 |
| 82 | Influence of specular reflectors on attenuation measurements in muscles. <i>Ultrasonic Imaging</i> , <b>1985</b> , 7, 84-85  | 1.9 | 2 |
| 81 | Preparation and Characterization of Lead Titanate and Lead Metaniobate Piezoceramics for Ultrasonic Transducer Design <b>1986</b> ,  |     | 2 |
| 80 | Wideband Fresnel Focusing Array Response <b>1979</b> ,   |     | 2 |
| 79 | ULTRASONIC SPECTROSCOPY IN CROSS-PLY FIBER REINFORCED COMPOSITES APPLIED TO DISPERSION EFFECTS CHARACTERIZATION OF ELASTIC SHEAR WAVE. <i>Journal De Physique Colloque</i> , <b>1990</b> , 51, C2-1265-C2-1268 |     | 2 |
| 78 | Amplification of Electromagnetic Waves Using Time Reversal 145-167   |     | 2 |
| 77 | Passive imaging of water pipelines using ambient turbulence noise. <i>Mechanical Systems and Signal Processing</i> , <b>2021</b> , 160, 107882   | 7.8 | 2 |
| 76 | Diffraction Impulse Response of Non-Planar Transducers. <i>Acoustical Imaging</i> , <b>1985</b> , 533-546  |     | 2 |
| 75 | Transverse localization of sound. <i>Physical Review B</i> , <b>2013</b> , 88,   | 3.3 | 1 |
| 74 | Échographie ultrasonore : principes et procédés. <i>Diagnostic and Interventional Imaging</i> , <b>2013</b> , 94, 504-513  |     | 1 |
| 73 | Experimental study of multiple scattering in anisotropic titanium alloys <b>2017</b> ,   |     | 1 |
| 72 | Imaging changes in scattering media from Time Reversal of the Coda wave Difference (TRECOD). <i>Waves in Random and Complex Media</i> , <b>2012</b> , 22, 109-120  | 1.9 | 1 |

|    |   |     |   |
|----|---|-----|---|
| 71 | Subwavelength Focussing in Metamaterials Using Far Field Time Reversal. <i>Springer Series in Materials Science</i> , <b>2013</b> , 141-168   | 0.9 | 1 |
| 70 | In vivo transthoracic ultrafast Doppler imaging of left intraventricular blood flow pattern <b>2013</b> ,   |     | 1 |
| 69 | <b>2010</b> ,   |     | 1 |
| 68 | Measurement of thickness or plate velocity using ambient vibrations. <i>Journal of the Acoustical Society of America</i> , <b>2010</b> , 127, EL252-7   | 2.2 | 1 |
| 67 | Numerical prediction of frequency dependent 3D maps of mechanical index thresholds in ultrasonic brain therapy <b>2010</b> ,  |     | 1 |
| 66 | In vivo soft tissues elasticity during thermal therapy is linked to the thermal dose <b>2010</b> ,  |     | 1 |
| 65 | High sensitivity brain angiography using Ultrafast Doppler <b>2010</b> ,  |     | 1 |
| 64 | In vivo brain elasticity mapping in small animals using ultrasound and its application to cerebral ischemia <b>2010</b> ,   |     | 1 |
| 63 | Effects of nonlinearity on propagation through the skull <b>2009</b> ,  |     | 1 |
| 62 | Cavitation bubble generation and control for HIFU transcranial adaptive focusing <b>2009</b> ,  |     | 1 |
| 61 | Energy-Based Adaptive Focusing of waves: Application to Ultrasonic Transcranial Therapy <b>2009</b> ,   |     | 1 |
| 60 | Ultrafast plane wave imaging: Doppler frequency distribution <b>2012</b> ,  |     | 1 |
| 59 | High Resolution MR-Elastography : a Unique Tool to Study the Rheological Properties of Tissue In Vivo and the Origin of Its Multiscale Behaviour. <i>AIP Conference Proceedings</i> , <b>2008</b> , | 0   | 1 |
| 58 | Tissue harmonics cancellation using time-reversal <b>2008</b> ,   |     | 1 |
| 57 | Non-invasive quantitative imaging of arterial wall elasticity using supersonic shear imaging <b>2008</b> ,  |     | 1 |
| 56 | Ultrafast ultrasonic imaging of in vivo muscle contraction <b>2006</b> ,  |     | 1 |
| 55 | 4J-5 A 3D Elastography System Based on the Concept of Ultrasound-Computed Tomography for In Vivo Breast Examination <b>2006</b> ,   |     | 1 |
| 54 | Imaging of optically diffusive media by use of opto-elastography <b>2007</b> ,  |     | 1 |

|    |  |     |   |
|----|--|-----|---|
| 53 | L'Échographie par ultrasons ou résonance magnétique: de nouveaux outils de diagnostic en cancérologie. <i>Medecine Nucleaire</i> , <b>2007</b> , 31, 132-141 | 0.1 | 1 |
| 52 | Tactile time reversal interactivity: experiment and modelization   |     | 1 |
| 51 | Ultrasonically induced necrosis through the rib cage based on adaptive focusing: ex vivo experiments <b>2003</b> ,   |     | 1 |
| 50 | Nonlinearity studies in soft tissues with the supersonic shear imaging system  |     | 1 |
| 49 |  |     | 1 |
| 48 | Auto-Focalisation, Communication and Sonoluminescence with Acoustic Time Reversal <b>2003</b> , 256-280  |     | 1 |
| 47 | Time reversed acoustics. <i>AIP Conference Proceedings</i> , <b>2001</b> ,   | 0   | 1 |
| 46 | Pulse echo imaging through a human skull: in vitro experiments <b>2001</b> ,   |     | 1 |
| 45 | Acoustic time reversal experiments in nonlinear regime. <i>AIP Conference Proceedings</i> , <b>2000</b> ,  | 0   | 1 |
| 44 | Time reversal invariance of nonlinear acoustic wave propagation in weakly viscous media <b>1999</b> ,  |     | 1 |
| 43 | Transport parameters for an ultrasonic pulsed wave propagating in a multiple scattering medium <b>1999</b> ,   |     | 1 |
| 42 | Vorticity measurements with an acoustic time-reversal mirror   |     | 1 |
| 41 | Improvement of time reversal mirror in detection of small cracks and metallurgical defects in sample with high ultrasonic speckle noise level <b>1993</b> ,  |     | 1 |
| 40 |  |     | 1 |
| 39 | L'imagerie ultrasonore. <i>Revue De Physique Appliquée</i> , <b>1983</b> , 18, 527-556   |     | 1 |
| 38 | Subwavelength focusing and imaging from the far field using time reversal in subwavelength scaled resonant media <b>2017</b> ,                               |     | 1 |
| 37 | Ambient noise correlation-based imaging with moving sensors. <i>Inverse Problems and Imaging</i> , <b>2017</b> , 11, 477-500                                 | 2.1 | 1 |
| 36 | Experimental Progress of Ultrasonic Time Reversal Mirrors. <i>Acoustical Imaging</i> , <b>1992</b> , 237-242   |     | 1 |

|    |  |     |   |
|----|--|-----|---|
| 35 | Ultrasonic Inspection of Titanium Alloys with a Time Reversal Mirror <b>1995</b> , 2105-2112   |     | 1 |
| 34 | Improvement of Time Reversal Processing in Titanium Inspections <b>1996</b> , 757-764  |     | 1 |
| 33 | Retrieving time-dependent Green's functions in optics with low-coherence interferometry <b>2015</b> ,  |     | 1 |
| 32 | Smart optical coherence tomography for ultra-deep imaging through highly scattering media <b>2017</b> ,  |     | 1 |
| 31 | How a moving passive observer can perceive its environment ? The Unruh effect revisited. <i>Wave Motion</i> , <b>2020</b> , 93, 102462                                       | 1.8 | 1 |
| 30 | 3D airborne ultrasound vibrometer for the detection of skin surface heterogeneities <b>2016</b> ,  |     | 1 |
| 29 | Non-Contact Surface Wave Elastography Using 40 kHz Airborne Ultrasound Surface Motion Camera <b>2018</b> ,   |     | 1 |
| 28 | Matched Filter Imaging Through Inhomogeneous Media. <i>Acoustical Imaging</i> , <b>1996</b> , 1-8  |     | 1 |
| 27 | Theoretical Modelisation of Time-Reversal Cavities, Application to Self-Focussing in Inhomogeneous Media. <i>Acoustical Imaging</i> , <b>1992</b> , 141-147                  |     | 1 |
| 26 | Time Reversal Precoding at SubTHz Frequencies: Experimental Results on Spatiotemporal Focusing <b>2021</b> ,   |     | 1 |
| 25 | Fourier transform acousto-optic imaging with off-axis holographic detection. <i>Applied Optics</i> , <b>2021</b> , 60, 7107-7112   | 1.7 | 0 |
| 24 | Soda Cans Metamaterial: Homogenization and Beyond. <i>World Scientific Series in Nanoscience and Nanotechnology</i> , <b>2017</b> , 205-250                                  | 0.1 |   |
| 23 | From Multiwave Imaging to Elasticity Imaging <b>2013</b> , 1-21  |     |   |
| 22 | Time-Reversed Waves in Complex Media 146-168   |     |   |
| 21 | Time-Reversal of Waves 399-412   |     |   |
| 20 | Aberration correction in ultrasonic medical imaging with time-reversal techniques. <i>International Journal of Imaging Systems and Technology</i> , <b>1997</b> , 8, 110-125 | 2.5 |   |
| 19 | 6. Imaging <b>2008</b> , 449-628   |     |   |
| 18 | Temperature estimation using ultrasonic spatial compound imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2004</b> , 51, 606-615 | 3.2 |   |



- 17 Comparison Between Time Reversal and Inverse Filter Focusing **2000**, 101-108
- 16 Basic Principles of Ultrasonic Time Reversal Processing in Non-Destructive Testing **1995**, 937-943
- 15 Autofocusing ultrasonic propagation in composite media based on laser generated ultrasound **1993**, 217-220
- 14 Problèmes inverses en diffusion acoustique avec des miroirs à retournement temporel. *European Physical Journal Special Topics*, **1994**, 04, C5-889-C5-892
- 13 Optical phase modulation by natural eye movements: application to time-domain FF-OCT image retrieval.. *Biomedical Optics Express*, **2022**, 13, 902-920 3-5
- 12 Expériences de renversement du temps en physique **2000**, 227-248
- 11 Time-Reversed Acoustics and Chaotic Scattering **2001**, 187-210
- 10 Digital Communication with Time-Reversal in a Multiple Scattering Medium **2003**, 596-605
- 9 New Developments in Ultrasonic Adaptive Focusing Through the Human Skull: Application to Non Invasive Brain Therapy and Imaging. *Acoustical Imaging*, **2004**, 447-456
- 8 ULTRASONIC NON-DESTRUCTIVE TESTING AND CHARACTERIZATION OF GRAPHITE-EPOXY COMPOSITES WITH A NEW RANDOM PHASE TRANSDUCER **1989**, 637-642
- 7 Sectorial Beam Scanning in Solids by a Laser Ultrasonic Source Array **1993**, 783-786
- 6 Theoretical Study of Focusing Techniques through Plane Interfaces: Comparison between Time-Reversal Methods and Fermat's Surface Techniques. *Acoustical Imaging*, **1995**, 17-22
- 5 Ultrasonic Time Reversal Processing in Non Destructive Testing. *Acoustical Imaging*, **1996**, 513-518
- 4 Beating the Diffraction Limit with Positive Refraction: The Resonant Metamaterials Approach **2017**, 33-90
- 3 Chapter 12 Time Reversal of Linear and Nonlinear Water Waves **2016**, 401-436
- 2 Physicists in a World of Wireless Communications: A Noisy Connection? [Industry Activities]. *IEEE Antennas and Propagation Magazine*, **2022**, 64, 89-94 1-7
- 1 Use of Time-reversal 827-839